



FINAL Minutes of Upper Itchen Initiative Meeting

1.30pm, 25 April 2013

The Christy Hall, Old Alresford

Present:

Chairman - Graham Roberts (GR) Hampshire and Isle of Wight Wildlife Trust
Minutes Secretary - Carrie Hutchings (CH) Vitacress Salads Ltd
Roger Harrison (RH) Riparian owner
Steve Rothwell (SR) Vitacress Salads/ Vitacress Conservation Trust
Arthur Leung (AL) VCT sponsored PhD student looking at phosphorus impact
Katherine Hesketh (KH) EA project on sediment
Jack Bloomer (JB) EA project on salmonid survival
Serena Leadley (SL) Natural England
Charles Barter (CB) The Watercress Company
Ollie Bedford (OB) The Watercress Company
Chris Jeffes (CJ) Alresford Salads
Pete Shaw (PS) University of Southampton
Ali Morse (AM) Hampshire & Isle of Wight Wildlife Trust
Kerry Evans (KE) Environment Agency
Zam Baring (ZB) Riparian owner
Tom Davis (TD) T&I / Wessex Rivers Trust
Mike Rushworth (MJER) Vitacress Salads Limited
Charlotte Rose (CR) Natural England
Ernie Jeffs (EJ) Winchester City Council
Bob Wellard (BW) Piscatorial Society
Martin de Retuerto (MdR) Hampshire and Isle of Wight Wildlife Trust
Rue Ekins (RE) Hampshire and Isle of Wight Wildlife Trust

1. Apologies

Gail Taylor (GT) University of Southampton
Tim Nevard (TN) VCT
Rose Timlett (RT) WWF UK
Martin Burton (MB) Independent Consultant
Ben Rushbrook (BR) Project Officer, Hampshire and Isle of Wight Wildlife Trust
Mark Baring (MBAR) Riparian owner
Simon Ffennell (SF) Riparian owner
Tom Amery (TA) The Watercress Company
Ben Rayner (BRa) Environment Agency
Tim Sykes (TS) Environment Agency

2. Introductions

As there were a number of new attendees each person introduced themselves, giving some background as to their interest in the Upper Itchen Initiative.

RH had brought along samples taken from the Itchen to illustrate the lack of living creatures and the early impact of brown algae, emphasizing that water quality problems have not improved. GR explained to the group that progress was being made albeit slowly and the statutory agencies were moving forward. There was not one clear solution as there were many complexities influencing water quality within the Upper Itchen catchment.

3. **Minutes of the Previous Meeting – 9 October 2012**

GR asked that the attendees review the Minutes from meetings as soon as they are issued and to progress actions.

- a. **Item 4, Alresford Pond** – CB explained that confusion continues to exist regarding the relationship of Alresford Salads and The Watercress Company. Under item 4 of the last Minutes, it was Alresford Salads who had received the quote for de-silting their settlement pond. Likewise the discharge problems referred to relate to Alresford Salads, not The Watercress Company.

GR had re-circulated the invertebrate report as agreed at the last meeting and, subject to clarifying the references to The Watercress Company and Alresford Salads, the document was accepted by the UII.

ACTION: GR to amend the references to The Watercress Company and Alresford Salads and arrange for the report to be published.

- b. **Item 4, Alresford Pond** - KE advised that her work with BR relates to the low numbers of gammarus, not a link with phosphorus.

4. **Matters Arising**

Matters arising were addressed within agenda items.

5. **Natural England Project Update**

- a. SL informed the meeting that 687 holdings of over 15ha were covered in the Test & Itchen catchment area map, giving a total of c.155,000ha. There are another 415 smaller holdings. If required she could split out the Itchen catchment but this will involve considerably more work. She asked that attendees report any issues so that she can target her work more appropriately.

The deadline for this year's capital grant scheme is Tuesday and four applications have been submitted for the Upper Itchen Catchment.

Forthcoming events will focus on Pesticides, Nutrient Planning and Soil Run-off. SL would welcome suggestions for other events. One to one visits also continue.

WFD funding has been secured to deal with problem tracks where they impact on SSSIs.

A copy of the newsletter has been circulated with these Minutes.

- b. CR reported that the ADAS sediment finger printing work had been delayed but she is hoping the report will be available in the next few weeks.

£12,000 funding has been allocated for ADAS to enable further information to be gathered relating to fish farms and watercress beds. The project content has yet to be discussed.

£40,000 has provisionally been allocated for Alresford Pond improvements. The funds will be used for further investigation depending on the output of the feasibility study. It is hoped to have workable options by the end of the year.

The River Restoration Strategy is now live. The next stage is for the EA/NE to determine priorities. Any interested riparian owners should contact Heb Leman at the EA who is responsible for delivering the strategy and will give advice.

GR requested that work submitted from earlier studies but not actioned be included in this exercise, suggesting that some of the more easily achievable projects will restore confidence amongst riparian owners. MDR advised that scoping reports from the Upper Itchen restoration bid were fed into the consultation.

ACTION: CR to review previous work in determining priorities

Bids have been made for some other WFD funding for projects such as crayfish captive breeding.

