



Department
for Environment
Food & Rural Affairs



Llywodraeth Cymru
Welsh Government

Joint Defra and Welsh Government summary of responses and Government response to the consultation on “the Water Act 2003: withdrawal of compensation on the grounds of serious damage.

A consultation on the principles to be used in determining whether a water abstraction may cause serious damage.”

November 2012

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www.defra.gov.uk/consult/2012/02/09/water-act-1202/

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1. Introduction

1.1. The consultation “The Water Act 2003: withdrawal of compensation on the grounds of Serious Damage. A consultation on the principles to be used in determining whether a water abstraction may cause serious damage¹” was issued jointly by the Department for Environment, Food and Rural Affairs (Defra) and the Welsh Government and ran from 9 February 2012 to 3 May 2012.

1.2. Section 27 of the Water Act 2003² (section 27) was commenced on 1 April 2004³ and, from 15 July 2012, it withdraws the right to claim compensation where an abstraction licence is varied or revoked in certain circumstances. The consultation sought views on the principles to be used in determining whether the revocation or variation of an abstraction licence was necessary to protect waters, underground strata or flora and fauna that depend on them from serious damage⁴, for the purposes of section 27.

1.3. The provision in section 27 says that:

“Withdrawal of compensation for certain revocations and variations

(1) This section applies where—

(a) a licence to abstract water is revoked or varied on or after 15th July 2012 in pursuance of a direction under section 54 or 56 of the WRA (which provide for the Secretary of State to direct the Environment Agency to revoke or vary a licence in certain circumstances);

(b) the licence was granted before the coming into force of section 19 of this Act;

(c) the licence is one which is expressed to remain in force until revoked; and

(d) the ground for revoking or varying the licence is that the Secretary of State is satisfied that the revocation or variation is necessary in order to protect from serious damage—

(i) any inland waters,

¹ <http://www.defra.gov.uk/consult/2012/02/09/water-act-1202/>

² <http://www.legislation.gov.uk/ukpga/2003/37/contents>

³ <http://www.legislation.gov.uk/uksi/2004/641/contents/made>

⁴ References to serious damage in this document are serious damage to waters, underground strata or flora and fauna that depend on them for the purposes of section 27

(ii) any water contained in underground strata,

(iii) any underground strata themselves,

or any flora or fauna dependent on any of them.

(2) Where this section applies, no compensation is payable under section 61 of the WRA in respect of the revocation or variation of the licence.

(3) Expressions used in sub-paragraphs (i), (ii) and (iii) of subsection (1)(d) are to be construed in accordance with section 221 of the WRA; and “waters”, in relation to a lake, pond, river or watercourse which is for the time being dry, includes its bottom, channel or bed”.

1.4. Separately, in 2009 Defra and the Welsh Government consulted⁵ on transitional arrangements and draft regulations to commence abstraction provisions in the Water Act 2003 that will bring currently exempt activities into abstraction licensing control. The consultation included proposals to pay compensation if a licence application under the transitional arrangements was refused or granted to a lesser extent, unless the reason for the refusal or for granting a constrained licence was that this was necessary to protect the environment from serious damage. The principles for determining serious damage will be used in reaching decisions on applications made under the transitional arrangements when the new provisions are commenced.

1.5. The consultation on the principles to be used when determining if an abstraction is causing serious damage was carried out by Defra and the Welsh Government in relation to England and Wales. This is Defra’s and the Welsh Government’s response to the consultation. References in this paper to the Government include Defra and the Welsh Government unless otherwise stated. All references to the Environment Agency include, in relation to Wales, the Environment Agency Wales and, after 1 April 2013, the Natural Resources Body for Wales.

1.6. This document summarises the responses to the questions asked in the consultation and also other issues raised by respondents. It sets out the Government’s response to the consultation and the approach the Government will take in considering whether a licence variation or revocation is necessary in order to protect the environment from serious damage.

2. Responses

2.1. The consultation was sent to 227 stakeholders and published on the Defra and Welsh Government's websites.

2.2. In total 34⁶ responses were received from a range of organisations. A full list of the respondent organisations can be found at Annex A. All responses received have been taken into account in developing the Government's response to the consultation.

2.3. Figures 1 and 2 below groups the number of responses by organisations into different sectors.

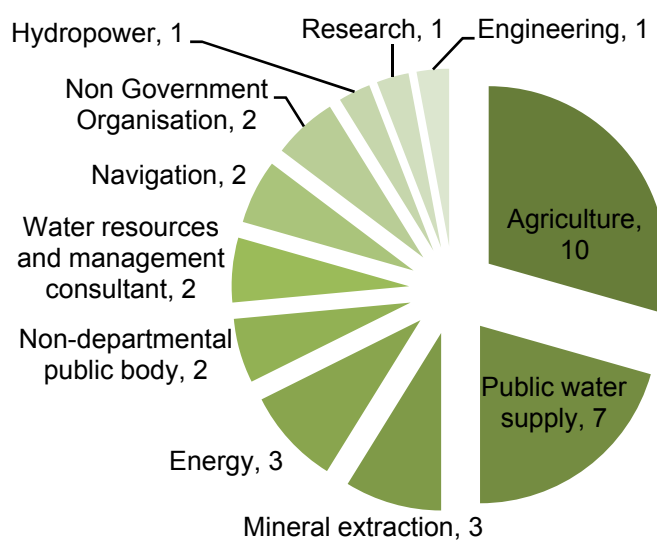


Fig 1. Number of respondents by sector/interest

⁶ Blueprint for Water's response, which represents 11 organisations indicated in Annex A, was considered as a single response and for the avoidance of doubt; numbers given in the Government's response have considered the Blueprint for Water's response as a single response unless otherwise stated.

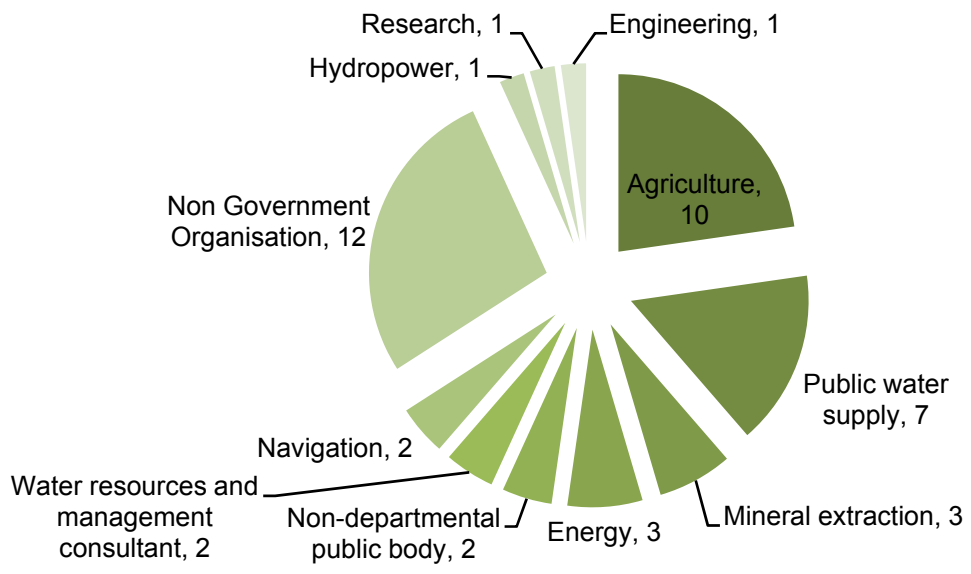


Fig 2. Number of responses by sector/interest, if Blueprint for Water’s response was considered as multiple responses from the separate organisations in the coalition.

