

<b>Title:</b> Removing the right to compensation for water companies for amending or revoking abstraction licenses <b>IA No:</b> 1493  <b>Lead department or agency:</b> Department for Environment, Food and Rural Affairs <b>Other departments or agencies:</b> Environment Agency	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 08/11/2013		
	<b>Stage:</b> Final		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Primary legislation		
<b>Contact for enquiries:</b> lisa.oakes@defra.gsi.gov.uk jackie.sullens@defra.gsi.gov.uk			
<b>Summary: Intervention and Options</b>			<b>RPC Opinion:</b> GREEN

Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out? Measure qualifies as
£0m	£0m	£0m	No NA

**What is the problem under consideration? Why is government intervention necessary?**

Water abstraction from rivers and aquifers is licensed by the Environment Agency, which can amend or revoke licences. Legislation provides for statutory compensation for any loss that arises from withdrawal. These losses are currently funded in different ways; some through Ofwat's Price Review Process while others are funded via a tax on abstractors called Environmental Improvement Unit Charge (EIUC). EIUC is not an efficient way of delivering timely changes to water company abstraction licences as it divorces decisions on the impact of such changes from mainstream water company business planning. Government intervention is required to change this system, changing it to a consistent, economically efficient, approach.

**What are the policy objectives and the intended effects?**

The policy objective is to ensure that schemes to address water companies' unsustainable abstractions are funded in the most efficient and timely way possible. The method of funding should allow companies to consider schemes to address unsustainable abstraction as part of their mainstream business planning processes, making their own decisions on investments that are in their own and customer interests. Government needs to provide clarity for water companies and regulators that the costs arising from licence changes to address unsustainable abstraction should be funded through the Price Review process. Abstractors other than water companies will continue to receive compensation via the payment of EIUC.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

Option 0: Baseline - continue using EIUC to fund schemes to tackle unsustainable abstraction. Perpetuates inefficiencies and some companies would pay more without getting any compensation in return. Long-term use of EIUC for water companies does not fit with government tax policy. Option 1: Repeal the water company right to compensation under Section 61 of WRA 1991. This would ensure funding for all sites goes through the Price Review process. Other option: A voluntary approach to funding sites through the Price Review, which was rejected as it did not offer sufficient clarity to water companies and regulators. Option 1 is the preferred option, as it will: provide clarity and certainty of the funding route; ensure all restoring sustainable abstraction schemes are funded in the same way; is more efficient; will not cause water companies to pay EIUC without receiving compensation; avoids delays to delivery; and will not cost water companies anymore than the current approach.

<b>Will the policy be reviewed?</b> It will not be reviewed. <b>If applicable, set review date:</b> Month/Year					
Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> Nil	<b>Non-traded:</b> Nil	

**I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.**

Signed by the responsible SELECT SIGNATORY: \_\_\_\_\_ Dan Rogerson \_\_\_\_\_ Date: \_\_\_\_\_ 1<sup>st</sup> February 2014 \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 1

**Description:** Repeal water company right to compensation and fund sustainable abstraction through Price Reviews

## FULL ECONOMIC ASSESSMENT

Price Base Year 2013	PV Base Year 2013	Time Period Years 11	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate:

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low		67.7	632
High		126.1	1176
Best Estimate	0	96.9	904

### Description and scale of key monetised costs by 'main affected groups'

The detail of monetised costs of this measure are subject to commercial confidentiality, but comprise estimates of costs required to restore sustainable abstraction over the period to 2025 (Source: Environment Agency). Under this option these costs would be met through the Price Review process (rather than through compensation funded by the EIUC), subject to OfWAT regulatory scrutiny. These are new costs to water companies, ultimately likely to be recouped from water customers.

### Other key non-monetised costs by 'main affected groups'

Water companies lose guaranteed compensation where they are currently entitled to it under s61 but Ofwat have a statutory duty to ensure companies can finance their activities hence the change to using the Price Review, which should mean better outcomes for customers, meaning costs may actually be less than monetised. Possible short term increase in some customer bills due to loss of regional cross-subsidy. Government: no identified costs.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low		67.7	632
High		126.1	1176
Best Estimate	0	96.9	904

### Description and scale of key monetised benefits by 'main affected groups'

Saving of compensation which would be payable under the baseline through the Environmental Improvement Unit Charge (EIUC). These savings will be of similar magnitude to the new costs of the option (i.e. this is simply a change in funding approach from EIUC to Price Review).

### Other key non-monetised benefits by 'main affected groups'

Absolute clarity provided that the Price Review is the funding stream for schemes to address unsustainable abstraction. Water companies able to plan solutions to restore sustainable abstraction as part of mainstream business planning process which should lead to better outcomes for customers. Companies only pay for their own schemes. Government: reduced administration costs. Provides clarity and certainty of funding route, fit for future challenges.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5%
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The figures are based on the Environment Agency's estimates for potential water company compensation claims for the Restoring Sustainable Abstraction Programme.

