



**MAKING THE MOST OF EVERY DROP:
Defra Consultation on reforming the water abstraction management system**

A RESPONSE BY NATIONAL PARKS ENGLAND

1. Introduction

National Parks England (NPE) exists to provide a collective voice for the nine English National Park Authorities and the Broads Authority. It is governed by the Chairs of the ten Authorities. Our response represents the collective view of officers who are working within the policies established by the National Park Authorities (NPAs), and follows internal consultation. Individual National Park Authorities may submit separate comments, which will draw on the specific issues for their particular area.

NPE is grateful for the opportunity to inform the consultation on reforming the water abstraction management system. The water environment is a key feature in many of the special qualities of England's National Parks and how it is managed for abstraction has direct implications for the statutory purposes of National Parks, and duties placed on the NPAs. The statutory purposes of National Parks are to:

- to conserve and enhance the natural beauty, wildlife and cultural heritage of the areas; and
- to promote opportunities for understanding and enjoyment of the special qualities of the National Parks by the public.

In pursuing these purposes, the NPAs have a duty to seek to foster the economic and social well being of local communities within the National Parks.

2. Summary

The key points NPE would like to make with regards to this consultation are listed below; our detailed response to the consultation document questions can be found in Section 3.

- In principle we support the conversion of seasonal licences to abstraction permissions based on water availability; however, with regards to surface waters, we wish to see water availability measured/defined on a daily basis to safeguard environmental flow requirements.
- Improved hydrometric networks will be required to support the conversion of seasonal licences to abstraction permissions based on water availability.
- We believe a feature of the new regime should be a greater consideration and transparency of potential environmental impacts upstream and downstream from any one monitoring point within a catchment.
- We wish to see groundwater resource assessments undertaken annually, at the end of the recharge season, and the abstraction volumes/units set accordingly.

- We wish to see a proportion of recharge being allocated for the environment (i.e. not available for licensing), safeguarding aquifers from groundwater mining.
- Reforming the water abstraction management system represents an ideal opportunity to review and align all abstraction licences with regards to supporting 'good ecological status' under the Water Framework Directive (WFD). This does not just relate to addressing flow pressures, but also addressing in stream physical modifications that support abstractions but lead to WFD failures; for example impoundments, weirs etc that retain water but provide barriers to fish migration.
- In principle we support the licensing of discharges; however we are concerned at the suggestion that the accurate measurement of discharges be a voluntary rather than mandatory process. If they cannot be measured accurately, they should not be made available for licensing.
- We believe that permanently limiting abstraction trading to those with a direct interest in abstracting water is very important. Under both the Current System Plus and Water Shares options there no longer appears to be a requirement to demonstrate a justification of need for the water – a fundamental principle of the current system. As a result of this we are very concerned about the potential for abstraction permissions to be bought and traded by those who have no intention of using the water.
- We believe that the demonstration of exemplar/'best practice' water efficiency with regards to the use of the abstraction should be a prerequisite with regards to the approval of all licence trades.
- We support the proposal to remove the payment of compensation for changes to abstraction conditions and to phase out the collection of the Environmental Improvement Unit Charge through abstraction charges. We recognise that the collection of these funds dramatically slows down the process of changing licences, exacerbating environmental risk and drawing out the period of uncertainty for business.
- We believe it is crucial that conditions on current licences safeguarding the environment (for example fish protection specifications) are transferred into the new system. This is essential for the conservation of protected wetland and freshwater sites and associated species.
- We are concerned that licences that have been unused are 'reactivated' to define a recent actual amount for transition into the new system, without the intention of use post transition; i.e. the sole purpose of reactivation is to retain the abstraction licence asset 'on paper'. To address this risk, we believe that the assessment period for considering previous use should cover a period of up to 10 years.

3. National Parks England detailed response

1) What are your views on the proposal to convert seasonal licences into abstraction permissions based on water availability?

In principle we are supportive of this proposal. However, for surface water, we wish to see more information regarding how water availability will be assessed/termed available; e.g. on a daily basis, linked to river telemetry/'real time' observation, or periodically (e.g. every week).