3. Overview of responses

3.1. The majority (71%) of those who responded to the proposals in the consultation expressed an opinion on the objective of the legislation to withdraw the right to compensation when a licence is varied or revoked in order to protect the environment from serious damage. There were more respondents who were positive (53%) and in agreement about the objectives of the legislation than were negative about it (18%).

3.2. Many responses (94%) related to specific implementation issues and in particular sought greater clarity and further detail on the evidence used and the decision-making processes when determining whether section 27 applied. This was particularly the case in responses from respondents that were abstractors. Respondents whose interest was in protecting the environment, such as Non-Government Organisations (NGOs), would have preferred the principles to have a wider scope so that more damage could be considered serious.

3.3. Figure 3 shows the number of responses to each of the questions in the consultation.

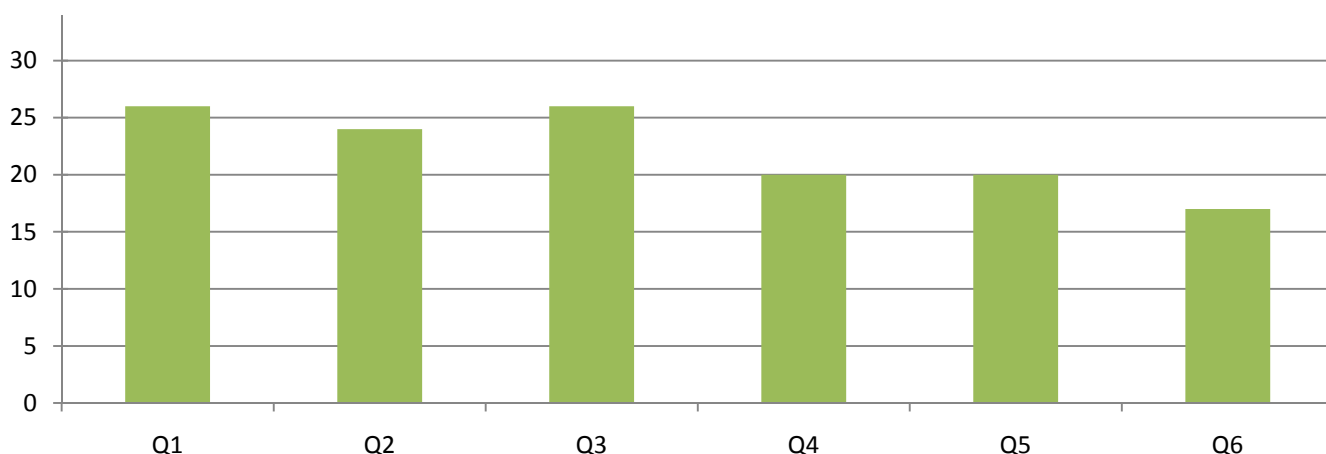


Fig 3. Number of respondents to each question (34 responses in total)

Government response

3.4. The provisions of section 27 (withdrawal of compensation for certain revocations and variations) took effect on 15 July 2012 and will apply to variations and revocations where the Secretary of State or Welsh Ministers direct that it is necessary in order to protect identified waters or flora or fauna depending on them, from serious damage. The purpose of the consultation and the Government response is to provide clarity on the process and the consideration that will be given to identifying the grounds referred to in section 27. It is important to note that each case will be treated on its merits taking account of the evidence of impact on

the environment of that water abstraction and it is not possible to provide a definitive list of the impacts that would constitute serious damage.

3.5. The principles outlined in the consultation were intended to provide transparency to abstractors on the factors that the Environment Agency and ultimately the Secretary of State or Welsh Ministers would consider in reaching a decision on the need to vary or revoke an abstraction licence to protect the environment from serious damage. Any investigation by the Environment Agency into the sustainability of an abstraction would consider evidence both for and against, applying the three principles which were consulted on. Information needed to apply the principles would be collected during these investigations and the Environment Agency's final decision would be determined on a case-by-case basis following consideration of the evidence gathered.

3.6. Throughout this process, there would be consideration of any cost-effective alternatives to changing the licence in order to meet environmental objectives. Similarly, if the matter were referred to the Secretary of State or Welsh Ministers for a direction to be given under sections 54 or 56 of the Water Resources Act 1991, the abstractor's evidence and representations refuting serious damage (and on any other points) would also be weighed up against the case made for the proposed variation or revocation, including the question of whether it was necessary to prevent serious damage.

3.7. The next section summarises the responses to each question and sets out the Government's response.

4. Government Response to individual questions

Q1 What additional criteria or alternative approaches could we use for Principle 1 to inform the assessment and demonstrate serious damage? Which, if any, of the criteria we have suggested do you disagree with and why?

Total responses = 26

Q2 What additional criteria or alternative approaches could we use for Principle 2 to inform the assessment and demonstrate serious damage? Which, if any, of the criteria we have suggested do you disagree with and why?

Total responses = 24

Q3 What additional criteria or alternative approaches could we use for Principle 3 to inform the assessment and demonstrate serious damage? Which, if any, of the criteria we have suggested do you disagree with and why?

Total responses = 26

Summary of responses

4.1. We have grouped these three questions together, as the vast majority of comments applied to all three principles.

4.2. Overall respondents to these questions considered that the three principles to be used to identify serious damage in the context of section 27 were sensible and reasonable. Respondents also recognised that it was difficult to set criteria that would cover every eventuality or set of circumstances.

4.3. Two key themes emerged in the consultation responses. These were on clarity around the information the Environment Agency would use to assess whether section 27 applied and on the decision making process.

4.4. Respondents considered that any assessments made using the three principles would have to be based on sufficient evidence, such as appropriate water abstraction data and baseline comparisons. It was commented that the Environment Agency should draw on the previous work that it had done examining the impact of abstractions and making decisions, for example, under the Habitats Directive Review of Consents (RoC)⁷ and the Restoring Sustainable Abstraction (RSA) Programme⁸.

4.5. Respondents thought that scientific data and appropriate local baselines should be used and that a causal link to the damage should be demonstrated. They felt that in contrast, qualitative evidence would be less reliable and could be open to different interpretation.

