Title: Private Water Storac	e and Supply		Impact Assessment (IA)			
IA No: Defra 1506	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Date: 08/05/2013			
Lead department or	agency:	Stage: Final Source of intervention: Domestic				
Defra						
Other departments or agencies:			Type of measure: Primary legislation			
			Contact for enquiries: David Jones david.s.jones@defra.gsi.gov.uk			
Summary: Inter	rvention and	RPC Opinion: GREEN				
Cost of Preferred (or more likely) Option						
Total Net Present Business Net Net cost to husiness per			In scope of One-In Measure qualifies as			

Value Present Value year (EANCB on 2009 prices) One-Out? £-8m £-8m £0 Yes Zero Net Cost

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

Owners of private water storage do not currently sell water to water companies. While private transactions are technically possible, there are regulatory barriers. Making this transaction easier may encourage the development of water storage capacity by providing a market mechanism for the sale of stored water. This could help increase the number and capacity of water storage facilities, which can increase the resilience of farmers and landowners to extremes of weather. Government intervention to create an enabling framework is necessary as the market is subject to an economic regulation regime which currently does not encourage supply from private water storage

What are the policy objectives and the intended effects?

The overall objective is that more private water storage facilities are built where this makes economic sense, increasing resilience of both storage owners and the public water supply to drought and reducing pressure on other sources. This measure is designed to open up a market which is currently inaccessible, in practice, to private water storage owners. This may then play a part in increasing the total volume of private water storage facilities, by providing a market mechanism which could make water storage and sale more viable. This could be either by encouraging new construction or adding in additional saleable capacity to existing or planned private water storage facilities.

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

Option 0: Do nothing. There would be no mechanism for supporting market development. At present, if a private water storage owner wished to sell their water, they could: A) Privately negotiate and contract with a water company or B) Become licensees under the reformed Water Supply and Sewerage Licensing (WSSL), which involves a significant administrative burden. Option 1: This option would introduce an enabling power into the Water Bill to allow us to introduce secondary regulations to extend the definition of "supplier" in the bulk supply regime, to include private water storage owners and people with water storage capacity. A supplier under the bulk supply would have a 'right to negotiate' with water companies, and access to market codes and recourse in case of disputes. Non-regulatory alternatives: There are ways to incentivise the development of storage via access to funding and planning reform, however these do not provide a market mechanism or the protection to potential suppliers of a regulated market.

Will the policy be reviewed? It will/will not be reviewed. If applicable, set review date: Month/Year						
Does implementation go beyond minimum EU requirements? Yes						
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes	< 20 Yes	Small Yes	Medium Yes	Large Yes	
What is the CO_2 equivalent change in greenhouse gas emissi (Million tonnes CO_2 equivalent)	Traded:	Non-t	raded:			

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.

Richard Benyon
Date: <u>1 July 2013</u>

Summary: Analysis & Evidence

Description: Managed market: private water storage owners have right to negotiate with water companies **FULL ECONOMIC ASSESSMENT**

Price Base PV Base		se	e Time Period		Net Benefit (Present Value (PV)) (£m)				
Year 2013	Year 2	ear 2013 Years 40 Low: -7.9 High: see text		gh: see text	Best Estimate: -7.9				
COSTS (£r	n)		Total Tra	Insition Average Annual Total Cost					
	,		(Constant Price)	Years	(excl. Transitio	n) (Constant Price)		(Present Value)	
Low			0		0.1			2.4	
High		-	0		0.6			11.4	
Best Estimat	е		0) 0.4 7.9					
Water companies: Administrative costs of negotiation, between £0.15m and £0.72m when in place (or £0.1m to £0.6m when averaged over the whole appraisal period). This includes staff costs for negotiating with 5 to 10% of private storage owners in a year, with high and low staff cost estimates. Suppliers: there is no compulsion to take part in this opportunity and any costs incurred in taking advantage of available opportunities are second order.									
Other key non-monetised costs by 'main affected groups' Minor administrative costs to Defra, EA and Ofwat, including policy development and development of market codes. Minor running costs to Ofwat and EA as part of normal operations.									
BENEFITS	(£m)		Total Tra (Constant Price)	nsition Years	(excl. Transitio	Average Annual n) (Constant Price)		Total Benefit (Present Value)	
Low									
High									
Best Estimat	е							See text	
Description and scale of key monetised benefits by 'main affected groups' This is a competition measure designed to open market access. To give a sense of the scale of benefit, if the amount of extra water available in a shortage year was 10% of non-water company storage (i.e. between 720M and 825M m3, for 1 year in 10 drought events, with water valued at £1 per m3, provides a benefit of about £7.5m per year, present value £119m and NPV £110m. Other key non-monetised benefits by 'main affected groups' Water companies: access to a variety of sources for water. Suppliers: Access to a market for the sale of water; a 'right to negotiate' with water companies and use of market codes.									
Key assumptions/sensitivities/risks Discount rate (%)									
That there are between 0 and 10% of current storage facilities that may be willing to negotiate with water companies, as most are built for private use and building new storage will take time. That we will design market codes which limit vexatious applications. That successful take-up will be limited to around 10% of storage, as it is situationally specific, requiring economical water and access to a water companies network in some way.									
BUSINESS ASSESSMENT (Option 1)									
Direct impac Costs: 0.3	t on bus	iness Bene	(Equivalent Ann efits: 0	ual) £m:	0	In scope of OIC Yes	00?	Measure qualifies as Zero net cost	

