

Outputs from the South Devon Catchment Partnership Workshops: Water Quality

Catchment Partnership Action Fund (CPAF) Priorities:

- Prevent deterioration or contribute to the achievement of protected area objectives (“Protected Areas” in this context include areas for: drinking water abstraction, economically important shellfish / freshwater fish species, bathing waters, nitrate vulnerable zones, SPAs or SACs)
- Improve the ecology by restoring natural features in and around watercourses
- Reduce the impact of man-made structures on wildlife in watercourses
- Reduce the impact of diffuse pollution that arises from rural and urban land use

Contributes to CPAF Priorities? **strongly** **weakly** **no** **adverse impact**

Potential CPAF projects should result in a tangible improvement on the ground during 2015/16. They should cement the role of the Catchment Partnership as a means to deliver improvements to the water environment.

Issue/solution	Actions		Catchment Workshop				Potential to contribute to CPAF Priorities?				Potential CPAF project ideas
			Y/E	A/SK	D/S	T	Protected Area (PA) objectives	Restore natural features & ecology	Reduce impact of man-made structures	Reduce impact of diffuse pollution	
	<i>Happening</i>	<i>Interested</i>									
Overarching issues											
Focus on bacterial quality of estuaries and rivers via shellfish waters and bathing water compliance.	EA – Shellfish Water Action Plans.		✓				BW and SFW in all 4 estuaries.				
Better and earlier coordination and data sharing between relevant parties and local communities (inc. shellfishermen), including when dealing with new developments as statutory consultees.		WRT carry out WQ risk assessments.	✓	✓							
Address both water quality and sediment together.	ACA – Stuart Watts.	Research on legacy contaminants in estuaries (N Pope/Bill Langston, MBA)		✓							
Chemical and ecological monitoring and analysis to ensure impacts and sources are identified. If WFD targets met (e.g. on Dart Est) then harder to justify additional work by statutory agencies. Work to trace sources (livestock/human) River users to act as monitors.	EA statutory role – able to share evidence if needed. WRT Projects in 14/15 (and want to do more). Environmental Consultants (how do we access data?) Prof. Huw Taylor, Univ of Brighton – Microbial source tracking and risk assessment. Canoeists monitor	WRT want to expand current project work during 15/16. N Pope / Bill Langston (MBA) – analysis of existing pollutant data for Avon Estuary. Singling Paddles - monitoring		✓	✓	✓	PA ‘Reasons for Failure’ generally already understood.				Citizen Science style monitoring project using communities and water users. Could focus on algal blooms in SKE.
Algal blooms in the Salcombe Kingsbridge Estuary Education and research	Declan Shroeder (MBA) would like to determine trigger nutrient for bloom events. ACA – Stuart Watts	Singing Paddles – helping to monitor blooms and group education.		✓			Not a PA				
Link advisors on wildlife, climate change, fisheries, water management for joint outcomes	NE do fund and support this work re wildlife and climate change links.			✓							
Endocrine disruptors - Education, regulation, monitoring, identify sources, management	Singing Paddles	N Pope / Bill Langston (MBA) – extensive research on endocrine disruption in estuaries and relationship to catchment activities.		✓			Not a cause of PA failures				