## BUSINESS ASSESSMENT (Option 1)

<b>Direct impact on business (Equivalent Annual) £m:</b>	<b>In scope of OITO?</b>	<b>Measure qualifies as</b>
Costs: 0	No	NA
Benefits: 0		
Net: 0		

# Evidence Base (for summary sheets)

## Problem under consideration

### Summary

This impact assessment sets out why the current statutory system for compensating water companies for any losses arising from the withdrawal of their license to abstract water from certain rivers or aquifers is inefficient. The proposal is to replace this clunky compensatory system with one that is both consistently and equitably applied across all water companies and that allows them to incorporate schemes (solutions to any water abstraction that is identified as not being sustainable) into their wider business planning. This should allow for schemes that are more cost-effective and that are better tailored to their own business and customer needs.

There are no net costs on business from this proposal because it does not remove the ability for water companies to fund schemes to make up losses arising from a reduction in their license rights. Rather, it changes the mechanism for funding such schemes, from an inconsistent and inefficient approach to a consistent, more economically efficient approach that ties in to the polluter pays principle and hence is more equitable than at present.

In fact, the costs incurred may, if anything, be lower as this funding mechanism would allow water companies to consider all schemes to address unsustainable abstraction in a holistic way as part of their overall business planning processes which may allow them to benefit from efficiencies. For example, they would be able to design, develop and implement solutions to unsustainable use at the same time as looking at solutions to changes in demand and thereby implement a single integrated solution that addresses both problems rather than being forced into adopting separate, more costly, solutions.

### Background

In theory, excessive abstraction of water from rivers and groundwater would occur where individual abstractors are not mindful of, or made to face, the full social consequences or costs of taking water, which is a common resource. In economic terms there is an inherent “externality” whereby the private costs of water abstraction tend to be significantly below the cost to wider society. Excessive abstraction can cause ecological damage to the nature conservation of designated sites and the ecology of rivers and wetlands, to the detriment of society which values these things.

Abstraction from rivers can significantly affect both water flow and levels, which can have an impact on the quality and type of habitat; the amount and type of sediment that is carried in the water and where it is deposited; and on water quality. In aquifers, abstraction can affect the availability of water for wetlands and rivers, damaging the environment or allowing saline intrusion. Saline intrusion, where saltwater is able to flow into freshwater aquifers due to a loss of pressure, can damage the environment and contaminate drinking water supplies.

Because of these inherent market failures, water abstraction is a licensed activity controlled by the Environment Agency (EA) and Natural Resources Wales (NRW). A number of years ago EA developed a programme, known as the Restoring Sustainable Abstraction (RSA) programme, which examined abstraction licences to establish whether water abstraction was causing environmental problems. Where problems have been identified, EA and NRW carry out detailed investigations and consider the range of possible options to best balance the needs of the environment and water users, working closely with abstractors to find solutions.

Sometimes solutions can be found that allow an abstractor to continue abstracting without any changes being made to the actual licence, for example the installation of a fish pass. However, on other occasions, no alternative solution can be found and a change to an abstraction licence needs to be made. EA and NRW have powers to amend or revoke water abstraction licences in certain circumstances in order to protect the environment, including nature conservation sites, from damage. An amendment could be, for example, the setting of a “hands off” limit on a licence, to prevent abstraction if river flow falls below a certain level, or an overall reduction in the amount that can be abstracted.

If a licence holder does not agree to the changes then they may be entitled to compensation for resulting losses, under section 61 of the Water Resources Act 1991. Losses might arise from, for example, a water company having to fund the development of a new source of supply or a demand management programme.

The RSA programme remains the current focus of activity for EA and NRW addressing unsustainable abstraction. However, in the future there are likely to be a significant number of further changes needed to abstraction licences, associated with requirements to protect and improve the water environment under the Water Framework Directive.

A wide range of sectors, businesses and organisations hold water abstraction licences, including, for example, farmers, the power sector, chemical plants, water companies supplying water to the public and the Royal Society for the Protection of Birds. Water companies generally abstract the largest volumes of water and so tend to be eligible for larger amounts of compensation than other abstractors.

It is the mechanism for funding compensation payments to water companies that is the subject of this IA.

## **Existing funding arrangements**

Currently for those nature conservation sites that are protected under the Habitats and Birds Directives, the cost of any water company schemes that are required to restore sustainable abstraction is included in the water company business plan and funded through Ofwat’s Price Review (PR) process<sup>1</sup>, subject to their efficiency scrutiny.

However, this funding mechanism does not apply to water company action required to mitigate unsustainable abstraction in other, non-EU designated nature conservation sites, such as Sites of Special Scientific Interest, Biodiversity 2020 sites and local sites. For these sites when the cost benefit case is favourable for a solution, compensation is funded via a tax on abstractors, called the Environmental Improvement Unit Charge (EIUC).

EIUC is currently charged to all abstractors in all Environment Agency regions where there are unsustainable licences identified in the RSA programme. There are separate EIUC accounts for water company abstractors and for non-water company abstractors in each region. The cost of this charge to water companies is largely recovered from customers through their water bills.

## **Problems created by the existing system**

### *Inefficient planning and delivery*

This system is not an effective way of delivering timely and efficient changes to water company abstraction licences. It separates decisions resulting from licence changes at non-EU nature conservation sites from the wider water company water resource management and business planning processes, which drive companies’ key investment decisions. This reduces the opportunities and incentives for water companies to consider more holistic and strategic

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<sup>1</sup> Ofwat carry out a review every 5 years of the price limits that water companies can charge customers.

solutions to addressing unsustainable abstraction, within the wider context of balancing their supply and demand. Instead, solutions are developed reactively as sufficient compensation becomes available. This risks delivering sub-optimal outcomes and hence higher costs for customers.