Evidence Base

Problem under consideration

Owners of non-water company water storage (referred to in this document as 'private water storage') do not currently sell water to water companies. They can trade water with other water users, such as farmers, and can, under the Water Supply Licensing (WSL) regime make a supply to a large user of water using a water company's network. However, this is a very small market with a number of regulatory barriers to making a supply, in particular that under the WSL they would have to become a licensed supplier and identify a non-water company customer themselves.

There are provisions in the Water Bill to make these supplies to non-household customers easier but there is no regulation to adequately support transactions directly to water companies with the aim of supplying the wider household market. While water companies do have to consider all possible supplies as part of their Water Resource Management Planning process (the 5 yearly reviews of their 25 year plans) there is no evidence of such transactions, and water companies are not required to negotiate with non-water company suppliers.

Making the market more explicit and providing market codes around these transactions may encourage the development of more water storage capacity by providing a market mechanism for the sale of stored water. This could help increase the number and capacity of private water storage facilities, which can increase the resilience of the overall water network, as well as increasing the resilience of farmers and landowners to drought, where new storage facilities are incentivised. Government intervention is necessary because the market is subject to an economic regulation regime which does not encourage supply from private water storage

This measure can be introduced by a small change to the existing Bulk Supply Regime, which currently only allows for supplies between incumbent water companies.

Why this is a competition measure.

The way the water sector has been regulated, as a privatised utility with strong natural monopolistic tendencies, has to date effectively excluded private water storage suppliers from the market for water resources. Action to enable greater competition in supplies will help markets to function effectively and play a part in addressing future water resource challenges.

This measure is designed to increase competition by directly increasing the number and range of sustainable suppliers who can access the market, by opening the regulated bulk supply regime market to non-water company suppliers. This also acts to strengthen the ability of private water storage suppliers to compete by opening the regulated market, providing an enabling framework, and reducing barriers by ensuring a right to negotiate. This should provide a net increase in competition, as befits a policy whose main direct aim is to increase competition in a regulated market. There is likely to be a net social benefit from this policy by the increase in water storage and positive impacts on resilience in the water system.

Rationale for intervention

Changing weather and population is likely to cause issues with water availability in England and Wales. The problem of current and potential future water shortages is national, but is most acute in water stressed areas in the south. Increasing the number and capacity of private water storage facilities can increase resilience to extremes of weather. Winter water, or water at high flows, is cheap and plentiful- storing it for the times when, in summer or at low flows, it is scarce and expensive makes sense. Localised sources of water could also be more efficient in dealing with pinch points in supply than transporting water over long distances.

A market for the sale of water would enhance the potential profitability of investment in water storage and so increase the likelihood that new sources will be developed, benefiting developers and reducing pressure on water resources more generally.

Policy objective

The overall objective is that more private water storage facilities are built where this makes economic sense, increasing resilience of both storage owners and the public water supply to drought and reducing pressure on other sources.

This measure is designed to open up a market which is currently inaccessible, in practice, to private water storage owners. This may then play a part in increasing the total volume of private water storage facilities, by providing a market mechanism which could make water storage and sale more viable. This could be either by encouraging new construction or adding in additional saleable capacity to existing or planned private water storage facilities.