Under this proposal there is a risk of increased abstraction (a fundamental principle of the reform) impacting environmental requirements when flows recede unless water availability is measured/ defined over a short duration. This is particularly the case for more 'flashy' rivers where flows can recede quickly within a twenty four hour period (e.g. on the River Ouse in the South Downs National Park). As a result, we wish to see water availability measured/defined on a daily basis to safeguard environmental flow requirements.

2) What do you think about the different proposed approaches to linking abstraction to water availability for surface water and groundwater abstractions?

Current System Plus – surface water

In principle we are supportive of allowing additional abstraction at high flows through the setting of a threshold above which abstractors could take additional water that does not count towards their annual limit (but would still be restricted by their daily limit). However, we are not clear what this would mean with regards to supporting a flow regime. We acknowledge that Section 4.1, Annex C states that thresholds "...would be set to a point where all abstractors could take their maximum daily licence quantities without impacting flows required for environmental protection..."; however, it is not clear if this refers to the continued protection of environmental flow indicators across the flow regime, preventing the licensing away of all flow above "...the very lowest flows..."

We agree that allowing additional abstraction at very high flows will provide an important incentive for abstractors to develop storage. However, storage reservoirs should not be seen as the 'immediate panacea' for all water resources pressures. Across National Parks there are important landscape and visual impact considerations to be addressed. These may result in the requirement of mitigation measures to reduce impacts to an acceptable level (for example, a reduction in size/scale, re-location or by repairing/enhancing surrounding habitats, planting screen belts or native hedge planting etc.). This needs to be recognised by Defra, particularly given the fact that many agricultural reservoirs could be permitted development (as set out in Part 6 of Schedule 2 of the 1995 General Permitted Development Order – agricultural reservoirs are permitted development on agricultural units of 5 hectares or more), thus planning control by National Park Authorities would be greatly restricted.

Water Shares – surface water

We recognise that this option represents our preferred option because, as stated in the consultation document, it is a more flexible system that reacts better to changing patterns of water availability than a system where the abstraction permissions are based on fixed volumes. However, the example given in Annex C implies that it is the full licensed volumes under the current system that would determine the number of shares under this option; we seek clarification that it would be revised full licensed volumes based on recent actual abstraction volumes that would determine the share allocation.

We understand that the Environment Agency/Natural Resources Wales would "...regularly assess how much water would be available for abstraction..." and allocate shares accordingly. Annex C states that this "...may need to be repeated frequently in enhanced

catchments to ensure the system responds quickly to peaks and troughs in availability, for example fortnightly.” However, as discussed in relation to Question 1, we believe that there needs to be a system in place that allows this assessment to be undertaken and communicated over a much shorter time period, perhaps daily. This would ensure that ecological flow objectives would continue to be met when flows recede, in particular for more ‘flashy rivers’. Therefore, robust observation/monitoring is required to support this option.

Whilst this robust monitoring is already undertaken on many main rivers (for example at telemetered gauging stations), it is not on many ‘minor rivers’ and wetlands/level dependent environments that also support many abstractions. Therefore, improved hydrometric monitoring networks will certainly be required to support this option.

We understand that there has to be a criterion to determine the reliability of an abstraction licence on transferral to the Water Shares option. We understand the reasoning behind this criterion being a flow constraint/HoF on a licence but wonder if consideration has been given to the purpose/use of the licence? – i.e. distinguishing between purposes/uses that require high reliability abstraction and those that are flexible enough to withstand lower reliability abstraction.

Current System Plus & Water Shares – groundwater

In principle we are supportive of linking abstraction from groundwater to water availability for both the Current System Plus and Water Shares options. However, we seek further information concerning:

- How groundwater recharge (availability) will be assessed; through ‘actual recharge’ as stated in Annex C (implying direct field measurement) or ‘estimated recharge’ provided by groundwater recharge models?
- How frequently groundwater abstractions would be altered in response to changes in groundwater availability (only the term ‘slowly’ is used in Annex C), and when would the assessment of groundwater availability be made – at the end of the recharge season?
- Will there be a proportion of recharge allocated to the environment (i.e. not available for licensing) safeguarding the aquifer from ‘groundwater mining’ (withdrawal of groundwater over a period of time that exceeds the recharge rate of the supply aquifer).

