

Title: Water companies – statutory consultees for shale oil and gas applications IA No: RPC15-FT-CLG-2319 Lead department or agency: Department for Communities and Local Government Other departments or agencies:	Impact Assessment (IA)
	Date: 16/03/2015
	Stage: Final (validation)
	Source of intervention: Domestic
	Type of measure: Secondary legislation
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Summary: Intervention and Options	RPC Opinion: GREEN
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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
–£0.003m	–£0.003m	£0.0003m	Yes	IN

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

The Government believes that shale oil and gas has the potential to provide the UK with greater energy security, growth and jobs. A robust regulatory framework is in place to ensure that exploration for shale gas and oil is safe, which includes the planning system dealing with planning applications for shale oil and gas in an efficient and effective manner.

Water undertakers (hereafter “companies”) are required to be consulted on the preparation of Local Plans (which set out mineral planning authorities strategies for mineral related development in their areas) but are not currently statutory consultees on individual planning applications. The water industry wish to be given statutory consultee status to ensure they can advise planning authorities on water quality, supply and waste water issues raised by specific shale oil and gas planning applications. This in turn will enable water companies to more effectively undertake their operational business and regulatory duties.

Government has consulted (December 2014 to January 2015) on whether to make water companies statutory consultees for this purpose, and has received overwhelming support. In parallel, the Government amended the Infrastructure Bill at Report stage to strengthen the role of water companies in the shale gas regulatory framework. Subsequently, section 50 of the Infrastructure Act 2015 places a requirement upon planning authorities to demonstrate that water companies have been consulted before the granting of planning permission. This is one of several conditions that have to be met before the Department of Energy & Climate Change can issue a consent to allow certain high volume hydraulic fracturing to take place.

What are the policy objectives and the intended effects?

Water quality and supply issues are important considerations in respect to the potential growth of the shale oil and gas sector. The key objective of this intervention – by making water companies statutory consultees – is to involve water companies in the planning application process and help ensure their views are taken into account. It will further strengthen the shale oil and gas regulatory framework, enhancing the confidence of the regulators and the general public by demonstrating that any impacts of shale development on water will be taken into account by the planning application process. The intervention will give effect to the requirement in section 50 of the Infrastructure Act relating to water companies being consulted prior to any planning application being considered (as a condition of Department of Energy & Climate Change consent to hydraulically fracture).

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

(1) Do nothing. This would leave it optional as to whether planning authorities choose to consult water companies, with the possibility that any potential water issues are not appropriately considered. This would not deliver the Government’s policy objectives or support the requirements of section 50 of the Infrastructure Act, so it has been discounted without further consideration.

(2) Develop non-statutory options to ensure enhanced water company involvement in the consideration of shale oil and gas applications. These would not meet the needs of water companies in terms of enabling them to discharge their statutory duties in respect to water supply, water quality and waste water.

(3) Amend existing regulations to make water companies statutory consultees in respect to shale oil and gas applications (**preferred option**). This would give effect to section 50 of the Infrastructure Act, which requires that mineral planning authorities consult water companies on certain high volume onshore hydraulic fracturing.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** April 2017

Does implementation go beyond minimum EU requirements?	N/A
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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 emissions? (Million tonnes CO ₂ equivalent)			Traded: n/a	Non-traded: n/a	

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 Minister:

Brandon Lewis MP **Date** 10 March 2015

Summary: Analysis & Evidence

Policy Option 3

Description: Amend existing regulations to make water companies statutory consultees in respect to shale oil and gas applications

FULL ECONOMIC ASSESSMENT

Price Base Year 2015	Present Value Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -£0.004m	High: -£0.003m	Best Estimate: -£0.003m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£0.003m	<£0.0001m	£0.003m
High	£0.003m	<£0.001m	£0.004m
Best Estimate	£0.003m	<£0.0001m	£0.003m

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

The total annual costs of this intervention would be very small. Water companies already monitor and respond to shale oil and gas applications. Making them statutory consultees would mean that water companies would be obliged to respond to mineral planning authorities on shale oil and gas planning applications – which would include 'no comment' responses. However, the relatively low numbers of shale oil and gas applications expected annually at the exploration stage (when compared to other types of development), combined with the likelihood that water companies will want to offer advice on water issues, mean that any 'no comment' replies are unlikely. Taking this into account, we estimate that the likely total maximum cost of 'no comment' responses would be £1,200 over the next 10 years.