It is hoped to include Fobdown Farm in HLS. Projects have also been identified for Tichborne Estate Lake and Avington Lake.

RH felt that with correct advice riparian owners can carry out river restoration at their own expense, but they cannot address water quality and felt that restoration without resolution of water quality was pointless. He felt water quality, along with flows, should be the focus of the UII. Discussion followed on the inter-relationship between water quality, flow rates and restoration and their respective weightings. SDR pointed out that biological rather than chemical quality of a river is the fundamental issue. He felt a measure of acceptable biological quality of a chalk headwater has never been fully established, despite progress by the BRI to that end. KE commented that the Habitats Directive stipulates the aims. To solve the problem a comprehensive water quality monitoring system is required to address the fundamental input of nutrients, with appropriate regulation. RH congratulated Vitacress for the improvements achieved on the Bourne Rivulet and felt this should be the standard for the Itchen.

6. **Wessex Chalk Rivers Trust Update**

The WCRT latest newsletter has just been issued. Nick Giles is working on an increasing number of projects mainly focussing on the Stour, Avon and a little on the Test. A major fund raising push is underway. The Trust is awaiting Owen Paterson's announcement regarding the Government's catchment approach.

7. **Environment Agency Project Updates**

- a. KE advised that the Regional Water Quality team have been reviewing consents and, although running behind the original timetable, alterations are to be made to watercress discharge consents by the end of 2013. Meetings have been held with the NFU Watercress Association, represented by both The Watercress Company and Vitacress to advise the new levels and the next stage is to verify the EA's work externally which could take 6-12 weeks. The new phosphorus target in discharges is an annualised average differential of 45 micrograms per litre. SDR expressed concern regards the methodology used to determine this target which is based on just a few random EA samples of watercress farm outflows, and a more comprehensive (though inadequate) set of data gathered by Vitacress. He stated the EA proposed limit is unworkable and unjustified and will be the subject of an NFU supported appeal if imposed. Over decades of Watercress and NRA/EA discussions the proposed consent was an annualised differential of 100ug/ISRP, but the EA are now basing the consents on Total Reactive Phosphorus at an unattainable level. He felt a 100 microgram per litre annualised average differential target, as per the Vitacress model, is more realistic and if imposed on all watercress

growers would dramatically reduce P loading to headwaters. He expressed regret that through decades of inactivity the EA have allowed a situation to develop where Vitacress will be forced to oppose rather than drive improvements to the control of P discharge from watercress farms. CB commented that the current regime of operation is the only one available within the SAC and any alternative would lead to a reliance on more imports and closure of a watercress farm would impact on water supply to headwaters. Discussion focussed on the need for the watercress companies to demonstrate that there is no damage rather than for the EA to say there is a problem. CB explained that most of the information supplied to the EA has come from Vitacress over several years of sampling and investment. TD supported SDR's call for a load based consent on P. KE advised there will be an opportunity for interested parties to comment on this work * Timescales, how this will work etc. will be shared at the next UII. She also undertook to check the position relating to fish farms.

ACTION: KE to check the phosphorus targets for fish farms- *post meeting note: phosphates are not a real concern in relation to fish farms, in fact many actually lead to a reduction in phosphate. However the fish farm consents are also being changed under this review of consents process on discharge consents but for fish farms ammonia and suspended solid elements will specifically be tightened.*

MdR commented that re fish farms, the consent is approval for abstraction and the scale of empowerment effect is not necessarily being factored in. He believes the two are fundamentally linked.

- b. KE explained that an application to reduce Franklyns Fish Farm abstraction licence had been agreed by the Secretary of State and the level of compensation payable to them as a result is currently being calculated. Once this has been established there should be two more similar applications depending on the compensation funding available.
- c. The factory alterations at Alresford Salads have been completed. The pond has been dredged and filtration installed, with the pond being split to make it easier to manage.

CJ informed the meeting that Alresford Salads are now using 90% less chlorine but a couple of retailers are concerned about the elimination of chlorine from the washing process, which has been compounded by the recent cryptosporidium issues. The meeting was pleased some progress has been made but would like to see the total removal of chlorine. CJ agreed a letter from the UII Group may help in his negotiations with these retailers. GR will discuss separately with CJ.

ACTION: GR/CJ to discuss UII Group assistance with persuading retailers to agree to the removal of chlorine washing.

KE will be rechecking gammarus levels at the end of May. *Post meeting note: Was delayed until July.*

- d. A show of hands clearly indicated that the issue of water quality is to be the focus of UII targets for the immediate future as this was considered to be of the greatest priority
- e. JB outlined his project to the Group, explaining that the aim is to better understand the biological response of incubating salmonid embryos to epochs of low dissolved oxygen. This research will follow one of two routes:
 1. The effect of low oxygen in ground water upwells on incubating embryos. This will involve research into the sublethal effects on the embryos such as altered time of hatching, restricted growth and other behavioural effects;
 2. The response of salmonid populations to these areas of low oxygen. This will involve research into the evolutionary responses of different salmonid populations. There will

be direct comparisons into morphological differences of salmon eggs between populations exposed to low oxygen and those not.