4.6. Respondents noted that section 27 referred to the need to protect from serious damage and thought this needed to be better embedded within the principles. This point was made by the NGOs in particular. An example given was the precautionary approach that is taken in the Habitats Directive. Respondents thought that the definitions should draw more on existing legislation such as the Water Framework Directive and the Environmental Damage Regulations. In contrast to this, abstractors who responded wanted the section 27 assessments to be based on evidence that causally linked the abstraction to the damage and there was more scepticism about the use of predictive evidence such as expert opinion. This was also reflected strongly in the response to question 4, where it was thought that evidence would rely on more predictive evidence. It was also suggested that failure to meet the Water Framework Directive good ecological status should not be used as a sole criterion to assess whether serious damage would be caused or that Habitats Directive's precautionary approach should not apply to section 27 decisions.

4.7. Twenty four respondents thought the principle tables (Tables 1, 2 and 3 in the consultation) and also the examples given in Section 5 of the consultation would be made clearer if the use of terminology was better. The comments made were about a lack of definition for a specific word (for example, "significant", "substantial", "native species"), or providing more clarity (for example the use of absolute numbers in the principle tables (for example "100 dead juvenile fish") and suggested amendments (for example frequency of damage, natural variability).

⁷ <http://www.environment-agency.gov.uk/business/regulation/31915.aspx>

⁸ <http://www.environment-agency.gov.uk/business/topics/water/32026.aspx>

4.8. There were a number of comments on the decision-making process and how the principles would be used within the process. It was suggested that the overall approach put forward in the consultation should be re-ordered so that the qualitative nature (principle 2) was considered first and that this would improve the clarity of the assessment. By first determining what was important in terms of environmental protection, this would set the context then the other principles (magnitude / reversibility and recovery) could be considered.

4.9. Respondents requested more information about what would be assessed by the Environment Agency. They sought clarity on how the assessment of the contribution of other causes of damage would be carried out. These other causes included damage by predators, pollution, natural variation such as ephemeral flow, accepted human interaction or temporary impacts. They also sought further information on the assessment of wider impacts on, for example, business, social or economic, long-term sustainability, Water Framework Directive technical feasibility/disproportionate costs. Some respondents also suggested that the Environment Agency should consider other options such as mitigation or voluntary approaches before modifying a licence.

Government Response

4.10. The Secretary of State and Welsh Ministers expect the Environment Agency to treat each case on its merits. Each case will be different and many factors will combine to determine the impact on the environment. The Environment Agency will investigate and evaluate each abstraction pressure in the environment. However, natural changes, for example in winterbourne rivers and streams that are not caused by abstraction will not be assessed for serious damage.

4.11. The Environment Agency already has existing programmes (such as the RSA programme, mentioned in paragraph 4.4 above and the Water Framework Directive programmes) through which it assesses the impact of an abstraction on the environment. Although an assessment of an abstraction will not be constrained by the RSA approach, it will identify ways to resolve issues caused by licensed abstractions. We expect the Environment Agency to undertake similar detailed analysis to provide robust evidence on which to base a recommendation for serious damage.

4.12. The aim of the Environment Agency's investigations into unsustainable abstraction is to collate and analyse technical evidence to be able to quantify the impact that licensed abstractions have or could have. The Environment Agency would then consider whether there were non-licence changes that would reduce the abstraction impact and then identify whether the impact warranted a change to the licence or operation.

4.13. The scope of an investigation would depend on the issues and site concerned but would usually consist of the following steps:

- development of a conceptual model - to establish an understanding of how the site/water body functions, such as the hydraulic connection between abstractions and impacts on the environment;
- evaluation of available data - to assess the quality and usefulness of the available information and establish the data gaps that may need to be filled;
- data collection - this may range from acquiring new data to gathering local and expert knowledge and past research; and
- data analysis - appropriate tools (for example, groundwater models), techniques (for example, Hydro-Ecological Validation) and expert judgment are used to quantify the impact including any potential impact of that abstraction on species and habitats etc.

4.14. The contribution of other factors that may cause negative effects at a site, such as climate change and pollution, would also be considered during the investigation. However any licence changes that were proposed would aim to address the detrimental impacts (including potential impacts) of abstraction primarily, not other environmental factors.

4.15. As explained in the consultation document, it is not possible to provide a definitive list of the impacts that would constitute serious damage because of the number of variables that would be taken into account on a case-by-case basis. The Environment Agency will use all of the evidence that it gathers through investigations and evaluation of unsustainable abstraction and appraise the evidence taking account of all three principles together. Whilst we provided some indicative numbers especially in the consultation's version of principle 1 the quantitative impact must be considered in the context of the qualitative nature of the site or species that is being damaged. To clarify this, as suggested by one respondent to the consultation, we have re-ordered the "principles" so that what was principle 2 (qualitative nature of the damage) is now considered before what was principle 1 (extent and magnitude of the damage) to provide a more logical order to the assessment and the principles are re-numbered accordingly (see suggestion at paragraph 4.8).

4.16. We have made some other minor amendments to the principles tables following the consultation exercise. The terminology used in these principles tables will also be kept under review in light of experience. However, absolute numbers and fixed definitions of what would constitute serious damage are not used. Revised Principle Tables are included at Annex B.

4.17. The Environment Agency has published "Restoring Sustainable Abstraction: Compensation" which sets the use of section 27 in the context of the RSA programme. Once sites have progressed through the assessment of serious damage the Environment Agency will publish case studies to show how the principles have been applied.

4.18. Re-ordering the principles should not affect the overall assessment of whether the action is needed to protect waters etc from serious damage because the principles would each be considered separately, before the evidence across all three was considered and an assessment made. It would not be necessary for each principle to be determined as serious for there to be a

final determination of serious damage. However, we agree that re-ordering to consider qualitative aspects first would provide the context for considering quantitative matters, and thus provide a more logical order in the assessment. The revised order of the principles is:

Principle 1 – establish the qualitative nature of the damage

Principle 2 - establish the extent and magnitude of the damage.

Principle 3 - establish whether the damage is reversible and how long recovery may take

4.19. In developing the principles for serious damage, we considered carefully other legislative requirements and definitions to ensure consistency of approach. The term “serious damage” is not found in either the Water Framework Directive or the Environmental Liability Directive (and Environmental Damage Regulations⁹) so there can be no direct read-across from those pieces of legislation into the interpretation of “serious damage” in section 27. However, the meaning of “water damage” and “biodiversity damage” under Environmental Damage Regulations was considered when interpreting the meaning of “serious damage” on a site-specific basis. The main general relationship with serious damage and the Water Framework Directive is through deterioration in status from an abstraction pressure. This is analogous to ‘Water Damage’ for the Environmental Damage Regulations (covered in section 3 of the consultation).