Description of options considered (including do nothing)

Option 0. Do nothing. There would be no mechanism for supporting market development. At present, if a private water storage owner wished to sell their water, they could:

A) Privately negotiate and contract with a water company. There is no evidence that private contracts have occurred between water companies and private water storage owners, and there is no requirement on water companies to negotiate with private water storage owners.

or

B) Become licensees under the reformed Water Supply and Sewerage Licensing (WSSL) regime that will replace the current Water Supply Licensing (WSL) regime, which involves administrative burden associated with applying for a licence, and requires private water storage owners to identify non-household customers or other licensees to sell the water directly to, using a water company's network.

The Water Bill already includes a revision to the WSL that will allow any person with their own water resources to enter the market to supply non-household customers. Private water storage owners could enter this market alongside other suppliers by applying for a water supply licence with a wholesale authorisation. This is a more limited market than that proposed in the preferred option as it relies on identifying a non-household customer that wants to purchase the water and entering into an arrangement with a holder of a licence with a retail authorisation. Apart from the additional burden and the prescriptive nature of the WSSL, this reform is also unlikely to come into place until 2020-2025.

Development of new storage facilities would still be on the basis of the private needs of the owner (rather than building additional capacity).

Option 1 – Managed market: private water storage owners have right to negotiate with water companies

This option would introduce an enabling power into the Water Bill to allow us to introduce secondary regulations to extend the definition of "supplier" in the bulk supply regime, to include private water storage owners and people with water storage capacity.

A supplier under the Bulk Supply Regime would be able to sell water directly to water companies, and have a 'right to negotiate' with the water company which ensures that they have an opportunity to discuss their water with the water company. This is a small modification of the Bulk Supply Regime, to allow for increased competition.

We would also include the development of an associated market code to govern negotiations and potential template terms and conditions. This would provide potential suppliers with an enhanced ability to negotiate with incumbent water companies if they have water to sell, and enable the supplier to ask Ofwat to intervene if the parties could not come to a suitable agreement. It would not, however, compel water companies to buy the water if it was uneconomic or otherwise risky. There are potential issues, including costs, around this code, therefore the scope and nature of the market code will be developed and assessed in detail at the secondary legislation stage.

We propose to include this in the Water Bill as an enabling power, and then do more detailed policy development, including a further impact assessment on the areas identified below where there is flexibility in scope.

This measure may need to be supported by wider activities to provide support and reduce barriers. During consultation, stakeholders identified that enabling activities could include alignment with water reform programmes and the various existing licensing regimes, and work on how to build this in with the Water Resource Management Planning process. These areas will be explored during the detailed policy development phase.

Overall, stakeholders saw this as a small change which will open the potential for competition and innovative approaches on a local level.

There are several areas where the scope of this measure is flexible:

- Size: there are a wide range of reservoir sizes in the UK, from very small reservoirs of • under 10.000m³ (roughly the size of four Olympic swimming pools) to regulated reservoirs of over 25,000. The over 25,000 range varies widely- the Register of Reservoirs has reservoirs ranging from the 25,000 floor to Kielder Water in Northumbria (owned by a water company), which is 199,000,000 m³ (80,000 Olympic swimming) pools). Of 98 reservoirs identified as part of farming businesses in the Register¹, the average size was 140,000 m3, with reservoirs ranging from 21,000 m³ to 1.36m m³. Larger reservoirs are generally owned by water companies, as well as the power sector, Environment Agency, mineral extraction and manufacturing. There are also other potential types of water storage, such as aguifer storage (see below). Constraining this measure to smaller private water storage will have an impact on the type of businesses involved and the extent of competition in water storage. Larger reservoirs are subject to proportionately greater levels of regulation through the current regime on safety and planning permission, but could offer economies of scale and therefore more competitive water costs; likewise we will need to understand the requirements on other types of water storage. Stakeholders from the mineral extraction sector in particular saw a wide range of opportunities in this measure, and their participation could be constrained by size limits. Overall, while this measure is designed to open competition, further work is needed on understanding the impacts which constraining or not constraining the size of water storage may have.
- **Degree to which water is stored for sale.** The initial aim of this policy is to increase resilience by encouraging storage to be built with enough water for private use, and

¹ Reservoirs where the undertaker had 'Farm' as part of their name.

some additional water available for sale. There is also an option to open this measure to water storage which is designed purely for selling water, which would significantly increase the scope and impact of this policy. There is a risk that this would lead to "stranded assets" (reservoirs, storage facilities and live abstraction licenses, which have been superseded by more competitive facilities downstream, wasting significant investment). During consultation, stakeholders from the water sector were particularly interested in third party financing of storage, and opportunities around shared storage facilities with multiple owners of the stored water. The scope and impact of these opportunities would need to be considered.