Assuming groundwater availability will be assessed through modelled recharge, we wish to see a consistent, robust modelling approach employed by the Environment Agency across the country. We wish to see this assessment undertaken annually, at the end of the recharge season, and the abstraction volumes/units set accordingly. We have concerns that if this is assessment/‘abstraction licence setting’ is not done on an annual basis, there is a risk of deterioration of groundwater resources in aquifers that are so finely balanced between average annual recharge and annual abstraction, particularly in a dry year, that there is often very limited net recharge (i.e. the aquifers are susceptible to over abstraction and groundwater mining). This is particularly the case, for example, for the chalk aquifers of the South Downs National Park. We also wish to see a proportion of recharge being allocated/‘ring fenced’ for the environment (i.e. not available for licensing) safeguarding aquifers from groundwater mining.

3) Would it be helpful if abstraction conditions required abstractors to gradually reduce their abstraction at low flows before stopping, rather than being just on or off?

It may be helpful for abstractors to have foresight that flows (and therefore water resources) are receding, thereby enabling them to prepare for the potential cessation of their abstraction. However, this could be provided through improved communication of river flows (e.g. telemetered river flows available on the internet). In times of water resources stress/receding river flows we do not see why a 'gradual reduction' would be helpful to abstractors (surely they would prefer 'all or nothing?'); unless this reduction had the net effect of reducing flow to a greater extent than otherwise would be permitted. We would welcome the views of abstractors with regards to this question.

4) Do you think the proposal to protect the environment using a regulatory minimum level at very low flows is reasonable? If not, how do you think we should protect the environment at very low flows?

Yes, in principle we are supportive of this. It is important that abstraction licences without hands-off flow (HoF) conditions are constrained to a regulatory minimum level (minimum residual flow - MRF) to safeguard environmental requirements at very low flows. However, the consultation document does not explain why all existing abstraction licences cannot be varied to have HoF conditions, and why this has not been considered. At face value this appears an ideal opportunity to review and align all abstraction licences with regards to supporting 'good ecological status' under the Water Framework Directive (WFD). This does not just relate to addressing flow pressures, but also addressing in stream physical modifications that support abstractions but lead to WFD failures; for example impoundments, weirs etc that retain water but provide barriers to fish migration.

We also seek further information on how regulatory minimum flows will be defined. We assume the UK TAG standards/ecological flow objectives will be applied; linking the ecological status of the river to key low flow duration exceedences and the percentage of available flow any given pressure removes (e.g. UK TAG, 2007 standard for flows <Q95, between 7.5 and 20% of the Q95 flow can be taken as a continuous amount provided this does not exceed 25% of the Q98 flow).

5) What do you think of the proposal to require abstractors who discharge water close to where they take it from to continue to discharge a proportion in line with their current pattern?

In principle we are supportive of this. The recognition of discharges in the abstraction licensing system will be important in providing increased water resources in areas that are currently over licensed/over abstracted (assuming that these discharges have not already been recognised in the associated Catchment Abstraction Management Strategy – CAMS – resource assessments). However, as recognised in the consultation document, the regulation of the water quality of these discharges will be crucial. For example, fish farms, whilst representing 'non-consumptive abstractions', can be significant sources of pollution and the reason for failure of water bodies under the Water Framework Directive classifications (particularly for Chalk streams in the South Downs National Park).

We are concerned at the suggestion that the accurate measurement of discharges be a voluntary rather than mandatory process. As discussed in relation to Questions 1 and 2, robust hydrometric monitoring is required to support a reformed abstraction licensing system that increases water resources by systematically linking abstraction to water availability. This means that the current hydrometric network/number of CAMS assessment points needs to increase. In 'enhanced catchments'/catchments that classified as no water available, over-

licensed or over-abstracted under CAMS, there is a risk that actual abstraction exceeds the assumed additional resource provided by discharges, breaching the associated ecological flow objective. Whilst there may be situations where the breach would only be slight, the ecological flow objectives do not represent a 'fuzzy boundary'; therefore this would still represent deterioration under the new abstraction licensing system.