4.20. The principles (in the consultation and revised at Annex B) present examples of how damage will be assessed to identify if it is serious. The Secretary of State and Welsh Ministers expect the EA to assess the risk of damage and to use the principles we have established in order to consider potential and known impacts in reaching a decision to vary or revoke a licence. The examples of serious damage in the principles tables are indicative only and apply equally to evaluations of whether potential impact would constitute serious damage.

4.21. The precautionary principle will be applied in accordance with case law in deciding what action needs to be taken in relation to a licence which impacts on the flora or fauna protected by the Habitats Regulations. In terms of applying section 27 to licence changes at Habitats Directive sites, damage to flora or fauna protected by the Regulations is serious damage where there is an adverse effect on the integrity of the protected flora/fauna and/or site. Cases where there is potential for an adverse effect on the integrity of the protected flora/fauna and/or site will be assessed for serious damage. Where, following such an assessment, there is evidence of potential for the abstraction to have an adverse effect on the integrity of protected flora/fauna and/or site then section 27 will apply.

⁹ The Environmental Damage (Prevention and Remediation) Regulations 2009 and the Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009

4.22. Another example is deterioration in Water Framework Directive status due to abstraction. Such an assessment may consider the deterioration in the context of the current condition of the water body together with other indicators of serious damage.

4.23. Failure to meet the Water Framework Directive environmental objectives, as published in the River Basin Management Plans, for example good ecological status, is not identified as specific criteria of serious damage. It, however, would be captured in the assessment and considered across all three principles. The assessment would also consider the impact of other non-abstraction pressures (such as water quality) on Water Framework Directive environmental objectives. Pressures other than abstraction may contribute to environmental problems, but only those caused by an abstraction would be considered in relation to application of section 27.

4.24. Before reaching a decision on the need for a licence change, the Environment Agency would carry out detailed investigations and consider possible options to balance the needs of the environment and water users. If its investigations showed that, a licence needed to be changed the normal process would be to talk to the licence holder about this change, discuss possible alternative options and explore the best way for this to happen. The Environment Agency will be transparent and open about the determination of serious damage and will keep the licence holder informed of the process.

4.25. A decision to vary or revoke a licence on the grounds it was necessary to protect waters, etc, from serious damage would only be taken following investigations into the impact of an abstraction on the environment and consideration of Environment Agency's general and environmental duties as to what decision should be made. Typically, that would involve an options appraisal to identify solutions to achieve the environmental outcome and remediate the damage. Options such as non-licence changes to mitigate the impact of the abstraction or voluntary measures would be considered before a mandatory approach was taken.

4.26. Alternative options for resolving environmental problems caused by abstraction would be considered before varying an abstraction licence using section 52 of the Water Resources Act 1991.

4.27. The types of solution that might be considered include:

- River restoration;
- River bed sealing;
- Making barriers passable to migratory fish;
- Changes to wetland management;
- More efficient use of water.

4.28. Alternative options for resolving environmental problems caused by abstraction would be considered before revoking an abstraction licence using section 52 of the Water Resources Act 1991.

4.29. The types of solution that might be considered include:

- reducing surface water/groundwater abstraction licences;
- redistributing abstraction among existing sources within the catchment; and
- introducing or changing flow/level constraints.

4.30. The Environment Agency would consider the risk of the potential impact of unused or partly used licences when it investigated the impact of an abstraction licence. Therefore, the Environment Agency's investigations and resulting proposals for abstraction licence change would not necessarily be based on actual abstraction levels.

4.31. The key stages that would be followed in the process of determining if changes to abstraction licences are required would be:

- Investigation - Evidence of environmental problems and the links to a specific abstraction would be gathered by the Environment Agency.
- Options appraisal - Options to protect and restore the site would be identified and individually considered by the Environment Agency (options may be discussed with the licence holder at this stage).
- Discussion with licence holders - Licence variations or revocations, including whether the changes are necessary to protect from serious damage, would be discussed with the licence holder in order to seek a voluntary solution.
- Variation or revocation of licences:
 - ..1. The licence holder may apply to the Environment Agency to vary or revoke their licence on a voluntary basis¹⁰. In these cases no compensation would be payable.
 - ..2. If the licence holder did not seek a voluntary change, and the Environment Agency (or Secretary of State / Welsh Ministers) considered that some steps were necessary, they would formulate proposals to vary or revoke the licence under section 52 of the Water Resources Act 1991. Notice of the proposals would be served on the licence holder and advertised. The notice would make clear if the Environment Agency considered that the licence variation or revocation was necessary to protect the environment from serious damage. If there were no

¹⁰ using s51 Water Resources Act 1991

objections the Environment Agency would proceed with the proposal and the licence would be varied or revoked, as proposed, and no compensation would be payable.

- Objection – Should the licence holder object, the proposal (along with a copy of the notice of objection) would be referred to the Secretary of State or Welsh Ministers. The Secretary of State or Welsh Ministers would consider the proposal and the objection and determine whether the licence should be varied or revoked and whether such variation or revocation was necessary in order to protect specified waters (or dependent flora or fauna) from serious damage.
- Determination - If the Secretary of State or Welsh Ministers direct that the licence must be varied or revoked the Environment Agency would issue a varied licence or notice of revocation to the licence holder.
- Compensation:
 - ..1. If the Secretary of State or Welsh Ministers were satisfied that the licence must be varied or revoked in order to protect waters or their flora or fauna from serious damage then section 27 would apply and no compensation would be payable.
 - ..2. If the Secretary of State or Welsh Ministers direct that the licence must be varied or revoked but not on grounds that it is necessary in order to protect from serious damage then compensation would be negotiated and assessed in the usual way.

Q4 What additional criteria, or alternative approaches could we use to inform the assessment of a risk of future serious damage than the same three principles we propose to apply to existing serious damage?

Total responses = 20

Stakeholder response:

4.32. A number of respondents agreed that the principles should be used to inform the assessment of a risk of future damage but most respondents did not comment on the applicability of the principles. A common theme for the respondents was again to question issues on the quality of evidence and the process for using the principles to assess the risk of future damage. Respondents suggested it would be difficult or impossible for the Environment Agency to collect adequate quantifiable evidence to predict future damage and questioned the use of section 27 to prevent future serious damage.

4.33. Other than this common theme, the main suggestions were the same as those made by respondents in relation to questions 1-3 and involved drawing on existing legislation such as making use of the precautionary principle under the Habitats Directive or Environmental Impact Assessment Regulations.

Government response:

4.34. The legislation withdraws the right to compensation where the Secretary of State or Welsh Ministers are satisfied that the variation or revocation is necessary in order to protect waters, or the flora or fauna depending on them, from serious damage. This encompasses not only instances where serious damage is already occurring but where the Environment Agency must take action to prevent such damage. Respondents did not suggest alternative or additional criteria to be used in the assessment. The Secretary of State and Welsh Ministers expect the Environment Agency to assess the risk of damage and to use the principles we have established in order to consider potential and known impacts in reaching a decision to vary or revoke a licence.

Q5 If serious damage arises because of multiple abstractions, how should section 27 be applied to individual licences? What other approaches should be used than the proportional approach described?