#### *Inequitable distribution of costs and benefits*

The existing funding mechanism is inequitable. Currently all water companies in a region with RSA sites pay EIUC, while those outside these regions do not pay any EIUC. However, companies sited within EIUC regions, which do not have an RSA site in that region themselves, and will therefore receive no compensation, still pay into the collective pot. Companies also pay different amounts overall, depending on how much they are licensed to abstract and in how many areas, and will be eligible for differing amounts of compensation depending on the number of unsustainable abstractions they have. For example, if water company A has 10 unsustainable abstractions and water company B has 1, but both abstract the same amount overall and pay the same amount of EIUC, water company A may receive a greater benefit from compensation, depending on the costs of the solution. Thus, the incentive for water companies to behave sustainably is muted. These inequalities are largely passed on to customers, who pay for EIUC via their bills.

#### *Delays to delivery*

There are delays in the current system caused by the need to accumulate sufficient EIUC to compensate water companies before EA / NRW can serve notice of the licence change in order to initiate the solution. Because EIUC is collected and spent regionally, if one water company has a particularly costly scheme at any particular time, this can use up all the existing funds in the regional pot. Other water companies, and hence their customers, will have paid into the regional pot, but suffer significant delays before funds are available for their own schemes.

This means that changes are put on hold, preventing timely restoration of sites where abstraction has been identified as unsustainable, and continuing damage to the environment ensues.

#### *Lack of future-proofing*

There is also a risk that the current system is not fit for future challenges. Current government tax policy is to avoid perpetuating small tax and spend schemes where there is no good reason to do so. Given the existence of a more efficient funding route – i.e. Ofwat's Price Review – the likelihood of HMT allowing EA to continue to recover EIUC from water companies beyond the current spending round is low. However, legislative action is required to allow the use of the price review for this purpose.

Challenges into the future are likely to be greater given our obligations under the Water Framework Directive and the increase in funding likely to be required to meet those obligations. Inability to collect funds to pay compensation raises the risk of EU infractions.

Given this range of problems with the existing system, essentially arising from institutional failures to provide an appropriate and consistent mechanism for addressing unsustainable abstraction, we want to remove the right to statutory compensation from water company abstractors. This would enable water companies to integrate solutions to unsustainable abstraction into mainstream business planning to be funded through the price review process (PR).

The issue under consideration here affects England and Wales and relates specifically to water companies.

This impact assessment considers the options available to resolve the problem outlined above, including the preferred solution of making a legislation change to ensure a move from statutory

compensation via EIUC to funding via Price Review for all water company solutions to restore sustainable abstraction.

## **Rationale for intervention**

Intervention is required to address the institutional failures in the existing system outlined above. We need to ensure that a mechanism exists that will provide water companies with the funds needed to maintain their supply/demand balance in a way that delivers best value for customers, whilst also ensuring a suitable pace of change in delivering improvements to our rivers. Given the regulated nature of the industry, water companies are not in a position to make this change themselves without intervention from government.

We signalled our intention to change the funding mechanism in the Water White Paper, published December 2011, which made clear that the Government, Environment Agency and Ofwat all believe that the Price Review route has the potential to deliver better outcomes for customers by delivering better value for money.

Ensuring that water company schemes for addressing damaging abstraction are funded through the PR rather via EIUC will improve the current system in a number of ways:

- Providing better value for customers, by enabling water companies to plan to balance supply and demand in an integrated way as part of their standard business planning processes, rather than looking at restoring sustainable abstraction schemes in a separate, reactive way;
- Ensuring proper scrutiny and efficiency challenge from Ofwat through the PR, which would also ensure better value for customers;
- Ensuring water companies and hence their customers pay for schemes carried out by that company, removing the potential for cross-subsidisation within regions and between companies;
- Removing delays in the Environment Agency serving notice and issuing licence changes before sufficient EIUC has accumulated regionally to fund individual schemes.

Removing the statutory right to compensation for water companies is the only way to provide sufficient clarity for water companies and regulators that Government's intention is for costs arising from licence changes to address unsustainable abstraction to be funded through the Price Review process.

This proposal has been broadly supported by water companies. It is a streamlining of the current arrangements, by ensuring that all schemes needed due to licence changes to address unsustainable abstraction are included in water company business plans and subjected to the same efficiency challenge by Ofwat as part of their PR process. Costs associated with addressing unsustainable abstraction will continue to be ultimately met by customers via their bills, albeit via a different and more equitable distribution.

## **Policy objectives**

The overarching policy objective is to ensure that water company schemes to restore unsustainable abstraction are carried out in the most efficient, timely way, delivering best value for customers.

In order to achieve this, we wish to ensure that all water company schemes to restore unsustainable abstraction are included in Ofwat's Price Review process, rather than some schemes being funded via the EIUC – i.e. to treat the funding for cost beneficial changes for all sites with damaging abstractions in the same way in order to streamline the system and deliver better value for customers.

