



Department  
for Environment  
Food & Rural Affairs

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# **Water abstraction management reform in England**

## **What would reform mean for abstractors?**

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Any enquiries regarding this publication should be sent to us at

Abstraction Reform Team  
Area 3B  
Nobel House  
17 Smith Square  
London  
SW1P 3JR

[abstraction\\_reform@defra.gsi.gov.uk](mailto:abstraction_reform@defra.gsi.gov.uk)

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# Introduction

The UK Government is reforming the system of water abstraction management in England. The detailed proposals and their rationale are set out in the [UK Government Response to consultation on reforming the Water Abstraction Management System](#)<sup>1</sup>. This document should be read alongside the response to help explain what the main changes would mean for abstractors with different types of licences and in different types of catchments in England.

**These changes are not intended to come into force until the early 2020s.** The move to a reformed system will be gradual and more detailed guidance and information will follow as we make progress towards reform. This document is designed to draw attention to the main changes you would see under a reformed system. The changes are highlighted in boxes at the start of each section with more detailed explanations underneath.

## A new national system

### 1. Your abstraction licence would become a permit

#### Headline

- All abstraction licences would be converted into permits.
- Permits would be made up of different elements including water accounts, local conditions and standard catchment rules.

You would have your licence converted into a permit within Environmental Permitting Regulations. If you already have a permit relating to different regulated activities such as industrial emissions, abstraction related conditions would be added to this permit. The point of this is so you only have one permit relating to all your regulated activities.

Your permit would be effectively made up of three parts:

- Water account conditions
- Site specific conditions
- Standard catchment rules

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<sup>1</sup> <https://www.gov.uk/government/consultations/reforming-the-water-abstraction-management-system-making-the-most-of-every-drop>

## Water account conditions

These are the conditions held online that apply specifically to your individual abstraction. For example, the annual volume limit and daily volume limits you must comply with and your abstraction returns. These are in an account to facilitate trading (see section 15).

## Site specific conditions

Site specific conditions are conditions that relate to your specific abstraction point such as requirements for fish passes. For the most part, these will have been transferred across from your existing licence without being significantly changed.

## Standard Catchment Rules

We would include standard abstraction conditions in catchment abstraction rule documents which you will be able to access online. Examples of these conditions include common hands off flows, trading rules and low flow controls. As these would apply to all abstractors in the catchment, it makes sense for these to be held centrally so everyone is aware of them and they can be changed easily if necessary and at the same time, generally following reviews (see section 9).

## 2. If your annual licensed volume poses a risk to the environment it would be reduced

### Headline

- Only permitted volumes posing a risk to the environment would be reduced.

Your permitted abstraction volume would only be changed from your previous licensed volume if use of your full licensed volume would create a risk to the environment. Abstraction licences not creating a risk of environmental deterioration would not have their volume limits changed when they are converted to permits; the volume limits or permitted volumes on these abstraction permits would be the same as they were on the licence – this applies to both surface and groundwater licences.

Typical licences that are unlikely to pose a risk to the environment are those:

- with non-consumptive purposes and managed depleted reaches;
- with hands off flow controls i.e. restrictions on abstraction linked to flow;
- which have recently been assessed as not presenting a risk to the environment when fully used such as recently reissued time-limited licences and licences granted as part of the process of removing exemptions from abstraction licensing.

If your licence does pose a risk to the environment, we would use a formula to set your permitted volume based on your peak actual annual abstraction volumes over a specified historic period of at least 10 years, which includes dry periods. This should reflect your abstraction needs, particularly if you have very variable requirements, while significantly reducing risks to the environment.

## For water companies

We intend to take a slightly different approach given your security of supply obligations. The Environment Agency would identify all your licensed volumes that pose a risk of deterioration to the environment<sup>2</sup> and you would have to individually justify your need for those volumes based on your legal obligations, emergency requirements and/or historical use patterns. If a licensed volume is required for emergency purposes, it would only be available for those purposes.