Therefore, we believe the 'precautionary principle' should be applied with regards to the licensing of discharges for abstraction; if they cannot be measured accurately, they should not be made available for licensing.

6) How best do you think water company discharges should be regulated to provide reliable water for downstream abstraction without impacting on water quality objectives or constraining flexibility in water management?

We recognise the complexities associated with the licensing of water company discharges for abstraction downstream (as discussed on page 33 of the consultation document). We propose two potential solutions:

1. The water companies themselves take responsibility for 'licensing' their own discharges to abstractors. This could be similar to the legal agreements already set up between water companies with regards to bulk supplies. However, we appreciate that there are legal issues to consider with regards to who 'owns the effluent', particularly once discharges exit water company infrastructure and enter the river system. The abstractor could address/negotiate issues regarding reliability etc through this 'legal agreement' and manage them accordingly. The Environment Agency/Natural Resources Wales would monitor compliance (i.e. licensed quantities) in the same way they would with any other abstraction licence.
2. The abstraction of such discharges could be 'ring fenced' to the respective water company. The utilisation of these resources could then be further encouraged through the water resources management planning process with regards to meeting future water demands or, more radically, to replace existing sources thereby 'freeing up' the associated licensed abstraction for other users. This approach would allow water companies to manage these resources as part of an efficient supply network.

We acknowledge that a number of water companies already operate effluent reuse schemes or are including them in their AMP 6 Water Resources Management Plans. However, this option refers specifically to schemes that would use the river as a conduit, i.e. discharging upstream and supporting abstraction downstream and improving flow conditions between these two points.

With regards to the encouragement of water companies to replace existing sources with such options thereby 'freeing up' the associated licensed abstraction for other users; this is simply a 'high level suggestion' based on the issue at face value. We realise that this could have significant implications on the 'financeability' of water company Business Plans.

7) If you are an abstractor, how would these charging proposals affect your business?

N/A

8) To what extent would a system that charges abstractors partly on permitted volumes and partly on actual usage (i.e. a two part tariff) encourage abstractors to use less water?

It is reasonable to expect that a system that charges abstractors partly on actual usage will drive water efficiency and the use of less water. We would like to see two part tariffs applied across all sectors, including public water supply – this could help further drive innovative water efficiency/ demand management measures from the water companies, going beyond statutory water efficiency targets.

9) Would quicker and easier water trading benefit abstractors now? How beneficial do you think it would be to abstractors in the future?

It is reasonable to expect that a system that facilitates quicker and easier trades would benefit abstractors, particularly in times of water stress/drought. However, this is certainly dependent on the purpose/use of the abstraction.

10) Do you agree that participation in abstraction trading should initially be limited to those with a direct interest in abstracting water?

We believe that permanently limiting abstraction trading to those with a direct interest in abstracting water is very important. Under both the Current System Plus and Water Shares options there no longer appears to be a requirement to demonstrate a justification of need for the water – a fundamental principle of the current system. As a result of this we are very concerned about the potential for abstraction permissions to be bought and traded by those who have no intention of using the water. The adverse impact of this could be to drive up the price of shares which has an economic impact for those who want to make a justified abstraction. This could conflict with the duty of National Parks to seek to foster the economic and social well being of local communities within the National Parks.

We also believe that the demonstration of exemplar/‘best practice’ water efficiency with regards to the use of the abstraction should be a prerequisite with regards to the approval of all licence trades.

11) Do you support our proposals for a more consistent approach to making changes to abstraction conditions? If not how would you improve the proposals?