Initially any changes would affect the sites that have been identified under the EA/NRW Restoring Sustainable Abstraction Programme. However we also need to make sure any system is future-proofed to deal with further licence changes to address unsustainable abstraction, such as associated with our obligations under the Water Framework Directive. We also need to ensure that changes do not result in increased overall costs to water companies and hence customers.

### **Improving efficiency**

A key objective is to ensure that delivery of solutions to address water company unsustainable abstraction is as efficient as possible, and therefore delivers best value for money to customers. We need to ensure the funding mechanism enables water companies to plan to balance supply and demand in an integrated way as part of their standard business planning processes, rather than looking at restoring sustainable abstraction schemes in a separate, reactive way. In addition, any new system should not incur additional Government administration costs.

### **Making the system more equitable**

In making changes to the existing system we are also aiming to make the distribution of costs and benefits more equitable across water companies, and hence customers. We want water companies who have unsustainable abstraction licences to include the costs of changes in their own business plans and so pass those costs on to their own customers. This would stop some companies when few changes are needed to address unsustainable abstraction subsidising others when much more costly changes are required.

### **Avoiding delays to delivery and future proofing**

We need to ensure that the funding mechanism is capable of providing sufficient funding for schemes to address unsustainable abstraction without causing delays, to avoid further environmental deterioration. Initially this applies to sites identified in the EA/ NRW Restoring Sustainable Abstraction programme. However, we also need to ensure we have a system fit for the future, when there are likely to be significant costs associated with protecting and improving the water environment under the Water Framework Directive.

Current government tax policy does not favour the prolonged use of small tax and spend schemes such as EIUC when more efficient longer-term solutions are available. As such, although in theory EIUC could be expanded to prevent affordability constraints into the future, this is unlikely given Treasury tax policy and the fact Price Review exists as an alternative (even though in practice this requires legislative change).

### **Providing clarity**

We need to provide absolute clarity to water companies and regulators that the funding route for changes to water company licences to address unsustainable abstraction is via the Price Review process. As long as the legal right to compensation exists, ambiguity over the funding route remains.

### **Description of options considered (including do nothing)**

We have two potential options:

- Option 0 – the baseline option to continue as is, funding required licence changes already identified as part of the RSA programme, and any other future licence changes, via the EIUC;
- Option 1 – to provide an alternative funding route through the Price Review process.

## **Option 0: Baseline – continue with EIUC**

The baseline option is to continue to fund losses from water company licence changes via EIUC. The amount of EIUC required to fund the licence changes at sites already identified in the RSA programme is discussed in more detail and quantified in the “Costs and benefits” section below. The amount required is likely to be significantly greater in the future given the likely costs associated with protecting and improving the water environment under the Water Framework Directive.

The current system has a number of weaknesses, discussed in detail in the “Problem under consideration” section above. In summary, this option leads to inefficient planning and delivery by water companies, risking higher costs for customers, has an inequitable distribution of costs and benefits, can cause delays to delivery and is not fit to face future challenges.

Continuing to rely on EIUC creates significant uncertainties about the levels and timing of funding that will be available in the future, given current tax policy on small tax and spend schemes. These uncertainties over levels and timing of funding exacerbate the difficulties for water companies to plan integrated, strategic solutions to meeting their supply / demand balance, which incorporate licence changes required to address unsustainable abstraction.

These difficulties with EIUC present a number of risks for government:

- Failure to address unsustainable abstraction affecting a range of rivers, including some high profile iconic chalk streams, which have been identified in the Restoring Sustainable Abstraction programme. The slow pace of delivery of solutions for RSA sites has already drawn criticism from environmental NGOs and other interested public groups. This would intensify significantly if further delays were incurred due to Government’s inability to ensure a workable funding stream;
- Failure to address changes required under the Water Framework Directive. This would risk infraction proceedings, prevent socially beneficial investments being delivered, and attract further criticism from environmental NGOs;
- Inability to move to a reformed abstraction regime if there is a significant legacy of historic unsustainable abstraction which has not been addressed prior to implementation of the new regime. A reformed abstraction regime is key to successfully regulating access to water in the future to promote resilient economic growth and protect the environment in a manner which is fair and adaptable at a reasonable cost. (Reforms to the abstraction regime are the subject of a separate Impact Assessment, due to be issued for consultation in December 2013).

An additional problem with continuing with EIUC arises from the fact it is collected on a regional basis. If we were to continue to use EIUC to fund RSA changes, plus any other future changes to licences required to address unsustainable abstraction, all water company customers would face an increasingly large charge, irrespective of whether their individual water company had any unsustainable abstraction licences which might be eligible for compensation. This would penalise some companies / customers increasingly unfairly as levels of EIUC rise.

## **Option 1: Switch funding mechanism to PR process, though legislative change**

This option ensures that losses resulting from changes to water company abstraction licences to address unsustainable abstraction can be funded through Ofwat’s Price Review process, by disapplying section 61 of the Water Resources Act 1991 as far as it applies to water companies. This would mean that the companies would no longer be entitled to statutory compensation for losses resulting from modifications and revocations of their abstraction licences. The practical



effect would be that all such losses would need to be funded through the PR as there would be no alternative funding route available. Ofwat have a statutory duty to ensure a company can finance its activities, so must ensure companies are able to fund any schemes required to replace supply lost because of a licence modification or revocation.

