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WWF-UK and RSPB's comments on Ofwat's Consultation: 'Setting Price Controls for 2015-2020 - framework and approach: a consultation'

Ofwat issued its 'Setting Price Controls for 2015-2020 – framework and approach: a consultation' documentation in January 2013. The consultation, which is open until the 26th of March 2013, sets out Ofwat's methodology for setting price limits for the period 2015-2020. It requests feedback to help inform the development of the final methodology ahead of publication in the summer.

WWF-UK and RSPB welcome the collaborative approach that Ofwat have taken to the development of policy for PR14, including the significant effort that Ofwat have devoted to dialogue and discussions with WWF-UK and other environmental stakeholders.

This document sets out WWF-UK and RSPB's response to the Ofwat's consultation. We have not provided feedback to every question in this consultation. We have provided an overview of our thoughts on the direction of travel of the framework and set out our recommendations for developing the specific parts of methodology in which we have most interest and expertise, specifically the proposed approach to abstraction and bulk water resources.

OVERALL APPROACH

WWF-UK and RSPB welcome many aspects of the updating and modernising of the approach to setting price limits to support more sustainable use of water, in recognition of the future challenges that will be faced by the water and sewerage industry. We particularly welcome the proposals to:

- Provide companies with greater control over their outcomes and more freedom to find innovative and sustainable solutions to the management of water resources. Providing encouragement and incentives to companies to manage water resources more innovatively has our full support - though we so far see little evidence that many water companies are seizing this opportunity.
- Assess total costs rather than operational and capital costs separately – with the aim of ensuring that companies are not biased towards finding capital solutions. We believe this has the potential to provide a significant step-change in the approach taken by water companies in meeting customer needs in a sustainable way. Catchment management

approaches and large-scale water efficiency activity clearly requires increases in operational expenditure that have been dis-incentivised in previous price reviews.

- We welcome the drive to improve efficiency in the use of water resources by incumbent companies and any new entrants.
- Putting greater emphasis on customers' views. We, and a number of Blueprint for Water colleagues, are members of Customer Challenge Groups (CCG). These are working quite well so far, but would benefit from greater guidance from Ofwat on the content required for their reports. It is disappointing that water companies have not used CCG's to help more with the phrasing of questions used in willingness to pay studies and quantitative research.

We believe that Ofwat should look at the possibility of considering incentives based around higher rates of return for companies trying more innovative, higher-risk solutions, including where these may have additional environmental and social benefits.

ABSTRACTION AND BULK WATER MANAGEMENT

WWF-UK welcomes Ofwat's focus on the value of water as a key future challenge for the water industry. In particular, we welcome the work that Ofwat have devoted to the development of the Abstraction Incentive Mechanism (AIM): with some adjustments that we propose here, we believe the AIM has the potential to make an important contribution to a number of water resource objectives.

In this context, we recognise the potential of providing companies with the freedom to trade water, where it is the most sustainable solution and where appropriate safeguards are in place to prevent damaging consequences such as the activation of 'sleeper abstraction licences' or unused portions of licences in areas of environmental sensitivity and water scarcity. We support the movement of raw water supplies between companies to maximise the efficient use of sustainably-exploitable resources, subject to the appropriate safeguards.

We retain significant concerns that increased incentives for trading and upstream competition may lead to unintended negative environmental consequences, if this is not developed in the context of the appropriate regulatory and incentive framework to recognise the value of water and environmental risks associated with abstraction. The joint statements published by WWF and Ofwat in 2008¹ and 2009² set out the importance of reforming the existing abstraction regime as a necessary complement to reforms to increase upstream competition and water trading.

While we welcome the interest that Ofwat have shown in sustainable abstraction, the proposed framework for PR14 does not yet make clear Ofwat's contribution to the reform of the abstraction regime that is the necessary complement to increased trading. Specifically:

- **PR14 and the Restoring Sustainable Abstraction programme.** We are disappointed that the methodology does not deliver on the Water White Paper proposals to fund measures under the Restoring Sustainable Abstraction (RSA) programme directly through PR14. We understand that direction in this regard is to be provided to companies through the Business Planning Guidance to be published in the Spring. We believe that bringing the RSA process into PR14 will provide the most cost effective solution to address the legacy of unsustainable abstraction. Water Companies that WWF-UK has spoken to are overwhelmingly supportive of addressing unsustainable abstractions through price limits, subject to cost benefit analysis, as this will remove a significant current source of uncertainty in water resource planning.