### 3. Your seasonality conditions would be removed

#### Headline

- No permits would have seasonal conditions in the new system.
- If your licence is winter only, you would be given a hands off flow condition which allows access to high flows whenever they occur.

If you currently hold a seasonal licence we would convert it into a permit that has no seasonal conditions; this applies in all catchments to all surface water and groundwater abstractors.

#### Winter only licences

If your licence is a winter only licence your new permit would have a hands off flow condition. The amount of water you can abstract would be linked to the availability of water in the environment not the season. For example, if previously you had a licence which only allowed you to abstract water during the winter to fill up your reservoir, now you would be able to abstract water at any time of the year during high flows, subject to your annual / daily limit.

Removing seasonality would give you more flexibility to abstract water irrespective of the time of year, provided that water was available at that time.

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<sup>2</sup> Further consideration will be given to the transition for water companies in the light of development of upstream reform plans

## 4. The time-limits on your licences would be removed

### Headline

- No permits would be time limited in the new system.
- All permits would be potentially subject to risk based reviews.

If you hold a time limited licence we would convert it into a permit that has no time limit; this applies in all catchments to all surface water and groundwater abstractors. This would mean your abstraction permit would not expire. Instead, there would be a risk based review system that the Environment Agency would use to make changes to all abstraction permits (see section 9 for further information on how your permit can be changed in the new system).

Currently around a quarter of licences are time limited (usually for 12 years). Abstractors need to re-apply for their licence when the time limit expires to the Environment Agency. This change would provide greater certainty to those who currently have time limited licences.

## 5. Your hands off conditions would be retained and standardised

### Headline

- Hands off flow or level conditions would be standardised on permits so that there are only a relatively small number of different reliability levels across a catchment.

We would standardise hands off conditions when we convert your licence into a permit; this means that the hands off condition on your permit may change.

There are often many similar but slightly different hands off conditions in the same catchment. Changing them to reduce the number of different hands off conditions to a small number would make it easier for the regulator to manage abstraction and facilitate trading. You may see a slight change in your hands off condition due to this rationalisation.

In enhanced catchments (see section 13) if you have a hands off flow condition, you would be gradually required to reduce your abstraction.

## **6. If you do not have hands off flow conditions, new conditions would be introduced to allow controls at low flows**

### **Headline**

- If you are a surface water abstractor who does not have hands off flow conditions you would be subject to a new low flows control system.
- If you are a ground water abstractor with direct impacts on surface water you would also be subject to a new low flows control system.
- If you are an irrigator, you would not be singled out for control as currently but there will be tailored catchment approaches that take into account costs and benefits and essential users.

In all catchments, there would be new conditions that allow controls at very low flows on surface water abstractors that currently have no flow based controls i.e. no hands off flows/levels. Groundwater abstractors with direct impacts on surface water would also be covered. The exact basis and nature of these controls would be determined at a catchment level to ensure they are appropriate to the condition of that catchment but would be determined in the manner set out below.



For each catchment, as part of developing catchment rules, the Environment Agency will identify any low flow levels at which there could be significant risks to the environment due to abstractors. If there are such flow levels, they will develop a broad approach to controlling abstraction to prevent risks to the environment at low flows taking into account costs and benefits and essential users. This will be included in the catchment rules.



If such low flow levels occur, the Environment Agency will review whether the overall weather conditions and outlook suggest there are actual significant risks to the environment.



If the Environment Agency determines that there are such risks, they will implement their agreed approach which is likely to include contacting abstractors to encourage them to use water more efficiently and make voluntary reductions in abstraction while the regulator also increases their monitoring of the water environment.



If the Environment Agency determines, through monitoring, that significant risks to the environment are continuing due to abstraction, they are likely to implement mandatory restrictions on abstraction proportionate to the risks, taking into account essential water needs and economic impacts.

We believe that this approach to controls at low flows would ensure a proportionate, evidence based approach to protecting the environment while minimising impacts on abstractors. It would also allow us to repeal S57 of the Water Resources Act 1991<sup>3</sup>.