Key to this option is the provision of absolute clarity to water companies and regulators that the funding route for changes to water company licences to address unsustainable abstraction is via the Price Review process. The publication of Ofwat's methodology for the next Price Review period, PR14, has provided greater clarity that Government's intention is for licence changes to address sustainable abstraction to be funded via the Price Review process. However, as long as the legal right to compensation exists, ambiguity over the funding route remains. Removing the right to compensation from legislation removes that ambiguity.

It is important to note that this change does not, of itself, lead to any additional schemes being funded so there is no increase in overall costs; it is simply a mechanical change to the funding route for compensating water companies for losses arising from licence modifications or revocations. The costs incurred may in fact be lower, as this funding mechanism would allow water companies to consider all schemes to address unsustainable abstraction in a holistic way as part of their overall business planning processes and so may lead to efficiencies. In addition, as an economic regulator Ofwat seeks to drive general cost efficiencies which could result in better value for money being achieved than through the current EA scrutiny process. The ultimate source of funding, via customer bills, remains the same as in Option 0.

Ensuring water company costs of licence changes to address unsustainable abstraction are included in their business plans and funded through the price review should ensure that costs are attributed more fairly, removing the current regional cross-subsidisation. For some companies this will mean their customers no longer pay for changes needed to licences held by other water companies within the same region. For other companies, the removal of cross-subsidisation may mean that they need to pay more in the short term if they have a number of unsustainable abstractions that require licence changes. However, as these costs will be passed on to customers, the impact on the water companies remains cost-neutral.

This proposal has been broadly supported by water companies in our informal consultation. This change would also apply to any sewerage companies regulated by Ofwat that became abstractors in the future. There are none at present.

Under this option, all abstractors other than water and sewerage companies would continue to pay EIUC and continue to be eligible for compensation under Water Resources Act 1991.

## **Other options considered**

### **Non-regulatory approach**

We explored the option of changing the funding mechanism through a non-regulatory approach. This would require securing formal agreement from Ofwat that all changes to water company licences to address unsustainable abstraction should be funded through the PR process, and agreement from water companies that they would not pursue compensation claims. Since mid-2011 we have been working with Ofwat, EA and water companies to try to identify ways to make this option viable, but have been unable to find a satisfactory solution. A key difficulty has been for the regulators to commit formally to this approach whilst a statutory right to compensation exists.

The publication of Ofwat's methodology for the next Price Review period, PR14, has provided greater clarity that Government's intention is for licence changes to address sustainable abstraction to be funded via the Price Review process. However, in order for a voluntary approach to work, we would have to be absolutely confident that all water companies regulated by Ofwat would voluntarily give up their statutory right to compensation along with any future

companies that enter the market. Whilst we know the majority of water companies are very supportive of this, it would only take one company to not agree, or to change their position in future, to jeopardise this agreement and make the system unworkable.

This presents something of a catch-22 situation. If changes to address unsustainable abstraction are to be funded through the Price Review, Government would need to stop charging Water Companies EIUC, or else customers would be charged twice and Water Company EIUC accounts would continue to accumulate funds that would be unlikely to be used. However, as long as the right to compensation remains, EA risks incurring financial liability for compensation claims it would have no possibility of paying if EIUC had not been collected.

Continuing to pursue this non-regulatory approach would perpetuate uncertainty for water companies who need to know how to treat schemes to address damaging abstraction in their business plans for PR14 and beyond, and for the Environment Agency who need to be clear about charges for 2014 and beyond. There is also significant risk that solutions would not be included in PR14 and therefore be delayed until PR19. The fact that this approach could easily fail further down the line could dis-incentivise water companies from taking the integrated approach to planning that should deliver the best outcomes for customers.

Hence we need to provide absolute clarity to water companies and regulators that the funding route for changes to water company licences to address unsustainable abstraction is via the Price Review process. As long as the legal right to compensation exists, ambiguity over the funding route remains. For these reasons, we did not pursue this option any further.

### **Remove rights to compensation for all abstractors**

Removing the right to compensation for all abstractors (i.e. not just water companies) has been discounted as an option at this time. This is because there is no alternative funding route for solutions to licence changes for non-public water supply abstractors at present.

## **Costs and Benefits**

The Restoring Sustainable Abstraction (RSA) programme was set up by the Environment Agency to establish whether water abstraction was causing environmental problems, and to take action at sites where it was established the abstraction was unsustainable. When this action includes changes to abstraction licences, the losses incurred can in some circumstances be recovered through compensation. Currently losses incurred at some EU designated conservation sites are already recovered through the Price Review process. In the analysis which follows, the total forecast costs of licence changes are based on Environment Agency (EA) estimates for the other non-EU sites that are already identified in the RSA programme (based on data from November 2012). For a more detailed explanation of the current funding arrangements, please see the “Problem under consideration” section.

Where sites are still being investigated we cannot be certain what, if any, action will be needed to address a problem. In some cases sites will drop out of the RSA programme as no action is needed or there is no cost beneficial solution. Therefore we have provided two ranges- the low estimate assumes a proportion of the sites will drop out and the high estimate assumes no drop out of sites. These figures do not include sites where changes to the licences are expected to have been made before 2015. They also do not include any changes that are likely to be needed in the future outside of the RSA programme, for example to meet obligations required under the Water Framework Directive. This is because no details of these changes are yet known and so we are unable to quantify this likely significant cost.