¹ WWF, *Waterwise and OFWAT joint response to the Cave Review*, August 2008.

² WWF-UK and Ofwat (*Water Services Regulation Authority*): *joint statement on pathways to sustainable abstraction*, August 2009.

There remains a significant legacy of over-abstracted and over-licensed catchments, which increased trading threatens to exacerbate.

- **Appropriate safeguards in the context of trading.** Increased water exports that use greater volumes of water taken from licensed but already over-abstracted or over-licensed abstraction points would be net detrimental. We want to see reductions in over-abstraction, and no creep of position from over-licensed into over-abstraction situations. We therefore want to see full and proper controls being used to prevent trading leading to any over-abstracted of sources.
- **A revised AIM.** We welcome the proposed AIM as an effort to indicate environmental risk to water companies and to help them to use the most environmentally sustainable sources rather than the cheapest. As we set out in more detail in the annex, we believe that a number of important adjustments need to be made to Ofwat's proposals so that the AIM meets its objectives.

We look forward to discussing these issues in more detail as part of the on-going positive working relationship between WWF-UK, RSPB and Ofwat.

RESPONSES TO SPECIFIC QUESTIONS

Q37 Do you agree with our preferred limit to the scope of the AIM?

No. See more detailed discussion of the AIM below. Specifically, we have the following concerns:

1. Trading and spill-over impacts. Band 3 sites are not the only sites at risk from abstraction. A narrowly defined AIM risks increasing abstraction in band 1 and 2 sites.
2. Groundwater and water supply resilience. Groundwater resources provide important sources of resilience in periods of low rainfall, offering security of supply to both people and the environment. Under Ofwat's proposals, the AIM would operate only when groundwater levels have already fallen to critically low levels. This is too late.
3. Limited scope. Sites in the EA's Band 3 categorisation are not the only ones at risk from over-abstraction, in particular at times of stress. Further, a limited focus on Band 3 sites risks meaning that the AIM will be focused on precisely the same sites as the RSA programme.

Q38 What evidence should we take into account in calibrating the AIM?

See detailed discussion of the AIM below.

Q39 What are your views on our proposed phased implementation of the AIM?

We recognise the advantages in a one-year phasing-in process for the AIM, based only on reputational rather than financial incentives.

WWF-UK and RSPB, 26th March 2013

Annex: A revised approach to the AIM - WWF-UK proposals

This note sets out an amended approach to the AIM, building on the model set out by Ofwat in their consultation on the price control framework for PR14. It attempts to realise the potential benefits of the AIM, while retaining the key feature of simplicity.

THE OBJECTIVES OF THE AIM

WWF believes that a well-designed AIM has the potential to contribute to the achievement of a number of objectives:

1. Secure low-cost reduction in environmental risk, in the context of the inherent uncertainties associated with the impacts of abstraction on ecosystems.
2. Provide signals about and control over environmental risk in the context of increased water trading.
3. Reflect the scarcity value of water to companies, increasing the resilience of supply and protecting the environment at places and at times of risk.
4. Encourage innovation in meeting the supply-demand balance. The AIM doesn't prejudge the options taken by companies under the incentive, which could include for example network optimisation, trading, spot-trading, demand management or leakage improvement, as well as resource substitution.

THE CURRENT OFWAT PROPOSAL

Under their consultation on the framework for PR14, Ofwat have proposed an approach to the AIM that:

- Is focussed only on the most at risk sites identified by the Environment Agency ('Band 3' sites).
- Contains a single threshold water level at which the incentive will be triggered (the Q95, which is not exceeded on only 5% of occasions).

WWF-UK believes that this approach is likely to fail to realise the potential for the AIM for the following reasons:

4. **Trading and spill-over impacts.** Band 3 sites are not the only sites at risk from abstraction. A narrowly defined AIM risks increasing abstraction in band 1 and 2 sites.
5. **Groundwater and water supply resilience.** Groundwater resources provide important sources of resilience in periods of low rainfall, offering security of supply to both people and the environment. Under Ofwat's proposals, the AIM would operate only when groundwater levels have already fallen to critically low levels. This is too late.
6. **Limited scope.** Sites in the EA's Band 3 categorisation are not the only ones at risk from over-abstraction, in particular at times of stress. Further, a limited focus on Band 3 sites risks meaning that the AIM will be focused on precisely the same sites as the RSA programme.