A small, one-off, familiarisation cost of £3,000 for all 24 water companies has also been identified. The business affected - the water companies - though their umbrella organisation Water UK, believe that any familiarisation costs would be negligible given that they have lobbied for this intervention and have assured us that their members fully understand the proposed requirement. This familiarisation is reflected in the fact that 22 of the 24 water companies who would be statutory consultees under this proposal responded to the Government consultation, supporting the proposed intervention.

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

No other costs to business arising directly from this measure have been identified.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	N/A	N/A	N/A

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

At present, water companies identify shale oil and gas applications through their monitoring of all local planning applications. The risk of this approach is that a shale application may be missed by the relevant water company, meaning that any potential water issues might not be appropriately considered by the planning process. Water UK believe that it would be disproportionate to attempt to monetise the benefit of water companies being consulted by planning authorities on all shale oil and gas schemes, given the likely small number of planning applications expected at the exploration stage.

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

This is a broadly permissive measure, having been asked for by the water companies through Water UK. The intervention will strengthen the role of water companies in the development of shale gas proposals and help to ensure that water quality and supply is protected while allowing for waste water issues to be addressed. Linked to this, it will enable water companies to more effectively undertake their operational business and regulatory duties.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
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BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: <£0.001m	Benefits: 0	Net: -<£0.001m	Yes	IN

Evidence base

Problem under consideration

1. The Government believes that shale oil and gas has the potential to provide the UK with greater energy security, growth and jobs. Effective exploration and testing of this resource is critical to realising its potential.
2. A robust regulatory framework is in place to ensure the safe extraction of gas from shale rock using hydraulic fracturing ('fracking'). The planning system is a key component of this framework, and a number of changes have been made over the past year to ensure that an effective, locally-led planning system is in place to deal with planning applications for shale oil and gas in an efficient and effective manner.
3. The regulatory framework for shale oil and gas already has safeguards in place to ensure that issues relating to water are addressed in a robust, joined-up way. The environmental regulator is required to check the potential impact on groundwater in terms of any shale oil and gas proposal, and will not grant a permit where groundwater and drinking water supplies could be affected. Anyone seeking to use or supply the volumes of water involved in such schemes requires an abstraction licence from the environmental regulator, which sets the maximum amount of water that can be used. In granting these licences the regulator checks that the implications for water resources are acceptable.
4. Shale oil and gas schemes are heavily reliant upon water where hydraulic fracturing is used to inject water at high pressure into shale gas fractures. The quantities of water needed vary on a site by site basis but can reasonably be expected to be in the region of 10 to 20 Ml per fracture. This demand, whilst not being nationally significant, could have an impact upon local resources where water is in short supply. Wastewater produced by hydraulic fracturing could in limited circumstances require specialist treatment, meaning that standard wastewater treatment works may not be able to manage waste water from shale oil and gas. These are all issues that water companies may need to offer advice on in respect to shale oil and gas planning applications given their responsibilities for water supply, water quality and waste water.
5. The water companies, through their trade body Water UK, already have a memorandum of understanding¹ in place to work with the industry throughout the shale gas exploration and extraction process in respect to water issues. This is designed to reassure the general public that both industries can work together in the public interest by helping the water companies ensure there are necessary protections in place for the public water supply. Whilst this has been in place over a year, it has no legal status and no consequences if not fulfilled.
6. While water companies are consulted on the preparation of Local Plans by mineral planning authorities, they are not currently statutory consultees for planning applications. Statutory consultee status can mean that the body concerned is under a duty to respond to consultation, and must provide the planning authority with a response within 21 days of being consulted – even if this is to confirm they have no comment to make in respect to a planning application.
7. As part of the passage of the Infrastructure Bill (which received Royal Assent on 12 February 2015), the water industry has lobbied to be given statutory consultee status. In response, the Government decided in December 2014 to consult upon the principle of whether to give water companies statutory consultee status for shale oil and gas applications, as part of a broader consultation on statutory consultee planning arrangements². The proposal received a significant level of support, with 98% of those responding being in favour, including Water UK and 22 of the 24 water companies who would be statutory consultees under this proposal.