[Must be redacted before publication – this is commercially sensitive] The low range best estimate of required base expenditure (before considering funding route) under the RSA programme is £745m, and the high range best estimate is £1.4bn (undiscounted figures). [end redaction]

## Option 0: Baseline

### Cost implications of Option 0

[Must be redacted before publication – this is commercially sensitive] From the commencement of EIUC in 2008/09 up to 2012/13, the charge raised £49m from water companies. At present, HM Treasury has set a maximum year-on-year allowable increase in chargeable costs incurred by EA (including the EIUC charge, but also EA admin charges) of 10% per annum. If this cap was to continue, then EIUC could raise around £460m in the period to 2024/25 (there is also an overall “DEL” cap on expenditure but this is ignored for these purposes). This contrasts with the estimated requirement of £745m-1.4bn as set out above. In theory it might be possible to relax the current capping arrangements, although as noted above, prolonged use of EIUC for water companies does not square with current government tax policy, as long as the more efficient alternative of Price Review funding exists. Although therefore it might prove difficult to allow EIUC to increase to the levels thought necessary over the longer term, for the purposes of the economic analysis in this IA it is assumed that one way or another (either through EIUC or Price Review funding), the necessary expenditure is able to be raised.

The variable amounts of compensation paid relative to EIUC charged will continue. Some EIUC will be paid by water companies who do not benefit, while others gain a disproportionate amount of compensation relative to how much EIUC they have paid. This will increase in line with the EIUC increases. Although it is difficult to calculate the exact amount which is affected, estimates based on rates of EIUC collected to 2012/2013 suggest around £2.5m has been paid either by companies above the compensation that they could be eligible for or, where there are companies who are not eligible for compensation, any EIUC paid. [end redaction].

### Other implications of Option 0

#### *To water companies and customers*

- Costs are currently higher than they need to be because individual solutions are being developed outside the mainstream water company business planning process, as multiple benefits cannot be easily exploited. For instance, a reduction in abstraction might be needed for a RSA site. By including the associated costs within the Price Review, and aligning funding for this with other operationally required changes, the company could save money and time. This might involve adapting an existing company proposal, already required for increased demand, such as a new borehole and supply pipeline by increasing the size of the pipeline to be capable of supplying the additional capacity or implementing leakage and demand management options. Isolating changes to licences to address unsustainable abstraction outside the business planning process forces a water company to design, develop and implement a separate solution.
- Currently, changes can only be funded once sufficient compensation funds have been collected via EIUC. Whilst in theory it may be possible, through changed fiscal rules to allow EA to spend in advance of charges being raised through EIUC, in the absence of any such change there would be potential for increasing environmental degradation through delayed action. This also prevents proactive future planning due to lack of certainty of when solutions might be implemented.

#### *To Government*

- There are presentational impacts, including challenges from the eNGO community and public on pace of delivery and environmental impact. This will then require more time to administer and respond to these challenges.

- Government will face administrative costs for the EIUC itself, including the need to consult on charges, collect charges, provide guidance on charges, and administer compensation payments.

*To society*

- The most significant and difficult to monetise cost comes from continuing damage to the environment due to failure to address unsustainable abstraction if no suitable funding mechanism can be negotiated.

Option 1- Price Review

**Monetised Costs**

Costs could be reduced as a result of OFWAT’s efficiency challenge and because of the ability of water companies to deliver integrated solutions.

For illustrative purposes we have assumed base cost estimates of a similar scale to those that have been estimated by the Environment Agency under the baseline (see above). Water companies might consider various options under the PR process for alternative sources of supply in response to licence changes. Some water companies may decide to include all sites earlier on to prevent possible further environment damage and potentially higher costs from occurring, or meet deadlines for environmental protection. Some companies may decide to consider sites later within the same price review period if there are other priorities to address.

These decisions are all equally likely and there will also be other possibilities:

- **Assume EA forecast profile of expenditure to 2024/25 continues.** Water companies could decide to increase the amount of funding for RSA sites on the same year-on-year basis as estimated by EA, based on need arising.
- **Spread amount evenly.** Water companies could spread the total requirement over the period to 2024/25 evenly over the period. Each water company would be able to include the RSA sites in their business plans.
- **Include sites at start of each 5 year PR process.**
- **Include sites at end of each 5 year PR process.**

Of these options, compared to a “base case” year on year increase, spreading the amount evenly or including sites at the start of the PR process incurs a similar amount of costs; spreading the costs over the 5 year PR process incurs fewer costs, and including the sites at the end of the PR process brings some savings, in Present Value terms.