Total responses = 20

Stakeholder response

4.35. The majority of respondents agreed with the approach taken in the consultation that, where more than one licence was causing serious damage, the modification of licences should be in proportion to the impact of each abstraction licence. A number of respondents stated that the proportion should be based on actual abstractions, rather than licensed amounts. An opinion expressed by one of the respondents was that a revocation or variation could only be described as necessary if a particular abstraction, considered alone, was causing serious damage, and that if one licence was causing a problem in combination with the other licences only, then it was not necessary to modify that licence as the other licences could be modified.

4.36. A number of proposals were suggested as approaches the Environment Agency should adopt in addressing the impacts caused by multiple licences. These included:

- taking action against newer licence, first;
- basing actions on actual abstraction;
- social-economic impacts;
- considering the taking account of efficient use of water;
- taking account of hydraulic connection; and
- considering (prioritising) the purpose of abstraction.

Government Response

4.37. Where a number of licences together are causing serious damage, there may not always be the evidence to allow the Environment Agency to attribute the impacts to specific abstractions, especially for example where a number of abstractions occur on the same stretch of water. It may not be possible in all cases, therefore, to vary licences according to their individual impact. In such cases, where there is no clear evidence to differentiate between the impact of each of the licences, we consider that the most appropriate approach is to vary each licence in the same proportion.

4.38. Where licences do not cause serious damage individually, we consider that the test in section 27 may be met in circumstances where the abstraction is part of a group of abstractions causing the serious damage which the variation/revocation is intended to address. The test is whether the Secretary of State is satisfied, or Welsh Ministers are satisfied, that the action is needed to protect from serious damage.

4.39. In relation to the suggestion that newer licences should be subject to action first, rather than older licences: none of the abstraction licences to which section 27 might apply will be recent. This is because section 27 only applies to abstraction licences issued before 1 April 2006 and which do not have end-dates (time limits). It has been a legal requirement to issue licences with end-dates since 2004 and, as a matter of policy, the Environment Agency has issued licences with end dates since the late 1990s. Therefore, most abstraction licences under consideration for section 27 will be at least 10 years old.

4.40. In relation to the suggestion that variations should be based on actual levels of abstraction, as mentioned in paragraph 4.30, the Environment Agency's investigations and resulting proposals would have to take into account the potential impact of unused or partially unused abstraction licences and proposals for licence changes would not necessarily be based on actual abstraction levels.

4.41. In relation to the three suggestions: the social-economic impacts, considering the taking account of efficient use of water and taking account of hydraulic connection, the Environment Agency would typically investigate options to use water more efficiently and cost effective alternatives to varying or revoking an abstraction licence. The Environment Agency would also consider the hydraulic connection of an abstraction but it will not always be possible for the Environment Agency to assess the individual impact of an abstraction licence.

4.42. Finally, where there are a number of abstractors who are in combination causing serious damage, we do not believe the Environment Agency should distinguish between abstractors according to the purpose of their abstraction activity when taking action to vary or revoke a licence. The action will be needed to protect the waters, flora or fauna from serious damage, and we believe an even-handed approach is most appropriate.

Q6 Do you agree with the conclusions from these examples? How can we make the decision process clearer and more transparent?

Total responses = 17

Stakeholder response

4.43. Overall, there was a mixed reaction to the examples in the consultation. Some (five) respondents felt that they were helpful and agreed with the conclusions that were made in the consultation. Many respondents said that they may agree with the conclusions given in most of the examples but it was felt there was insufficient information to agree conclusively. They also suggested that other factors would need to be considered (for example social-economic impacts, appraisals of alternative options, long-term changes in weather patterns). It was suggested that anonymous real life examples should be used and further examples should be provided. Some respondents felt the examples used to demonstrate serious damage either did not show serious damage should apply or felt they were not realistic examples.

Government Response

4.44. The examples used reflected the Environment Agency's experience of reviewing damaging abstraction in the context of the RSA programme and the RoC process. They were intended to provide realistic, clear examples of serious damage cases that were not site-specific.

4.45. However, we have reviewed the evidence in the examples to ensure sufficient detail has been provided to inform the conclusion. As a result, some adjustments have been made to examples B, C and D to provide better clarity. The updated examples are included at Annex C.

4.46. No further examples have been developed as the examples in the consultation were intended to be illustrative of the approach, not an exhaustive list of all scenarios. The approach to assessing serious damage must be flexible to enable each site to be dealt with on a case-by-case basis taking account of all of the evidence.

5. Other points raised during the consultation

5.1. A number of additional points were raised in response to the consultation. These included:

- a request for information / clarification about the appeals process;
- a request by water companies for clarification of the implications of withdrawing compensation, where section 27 is applied, and how this affects the current funding mechanisms through Ofwat's five yearly price review processes;
- a concern that where the Environment Agency had already input or had the chance to input into a permit for an activity, should not then be able to "change its mind" at a later point, especially if the permit for the activity was recent;
- concern from respondents about the loss of assets without compensation and queries as to whether human rights issues had been addressed; and
- a suggestion that the Government should update the Water Act 2003's Impact Assessment.

Government response

5.2. We do not believe that a decision on varying or revoking a licence on basis of serious damage should be subject to a separate procedure, as was suggested by some respondents. A process for investigating unsustainable abstraction and making variations to or revocations of licences already exists under the Water Resources Act 1991. Reaching a decision as to whether this is necessary in order to protect from serious damage will be part of the existing process, including the right of appeal to the Secretary of State or Welsh Ministers. The current procedure allows the Secretary of State or Welsh Ministers to consider the Environment Agency's proposals, the licence holder's objections and any third party representations. The Secretary of State or Welsh Ministers must convene either a local inquiry or a hearing before an appointed person¹¹ if a request is made by the Environment Agency or licence holder for the matter to be heard.

5.3. It is recognised that for this procedure to be effective in airing section 27 issues, the Environment Agency's proposals to vary or revoke the licence must make the case that the variation or revocation is necessary to protect from serious damage. This is required so that the reference procedure gives the objecting licence holder a sufficient opportunity to address the

¹¹ Usually a Planning Inspector <http://www.planningportal.gov.uk/planning/planninginspectorate/>

point in representations and be heard. Paragraph 4.31 explains the procedure for varying or revoking abstraction licences.

5.4. In relation to water companies' request for clarity on the implications for funding mechanisms, Ofwat is responsible for making sure that efficient water companies can finance the proper carrying out of their functions whilst also protecting the interests of customers. Where a water company is served with a section 52 Water Resources Act notice on the grounds of serious damage, and it incurs legitimate costs in dealing with the consequences of the loss of a licensed abstraction, it should discuss any financial implications with Ofwat within the usual terms of a price determination.