¹ The MoU was agreed in November 2013 between Water UK and the UK Onshore Operators Group - see <https://www.gov.uk/government/news/water-uk-and-ukoog-memorandum-of-understanding-on-shale-gas-exploration-and-extraction>

² See <https://www.gov.uk/government/consultations/planning-application-process-statutory-consultee-arrangements>

Rationale for intervention/Policy objective

8. The rationale for this intervention is that:

- It would ensure that water companies are involved early in the planning application process so that they can work with shale gas operators to develop solutions to any water-related issues
- It would enhance the confidence of the regulators and the general public by demonstrating that any impacts of shale gas on water supply, water quality and waste water will be fully taken into account by the planning application process; and
- The existing Memorandum of Understanding between Water UK and the UK Onshore Operators Group has no formal legal status, meaning that it cannot be enforced and will not have the same level of public confidence as that provided by a statutory requirement to consult water companies

9. The Government wishes to encourage the rapid development of the shale oil and gas sector, ensuring this is done in a safe and environmentally sensitive manner. Impacts on water issues are important considerations in respect to the potential growth of this sector. The key objective of this intervention – by making water companies statutory consultees – is to ensure that water companies are involved early in the planning application process and that their views are taken into account in the decision making process. This will provide further assurance to the general public that a robust regulatory framework is in place, and that the planning system can deal with planning applications for shale oil and gas in an efficient and effective manner.

10. Linked to this, section 50 of the Infrastructure Act 2015 requires water companies to have been consulted before planning permission has been granted, as one of several conditions that have to be met before Department of Energy & Climate Change consent to allow certain onshore high volume hydraulic fracturing can be given. The amendments to secondary legislation needed for this intervention will therefore support the new legislative requirement in the Infrastructure Act.

Policy options considered, including alternatives to regulation

11. **Option 1: Do nothing.** This leaves it optional as to whether planning authorities choose to consult water companies on shale oil and gas planning applications, with the possibility that potential water issues are not addressed. Responses to the Government's consultation strongly supported making water companies' statutory consultees for shale oil and gas planning applications. Doing nothing would not support the legislative requirement in section 50 of the Infrastructure Act that planning authorities consult water companies before the granting of planning permission for certain high volume hydraulic fracturing.

12. **Option 2: Develop non-statutory options to ensure enhanced water company involvement in the consideration of shale oil and gas applications.** Having explored with Water UK a number of potential mechanisms, we are clear that non-statutory options would not meet the requirements of water companies in terms of providing advice to planning authorities and enabling them to discharge their statutory duties in respect to water supply, water quality and waste water. As this option would not support the legislative requirement in section 50 of the Infrastructure Act, it has not been pursued further.

13. **Option 3 (preferred option) Amend existing regulations to make water companies statutory consultees in respect to shale oil and gas applications.** The relevant planning legislation sets out those statutory consultees which planning authorities must consult, depending on the type, location and scale of the development proposed. For example, the Environment Agency must be consulted on certain proposed developments located in flood zones 2 and 3, while Natural England must be consulted on developments in, or likely to affect, Sites of Special Scientific Interest.

14. To achieve this intervention requires amendment so that planning authorities are under a legal duty to consult water companies in respect to shale oil and gas planning applications. This would apply to

the companies that provide water services, which includes water undertakers and sewerage undertakers as defined by the Water Act 1991.