[Must be redacted before publication – this is commercially sensitive] If we assume that, under a base case, Water Companies will need to raise somewhere in the range of £745m to £1.4bn (undiscounted) of funding for RSA sites by 2025, based on Environment Agency estimates of requirements, then the Net Present Values in £m of the various decision scenarios applicable under Price Review funding are illustrated in Table 1:

**Table 1: illustrative figures**

	High Estimate	Low Estimate	Mid-point estimate	Equivalent Annual Cost*
<b>Base case</b>	1176.43	632.15	904.29	80.10
<b>Spread</b>	1166.12	626.61	896.37	79.40

<b>amount evenly over PR process</b>				
<b>Include sites at start of PR process</b>	1248.52	670.89	959.71	85.01
<b>Include sites at end of PR process.</b>	1097.86	589.94	843.90	74.75

Note: \* - Calculated on the same basis as Equivalent Annual Net Cost to Business for One In, Two Out purposes – but see “One In, Two Out” section later in this IA. [end redaction]

It is assumed here that the funding requirements for this option are fundamentally the same as for Option 0. However, water companies have a variety of choices which could deliver cost savings depending on the profile of funding they choose. These include investment decisions on how to use money which would have been paid under EIUC, or streamlining their activities to take advantage of modifications which solve both RSA and general supply management challenges. (Note however that the above estimates only take account of timing changes in Present Value terms, not expected efficiencies arising from, for example, economies of scale or scope). As an example, under Option 1, water companies could be able to save money (in Present Value terms) by implementing their sites at the end of the PR process. For the purposes of analysis presented in the summary sheets of this Impact Assessment, we present the “base case” figures above, i.e. assuming no savings as a result of different cost profiling (nor any savings arising from wider efficiencies).

As mentioned above, there are also some EIUC payments which are paid by water companies who do not benefit from compensation- the removal of this could provide a cost saving [Must be redacted before publication – this is commercially sensitive] of around £2.5m in 2012/13, or with a 10% year on year increase around £53m by 2027 [end redaction] to those companies.

### **Monetised benefits**

Benefits arise under Option 1 in terms of avoided requirements for compensation to Water Companies under the existing EIUC regime, since the requirement to compensate has been revoked. It is assumed that the avoided costs are equivalent to the costs which would be raised through the Price Review process. This is conservative to the extent that costs under a PR funding route may be lower where efficiencies can be gained (these have not been estimated). Implicit in the assumption, however, is that government would have relaxed the current capping arrangements on EIUC collection, in the absence of alternative funding arrangements.

## Non-monetised costs and benefits of Option 1

### Costs

#### *To water companies and customers*

- PR decisions have to be taken in the round, which means that water companies do not have a cast iron guarantee that 100% of their costs will be allowed for in price limits for each and every scheme that is included in their business plan. However, Ofwat have a statutory duty to ensure a company can finance its activities, so must ensure companies are able to fund any schemes required to replace supply lost because of a licence modification or revocation.
- Changes to the timing of action to tackle unsustainable abstraction could reduce or increase costs in the short-term. However over the long-run the costs would be, at a maximum, the same as under the baseline, with the potential for lower costs due to more efficient solutions. Total (direct and indirect) costs to business (i.e. water companies) would in any case likely be cost neutral as the costs will be recovered from customers, subject to regulatory decisions.
- Including schemes to address unsustainable abstraction in individual water company business plans will mean some redistribution of the costs. For some companies, their customers will no longer pay for changes needed to licences held by other water companies within the same region. For other companies, the removal of cross-subsidisation may mean that their customers need to pay more in the short term if they have a number of unsustainable abstractions that require licence changes. The impact on water companies remains cost-neutral.

#### *To Government*

- There are no identified non-monetised costs to Government under this option.

### Benefits

#### *To water companies and consumers*

- Under this option, water companies will no longer pay EIUC. Instead, water companies will be required to plan for solutions to unsustainable abstraction as part of the PR process. This would enable water companies to plan solutions alongside mainstream supply and demand activities in an integrated way as part of their standard business planning processes, rather than looking at restoring sustainable abstraction sites in a separate, reactive way. This should lead to efficiency savings.
- Multiple sites can be addressed in parallel and in combination with other water company water resources sites from the Water Resource Management Plans (WRMPs), to maximise the delivery of benefits.
- This option provides for greater certainty on planning and funding, and means action can be scoped and costed more quickly.
- This is a more proactive approach than the current approach, which requires water companies to develop solutions reactively when sufficient EIUC money becomes available to pay compensation for the costs of those solutions. This will streamline the process for water companies and has the potential for small administrative cost savings as a result of no longer having to pay the EIUC.

- This option will ensure that water companies and their customers only pay for sites which address their own unsustainable abstraction, removing the potential for cross-subsidisation between companies within regions;
- This option will remove delays caused by the current need to collect sufficient EIUC to cover compensation before the Environment Agency serves notice and issues licence changes (though in theory at least it would be possible for government to change current expenditure rules if EIUC were to be maintained in the absence of other options).
- Public and NGO challenge is also likely to be reduced, lowering burden on water companies and government in responding to challenges about pace of delivery of environmental solutions.

#### *To Government and the public*

- This option ensures a mechanism is in place to fund licence changes needed to address unsustainable abstraction into the future, avoiding the costs associated with infraction proceedings under WFD, and avoiding further environmental degradation.
- There will be no costs associated with consultation on annual EIUC charges and levy and collection of charges for water companies, and no HMT costs for administration of collected tax.
- Cost scrutiny will be provided through the existing PR mechanism, which means there is no additional administrative burden.
- This option also allows for companies to take a more integrated catchment approach to delivering solutions, and means that sites with different environmental drivers such as SSSI, Biodiversity 2020 and local sites, along with solutions required by Water Framework Directive and Habitats Directive, could be implemented at the same time, in an integrated way, subject to a favourable cost-benefit appraisal.

