



Briefing Note: Permitting Consultation

The Environment Agency aims to limit the discharge of phosphates into the River Itchen from watercress and fish farms, by issuing new permits to replace existing historic Discharge Consents. These existing consents have no limits on the amount of Phosphorus that can be discharged into the river.

The new permits will contain limits for Ammonia and BOD as well as Total Reactive Phosphorus (TRP), and will also require the adoption of an agreed 'Environmental Management System' which will see companies setting out how they will manage their systems to optimise compliance with water quality standards.

- The EA are likely to impose a standard of 0.045mg/l TRP for discharges from March 31st, although the industry will be given time to adjust. The EA assured us this would only be allowed in months, not years.
- The EA will be flexible about reviewing the standard as new evidence becomes available, and it is likely that standards could become more stringent in future.
- The industry does not currently accept the science, claiming phosphates are not proven to be causing ecological damage. The EA can refute this; there are studies from the USA and Canada as well as the UK. In addition, independently collected data from the Itchen is showing significant and prolonged spikes in phosphorus, and upon sight of this data, **Dr Mike Bowes of CEH** (a Government scientific advisory organisation) summarised: *'The data collected here clearly shows sporadic phosphorus pollution incidents are occurring, and the resulting elevated phosphorus concentrations are not typical of a chalk stream. It is clear from this evidence that there is a phosphorus pollution problem on the River Itchen. As much of the phosphorus is in particulate form, this infers that there is also an associated sediment problem, and the magnitude and duration of the incidents are likely to impact the ecology of the river.'*

We believe that the watercress industry is likely to challenge the introduction of the new permits, and so it is important that we too respond to the consultation. We will be submitting a formal response to the Environment Agency which will be based around the following key points:

- The River Itchen is designated as a Special Area of Conservation (SAC) under an EU Directive. This requires that in issuing Environmental Permits, the Environment Agency as competent authority must have ascertained that the permitted activity will not adversely affect the integrity of the European site.
- Data collected independently and analysed by Southampton University has shown that a significant proportion of phosphate pollution from watercress farms is in particulate

form. This bound phosphorus can later become available to the ecosystem, so it is important that the environmental management system requirements of the new environmental permits prevent excessive sediment being discharged from watercress farms, thereby limiting the output of total phosphorous loads bound up in particulate form.

- We view the 0.045mg/l limit put forward as a significant and positive first step, and will press for a monitoring regime which demonstrates compliance with the limits.
- However, whilst we very much welcome the new permits, we are not convinced that the 0.045mg/l limit will meet the requirement of ensuring no adverse impact upon the SAC. Therefore we will press the Environment Agency to review permits in light of any new data, evidence of ongoing ecological impacts, or advice from Natural England on appropriate phosphorus levels for the Itchen, in a timely manner.
- Furthermore, we believe that basing standards on an annual average limit is not acceptable. It is the phosphate concentrations in the spring and summer growing periods that are most likely to impact the river, so a permitting regime which allows high concentrations to be discharged at the most damaging times is problematic.
- We believe that basing permits around a daily load maximum for total phosphorous is the best way to ensure the ecological recovery of the Itchen. Currently cress farms can increase water abstraction in order to *dilute* Phosphorus discharges, rather than working to reduce the *amount* of Phosphorus lost to farms. An approach which considers total load will have benefits which include reduced costs of removing phosphorus from the drinking water supply. The EA should work towards reviewing standards to take total Phosphorus load into account.
- In the longer term, we will continue to work with the Agency and others to promote our goal that 'no abstractor should discharge water to a protected river in worse quality than it was abstracted'.
- While we appreciate that watercress farming is important for the local economy, so too is a healthy River Itchen, which already has a global iconic status for its environmental, amenity and economic value.