15. Statutory consultee status would allow water companies to receive vital information about proposed shale extraction sites and would give them time to engage with planning authorities, regulators and operators to ensure that development proposals are fully understood. It would enable companies to provide robust and timely evidence to planning authorities regarding the water issues relating to shale development – including identifying potential risks and any mitigation required. This would help enable companies to meet their regulatory duties in respect to water by ensuring that the provision of services to shale operators does not adversely impact water resources or the natural environment more generally.
16. The requirements in section 50 of the Infrastructure Act 2015 means that water companies must now be consulted on certain planning applications involving high volume hydraulic fracturing. Given that any effects on the water environment are important issues that need to be fully considered, the proposed intervention addresses concerns raised by the industry (water companies) and will ensure that their views are taken into account as part of the decision making on planning applications. It will also reassure the general public that environmental considerations like water are being appropriately considered.

Summary of costs to business

18. Option 2 is not viable, and in accordance with section 1.4 of the better regulation framework guidance³ on the requirements for validation impact assessments, has not been further analysed. The following is an assessment of the impact of **the preferred option (Option 3)** on business, specifically the water industry, against the counterfactual (Option 1, do-nothing). Mineral planning authorities would be under a legal duty to consult water companies for their views on the water issues raised by shale oil and gas planning applications. Statutory consultees are under a duty to respond to consultation, and must provide the planning authority with a response within 21 days of being consulted – even if this is to confirm they have no comment to make on the planning application.

Cost implications

19. The total number of planning applications in the geographical area supplied by each water company varies, depending on the size of the company's area and the volume of development activity in that area. Monitoring planning applications for all development to consider any impacts of shale development on water quality and water quantity is a key role currently undertaken by water companies (the 'counterfactual'). Water UK have provided evidence that smaller companies already consider a total of 5,000-10,000 planning applications per year (for all types of development) in their areas, while the largest companies, particularly those in areas of the country with the greatest volume of development, may consider 40,000-100,000 planning applications or more.

Cost of nil response

20. The cost to water companies in terms of staff time to consider a planning application for shale and respond with any points of substance would be the same, irrespective of whether the application was identified through their current monitoring role or the proposed requirement to put them on a statutory consultee footing. In practical terms any 'new' costs derived from this intervention relates to the requirement upon a water company to have to reply to a planning authority, even if it's only 'no comment'. This would require a water company to prepare and send a short e-mail or letter to this effect.
21. The counterfactual (as is currently the case) requires water companies to monitor every planning application for development in their areas, identify which are shale oil or gas applications and then

³ 'The Better Regulation Framework Manual' - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211981/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf

review the content to decide whether they need to comment on the application. Where they have no comments, companies will not reply, thereby incurring no further costs.

22. Under the proposed intervention, the relevant planning authority will directly provide the shale planning application to the local water company. The water company will still need to review the application to decide upon whether a response is required, meaning that no costs will be saved at this point. The difference is that water companies will then need to submit a 'no comment' response whereas they are not presently under a duty to reply (they are also free to submit a more detailed response if they wish, though if they did it would be reasonable to assume that the issue would have been significant enough that they would have supplied the same response in the counterfactual). The impact of this measure needs to be considered against the relatively low numbers of shale oil and gas applications expected annually at the exploration stage (when compared to other types of development), combined with the likelihood that water companies will want to offer advice from a water quality and supply perspective, meaning that any 'no comment' replies are unlikely.
23. The additional cost incurred by a water company will therefore be the time spent preparing a response to the effect of 'no comment'. While the time taken to issue a 'no comment' response is likely to be small, there is uncertainty as to how many times this will need to be done each year. It is difficult to judge the likely numbers of applications coming forward for shale oil and gas given the commercial sensitivities around this nascent sector. To date, three planning applications have been submitted in respect to exploratory schemes in England of which two were made last year. . Reflecting that this is a very nascent sector, for illustrative purposes, assuming a scenario under which water companies gave a 'no comment' reply to two shale oil and gas applications in the first year, and based upon one person taking half an hour to write a response (which is a generous estimate given that companies are likely to use templates), the total cost to business would be £24.70. This calculation is based on the average hourly wage of £18 in 2012. The wage is up-scaled from the median wages of 'construction project managers and related professionals'⁴ to reflect i) non-wage labour costs in line with HM Treasury guidance and ii) the Office for Budget Responsibility forecast of wage growth⁵. This gives an average hourly wage of £24.70 at 2015 prices (which is further increased by the Office for Budget Responsibility forecast of wage growth in calculations).
24. Over time we would expect the number of shale oil and gas applications to increase as the sector moves beyond exploration. The Department for Communities and Local Government standard methodology assumes that the number of planning application grows at the same rate as Gross Domestic Product (see RPC14-FT-CLG-2147(2)). Since shale gas is a nascent sector it is likely that the number of planning applications will grow faster than Gross Domestic Product. For that reason we have doubled the number of planning applications that would be submitted (compared to the Gross Domestic Product growth rate) which gives a total of 43 over 10 years. In this scenario, the costs to businesses would be £600 over this period. As this illustrates the negligible impact of the additional cost of 'nil responses', it would be disproportionate to undertake additional work to further quantify the impact.