### **If these new controls apply to you, you would:**

1. Be able to see what the trigger levels are for low flow reviews in your catchment abstraction rules document.
2. Be asked to voluntarily reduce abstraction when there are risks to the environment from over abstraction at low flows.
3. Be notified of mandatory reductions in abstraction at low flows if required.
4. Be notified when restrictions on abstraction are reduced or removed.

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<sup>3</sup> Section 57 of the Water Resources Act 1991 gives the Environment Agency / Natural Resources Wales powers for "Emergency variation of licences for spray irrigation purposes when there has been an exceptional shortage of rainfall or other emergency." Groundwater licences can also be restricted through this power if the abstraction is likely to affect the flow or level of the river.

## 7. We are doing further work on our regulatory approach to non-consumptive abstractors

### Headline

- Low/non-consumptive abstractors would all have licences converted to permits.
- We are going to be talking further to non-consumptive abstractors about how best to make the new permitting framework work for them.

There are approximately 2,500 abstraction licences (8% of licence stock) that are classed as either low or non-consumptive. These include licences for fish farming, watercress growing, amenity leats, hydropower and some industrial and energy generation related purposes. Many of these abstractors may have separate impoundment, fish pass, transfer and/or abstraction licences. In the reformed system all these would be under just one permit, with conditions covering all relevant abstraction activities. This has the potential to reduce the red tape they face and reconsider what conditions are relevant and required. We will be talking to non-consumptive abstractors further about this.

## 8. If you abstract 20 cubic metres or less per day you would still not need a permit

### Headline

- Abstractors who take 20 cubic metres or less per day would continue to be exempt but can voluntarily register their abstraction.

Currently, if you abstract 20 cubic metres or less of water per day you do not need a licence. This is because these small abstractions have little impact on rivers and groundwater, and not requiring a licence reduces the administrative burden these abstractors face. No evidence has been found of any significant impacts to the environment from these deregulated abstractions. The current policy to exempt small abstractions of 20 cubic metres or less of water per day would remain unchanged. If evidence of impacts is identified in a particular catchment, these limits can be reviewed and changed in the future.

## 9. Your permit would not expire but your abstraction permit conditions may be changed through risk based reviews

### Headline

- Reviews would be triggered if there is evidence of risks to the environment on bases set in the standard catchment rules.
- The Environment Agency would make necessary changes to permits following transparent, evidence based investigations.
- All permits would be in scope for reviews.

All permits would have the same status rather than some being permanent and others time-limited. All abstraction conditions on permits would be reviewable when there is evidence of environmental risk being caused by abstraction. There could also be situations where evidence shows that more water could be abstracted than previously thought without putting pressure on the environment. In these circumstances abstraction conditions could be loosened.

The approach to the assessment of environmental risk due to patterns of abstraction and discharge would be set out for you, including 'review thresholds', in the standard catchment rules. If a review is triggered the regulator would notify you that a review of your permit abstraction conditions was underway and would keep you updated on progress and implications. Once decisions are made on any required changes to abstraction conditions on permits if the impacts are significant for abstractors, at least 3 years notice would be given for changes to come into effect. The exception to this is where serious damage is being caused. Where this is the case notice is not required. Compensation would no longer be paid for any losses due to changes to abstraction conditions on permits.

### As an abstractor you would:

1. Be notified when any reviews start;
2. Be able to see online the availability of water in your catchment as well as environmental indicators and review the long term trend in water availability and risk for your catchment;
3. Be consulted on any changes to your catchment rules;
4. Be asked to make voluntary changes before mandatory permit changes were undertaken; and
5. Be given at least 3 years notice of any significant changes needed to permits unless they are required to address 'serious damage'.

For an abstraction to be classed as serious damage, the Regulator would use the three principles set out in the 2012 serious damage consultation<sup>4</sup> and response to guide an assessment of available evidence and draw a conclusion about whether serious damage is caused or not. These are:

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.

If your licence had already been identified as unsustainable prior to the implementation of reform, you would receive compensation for any losses due to subsequent changes after the implementation of reform.