Yes, we are very supportive of this. For example, the South Downs National Park has many surface and groundwater bodies that are over-licensed or over-abstracted. This pressure is principally caused by licences of right/non-time limited licences; there are very few time-limited licences simply due to commitment of water resources before the introduction of the time limits in the Water Act 2003. Therefore National Parks England would welcome a reformed system where: a) licences of right/non-time limited licences can be easily/efficiently changed (this is certainly not the case at present), and b) all abstraction licences would have equal status to ensure that the impact of required changes/sustainability reductions would be shared by all relevant abstractors.

12) What notice periods do you think would best balance the needs of abstractors and the environment?

We appreciate the length of notice period needs to be balanced between providing abstractors adequate time to plan for the change and minimising the amount of time that the environment is at risk of being damaged by abstraction. However, we question why a six year monitoring and subsequent notice period has been chosen. We believe it would be more efficient for these periods to span five years, aligning with Water Framework Directive classifications and the production of associated River Basin Management Plans.

13) Do you support the proposal to remove the payment of compensation for changes to abstraction conditions and to phase out the collection of the Environmental Improvement Unit Charge through abstraction charges?

Yes, we are supportive of this. We recognise that the collection of these funds dramatically slows down the process of changing licences, exacerbating environmental risk and drawing out the period of uncertainty for business.

Further support for this proposal would be gained through the production of evidence identifying the cost savings to abstractors as a result of no longer having to pay the EIUC.

14) Do you agree it is important to take measures when moving licences into the new system that would protect the environment from risks of deterioration?

Yes, it is crucial that conditions on current licences safeguarding the environment (for example fish protection specifications) are transferred into the new system. This is essential for the conservation of protected wetland and freshwater sites and associated species.

15) Would you prefer us to consider the risks in each catchment when designing the rules for moving licences into a new system, or should we treat all abstractors in the same way regardless of water availability?

We would prefer a universal approach being applied to all catchments regardless of water availability – i.e. to remove unused water from all licenses in a catchment. This would provide a 'consistent baseline' of water resource availability, ensuring that the statuses between catchments are directly comparable. We believe that this 'true representation' of water resources availability would be of greater benefit in encouraging economic development/rural business expansion into more sustainable catchments. Again, this is particularly important in large water stressed areas such as the South Downs National Park.

16) What would be the most effective method to calculate the new annual limits to be transferred into the new system (for example average annual, average peak or a combination of actual and licensed volumes)? And what assessment period should be used to calculate them?

We are pleased to see the careful consideration of the possible assessment periods for considering previous use. We are concerned that licences that have been unused/dormant are 'reactivated' to define a recent actual amount for transition into the new system, without the intention of use post-transition; i.e. the sole purpose of reactivation is to retain the abstraction licence asset 'on paper'. This is clearly not in the spirit of the process. In this situation, there is also a high risk that this results in environmental deterioration of water bodies; for example over-licensed water bodies could become over-abstracted, and over-

abstracted water bodies could further deteriorate. This could certainly occur in a large number of water bodies in National Parks (including the South Downs) and undermine the achievement of targets set out in the Government's Biodiversity 2020 Strategy.

To address this risk, from careful consideration of Table 2 in the consultation document, we believe that the assessment period for considering previous use should cover a period of up to 10 years. In the context of most National Parks, this would include a drought/period of water stress for both surface water and groundwater resources. We believe that focusing specifically on an assessment period that includes a drought would significantly disadvantage abstractors who have been unable to abstract due to flow constraints.

Whilst protection of the water environment is a key consideration for the achievement of the first statutory purpose of National Parks (to conserve and enhance the natural beauty, wildlife and cultural heritage of National Parks), we are satisfied that the environment is afforded protection in times of drought through Environment Agency and water company drought plans, and Section 57 spray irrigation restrictions. In the context of the South Downs National Park, for example, public water supply abstraction and abstraction licences for spray irrigation are certainly the two largest sectors of water use.

17) Do you support the establishment of a water reserve to support economic growth?

Yes, we are supportive of this for catchments where there is no water available. However, we would like to see the consideration of reserves to support freshwater and wetland habitat creation (above the environmental requirement defined by ecological flow objectives). 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' has an aspiration for the creation and restoration of 200,000ha of priority habitat by 2020; such a reserve would help support this.

National Parks England

March 2014