DESIGN PRINCIPLES FOR THE REVISED APPROACH

The approach proposed here is based on the following design principles.

1. Simplicity

Simplicity is a key requirement for incentive mechanisms, in particular for a new mechanism such as the AIM. By taking a flexible approach, greater sophistication could be introduced if and when appropriate.

2. Avoidance of spill-over impacts

Include more than just the most at risk sites, to ensure that the AIM does not risk displacing abstraction from most at risk sites to other high-risk sites.

3. Reflects stress and scarcity at time of low flows

The AIM is focussed on times of hydrological stress when there is the greatest risk of ecological damage. Fore-stalling the risk of damage requires early action in slowly-responding groundwater and groundwater-fed situations, so triggers for action there need to be set higher than in fast-response surface water situations. Further, at times of stress, environmental risk from abstraction will be present beyond just band 3 sites, so other bands need to be included at times of greatest risk.

4. Flexibility and learning

One of the important benefits from the AIM will be the information that it provides about innovative options available to water companies. The AIM should be designed on the basis that the first round will be based on imperfect information, with revisions to the mechanism from revealed information being introduced in future price reviews. In recognition of this, the mechanism should include safeguards (caps and collars) to ensure that the risks to companies and customers are bounded.

A REVISED APPROACH

On the basis of these design principles, WWF-UK believes that an alternative approach is possible that retains Ofwat's desire for simplicity, while realising the broader potential of the AIM.

The AIM needs to be understood in the context of broader mechanisms to deal with the historic legacy of over-abstraction and future pressures on resources. As currently envisaged, the AIM would not function as an alternative to other initiatives like the RSA programme and licence reform, but as a complement. The AIM has the potential to address abstraction problems not otherwise dealt with, now and in the future (including before, during and after implementation of the RSA programme).

1. Broaden the scope of the AIM to 'band 1 -3' sites.

Include bands 1-3 sites within the AIM mechanism, to reflect the likelihood of risk at all these sites at times of low flows, and to mitigate against the risk of spill-over effects. If all bands 1 – 3 sites were included with a single weighting, this would introduce no greater complexity to the incentive mechanism (albeit resulting in reduced differentiation).

There are options for a weighting mechanism to reflect the relative vulnerability of sites to water scarcity, for example affording a greater weight to band 3 sites than bands 1 and 2. The model proposed here uses a single weighting in order to achieve simplicity, recognising that many band 3 sites will be covered anyhow under the RSA programme.

Consideration should be given to allowing companies to nominate sites which they believe to be of particular environmental risk but not covered by bands 1 -3, for example chalk stream headwaters or some surface water abstractions at times of very low flow. 'Opt outs' (where companies believe there is no risk from abstraction in bands 1 – 3 sites) may not be required, as the AIM places no obligation or penalty on companies electing not to alter existing operations.³

2. Introduce tiered signals for groundwater.

Tiered incentives for groundwater sources and high base-flow rivers at levels above the Q95 can reflect the need to take early action to maintain resilience in these sources of water. Using two or three tiers would provide earlier signals of risk, and would incentivise companies to check withdrawals from groundwater, thereby increasing the overall resilience of the system.

3. Develop a single national incentive level (a shadow price of abstraction), with weightings for groundwater tiers to translate the base shadow price into lower shadow prices for abstraction at higher tiers.

The use of a single national incentive level would provide simplicity in the design of the system. Weightings for abstraction at different levels of groundwater would reflect increasing scarcity. The value of the incentive level would determine the strength of the AIM incentive. The value could be based on a combination of willingness to pay data and a consideration of the other benefits of the AIM, including signals around scarcity in the context of trading, and benefits of increased information on innovation options.

Companies would be rewarded or penalised under the AIM based on their performance against the historic baseline. The boundary between rewards and incentives could be set as a percentage reduction against the historic baseline to prevent companies from enjoying windfall benefits.