- **Types of water storage.** This measure is at present aimed at surface storage of water in reservoirs. Aquifer storage and recovery is not currently included because it raises challenges around water contamination and cost. This option may be worth examining further in future. Exploration of other types of private water storage (such as artificial channels and canals, excluding those fed by direct river abstractions) may also be worthwhile.
- Implementation date This measure could be implemented soon after the publication of the Water Act, or could be implemented as part of the wider abstraction and upstream reforms. These two reform programmes will be coming into effect around 2019 onwards, and while this would be a delay in implementation, there would be benefits (such as ensuring that areas which could be barriers, such as abstraction licenses, could be reformed in a supportive way) in building this measure into the wider programme of work. This could also tie in with the Water Resource Management Planning process, where water companies consider their water needs and potential sources. The current round of planning is being prepared now, and will be finalized in April 2015, which may be too short a timescale, but will be followed by another 5 year cycle ending in 2020. Stakeholders saw implementation integrated with the wider reforms to be the most promising way of delivering this policy, and reducing barriers associated with licensing regimes.

Other options considered.

Other non regulatory approaches have been considered, however they do not provide the protection of a regulated market when selling to water companies. We ruled out delivering this by enabling the creation of new type of upstream authorisation in the WSSL regime. This was thought to be an unattractive route to suppliers because they would need to obtain a licence (see the Do Nothing option). This would allow them to sell water to non-household customers via water companies own networks. However, the WSSL is specifically designed to provide services to non-household customers, is based on common carriage and is more restrictive around connecting supplies to the network.

The preferred option provides scope to produce a more flexible regime, using the Bulk Supply Regime which has an emphasis on trading of water and is less prescriptive than the WSSL. While the WSSL reform could have been used for this measure, it would have brought higher burdens and regulatory complexity to suppliers than the Bulk Supply regime, and would not be implemented until 2020-25. The proposed measure would also bring the private water storage owner closer to a level playing field with neighbouring water companies that may also wish to sell water to the incumbent for the wider household market.

Option 1 is the preferred option.

Monetised and non-monetised costs and benefits of each option (including administrative burden)

Option 0

Costs

There will be no additional costs to any group from this option.

Benefits

There will be no additional benefits to any group from this option

Option 1

Costs

To water companies

Under the regulatory approach, Water Companies will be required by law to negotiate with owners of private water storage for sale of water. While this may at first seem onerous, we propose guidelines which will make clear exactly what is required under the right to negotiate and limit the potential for vexatious applications. Market codes could include template contracts to reduce negotiation costs for both parties. There are nine water and sewerage service providers and ten water suppliers in England who will be affected by this regulation. We estimate that the costs to the water companies from this measure will be between **£0.15m and £0.72m per year**.

Direct cost to business calculations

Costs to water companies from the right to negotiate will be marginal but on-going. We have based our calculations on 5 hours to perform the part of the negotiation required by this regulation- companies will have to hear an initial approach, consider this against basic criteria ('is this required or desirable under their Water Resource Management Plans (WRMPs)?', for example) and respond. The other costs which could be incurred in the process of agreeing these opportunities - negotiation, site visits and water tests, interconnections - are part of the business opportunity, are non-obligatory and will only be incurred once a company has assessed that the benefits of action will exceed the costs.

The calculations are based on staff costs and overheads for a team within the water companies who will deal with the required negotiation. On the low cost estimate, this is worked out as a team of 2 people or parts of FTEs with limited senior and legal support; on the high cost estimate this is based on a team of 4 people or parts of FTEs with significant senior and legal support. Costs are drawn from median annual gross salaries from the ONS ASHE dataset, with a 24% uplift for employer national insurance and pension contributions², and an additional allowance for overheads.

The low cost estimate has been worked out as around \pounds 55 per hour of team operations for negotiation, and the high cost as around \pounds 132 per hour, both as an illustrative cost.

² 11% of salary for employers' NIC (applying the standard rate of 13.8% to income over the exempt threshold for an employee earning £35,000 a year) and 13% for employers' contribution to pensions (estimated roughly from ONS's "SIC2007 Table P10.1 Employer Contributions - For all employee jobs: United Kingdom, 2012")

At present, there are around 2,100 water storage facilities of over 25,000 m3 in England and Wales, and around 5-7,000 between 10,000 to 25,000 m3, with an unknown number below 10,000 m3. We have used 9100 as a working number of storage facilities. We estimate that around 10% of these 9100 private water storage owners may attempt to negotiate with the water companies per year at a high range, and around 5% at the low range. This is based on the assumptions that:

- a) most water storage is currently designed with capacity for private use only, and
- b) that water storage takes around 2 years (based on draft research from Cranfield University) to be planned, funded and built, which will provide a drag on the number of applications per year.
- c) that the market codes will prohibit repeated applications unless the situation has changed.