## 10. Your abstraction charges would still be based on cost recovery

### Headline

- The Environment Agency would do further work to review the basis of abstraction charging but charges would still be based on cost recovery.

Given the proposed changes to the abstraction management system, further work needs to be done to examine the charging system. The Environment Agency would aim for an approach that:

- Is simple and understandable;
- Provides a degree of continuity with charges paid under the current system;
- Is predictable for customers; and
- Recovers the regulator's costs of water resource management.

The Environmental Improvement Unit Charge would be phased out as funds are no longer required for paying compensation for any losses due to changes in permit conditions.

Further work would focus particularly on:

- The current approach to adjusting charges based on seasonality which would move toward adjusting charges based on reliability;
- Reviewing standard loss factors that adjust charges according to how much water is returned locally;
- The possibility of a closer relationship between charges and actual water use;
- The basis for charging for supported sources;

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<sup>4</sup> <https://www.gov.uk/government/consultations/the-water-act-2003-withdrawal-of-compensation-on-the-grounds-of-serious-damage>

- Differential charging for enhanced catchments; and
- Recalculation of unit charges to ensure cost recovery from transitioned licences.

The Environment Agency would consult on any changes to the current charging system.

# Additional reforms in Enhanced Catchments

In enhanced catchments there would be further reforms to help you make the most of scarce water resources. These would include:

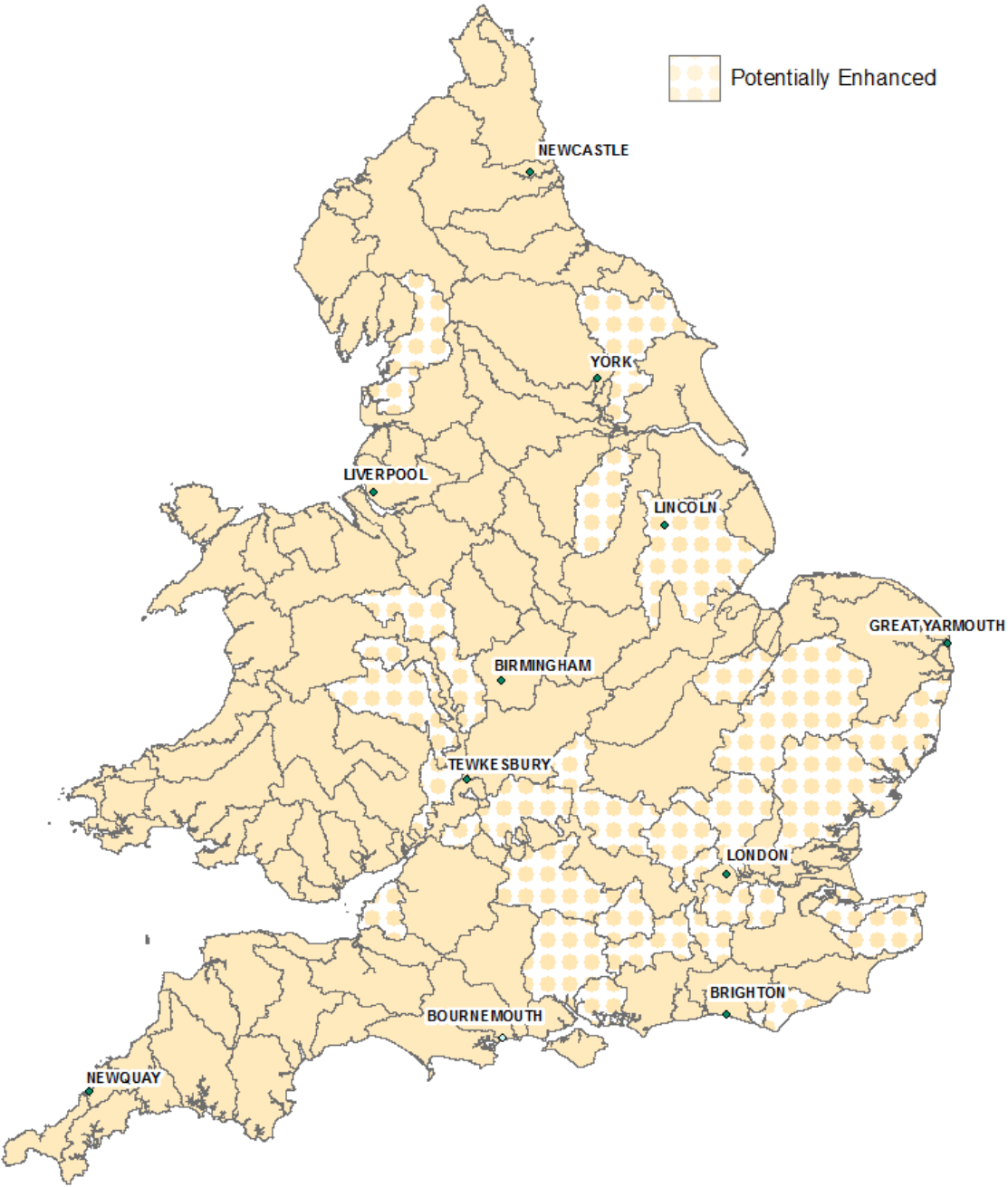
- 'Bonus' water when flows are high that does not count towards permitted volumes;
- Hands off flows for those who already have them that switch gradually on and off to help you respond;
- The annual amount of water each abstractor is permitted to take is accounted for as proportions ('shares') of the amount of water available for abstraction in different parts of a catchment; and
- Pre-approved trading rules to make trading quicker and easier.