5.5. New regulations that will commence abstraction provisions in the Water Act 2003 will bring currently exempt activities into abstraction licensing control. Applications for abstraction licences for such activities will be determined by the Environment Agency in accordance with current legislation and guidance and be subject to a right of appeal. The exempt activities may already have other consents or permissions (e.g. planning permission) in place, as suggested by a respondent, however these will have been determined by another regulatory authority with a different remit from that of the Environment Agency; at most, the Environment Agency may have been a statutory consultee on an application. The Environment Agency should not be constrained in reviewing the evidence of the impact of an abstraction in cases where the Environment Agency was previously commenting as a statutory consultee (to another regime) and where abstraction licensing control did not apply to the activity at the time of the Environment Agency's consideration.

5.6. In relation to a few respondents concerns about the loss of assets and the human rights issues, these were considered when the Water Act 2003 passed through Parliament and section 27 was commenced on 1 April 2004. The Impact Assessment was prepared to accompany the provisions as enacted through the Water Act 2003. The consultation does not itself change the impact of the provisions – rather it provides clarity to the considerations the Environment Agency will give to the level of impact when determining whether a licence must be varied or revoked in order to protect from serious damage.

Annex A

Organisation:

- Aggregate Industries
- Associated British Ports
- Blueprint for Water Coalition whose response was supported by the 11 organisations:
 - Amphibian and Reptile Conservation
 - Angling Trust
 - Buglife – The Invertebrate Conservation Trust, National Trust
 - National Trust
 - Royal Society for the Protection of Birds
 - Salmon & Trout Association
 - The Rivers Trust
 - The Wildlife Trusts
 - Waterwise
 - Wildfowl and Wetlands Trust
 - WWF-UK
- Bristol Water
- British Waterways
- Broadland Agricultural Water Abstractors Group
- CBI Minerals Group
- Dee Valley Water
- Derwent Hydroelectric Power Ltd
- Dŵr Cymru Welsh Water
- East Suffolk Water Abstractors Group
- EDF Energy
- Energy UK
- Envireau Water (Wales)

- Environment Agency
- Farmers' Union of Wales
- Institution of Civil Engineers Wales Cymru
- Mann Power Consulting Ltd
- Mineral Products Association
- Natural England
- NFU
- NFU Cymru
- NFU Watercress Association
- Place UK Ltd (two responses)
- Potato Council / Horticultural Development Company
- Severn Trent Water
- SSE
- Thames Water
- The Central Association of Agricultural Valuers (CAAV)
- The Geological Society
- United Utilities
- WWF
- Yorkshire Water Service Ltd

Annex B

Revised principles tables used in the consultation (changes are shown in green highlight) the original consultation version of the table follows the revised table.

Principle 1 – establish the qualitative nature of the damage

Revised examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 1 - establish the qualitative nature of the damage

damage – but not serious	serious damage
<p>Deterioration in flow as a supporting element of WFD¹² status, but no measurable change in overall WFD classified status.</p> <p>WFD Groundwater body status remains above poor and drawdown effects are localised.</p> <p>Damage to flora or fauna notified under section 28 the Wildlife and Countryside Act 1981 or protected by the Habitats Regulations; but that is considered localised and does not affect the integrity of the protected flora/fauna and site.</p> <p>Damage to modified (agriculturally improved) or degraded land.</p> <p>Localised damage to native flora and fauna not thought to affect viability of the species at that site.</p>	<p>Deterioration in WFD water body classified status which is caused by an abstraction pressure.</p> <p>Deterioration in WFD groundwater body status overall to poor.</p> <p>Damage to flora or fauna notified under section 28 the Wildlife and Countryside Act 1981 or protected by the Habitats Regulations where the level of damage has an adverse effect on the integrity of the protected flora/fauna and/or site.</p> <p>Destruction or major damage to part of a statutory protected site.</p> <p>Extinction of a protected species or habitat from a specific area.</p> <p>Extensive damage to habitat, or death of native flora or fauna typical to the habitat.</p> <p>Extensive damage to Biodiversity Action Plan</p>

¹² WFD - Water Framework Directive

	(BAP) species (on any stage of the life cycle) or habitat.
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Table 1: Revised examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 1.

Consultation version:

Examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 2.

damage – but not serious	serious damage
<p>Deterioration in flow as a supporting element of WFD status, but no measurable change in overall WFD classified status.</p> <p>WFD Groundwater body status remains above poor and drawdown effects are localised.</p> <p>Damage to flora and fauna notified under section 28 the Wildlife and Countryside Act 1981 or protected by the Habitats Regs; but that is considered localised and does not affect the integrity of the protected flora/fauna and site.</p> <p>Damage to modified (agriculturally improved) or degraded land.</p> <p>Localised damage to native flora and fauna not thought to affect viability of the species at that site.</p>	<p>Deterioration in WFD water body classified status which is caused by an abstraction pressure.</p> <p>Deterioration in WFD groundwater body status overall to poor.</p> <p>Damage to flora and fauna notified under section 28 the Wildlife and Countryside Act 1981 or protected by the Habitats Regs where the level of damage has an adverse effect on the integrity of the protected flora/fauna and/or site.</p> <p>Destruction or major damage to part of a statutory protected site.</p> <p>Extinction of a protected species or habitat from a specific area.</p> <p>Extensive damage to habitat, or death of native flora or fauna typical to the habitat.</p> <p>Extensive damage to Biodiversity Action Plan (BAP) species (on any stage of the life cycle) or habitat.</p>

[Consultation] Table 2: Examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 2.

Principle 2 - establish the extent and magnitude of the damage.

Revised examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 2 - establish the extent and magnitude of the damage (figures are indicative).

damage – but not serious	serious damage
<p>A measurable reduction in surface water flow below natural flows.</p> <p>Substantial loss of flow that has only a localised effect e.g. less than 1km of river.</p> <p>A small loss of habitat attributable to abstraction.</p> <p>Localised destruction of habitat which supports fish or other water-dependent species.</p> <p>Low numbers of mortality, not thought to have adverse effects on a local population</p>	<p>Complete loss of flow in any river caused by an abstraction.</p> <p>Substantial reduction in flows e.g. over 60 per cent lower than natural flows and over more than one km of river.</p> <p>Loss of main groundwater supply to a wetland indicated through cessations of springs and seepages.</p> <p>Substantial loss of habitat (e.g. more than 10 per cent of a site).</p> <p>Substantial change in habitat type e.g. over more than 30 per cent of a defined site.</p> <p>Substantial loss of flow which is visible outside of drought periods.</p> <p>Substantial loss of individuals (e.g. 100* dead juvenile fish, 100* dead crayfish) or large adverse effects on a wildlife population (e.g. more than 10 per cent of a local population)</p>

Table 2: Revised examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 2.

