

THE ABSTRACTIONS REGIME: DISCOVERING THE VALUE OF WATER

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THE IMPORTANCE OF ABSTRACTIONS

DEFRA, Future Water (2008)

6. ***The principal mechanism for achieving sustainable management and development of water resources is the Environment Agency's system of abstraction licensing.Abstraction rights can be transferred or apportioned within the current licensing regime; the review of competition for water (discussed in Chapter 9) will examine whether the system can be modified to facilitate this further. For historical reasons, many licences were issued to remain in force until revoked and cannot be readily modified. All licences issued since October 2001 have been issued with a time limit. There is a presumption of renewal such that a new licence would be granted, on the expiry of a time-limited licence, subject to a continuing need for, and efficient use of, the abstracted water and so long as the environmental impacts of the abstraction are acceptable.***
7. *We need to ensure that water resources are allocated efficiently in order to cope with the anticipated impacts of climate change and to achieve water quality objectives. **We intend to consult on further changes to the licensing regime. ...***

Two ways to access water supply:

- Develop 'new' sources of water and apply to EA for an abstraction licence.
- Acquire rights through the 'trade' of an existing abstraction licence (also involves applying to EA).



WATER RIGHTS TRADING PROCESS

- Water Act (2003) introduced significant changes to abstractions system, including measures intended to simplify the water rights trading process.
- However, unnecessary restrictions on trading still exist.
 - Not a conventional trade mechanism: trading proposals are dealt with by EA in manner similar to a new application.
 - Critically, the EA retains the discretion to vary the character and nature of rights from those surrendered when it re-issues an abstraction licence.
 - In the EA's view, many areas are 'over licensed' and 'over abstracted' and new or varied licences in these areas are very likely to be restricted.
 - Time to complete transactions is relatively long: between 3 to 4 months or even longer.

Assessment:

- 'Trading mechanism' represents poor policy targeting.
- EA's approach is effectively a 'tax' on trading.
- Wide discretion creates uncertainty.

AVAILABILITY OF WATER

- Most recent WRMPs show a supply-demand deficit for the majority of water companies over 25 year horizon (only 4 companies had forecast sufficient supply resources).
- May not be full picture: discussions indicate that significant water resources exist for a number of water companies.
 - It has been suggested to us that this extra supply could be released or traded if abstractions regime more conducive to such trades.
 - Difficult to assess as in current environment there is little incentive for water companies to maintain accurate information about available reserves.
- If such a deficit is likely in some areas, one obvious response would be to invest in measures to increase supply. But the EA appears averse to this approach, and has asked water companies to consider more than 'engineering' solutions. *This should point toward marketisation.*

Assessment:

- Current arrangements approximate a central planning approach
- Danger of assumed level of knowledge in long-run planning when in reality operating in a context of limited and evolving information.

ABSTRACTION LICENCE FEES

- Current approach to abstraction licence fees is administrative in nature: set to recover the costs associated with managing water resources in each region.
- Immediate observation: abstraction licence fees do not reflect perceived scarcity of water at different points in country.
 - Standard unit charge in Northumbria (water stress level: low) is 90% greater than in the Thames region (water stress level: high).

Assessment:

- EA's charges for water abstractions reflect an administrative valuation process and result in values inconsistent with policy statements in *Future Water*.
- Rough estimates on the basis of other policy documents suggest that current rates might be *less than a tenth* of the incremental-cost based estimate of the value of water in certain regions.
- Move toward economic valuations will involve decoupling average and incremental value of water.
- Not straightforward, but has been done successfully elsewhere. Will require any 'rent distribution settlement' to be effected through the price control mechanism.

AN ACTIVE SYSTEM OPERATOR?

- SO: an organisational innovation – trading around economic externalities (typically third party harm). Most familiar in energy, particularly electricity, but analogues in other sectors (e.g. air traffic control).
- There are variants on the basic model, and each case tends to involve adaptations tailored to context (strong/weak, deep/shallow). We refer to a SO responsible for mitigating water abstraction externalities as a WMSO.
- In water the externalities arise from water abstraction in a context where rights are already allocated. Pattern of external effects (harm) is geographically heterogeneous.

AN ACTIVE SYSTEM OPERATOR: STRAWMAN

- (1) Start with an administrative charging structure – the ‘initial structure’ – for abstractions (as now).
- (2) Allow trading with no reductions in rights.
- (3) Add abstraction surcharge to establish budget over admin costs (i.e. replace current tax-on-trading approach with extra charge on abstraction).
- (4) Use WMSO budget to buy-back rights (overall effect is revenue neutral), e.g. by inviting tenders for reductions in specified locations.
- (5) Simultaneously introduce incentive schemes for regulated companies (otherwise why sell rights?).
- (6) WMSO might initially be proactive in facilitating/promoting direct trades between rights holders (e.g. by price reporting), but is generally passive on this matter.
- (7) Over time, gradually adjust the structure, but not the overall level of ‘initial charges’ toward the relative prices established via trading

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