DEVON AVON WATER QUALITY GROUP (DAG)

Notes of a meeting at Follaton House, Totnes: Wednesday 20th Jan. 2016

Attendance:	Representing:
Stuart Watts – Chair (SW)	Chair, Aune Conservation Association (ACA)
Kelvin Broad (KB)	Environment Agency (EA) - Fisheries Technical Specialist
Glenis Pewsey (GP)	South West Water (SWW) – Resources Strategist
Roger Furniss (RF)	South West Rivers Association
Trevor Cronin (TC)	EA Catchment Coordinator – South Devon
Mike Cooper (MC)	Avon Fishing Association (AFA)
Peter Marsh (PM)	ACA
Nigel Mortimer (NM)	South Devon AONB

Apologies:	
John Roberts (JR)	Chair, (AFA)
Scott West (ScW)	Education & Development Manager (Westcountry Rivers Trust)
Mike Blackmore	Wild Trout Trust Conservation Officer South and West

1. Welcome & introductions

2. Matters arising from 1st June 2015 DAG meeting

2.1 South Hams Rivers Improvement Project (SHRImP)/ Catchment Restoration Fund (CRF) report:
In his absence, ScW had provided several updates by email. The SHRImP report on the Catchment Restoration Fund (CRF) work has been completed and is at the press; delivery and circulation awaited. **ACTION: ScW**

2.2 Devon Avon map & comments:
TC had circulated the EA's map with water body numbers in advance (see appendix to June 2015 DAG Notes). The nomenclature is confusing although the unique water body numbers are important for identification purposes. RF pointed out that the EA's public database includes the Catchment Explorer programme containing data on individual catchments and their separate water bodies (see - http://environment.data.gov.uk/catchment-planning/OperationalCatchment/6dc). The Avon water bodies are listed there as 1. Avon (i.e. the tidal river) 2. Avon - Lower 3. Avon - Upper 4. Avon Dam Reservoir 5. Avon (Devon Tidal) and South Hams- Frogmore (i.e. nothing to do with the Avon as commonly understood!)

2.3 Obstacles to fish movement - 'barriers' map for South West (BS/RF):
The West Country-wide barriers map is a work in progress but ScW had circulated a classification of the weirs on the Avon (Fig. 1). These had been classed as 'non-priority' or 'other' but Avo9, Newhouse Fish Farm, is classified as a 'target'.

2.4 Fish tracking programme & electro-fishing prospects
ScW reported that no fish-tracking programme is currently being undertaken for the Avon although there has been some discussion on funding this either as another option or in unison with SWW's Highly Modified Water Body (HMWB) investigations on the upper Avon. The possible funds for these investigations are available in association with gravel augmentation studies but priorities might be open to change after discussion with the EA. **ACTION: ScW/GP/KB**

Some electrofishing (EF) is continuing in the Avon funded by SWW under the HMWB work - the EF provides historical data on fish numbers for comparison with fresh data collected after habitat creation via the gravel augmentation programme. Three years' of valuable semi quantitative data for the Avon are available thanks to this work and the earlier SHRImP studies. (The Avon EF report will also be available soon for circulation to the group - once the EA's data has been considered). **ACTION: ScW**

ScW loosely oversees the gravel augmentation work but Matt Healey (MH - WRT) is now the main specialist. MH's brief update on the work, funded by SWW, carried out since SHRImP terminated, follows:-

"I have undertaken some EF monitoring to carry on from CRF sites but much reduced in scale due to time and budget limitations. The number of sites will increase next year to try and assess salmon in the uppermost reaches of the Avon and Bala Brook but also to assess recruitment at sites further down in the catchment due to augmentation. Six sites were monitored from the Avon dam to South Brent island. The clear and outstanding finding was at the Badworthy Brook confluence with main-river where, after one year of augmentation, the salmon classification changed from absent to good, although the trout classification at the same site dropped from fair to poor. The other sites showed similar results to 2014 as general rule".

RF suggested that, although expensive, a DIDSON (Dual-Frequency Identification Sonar) monitor (see - http://www.fishtek.co.uk/fisheriesmonitoring.html) would be useful in tracking fish movements and he showed a fascinating video clip from a study on the R. Fowey.

2.5 Water releases from Avon dam for 2016 – KB/GP

A second series of water releases was made during 2015 for a 24d period from 2nd July, during a natural low flow period and in order to utilise the residual 'water bank '. GP to provide flow charts showing the fisheries bank releases. (Note added in draft: GP has circulated a short note showing the releases from Avon Reservoir for fisheries purposes during 2014 to 2015. This note will be added separately to the ACA's website). The releases were in line with the trials discussed during recent meetings, which the EA and SWW plan to continue, depending upon local conditions, in 2016.