- f. KH's project is "Reconstructing sediment yields and lake ecosystem dynamics". She has conducted a literature review and fieldwork to obtain the sediment samples which will be undertaken in early May. As identified previously, Old Alresford Pond has a significant level of sedimentation and the project aims to quantify the rates of sedimentation of the upper sub-catchments of the River Itchen. The three lakes selected for sampling are Old Alresford Pond, the Grange Lake and Tichborne Lake. Changes of environmental conditions of the lakes will be determined by reconstructing ecological community assemblages. These assemblages will inform of the frequency and magnitude of environmental changes, which will include the trophic state of the lake. Detailed sediment accumulation rates will be determined. The project has two project aims; to determine changes of nutrient and sediment transfer through the catchment and stored in the lakes and to determine the reference condition of the three lakes to inform policy decisions. GR advised that Rob Murdock has been investigating Alresford Pond on behalf of the UII looking at broad based restoration, and KH should liaise with him. Other reports have also been produced over the years and KH should review these.

8. Research Project

a. Southampton University

PS advised that in conjunction with the Wessex Chalk Stream Rivers Trust, a team of field samplers is being set up, calling on people living close to rivers to take samples which AL will then analyse to determine sources and speciation of phosphorus.

Monitoring will last 12 months and will ideally be undertaken twice weekly, once weekly minimum. GR suggested the Hampshire & Isle of Wight membership network may be able to help. BW thought the Piscatorial Society would also be able to help with the sampling project and may be able to make a small financial contribution. PS and BW will discuss further.

ACTION: GR/BW / PS to review how the H&IOWWT membership and Piscatorial Society could help with sampling

Masters environmental students are working on suspended and depositional sediments and will link up with KE and the ADAS fingerprinting work. Work will start in the next two to three months, including high resolution which will give hourly data.

An update on this work and trials on the Fobdown experimental beds should be given at the next VCT Chalk Stream Headwaters Forum.

ACTION: SDR to include on the agenda for the next Forum

b. Septic Tanks

AM presented the work undertaken by Alex Poynter looking at phosphorus inputs from the Upper Itchen catchment area, focussing on sewerage connectivity, household detergent contents and usage habits of the population within the area and evaluating any future work required to fill gaps in knowledge.

The amount of phosphorus in various domestic commodities was reviewed, identifying that dishwasher products, particularly tablets, contain high levels of phosphorus. This is therefore a key area to target. Future work could extrapolate data to catchment scale to draw broad conclusions about P inputs. GR thanked NE for financing this work.

The findings and recommendations will be published in the Wildlife Trust magazine once finalised; CR suggested also including an article in the Southern Water newsletter.

Possible endorsement of products could be explored – KH suggested Fishery Stewardship product accreditation might be appropriate; BW suggested "DEFRA" approved. This work might open opportunities for other research through PS.

One issue highlighted by AP's study was that over 95% of New Alresford properties are connected to the mains system. KE advised the main sewerage is discharged to groundwater with no phosphate stripping. An overflow system is already in place. TD commented that Southern Water are aware of growing public dissatisfaction and are considering setting up their own Environment Department. KE advised that SL is aware of a project looking at tracking phosphate and how it moves through the ground.

c. **Itchen Valley Grazing Project**

RE reported that 120ha around Winchester are being grazed across 20 different sites. Ten/eleven year tenancies have been established on two sites. Flood plain restoration work is taking place at Fobdown Farm in conjunction with Vitacress, with a view to achieving HLS. It is hoped to use a couple of holdings as demonstration sites to show how management of land around the catchment can be integrated. Whilst a number of people have expressed interest in working with the H&IOWWT in the future no new land will be taken on to manage imminently, instead focussing resources on implementation of existing projects. It is also planned to market meat from the holdings being managed.

d. **Crayfish Study and Fobdown Update**

MdR advised the meeting that BR is working in partnership with Bristol Zoo, the NE and EA on a captive rearing project for crayfish in the Candover. A purpose built facility has been set up at the zoo for egg carrying females. The adults will be returned to the stream this summer and the young will be released next year. The aim of the project is to spread the risk bearing in mind the vulnerability of this species to predation and disease and it is being conducted in combination with channel enhancement. The original funding was for captive rearing but it is hoped that in the longer term captive breeding work can be conducted.

e. **Cormorant Update**

GR referred to the impact of predatory species, particularly cormorants, on the Itchen. SF has co-ordinated work on behalf of riparian owners, trying to drive the cormorants down the valley. Licences have been issued and controls carried out to reduce numbers.

Swans are another issue, particularly for Ranunculus stands and occasionally for The Watercress Company. TD explained that a population control project on the Avon has built confidence with the Regulator and work will be extended to the Test and Itchen this year. This will initially involve a lot of data gathering. This is possibly another student project.

9. **AOB**

- a. **BW raised** the issue of bio-security in relation to crayfish plague, emphasizing the need to ensure kit is dry particularly when moving between sites. He felt there are two elements – raising awareness and chemical baths at each site.

10. **Date of Next Meeting**

CH will circulate a Doodle request for the next meeting, likely to be held in August/September.