Consultation version

Examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 1.

damage – but not serious	serious damage
<p>A measurable reduction in surface water flow below natural flows.</p> <p>Substantial loss of flow that has only a localised effect e.g. less than 1km of river.</p> <p>A small loss of habitat attributable to abstraction.</p> <p>Localised destruction of habitat which supports fish or other water-dependent species.</p> <p>Low numbers of mortality, not thought to have adverse effects on a local population</p>	<p>Complete loss of flow in any river caused by an abstraction.</p> <p>Substantial reduction in flows e.g. over 60 per cent lower than natural flows and over more than one km of river.</p> <p>Loss of main groundwater supply to a wetland indicated through cessations of springs and seepages.</p> <p>Substantial loss of habitat (e.g. more than 10 per cent of a site).</p> <p>Substantial change in habitat type e.g. over more than 30 per cent of a defined site.</p> <p>Substantial loss of individuals (e.g. 100 dead juvenile fish, 100 dead crayfish) or large adverse effects on a wildlife population (e.g. more than 10 per cent of a local population).</p>

[Consultation] Table 1: Examples to demonstrate how damage may be assessed to identify whether it is serious damage for Principle 1.

Principle 3 - establish whether the damage is reversible and how long recovery may take

Revised examples to illustrate how damage may be assessed to identify whether it is serious damage for Principle 3 - establish whether the damage is reversible and how long recovery may take

damage – but not serious	serious damage
<p>Substantial loss of flow seen only during drought conditions.</p> <p>Substantial, but temporary, loss of flow where any effects are reversed after a short period of time.</p> <p>Short-term loss of habitat but outside of key life stages of fauna dependent on that habitat.</p>	<p>Reduction of flow outside of drought periods which restricts fish movement during key life stages – for example upstream / downstream migration or loss of juvenile holding areas.</p> <p>Permanent loss of native species or habitat.</p> <p>Short-term loss of habitat during key life stages not caused by drought. For example drying out of pools during or after amphibian spawning or lowering of water levels and drying of marginal river habitat during or after fish spawning.</p> <p>Reduced long term distribution and abundance of populations.</p> <p>Reduced capacity for natural regeneration</p>

Table 3: Examples to illustrate how damage may be assessed to identify whether it is serious damage for Principle 3.

Consultation version

Examples to illustrate how damage may be assessed to identify whether it is serious damage for Principle 3.

damage – but not serious	serious damage
<p>Substantial loss of flow seen only during drought conditions.</p> <p>Substantial, but temporary, loss of flow where any effects are reversed after a short period of time.</p> <p>Short-term loss of habitat but outside of key life stages of fauna dependant on that habitat.</p>	<p>Substantial loss of flow which is visible outside of drought periods.</p> <p>Reduction of flow outside of drought periods which restricts fish movement during key life stages – for example upstream / downstream migration or loss of juvenile holding areas.</p> <p>Permanent loss of native species or habitat.</p> <p>Short-term loss of habitat during key life stages not caused by drought. For example drying out of pools during or after amphibian spawning or lowering of water levels and drying of marginal river habitat during or after fish spawning.</p> <p>Reduced long term distribution and abundance of populations.</p> <p>Reduced capacity for natural regeneration.</p>

[Consultation] Table 3: Examples to illustrate how damage may be assessed to identify whether it is serious damage for Principle 3.

Annex C

Revised Examples B, C and D (changes are highlighted in green)

Example B: River

5.7. **Background:** An abstraction for water supply [~~sits across the full width of a river and~~] collects most of the flow. There is a substantial loss of flow in the river for about 200m. A number of tributaries enter the river about 200m downstream of the intake and flow is restored, but still depleted. The river is not designated. It contains a declining salmon population, which has spawned in other tributaries. Upstream of the intake there is estimated to be as much suitable and good quality spawning habitat as that currently available.

5.8. Impacts:

- Substantial loss of flow that has only a localised effect over 200m, with the flow depleted for approx five km further downstream
- Substantially depleted reach and intake structure act as a barrier to salmon migration into a key spawning area.

Principle	Principle 1	Principle 2	Principle 3
Triggered?	Y	N	Y
Reason	There has been damage to a European protected species in that the capacity of the species for propagation is restricted which has resulted in the risk of extinction of a protected species (in the area) due to restricted access to spawning area	Substantial loss of flow over 200m of river	There is a loss of river life within the 200m section of river. Due to the restriction of fish movement during key life stages the salmon population will continue to decline if access to spawning areas is limited.

5.9. **Conclusion:** The damage is considered serious. The direct impact from the abstraction on the viability of the salmon population by restricting access to a substantial spawning area is considered serious. However, the loss of river life from the 200m of substantially depleted river reach would be considered a localised effect and not, in itself, serious.

Consultation version of Example B: River

5.7. **Background:** An intake for water supply sits across the full width of a river and collects most of the flow. There is a substantial loss of flow in the river for about 200m. A number of tributaries enter the river about 200m downstream of the intake and flow is restored, but still depleted. The river is not designated. It contains a declining salmon population, which has spawned in other tributaries. Upstream of the intake there is estimated to be as much suitable spawning habitat as that currently available.

5.8. Impacts:

- Substantial loss of flow over 200m, with the flow depleted for approx five km further downstream
- Substantially depleted reach and intake structure act as a barrier to salmon migration into a key spawning area.

Principle	Principle 1	Principle 2	Principle 3
Triggered?	N	Y	Y
Reason	Substantial loss of flow over 200m of river.	There has been damage to a European protected species in that the capacity of the species for propagation is restricted.	There is a loss of river life within the 200m section of river. The salmon population will continue to decline if access to spawning areas is limited.

5.9. **Conclusion:** The damage is considered serious. The direct impact from the intake structure on the viability of the salmon population by restricting access to a substantial spawning area is considered serious. However the loss of river life from the 200m of substantially depleted river reach would be considered a localised effect and not, in itself, serious.

Revised version of Example C: Industrial process

5.10. **Background:** An industrial process has been in place for 20 years. It diverts some of the river flow down a bypass channel alongside the river. The amount left in the main river is not controlled by a hands-off-flow restriction (i.e. abstraction stops when flow in the river drops below a certain point). There is usually some flow in the main channel but there is substantial loss during some short periods of peak activity. The abstracted water is returned about 750m downstream. No migratory fish are present in the depleted reach due to a section of river gorge which would naturally prevent fish movement. The river is designated a SAC but none of the interest features are found within the depleted reach during any stage of their lifecycle.

5.11. Impacts:

- Depleted flow over a distance of 750m with short periods of severe depletion.
- Periodic damage has been caused during 'normal' flow periods and has been ongoing for 20 years. The ecology of the depleted reach is shown to include invertebrate species that are tolerant of low flows and not normally expected within a river gorge environment.
- The damage is within a designated site, but is not affecting specific designated habitats and species.
- The change to flow has been caused by the industrial scheme and is established as a cause of the damage.

Principle	Principle 1	Principle 2	Principle 3
Triggered?	N	N	Y
Reason	Although the site is designated the integrity of the site and the designated interest features are not affected.	A substantial loss of flow over 750m of river.	Limited damage is visible outside drought periods and has been ongoing for 20 years. It has permanently affected the river ecology in the depleted reach.

