

River Esk CaBA prioritisation workshop

TOP 5 PRIORITIES

Table 1

- 1) Water Quality – Fine sediment and other pollutants from roads
SUDS
- 2) Water Quality – Nutrients from septic tanks (advice) + Nutrients from sewage treatment works and CSO`s.
- 3) Water Quality – Fine sediment and nutrients from agriculture + River Restoration / CSF and Promotion of Agri-environment schemes with landowners/farmers.
- 4) Peatland Restoration work
Address flooding issues (upstream measures)
- 5) Fisheries enforcement
Illegal salmon catch and protection of FWPM population.

Table 2

- 1) Water Quality – Fine sediment and nutrients from agriculture
- 2) Monitoring – fish counter/juvenile monitoring
- 3) Barriers to fish migration
- 4) Biodiversity Action Plan Priority Species
- 5) Engaging local community (co-ordinate volunteers) + work with MSc and PhD students.

Table 3

- 1) Monitoring (Number 1 priority). Water Quality – Nutrient, sediment and man-made chemicals.
- 2) Water Quality – using river invertebrates
- 3) Engaging local community
- 4) Water quality - Nutrients from septic tanks (advice) + Nutrients from sewage treatment works and CSO`s.
- 5) River Restoration i.e. fencing and buffer strips + Promotion of Agri-environment schemes with landowners/farmers.

Table 4

In order of priority

- 1) Peatland restoration work
Work at top of the catchment – effects lower down
- 2) Biodiversity Action Plan Priority Species
- 3) Pollution monitoring (i.e. walk over surveys)
- 4) Fisheries monitoring i.e. Electric fishing - monitoring juvenile salmonids populations
Murk Esk
- 5) Water Quality –Nutrients from sewage treatment works and CSO`s.

Table 5

- 1) Atlantic salmon and brown trout – healthy populations i.e address barriers to fish migration
- 2) Peatland restoration work
Work at top of the catchment
- 3) Wider land management – Agri-environment/Sediment from Agriculture
- 4) Biodiversity Action Plan Priority Species
- 5) Engagement with local community + Monitoring (why doing work?)

Table 6

- 1) Water Quality – Sediment, nutrients + Agri-environment schemes
- 2) Water Quality – using river invertebrates
- 3) Water Quality – Nutrient, sediment and man-made chemicals.
Scientific proof
- 4) Barriers to fish migration
Upward and downward fish migration (easy wins)
- 5) Biodiversity Action Plan Priority Species
otters, sandmartins, water vole + kingfisher

Comments on work items

1) Water quality – Fine Sediment + Nutrients (Agriculture)

- Water quality is key to river life (HIGH)

2) Water quality – Nutrients (Septic tanks)

- Mail shot and awareness raising. Very achievable and low cost (HIGH)
- Campaign? Day job for Environment Agency and Local Authority (HIGH)
- Recent research into poor nitrate levels from septic tanks (MEDIUM)

3) Water quality – Nutrients (Yorkshire Water Infrastructure)

- To avoid degradation of the river system (HIGH)
- Increased rain events will become a greater problem (HIGH)
- Continue to monitor, impact on FWPM population (HIGH)
- Monitor! (MEDIUM)

4) Water quality – Fine Sediment and other pollutants from roads (Highways)

- Winter months – salt on road (HIGH)
- Work with local authority to improve drainage, SUDS (HIGH)
- Only if there is a spillage of toxic waste (LOW)

5) Woodland works

- The sooner the better because of time for trees to mature (HIGH)
- Higher priority on river banks, medium priority higher up catchment, Link to Agri-environment (HIGH/MEDIUM)
- Sediment and biodiversity (MEDIUM)
- River species, roughness, habitat, wildlife corridors (MEDIUM)

6) Non-native invasive plant species

- Can cause sediment problem and loss of biodiversity (HIGH)
- Multi-benefit, co-ordinated approach and volunteers (MEDIUM)
- Volunteers and low cost (MEDIUM)
- On-going – with plenty of money thrown at it (LOW)

7) Peatland Restoration

- Multiple gains – including flood (HIGH)
- Mostly done? (LOW)