Sensitivity analysis

25. As way of further illustration, if the number of shale oil and gas planning applications grew at the rate of Gross Domestic Product growth, then there could be 22 applications over 10 years, which under a 'worst case' scenario would give a maximum cost of £300 in terms of issuing nil responses. Alternatively, if the number of shale gas planning application grew at four times the rate of Gross Domestic Product there would be 83 planning applications over 10 years, giving a 'worst case' scenario cost to businesses of £1,200 over the period. Whilst it is possible that more than one water company would need to provide a "no-comment" response, for example where a shale oil or gas application has implications beyond one water catchment area, the additional costs would still be significantly less than £0.01m per year.

⁴ ONS-ASHE

⁵ http://budgetresponsibility.org.uk/pubs/December_2014_Charts_and_tables-web516.xls

Familiarisation costs

26. The business affected - the water companies - through their umbrella organisation Water UK, believe that any familiarisation costs would be negligible given that they have lobbied for this intervention and have assured us that their members fully understand the proposed requirements. This familiarisation is reflected in the fact that 22 of the 24 water companies who would be statutory consultees under this proposal responded to the Government consultation, supporting the proposed intervention.
27. Notwithstanding Water UK's views, assumptions have been made to formulate a 'worst case' familiarisation cost using the hourly wage and non-wage costs set out in paragraph 23 above. Allowing for a conservative estimate of one hour of staff time for five members of staff, this would result in a cost of £124.00 per water company, giving a one-off total of £3,000 for all 24 water companies.

Additional cost risks

28. The business (water companies) affected by this intervention consider that the greater costs are not derived from this measure per se, but rather the risk of not being aware of a shale oil or gas planning application, or the perceived risk that they might not be aware. Any perception that there is a risk to water supply or water treatment could lead to a loss of consumer confidence, which could result in a switch to bottled water. This would be likely to have a significant impact on a water companies operating profit.

Benefits to water companies

29. Reflecting the above, Water UK regard this intervention as having a potential long term cost saving in the sense that the statutory requirement to be consulted on all shale oil and gas planning significantly reduces the likelihood of water companies missing applications that come forward. The risk here is that any applications not considered by water companies could have impacts upon water. We are unable to monetise the scale of the benefit and it would be disproportionate for us to attempt to do so, but Water UK has highlighted the benefit derived from the increase in certainty provided by this intervention.

Direct costs and benefits to business calculations (following One In Two Out methodology)

30. The proposal to make water companies statutory consultees in respect to shale oil and gas applications are in scope of One In Two Out.
31. These measures are classified as an IN.
32. For reasons set out above, the intervention is likely to result in negligible costs to business (water companies) in terms of familiarisation and needing to provide (if appropriate) a 'no comment' response. The supporting evidence indicates how marginal these costs would be, and the businesses affected have requested this intervention.

Wider impacts

33. We have considered the potential impacts of the intervention in the context of the public sector equality duty and concluded that they are not likely to result in any significant differential impacts on any of the protected characteristics.

Summary and implementation plan

34. Option 3 is the preferred option. Making water companies statutory consultees can only be done by amending existing secondary legislation. We propose to undertake this alongside other changes proposed to the existing regulations to form a new consolidated Development Management

Procedure Order, which is expected to be laid before Parliament during March 2015. The Order, including this measure, is expected to come into force in April 2015.