In order for these reforms to operate, you would require smart meters. Small businesses may want to opt out of having a smart meter in which case they would not be able to take advantage of these reforms.

## 11. Determining which catchments benefit from being enhanced

We do not know how many enhanced catchments there would be at the moment as the Environment Agency will have to do further work with stakeholders to examine the costs and benefits for different catchments of becoming enhanced. The benefits will be greatest where there is significant potential for trading in a catchment. We believe that less than a third of catchments would be enhanced initially. This means that many of you would not be in enhanced catchments and would see little difference to your day to day experience. Map 1 below presents an initial assessment of catchments that we and the Welsh Government think could possibly be enhanced catchments when we reform the system. Further work with local experts and stakeholders could rule some of these out or highlight other catchments that could benefit from enhanced status.

Figure 1 – Map of England and Wales indicating the catchments which could potentially be enhanced



## 12. Bonus water would be available to those in enhanced catchments

### Headline

- If you abstract in an enhanced catchment you would be allowed additional abstraction at very high flows that is not counted towards your permitted volumes.

We want you to be able to take water and store it at times when there are high flows. This is part of making the system more responsive to real time water availability and encouraging storage of water at high flows. The Environment Agency would allow additional abstraction ('bonus water') at high flows meaning that you can take the water when it's available and store it if you wish. The rules for 'bonus water' would be included in standard catchment rules. In these scenarios, the Environment Agency would alert you that flows are above a set threshold. Abstractions at this time would not count towards annual permitted volumes. Smart meters would also be required to implement these controls which we would only require in enhanced catchments.

## 13. Your hands off flows would switch on and off gradually in enhanced catchments

### Headline

- If you abstract in an enhanced catchment you would have smart HoFs that gradually switch on and off to allow you to better adapt.

We would refine existing hands-off flow conditions in enhanced catchments so your daily limit on abstraction would gradually reduce. This differs from current hands-off flow controls that are generally either off or on, which makes adaptation difficult and does not encourage efficiency. The reliability of your access to water wouldn't change significantly but your hands-off flow condition would trigger slightly more often but switch you off totally less often. This would only be possible with smart meters.



## 14. If you abstract surface water from an enhanced catchment you would get shares in the available water to extend the potential for quick and easy trading

### Headline

- Annual permitted volumes would be accounted for as proportions or 'shares' of the water available in different parts of the catchment.

You would still have annual and daily limits but these would be linked to proportions ('shares') of water available for abstraction in different parts of that catchment. In effect, this accounts for where your water comes from in the catchment. The annual and daily limits would not change unless required following a review (see section 9). The use of the shares accounting framework in these catchments helps facilitate the pre-approval of upstream trading. It would not affect your day to day access to water.