8) Land Management – promotion of Agri-environment schemes

- External funding stream. New agri-environment scheme 2016. (HIGH)
- Promotion good but a lot of people decline/don't commit (LOW)

9) River habitat restoration

- Quick win (HIGH)
- Not sheep netting – it traps debris (HIGH)

10) Barriers to fish migration (man-made structures)

- Which are the key ones? involve everybody in decisions (HIGH)
- Danby Weir Fish Pass (HIGH)
- In particular Danby Weir (HIGH)
- Consideration of historic features / mills must be taken into account (LOW)

11) Biodiversity Action Plan Priority Species

- Health of the river depends on the entire river food web. Important that all populations are in good condition (HIGH)
- Water voles(HIGH)
- FWPM priority species, Dependant on species rarity or vulnerability and specific threats (HIGH/MEDIUM)
- Funding hooks (MEDIUM)

12) Fish stocking

- Would like to see this as a low priority (£35,000 over 5 years - £7k per year) (MEDIUM)
- Pros and Cons – if healthy river, no need (MEDIUM)
- Being done already (MEDIUM/LOW)
- Effect of stocked fish on natural populations (LOW)

13) Maintenance of fish passes - Removal of debris from structures

- Ensure fish passes that are put in work (HIGH)
- Important (HIGH)
- Yes, but what about slow the flow (MEDIUM)

14) Engaging the local community in the Esk valley

- Without community there is no future (HIGH)

15) Education – activities with schools and Esk valley community

- Grass roots! (HIGH)
- Future generations, media and landowners (MEDIUM)

16) Fisheries monitoring - Fish counter

- Need to know if it works (MEDIUM)
- The jury is out whether they are effective (LOW)

17) Fisheries monitoring - Smolt trapping

- Need data for Murk Esk in particular (HIGH)

18) Fisheries monitoring - Electric fishing

- Need data for Murk Esk in particular (HIGH)
- Rod catch as well (HIGH)

19) Fisheries monitoring - Acoustic tracking of adult Salmonids at Ruswarp Weir

- Key to understanding the impact of the hydro (HIGH)
- If habitat and water quality right – still ok? (LOW)
- Happening, will it work? (MEDIUM)

20) Water quality monitoring - river invertebrate monitoring

- Barometer of river health (good engagement with local community/involvement) (HIGH)
- Engage volunteers (LOW)

21) Water quality monitoring – water sampling (nutrients, sediment and man-made chemicals)

- On-going evidence. Measure of gain/loss of water quality (HIGH)
- Package of monitoring, why doing it? How to complement others work? What is our role? How do we use it and feedback? (HIGH)
- Essential to know what you've got (HIGH)
- Informs the other actions (MEDIUM)

22) Pollution monitoring – walkover surveys

- Action following pollution is very important. Need to know where pollution is occurring (HIGH)

23) Fisheries Enforcement i.e. prevention of poaching

- Important for FWPM, Liaison with police / wildlife crime officer, Local “watchers” (HIGH)
- Environment Agency responsibility (MEDIUM)
- Environment Agency licence payers (LOW)
- Need data, netting as well (LOW)

24) Hydropower development

- Need to know how well Ruswarp turbine is working first. More evidence needed (HIGH).
- Use evidence from Ruswarp (LOW)
- Depends on results of monitoring (LOW)
- Not benefitting biodiversity (LOW)

25) Predator research

- Cormorants, goosanders, herons etc on the Esk, more needs to be done (MEDIUM)
- Conflict – but need to know what issue is to inform the debate. Mink control (LOW)

26) Continued promotion of catch and release of adult salmonids

- Happens anyway (LOW)
- Continue to promote, extending campaign out to sea to fishermen (Inshore Fisheries Conservation Authority) (LOW)
- Uncertain – possibly more could be done (LOW)

27) Spawning habitat improvements

- Monitoring and natural fish stocks (MEDIUM)
- Good to reduce silt naturally (Medium)
- Comparison with other rivers, delivered via other works i.e. habitat works (MEDIUM)

28) Other – Volunteer

- Volunteer co-ordinator to carry out a variety of tasks i.e. redd counting, fly life and BAP species (HIGH)

29) Other – Research

- Involvement with universities PhD/MSc students to take responsibilities for certain projects. (HIGH)