There will be some requirement for dispute resolution when the parties are unable to come to an agreement. This would involve Ofwat deciding the terms which the parties should accept (the reservoir owner can however walk away if it does not like the outcome but the water company will be bound by the terms). Ofwat has to consult the Environment Agency in England or Natural Resources Wales to decide whether the arrangement will be beneficial in terms of water resource management. We have assumed the average staff time required for each appeal would be 10 hours.

We assume that there will be minimal familiarisation costs, as there will be guidance issued and water companies have extensive experience with regulated activities.

Overall, these assumptions give us the following range of costs, including appeals, to water companies per year:

	Low staff cost estimate	High staff cost estimate
5% of reservoirs	£0.15m	£0.36m
negotiating in a year		
10% of reservoirs	£0.3m	£0.72m
negotiating in a year		

These totals are calculated from the assumptions given above. For example, $\pounds 0.15m$ is 5% of 9100 private reservoirs at 5 hours per negotiation multiplied by the low staff cost $\pounds 55$ /hour plus one in ten of these (0.5% of 9100) going to appeal at 10 hours per appeal at $\pounds 55$ /hour. Similarly, $\pounds 0.72m$ is 10% of 9100 times 5 hours at the high $\pounds 132$ plus 1% of 9100 times 10 hours at $\pounds 132$.

These estimates are ceilings- we do not expect that the number of storage owners approaching water companies will in fact approach 10%.

The present values and EANCB shown in the Summary sheet have been derived using a 40 year appraisal period from 2013, in line with other water industry measures, but assuming that costs and benefits begin in 2020, as part of an implementation of this measure aligned with Abstraction Reform.

To suppliers

Suppliers have the option of approaching water companies to negotiate, should they see an opportunity to sell currently stored water, or create a storage facility of water for sale. Once the supplier has successfully concluded their negotiation with the water company and a supply contract has been agreed, they will then incur additional costs. These can include:

- building more capacity into storage,
- planning and construction costs for new storage,
- costs for connecting to the water company's network- if a storage facility is far away from either a river or the water company network, there could be significant costs in connection,
- apply for, or bring into use, abstraction licenses to add water to their storage,
- modify existing discharge permits to be able to transfer water via rivers

These costs are second round (part of the business opportunity) and do not directly arise from this regulation. They will only be incurred where a supplier makes a rational judgement that they will be exceeded by returns. Therefore we do not consider that suppliers will incur any direct costs from this measure

To Government

Delivery costs for the regulatory approach are likely to be minimal to the public purse. Depending on the decisions made in the detailed policy development stage, there may be some minor additional costs such as guidance and best practice development, policy alignment etc.

To delivery bodies

Once the Water Bill comes into force, Ofwat will be regulating retail licencees, self lay organisations and insets all of which can be small-scale operations. The same mechanisms as we are suggesting here will be used in many of these cases – codes and charging rules. This particular reform will have a negligible impact on Ofwat's costs.

The Environment Agency would need to be involved in any transfer of water via a watercourse, to ensure it could be successful and also to protect the environment. For example, they would need to ensure that any water discharged from a reservoir for subsequent re-abstraction was not used by intervening abstractors, and issue the relevant discharge consents. These activities are part of the Agency's normal operation and additional cost would be minimal.

Benefits

To Water Companies and consumers

This measure will allow Water Companies to diversify their supply base and explore new avenues for water supplies. The volume of water available is challenging to quantify. The Public Register of Reservoirs lists 2142 reservoirs over 25,000m³- of these, there are 740 reservoirs identifiably belonging to water companies with a total volume of 2.83 billion m³; the remaining 1402 reservoirs have between them 650 million m³ - around 27% of the water company capacity. While there are no solid figures for the c.7000 reservoirs between 10,000 and 24,999 m³, this could be between 70 million and 175 million m³, bringing the total up to between 30 and 35% of water company storage, assuming that all the under 25,000 m³ reservoirs are private storage.

Depending on market development, it may be that anything from 0 to 10% of this could be available for sale, potentially growing as the opportunity develops. There are significant caveats- this water is likely to be currently used for agricultural or other private use, and therefore does not represent the likely amount of water available for sale; reservoirs are currently clustered around the south east and south of Wales in areas of heavy irrigation, making this availability further constrained by location; water companies will only need to consider water which fits with their current areas of scarcity.