5.12. **Conclusion:** The damage is not considered serious damage. There is a clear impact from the abstraction and severely low flows are visible during peak abstraction periods. Although the ecology within the depleted reach has been affected, it does not affect the integrity of the European site, or the habitats and species that are designated.

Consultation version of Example C: Industrial process

5.10. **Background:** An industrial process has been in place for 20 years. It diverts some of the river flow down a bypass channel alongside the river. The amount left in the main river is not controlled by a hands-off-flow. There is usually some flow in the main channel but there is substantial loss during some short periods of peak activity. The abstracted water is returned about 750m downstream. No migratory fish are present in the depleted reach due to a section of river gorge which would naturally prevent fish movement, The river is designated a SAC but none of the interest features are found within the depleted reach during any stage of their lifecycle.

5.11. Impacts:

- Depleted flow over a distance of 750m with short periods of severe depletion.
- Periodic damage has been caused during 'normal' flow periods and has been ongoing for 20 years. The ecology of the depleted reach is shown to include invertebrate species that are tolerant of low flows and not normally expected within a river gorge environment.
- The damage is within a designated site, but is not affecting specific designated habitats and species.
- The change to flow has been caused by the industrial scheme and is established as a cause of the damage.

Principle	Principle 1	Principle 2	Principle 3
Triggered?	N	N	Y
Reason	A substantial loss of flow over 750m of river.	Although the site is designated the integrity of the site and the designated interest features are not affected.	Limited damage is visible outside drought periods and has been ongoing for 20 years. It has permanently affected the river ecology in the depleted reach.

5.12. **Conclusion:** The damage is not considered serious damage. There is a clear impact from the abstraction and severely low flows are visible during peak abstraction periods. Although the ecology within the depleted reach has been affected, it does not affect the integrity of the European site, or the habitats and species that are designated.

Revised version of example D: Quarry dewatering

5.13. **Background:** The quarry is for sand and gravel extraction, overlaying a chalk aquifer. The operation has planning permission. A water management plan has been agreed with the Planning Authority, estimating de-watering rates of 15,000 m³/day, to allow dry working of the mineral. Quarrying began at the site around 10 years ago. When the provisions of the Water Act are commenced to end most exemptions from abstraction licensing, the operator will be required to apply for a licence under the transitional arrangements.

5.14. The water table in the chalk aquifer is high, only a metre below ground level, therefore excavations here require dewatering of a principal aquifer.

5.15. The site is close to a fenland SSSI ½ km away which is a groundwater level dependent site and contains protected species such as Bittern and Fen Orchid. Groundwater levels have reduced over the last 10 years which can be attributed to the quarry dewatering. The site management records show that vegetation types have gradually changed over the last 10 years to habitats favouring dryer conditions. Permanent springs and seepages recorded on the site associated with wet flush habitats have also disappeared and are now only recorded during very wet periods.

5.16. Impacts:

- Consistently lowered groundwater levels have been measured within the site.
- Permanent springs and wet seepages have been lost and are now ephemeral, associated only with very wet periods.
- Comparison of historical vegetation community maps with current assessments show a change across half the site area to dryer communities since the dewatering commenced. Vegetation communities associated with permanent wet seepages have been lost.
- The areas of Fen Orchid habitat have reduced resulting in a dramatic decline in the numbers of fen orchids with few individuals remaining in isolated pockets.
- Reedbed habitat associated with the Bittern has also degraded with reduced numbers of breeding pairs recorded at the site.
- Loss of access to wetland habitat for eel, an important food for Bittern and itself a protected species

Principle	Principle 1	Principle 2	Principle 3
Triggered?	Y	Y	Y
Reason	There has been damage to protected flora and fauna.	Over half the site is affected with large areas of changed habitat and loss of permanent springs and seepages and	Lowered groundwater levels have been ongoing for 10 years. Habitat management alone will not help to restore the lost wetland species and an increase in

		<p>associated habitat.</p> <p>Numbers of Fen Orchids have dramatically declined.</p> <p>Breeding success of the Bittern is reduced.</p> <p>Breeding success of the Bittern is reduced.</p>	<p>groundwater is required.</p>
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5.17. **Conclusion:** Lack of water from springs and seepages has changed the vegetation type harming the populations that are dependent on wetland habitat. This is demonstrated by the reduced orchid populations and the Bittern failing to breed. The overall effect is that the site is failing to meet its conservation objectives. This is serious damage.

Consultation version of Example D: Quarry dewatering

5.13. **Background:** The quarry is for sand and gravel extraction, overlaying a chalk aquifer. The operation has planning permission. A water management plan has been agreed with the Planning Authority, estimating de-watering rates of 15,000 m³/day, to allow dry working of the mineral. Quarrying began at the site around 10 years ago. When the provisions of the Water Act are commenced to end most exemptions from abstraction licensing, the operator will be required to apply for a licence under the transitional arrangements.

5.14. The water table in the chalk aquifer is high, only a metre below ground level, therefore excavations here require dewatering of a principal aquifer.

5.15. The site is close to a fenland SSSI three km away which is a groundwater level dependent site and contains protected species such as Bittern and Fen Orchid. Groundwater levels have reduced over the last 10 years. The site management records show that vegetation types have gradually changed over the last 10 years to habitats favouring dryer conditions. Permanent springs and seepages recorded on the site associated with wet flush habitats have also disappeared and are now only recorded during very wet periods.

5.16. Impacts:

- Consistently lowered groundwater levels have been measured within the site.
- Permanent springs and wet seepages have been lost and are now ephemeral, associated only with very wet periods.
- Comparison of historical vegetation community maps with current assessments show a change across half the site area to dryer communities. Vegetation communities associated with permanent wet seepages have been lost.
- The areas of Fen Orchid habitat have reduced resulting in a dramatic decline in the numbers of fen orchids with few individuals remaining in isolated pockets.
- Reedbed habitat associated with the Bittern has also degraded with reduced numbers of breeding pairs recorded at the site.
- Loss of access to wetland habitat for eel, an important food for Bittern and itself a protected species

Principle	Principle 1	Principle 2	Principle 3
Triggered?	Y	Y	Y
Reason	Over half the site is affected with large areas of changed habitat and loss of permanent	There has been damage to protected flora and fauna.	Lowered groundwater levels have been ongoing for 10 years. Habitat management alone will not

	<p>springs and seepages and associated habitat.</p> <p>Numbers of Fen Orchids have dramatically declined.</p> <p>Breeding success of the Bittern is reduced.</p>		<p>help to restore the lost wetland species and an increase in groundwater is required.</p>
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5.17. **Conclusion:** Lack of water from springs and seepages has changed the vegetation type harming the populations that are dependent on wetland habitat. This is demonstrated by the reduced orchid populations and the Bittern failing to breed. The overall effect is that the site is failing to meet its conservation objectives. This is serious damage.