Potentially in the future a shares accounting framework could support more sophisticated management of water resources with short allocation periods allowing flexible 'put and take' trading from shared water resources<sup>5</sup>. In the face of climate change this could significantly enhance our resilience and underpin future growth. However we do recognise that this raises complex issues as highlighted in the consultation so we are only planning immediately to pilot these approaches in a very small number of catchments.

## 15. You would be able to trade more easily and more quickly in enhanced catchments

### Headline

- If you abstract in an enhanced catchment you would have some trades pre-approved so that they can happen almost instantaneously.
- If you are not in enhanced catchments you would be able to trade in a similar way to the current system.

The Environment Agency would make it easier and quicker for you to trade in enhanced catchments including upstream trades. Each catchment where trading is facilitated would have its own pre-approved trading rules. Pre-approval rules would set out how much you can trade, who you can trade with and for how long. All this information would be available online probably through a user friendly catchment map. These would take account of

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<sup>5</sup> Where water is released from reservoirs, re-use schemes and groundwater abstraction discharged into rivers to be traded with others.

catchment specific characteristics to ensure that individual catchments are managed in the most appropriate way.

You would be able to indicate in the Environment Agency's online system an interest to buy or sell and even how much you are looking to pay or receive. However the price of water when you trade would be agreed between the buyer and the seller directly and the Environment Agency would not process payments for you. These trades could be part of long-term commercial agreements to provide water services. The price agreed and the payment for trading would be completely separate from your charges set by the Environment Agency for abstraction permits. All trades that do take place would have to be registered with the Environment Agency. Large, complex trades and those that could create a risk to the environment would still be subject to individual approval.

The Environment Agency would make trading quicker and simpler by:

- Publishing standard rules that allow you to make simple trades without individual approval from the Environment Agency.
- Holding the volume you can trade electronically in water accounts instead of it being detailed on paper licences. This would allow trades without the need to revoke old licences and re-issue new ones.
- Standardising and publishing in water accounts the hands off flows that different abstractors have so potential buyers can easily see how reliable any water on sale is.

### **When you want to trade you would:**

1. Go online to see who and how much you are able to sell water to / buy water from.
2. Agree with another abstractor/s how much you wish to sell / buy within the pre-approved limits set by the Environment Agency.
3. Agree a price and payment with the other abstractor<sup>6</sup>.
4. Register the trade online with the Environment Agency including the sales price<sup>7</sup>.

Traders could also use brokers to facilitate trading and the Environment Agency would allow brokers to easily access trading rules and report trades.

Trading is possible under the current system but it is slow and each trade requires individual approval. In non-enhanced catchments we would not change the trading process as there is no evidence to show there would be any demand for trading and therefore there would be no benefit to facilitating trading.

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<sup>6</sup> The Environment Agency will not be involved in setting the price for buying or selling or in processing the payment, nor will the mechanism for payment be offered to you by the Environment Agency online. This will be between you and the buyer / seller.

<sup>7</sup> The Environment Agency will publish average prices so that abstractors are aware of the value of water while protecting commercial confidentiality.

# Moving to the new system

## 16. How and when would I get my new permit?

In the years before the reformed system goes live the Environment Agency would carry out a range of work to prepare to convert your abstraction licence into conditions on a permit. All abstractors would operate under their existing licence until the reformed system goes live. **We expect the reformed system would go live in the early 2020s.**

### During this period you would:

1. Be asked to verify the data on which your future permit would be based. For example, your historical abstraction records, your site specific conditions and the proportion of water returned locally as part of your operations.
2. Be consulted on the setting up of standard catchment rules.
3. Receive notification of what your new permit is likely to look like at least one and a half years in advance of the reformed system going live. This would give you the chance to raise any issues with the Environment Agency.
4. Receive your new permit at least 1 year in advance of the reformed system going live.
5. Have an appeals route open if you genuinely need to appeal.