At this stage it is not possible to assess the scale of uptake of the opportunities created by this measure or to provide a sound estimate of the benefits. However, we can give some sense of the potential scale of benefit by making some purely illustrative assumptions. Water companies might need to draw on private supplies in a year of shortage, perhaps arising one year in ten. Assume that the amount of extra water available to them from private supplies in a shortage year was 10% of the non-water company storage capacity (i.e. between 720M and 825M m³, the combined sums of the over 25,000 and under 25,000 m³ reservoirs at low and high estimates shown above). A typical value of water supplied to households would be about £1 per m³. On these illustrative assumptions the potential benefit would be about £7.5m per year giving a net present value for the measure of £110m over the appraisal period. The benefits would accrue partly to water customers through use of additional metered supplies, partly to the storage owners and partly to water companies. We emphasise that this calculation is entirely speculative at this stage; the NPV and EANCB shown in the Summary assume that there will be zero benefits, which is the most pessimistic outlook.

This is consistent with the nature of the measure- small scale and designed to allow opportunities to be developed only where they are feasible and economical.

To suppliers

This policy is likely to provide a beneficial impact to businesses including famers, and to landowners. It will provide a market mechanism for the sale of water into water companies, helping private storage owners to sell their water more easily. Some of the benefits identified by stakeholders range from the ability to sell small amounts of water to offset abstraction costs to opportunities for investment offered by larger private water storage facilities.

Rationale and evidence that justify the level of analysis used in the IA

This is a small- scale enabling power, which does not require significant analysis. There will be a second, more detailed impact assessment and consultation when the secondary legislation to bring this measure into force is developed.

Risks and assumptions

Key risks and assumptions are:

- That there are between 0 and 10% of current storage facilities that may be willing to negotiate with water companies, based on the assumptions that
 - o most water storage is currently designed with capacity for private use only, and
 - That water storage takes around 2 years (based on draft research from Cranfield University) to be planned, funded and built, which will provide a drag on the number of applications and successful agreements per year
 - That the market codes will prohibit repeated applications unless the situation has changed, and
- That the market will stabilise with around 10% of non-water company water being sold to water companies when needed.

One in Two Out

This measure has been classified as an "IN" with a net Zero cost to business. The RTA confirms "this measure is designed to increase competition by directly increasing the number and range of sustainable providers who can access the markets by opening the regulated bulk supply regime to non-water company suppliers". As such the RTA says the proposal is a regulatory

measure that imposes a net cost to business but as the costs are primarily intended to promote competition, the measure should be considered an "IN" with a zero net cost to business for the purposes of OITO.

Wider impacts

Economic / Financial

Major impact

- This measure will have a positive impact on markets and particularly on small and start up businesses, allowing them regulated access to the water market.
- Water Companies will bear costs from this measure (estimated to be under £1m per year), while small, generally rural, businesses including farmers, landowners, golf courses and quarries, are likely to benefit.
- This measure has a positive impact on competition encouraging new suppliers into a previously limited market.

Minor impact

- There will be no direct costs to micro businesses via this proposal, and costs under one-in one-out will be offset during the development of secondary legislation.
- This measure may create some positive impact in the wide economy by creating some jobs in the construction of reservoirs, and in increasing rural competitiveness and farming diversification.

Social

Major impact

- The costs and benefits are likely to be greater in rural areas, where reservoirs are likely to be built. An increase in private storage may have positive effects on rural diversification and farming competition.

Minor impact

- There could be a minor impact on safety at work or risk of accidents in the community from safety risks associated with the increased construction and ongoing use of private water storage.

Environmental

Major impact

- The proposals are designed to help adapt to climate change by providing greater water resilience to landowners.
- This proposal could have a positive effect on levels of abstraction of water, as reservoirs provide farmers and other landowners with a way to abstract water during periods of high water flow, and use it during periods of low flow to prevent environmental damage.

Minor impact

- These proposals could cause a minor change to the appearance of the landscape or townscape as they involve the building of private water storage facilities.

Summary and preferred option with description of implementation plan.

The preferred option is 1 Managed market: private water storage owners have right to negotiate with water companies. This provides the best combination of enabling market based solutions with market codes and supporting non-regulatory activities. Implementation of this measure will be finalised as part of the development of the secondary legislation, including a further impact assessment and consultation.