It was suggested that redd-counting in December would be a useful indicator of the effectiveness of these releases. **ACTION: AFA members / All?**

2.6 Gravel augmentation

2.6.1 SHRImP

ScW had submitted a final report on the SHRImP gravel augmentation work. The report will be made available for public inspection on the ACA's website at www.auneconservation.org.uk. **ACTION: SW**

2.6.2 HMWB work programme, 2015-2020 (GP/TC/BS/PD)

ScW provided a map of the gravel augmentation sites at September 2015 (Fig. 2) with the following comments:-

- 10 sites were augmented in 2015 and a total of approx. 180 tons went in (see separate map to show locations)
- Gravel size varied between 10mm-250mm. This, together with locations, will be assessed for suitability prior to next augmentation
- Plymouth Univ./CRF completed report. I am meeting up with Peter Downs on Monday to discuss future works.
- 2016-2017 and onwards: surveys from Plymouth Univ. possibly will include cross sectional baseline mapping of river channel, FRID tagging, Impact plates and habitat mapping to assess any change in habitat type. Also to determine where sediment is ending up i.e. gravel sinks/stores and if creating new spawning. Monitoring (biological and gravel) and augmentation may need to be tweaked year-on-year depending on each previous year's results.
- A visit to the river is needed for visual assessment of gravel locations after a very wet 2015-2016 winter.

2.7 River bank/ land management

2.7.1 Fowey work programme (pre-circulated by email – RF)

2.7.2 schedule of works for Avon (JR) - not available at this time

2.8 EA and DCC responsibilities: 'main river' vs the rest

TC had confirmed by email that the EA's powers to carry out flood defence work apply to main river only and are permissive. Main rivers are a statutory type of watercourse, usually larger streams and rivers, but also include some smaller watercourses. A main river is defined as a watercourse marked as such on a main river map and can include any structure or appliance for controlling or regulating the flow of water in, into or out of a main river. Main rivers are designated by DEFRA and the main river maps are held by DEFRA. Every other watercourse in England and Wales is determined by statute as an 'ordinary watercourse'.

The main river section on the Avon runs from Loddiswell Mill Bridge to the mouth of the Avon. Everything above Loddiswell Bridge would be designated as an ordinary watercourse. TC had also spoken to Richard Rainbow (Senior Flood Risk Officer, Devon County Council) where he confirmed that there is no formal

agreement that DCC would consult with the EA unless the work they were undertaking required a form of consent. (N.B. DCC and the EA did consult with each other regarding the bank works undertaken by them around the Curtisknowle Hydro Electric Plant (HEP). The bank erosion work undertaken downstream of the HEP was instigated by the riparian owner who instructed a third party contractor to carry out the task. As DCC can only regulate structures within the watercourse they would not have had any involvement in this work.)

Bank maintenance work / dredging work in an ordinary watercourse can be done by the riparian owner and does not require consent. This does not preclude the need for the riparian owner to comply with any legislation that may be relevant to the work planned. (Note added in draft by SW: The risk management authority, i.e. DCC, will tell you whether you need its consent before doing the works. It takes many environmental factors into account before authorising work. These factors include flood risk, wildlife conservation, fisheries, tidal limits and the reshaping of the river and landscape;
see - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/454562/LIT_7114.pdf).

3. Upstream retention of rainwater

MC drew attention to the problems of poor land/ water management . See below.

4. Minimisation of soil run-off

Items 3 & 4 are related, long-standing issues - together with soil compaction - that are not specific to the Devon Avon. These issues have been addressed in the past on a national basis and are strongly influenced by DEFRA policies, a strong farming lobby, the increase in contract farming, inappropriate advice from agronomists about farming practices, advances in farm vehicle technology and the financial incentive to cultivate inappropriate terrain. Historically, the ACA and AONB Unit had been in the vanguard with funding for the Catchment Sensitive Farming Initiative in South Devon but problems remain. SW suggested that land/ water management should be central to the South Devon Catchment Partnership action plans currently being drawn up because previous solutions have been only partially effective. **ACTION: NM**

PM drew attention to what he considers to be the poor control of sewage sludge application to agricultural land, resulting in water body contamination. However, RF pointed out that pollution of the Avon due to poor land management had not been identified as an issue with the EA during consultation opportunities. (Note added in draft by SW: pollution of the tidal estuary by run-off was well documented in the Avon Estuary Siltation Research reports - see http://auneconservation.org.uk/wp-content/uploads/2011/02/CONCLUSIONS-AESRP-for-website2.pdf). If poor land management resulting in increased water/soil run off is observed the incident should be reported to Trevor Cronin giving location (grid reference) and photographs (if possible). **ACTION: All**

5. Estuary affairs

There is a question about whether or not estuary water quality is still being monitored under the Shellfish Waters Directive because oysters are not being actively farmed in the estuary at the moment. If not, what would be the best contact for private microbiological monitoring of water quality e.g by the ACA? TC would investigate and provide the details to SW. **ACTION: TC**

5.1 Clarification of estuary netting policy

At the last Avon Estuary Forum, considerable confusion was generated by IFCA about the granting of fish-netting licences in the estuary. SW had sought clarification from the Land Steward of the Duchy of Cornwall who had confirmed that it is agreed policy to issue no licences for the Avon, other than for the netting of sand eels.