Under such an approach, neither Ofwat nor the EA would be required to make site-by-site assessments of vulnerability. Ofwat would merely provide the reward or penalty at the end of the process. The information on which the incentive is based is already used by companies.

4. Introduce a cap and collar to limit exposure.

A maximum level for the payment or reward available under the AIM to any company under the price review would be set, to limit the risk to either companies or customers. This is particularly important in the context of the imperfect information under which the first round of the AIM would be operating.

5. Assess performance over 5-years.

Companies would be rewarded or penalised at the end of the price review period. The use of a 5 year period would smooth out the effect of annual variations in water availability, and reduce any volatility in customer bills. Caps and collars would limit exposure to a particularly wet or dry set of 5 years.

* There may be a need to consider a process of opt-outs for particular cases where it is clear that no environmental risk is associated with the abstraction, in order to remove the risk of perverse incentives (for example, abstraction from entirely degraded catchments).

6. Amend the AIM for the next price review.

The number and weighting of bands and tiers, and the levels of the caps and collars would be amended ahead of the next price review, on the basis of information that emerges under the use of the AIM from 2015 - 2020. The inclusion of caps and collars would ensure that risks to customer bills are mitigated in this iterative process.

ILLUSTRATION

The ‘base model’ shown below illustrates how the approach could be developed, using different weights to moderate the incentive for reduced abstraction in different categories of sites (bands 1 – 3) and at different flow levels (tiers 1 to 3). A nine cell (3 bands x 3 tiers) model is shown; but the number of cells employed can be significantly reduced, to gain the benefits of simplicity without abandoning the benefits of some differentiation. The ‘shadow-price’ (£/Ml) for each cell in use is calculated from that of the band 3, tier 3 shadow price by multiplying it by the relevant weight. The weights would be set to reflect the perceived benefit of reduced abstraction in each particular cell.

The General model

0.025	0.05	0.1	Q60
0.1	0.2	0.4	Q85
0.25	0.5	1.0	Q95
Band 1	Band 2	Band 3	

The proposed model

The proposed model recognises the need to keep the AIM as simple as possible, while at the same time ensuring that it realises its key benefits. Accordingly, three tiers are included for groundwater and high BFI sites alone; and, a single category (covering bands 1-3); single tier cell is used for all other sites

Proposed model

Groundwater and high BFI systems

Surface water abstractions



FURTHER DESIGN WORK

On the basis of this approach, detailed design is required to establish:

- The baseline incentive level (the base shadow price)

- The levels of caps and collars
- The levels and relative weighting (shadow price) of groundwater tiers
- The criteria for any 'nominated' sites that companies may wish to propose (e.g. with agreement with the Environment Agency).

PROCESS: HOW WOULD THIS WORK?

The note below sets out some guidance as to how this would work in practice.

1. **Ofwat set a national shadow price (£/Ml) for abstracting when flow or level is <Q95 values, and for abstracting at other times in groundwater / high base-flow systems.**
 - Levels set using National Willingness to Pay data (EA surveys), and/or using indicative substitution cost data (e.g. CFonstream report; Southern Water work) and/or using expert judgement.
 - Weightings for groundwater and high base-flow systems set for a maximum of 3 Tiers, say below Q60; Q85; Q95.
2. **Ofwat set volume-based caps and collars for penalties and rewards for abstraction against baseline values**
 - Using National Willingness to Pay data, considering broader AIM benefits.
 - And/or using simple % of baseline values (say $\pm 20\%$ of BL volume).
 - And/or using local willingness to pay.
3. **Companies calculate baseline 'budget'**
 - Determine the baseline abstraction total for all sites in the selected categories, by Company area. Set budget using actual abstraction data for previous years.
 - Allow companies to 'opt-in' additional sites believed to be at risk, in agreement with EA.
4. **Companies collect data on volumes abstracted**
 - Companies likely to reduce abstraction from higher risk sources where cost of alternative < reward available for reduced abstraction through AIM.
 - Companies record total volumes abstracted over price review period.
5. **Ofwat provide reward/penalty on basis of performance against baseline over price review period**
 - Reward / penalty calculated as increase / decrease in volume of water abstracted from places and at times identified by the AIM compared to budget, with total calculated on basis of shadow price x volume.
 - Reward / penalty paid at the end of PR period.