#### **One-in-Two-Out (OITO)**

On the face of it, the shift of funding for restoring sustainable abstraction from a tax measure (EIUC) to an economic regulatory measure (via the Price Review) results in a regulatory “IN” equivalent to the amount of funding raised through the latter route (about £80m in Equivalent Annual terms – see Table 1, base case estimates).

However, we received agreement that this measure should be treated as being out of scope of OITO given that it does not impose net costs on business *in practice*. This is because there is no actual net difference in costs to water companies and customers for any particular changes as the difference is only in the route for funding, not the amount being funded. If the change was recorded as an IN, it would be a perverse outcome for OITO to record a significant increase in business burdens as a result of a technical government internal rule around the classification of the predecessor measure as a tax which for the purposes of the Government’s OITO policy are out of scope.

We have detailed above that any changes are simply to the funding route, rather than the overall amount, so the net cost of prolonging the current system (albeit with some technical changes to spending rules to allow needs to be met) and Option 1 would be broadly equivalent and hence net each other off.

#### **Small and Micro Business Assessment (SMBA)**

This policy only affects water companies. There is currently only one water company that is classed as an SMB and currently this company has no sites identified under the RSA programme. Hence there would be no initial impact on any SMBs.

[Redactable] The Cholderton and District Water Company is currently the only water company that would be considered to be a SMB. In the past they have paid EIUC of £245.28 per year since 2008 and have not received any compensation in return. There were originally RSA sites identified in the Cholderton water area but these have been closed as no action required. No further RSA schemes have been identified in this company's area through to 2025.[end redaction]

Should any water companies which are SMBs become affected by this policy, Defra will provide tailored advice and support.

## **Wider impacts**

Economic / Financial

### **Major impacts**

- Impacts on businesses will be from the changes to the funding mechanism for the RSA solutions. Businesses will no longer pay the EIUC charges, which reduces some impact, and will be able to negotiate for funding through the Price Review Process, but will lose the guaranteed right to compensation under Section 61.
- At present, some businesses benefit while others bear costs; this measure will end this differential impact.

### **Minor impacts**

- There may be a minor positive impact on innovation as water companies will be able to plan and research interventions for unsustainable abstraction with a greater degree of certainty and more flexibility on how they go about the intervention.

### **No impacts expected**

- There is no expected impact on competition or the number of suppliers

Social

### **Minor impacts**

- There will be positive impacts on rural areas, as RSA sites are generally in rural areas, and will be funded more effectively under the preferred option.
- There may be positive local impacts on wellbeing and quality of life in areas with RSA sites, due to a more efficient and timely improvement in environmental conditions.

### **No impacts expected**

- There are no expected impacts on safety at work, risk of accidents, crime and crime prevention, levels of skills and education, human rights or Equality Act responsibilities.

Environmental

### **Major impacts**

- There will be positive impacts on the environment in and around RSA sites, due to the efficiency and potential for timely delivery which the preferred proposal offers.

### **No impacts expected**

- There are no impacts expected on greenhouse gases, financial costs or health impacts on waste management, air quality or the landscape.



- The preferred proposal is designed to help mitigate in part the effects of climate change, and will not be vulnerable to it.

### **Rationale and evidence that justify the level of analysis used in the IA (proportionality approach);**

We have provided a range of estimates from the data that the Environment Agency has on the amount that is required to fund the 180 RSA sites expected between 2015 and 2025. These have been used to illustrate possible funding decisions that water companies could make.

### **Risks and assumptions**

The figures are based on the Environment Agency's estimates for potential water company compensation claims for the Restoring Sustainable Abstraction Programme.

The current methodology for estimating compensation for the Restoring Sustainable abstraction programme is derived from applying a "compensation factor" to a "sustainability change" for each licence change.

The basic calculation is as follows:

$$\text{Sustainability change (MI/annum)} \times \text{compensation factor (£/MI)}$$

The sustainability change is a reduction in licence quantity for each licence. The Environment Agency also allows for physical solutions eg fish screens (small/large site size) to be accounted for with a monetary value.

In the absence of better information a default of 28% sustainability reduction is used. This is based on recent actual sustainability changes. If a more accurate estimate of the sustainability change becomes available, this value will be applied and will inform future individual and total compensation estimates.

The compensation factor of the cost of water (£/MI) uses predefined information based on the purpose the water is used for and will differ between sectors.

### **Summary and preferred option with description of implementation plan.**

The preferred option is option 1- Price Review. This change would mean that all licence changes to address unsustainable abstraction would be funded in the same way through the Price Review. There would be no net difference in costs to water companies and customers for any particular changes as the difference is only in the route for funding, not the amount being funded.

To implement this, we will incorporate a clause into the forthcoming Water Act which states: "In section 61 of the Water Resources Act 1991 (compensation where license modified on direction of the Secretary of State or Welsh Ministers), in subsection (1), after "Where a Licence" there is inserted "held by a person other than a water undertaker or sewerage undertaker"."

This will remove the right of compensation for water and sewerage undertakers.