5.2 Bantham Estate

SW recently had met with Ryan Hooper (RH), the Estate Manager for the Bantham Estate, for a wide-ranging discussion. Ryan now serves on the ACA committee, which will be meeting on 26th January. The ACA's particular concerns involve the possible effects of gamekeeper activities and 'shoot'-associated vehicular movements on the river and its ecological environment. (Post-DAG meeting note: the ACA committee met Nicholas Johnston (NJ), Bantham Estate owner, prior to their meeting on 26th Jan. and were reassured a) that the long-term welfare of the estuary is the Estate's primary interest b) effective lines of communication exist between SW, NJ and RH for discussion of matters of topical concern.

6. South Devon Catchment Partnership: what next & future funding? WRT/AONB

A Catchment Action Plan will soon be published for public consultation (see - http://www.southdevonaonb.org.uk/our-work/active-projects/the-catchment-based-approach-south-devon-catchment-partnership).

7. AOB - none

8. Date of next meeting agreed for June/July - TBA **ACTION: SW**

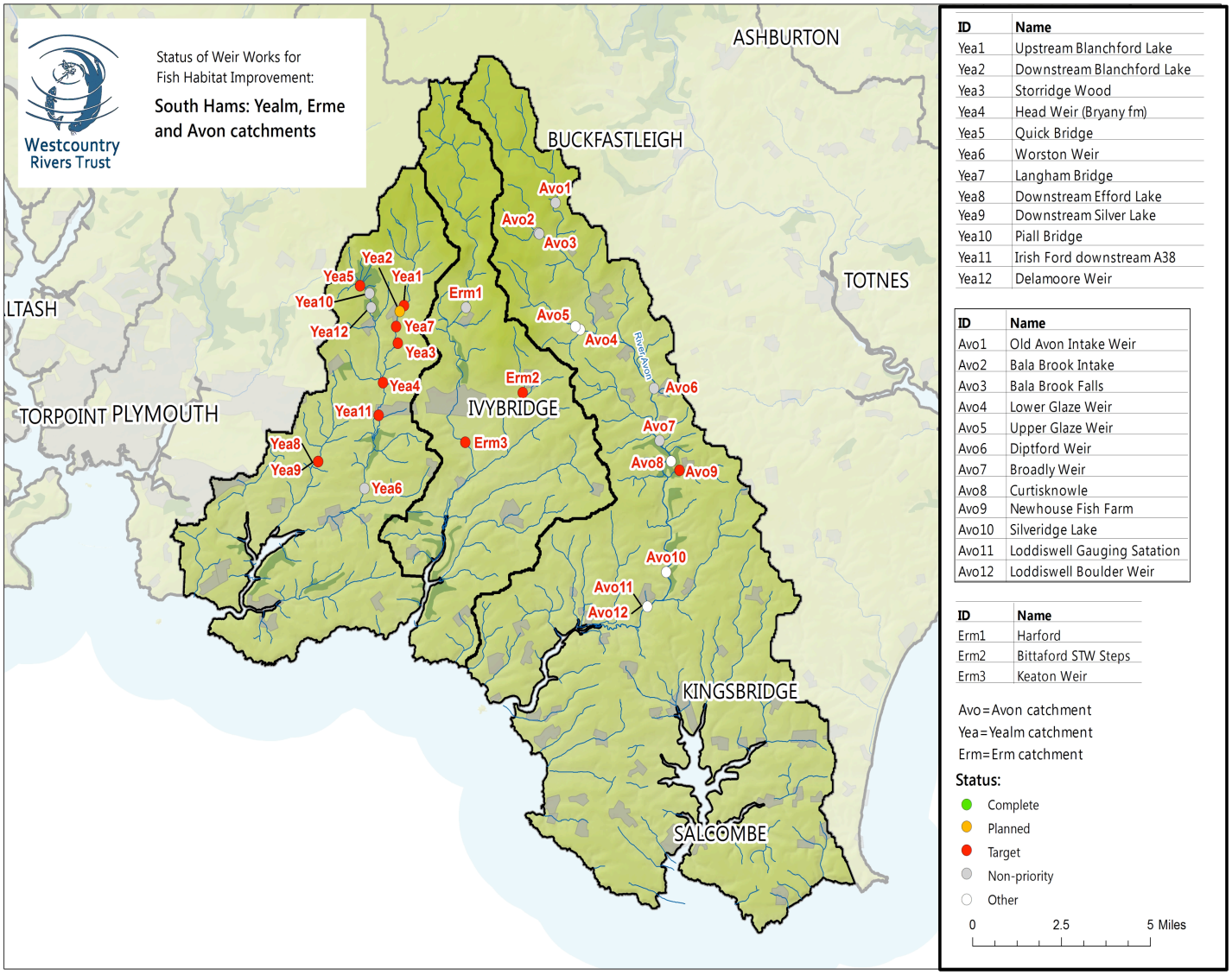

Figure 1: See Minute 2.3

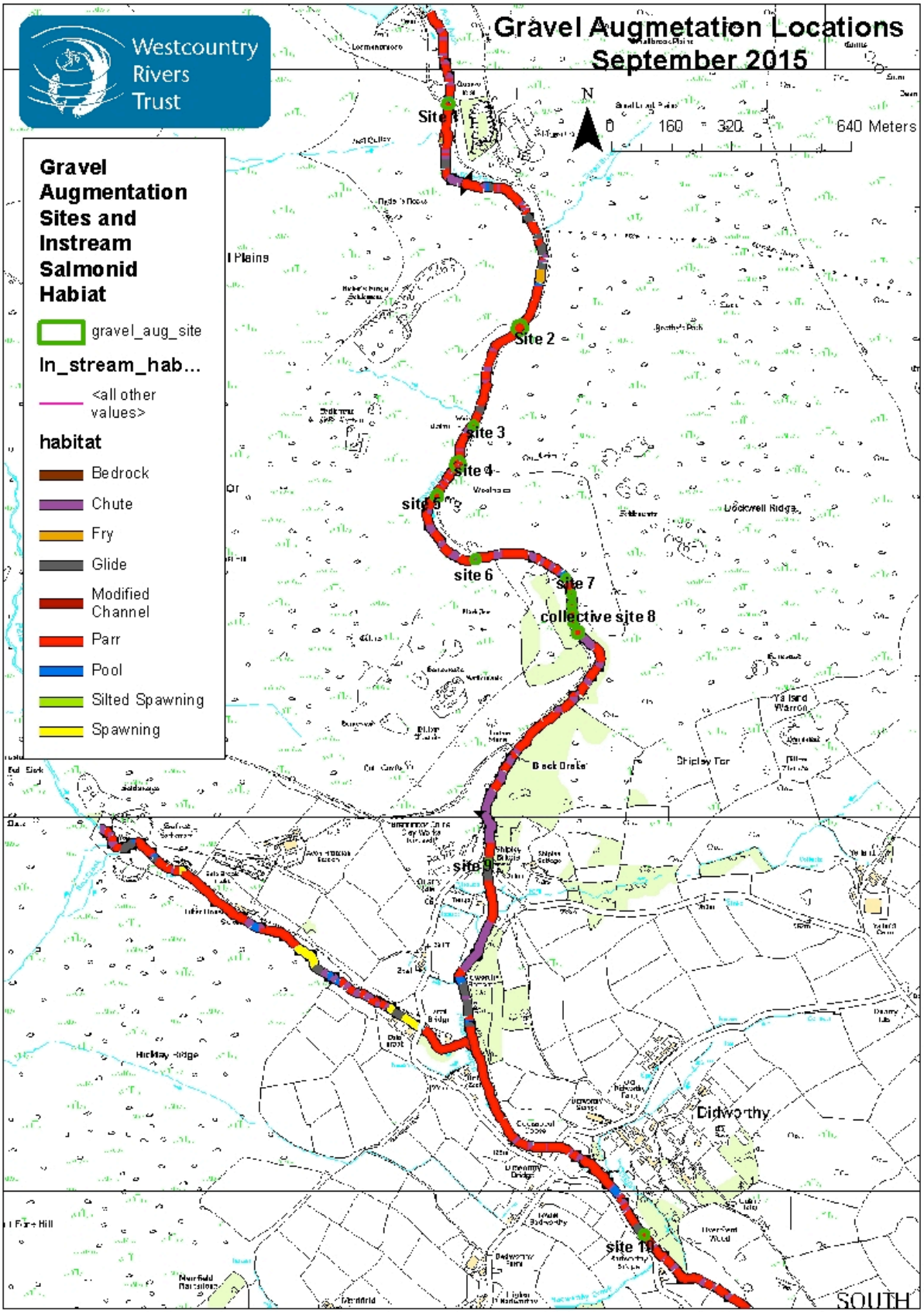

Figure 2: see Minute 2.6.2