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Reduce sources of urban / industrial pollution on our rivers, lakes, estuaries and coasts (sewage, pesticides, bacteria, chemicals, litter, dog fouling etc) – from domestic, recreational, commercial, industrial, highways sources											
Increase education and awareness of the issue to change behaviours and reduce impact. Target communities, homeowners, commercial premises/industries, recreation providers/participants, campsites, dog owners, schools, public sector buildings etc. Share existing best practice. e.g. Yellow Fish campaign	SDAONB slug pellet campaigns (garden centres). Teign Corinthian Yacht Club Teign Rowing Club Dave Curno – Yellow Fish project EA Misconnections Project (where linked to WFD or Bathing Water failures). WRT keen to be involved in BWRAs [???] – written in relation to dog fouling] Flete Estate restrict dog access to Mothecombe beach May-Sept. National Trust (Lorna Sherriff) – flick sticks but would like to know more [???] – written in relation to dog fouling] ? – Campaign to reduce phosphates in household products. EA – Education for building contractors. ACA (Stuart Watts) – create models to use in communities and schools. WRT – keen to get involved with septic tank work (need to educate owners re maintenance)	SDAONB septic tank campaigns (homeowners). SDAONB / Teign Estuary Forum. DWT could expand schools river/water project currently on Otter catchment. Good example of sustainable community right to build project in Totnes (Atmos). Singing Paddles – education for all groups. Also encourage use of grey water for washing boats and equipment.	✓	✓	✓	✓					Septic tank surveys, campaign and grants towards improvements.
Continue to invest in improved treatment and capacity. Nutrient stripping required at Buckfastleigh STW. Post scheme assessment to ensure WQ has improved.	EA – identify where capacity issues could impact on WFD Protected Areas. SWW Investment Programme, including Ermington, Modbury, Holbeton, Gerston Dr Louise Heathwaite PhD on Slapton in the 90s.		✓	✓	✓	✓	Improvements for BW and SFW already programmed.				
Natural solutions (can also offer flood risk benefits) - SUDS - clean water separation - rain water harvesting - buffer strips - wetland habitat creation - replant oak borders on the Avon	SUDS should be addressed via new developments. Good e.g. from Torbay LP submission – local plan policy requiring SUDS and separation of SW from combined sewers. ACA – Stuart Watts	TDC GI Plan (Johnny Miller) – also raising awareness with developers. Could LPAs include measures when planning safety/traffic calming measures? EA to influence planning and identification of Critical Drainage where problems most acute. WRT keen to help deliver SUDS in the area. N Pope (MBA) – interest in seagrass habitats/education/filming in relation to sediment reduction.	✓	✓	✓	✓					Small scale SUDS or habitat creation scheme?

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<p>Technical solutions</p> <ul style="list-style-type: none"> - stabilise historic waste - anaerobic digestion (treats sewage, cleans water, creates renewable energy) - grey water recycling - event duration monitoring on combined storm overflows - new routes for road run-off - address issues with LA derived inputs, e.g. grass cuttings and salt, inc. monitoring, change practices and community engagement. 	<p>WRT - working with highways to look at road drains into Fingle Brook. AD unit in Totnes is a good example (Jacqui Hodgson). WRT keen to get involved in CSO monitoring.</p>	<p>WRT –would like to investigate mining leachate mitigation. EA – working with mining and quarrying sector to relocate sediment run-off.</p>	✓	✓	✓	✓						
Stop abstraction at Littlehempston					✓		No d/s PA					
<p>Address specific problems due to increased development at Lee Mill Industrial Estate, Yealmpton, Brixton Brickworks</p> <p>Trade effluent controls, storm tanks, water balance assessment, monitoring, SUDS</p>	<p>EA statutory permitting role. EA Misconnections Project and working with individual traders to employ best practice. WRT keen to get involved in SUDS work.</p>		✓									
Review into poorly performing assets			✓									
SWW should not be only water supplier			✓									
<p>Leachate from inert landfill at Strashleigh</p> <ul style="list-style-type: none"> - increased understanding hydrogeology and surroundings - historical records - specific water quality monitoring - investigation into potential impact <p>Run-off from Tor Quarry needs further investigation. General concerns re quarrying in ASK catchment.</p>		<p>EA – Environment Officer to look at data and work out if WFD impacts. N Pope (MBA) interested in this – previous research on leachates from landfills into estuaries.</p>	✓	✓			If affecting Yealm and Avon SFW otherwise 'weakly'					
<p>Regulation & Development Planning</p> <ul style="list-style-type: none"> - Generally stricter controls and new time limits on historic agreements. - Building inspectors to check sewage connections before signing off. - Need to find drivers where WFD targets are met but there are still localised issues. - Re-instate permits for septic tanks in sensitive areas and promote bio-chemical units / LPAs to consider location and standard of new non-mains systems. - require planning permission for additional paving and patios 	<p>EA statutory role – enforce sanctions on SWW for illegal discharges. EA statutory role – provide advice to LPAs and developers to include SUDS and create strategic networks to avoid combined sewers, but limited resources.</p>	<p>Re non-mains drainage, LPAs could incorporate into clear local plan policies and EA could update non-mains drainage standing advice. NE are doing some work on septic tanks with CEH.</p>	✓	✓	✓	✓						
<p>Reduce litter/plastic pollution via:</p> <ul style="list-style-type: none"> - Beach cleans - Litter picks - Lobby for a 'Marine Litter Strategy' for England - Use community service 	<p>SDAONB/MCS/SATS/Dawlish Town Council already organise beach cleans but need to get more people involved. Local Authority - fly tipping response. TDC Ranger – working with volunteers</p>	<p>SDAONB slipway signage. SDAONB equipment loan service. LA support for rubbish removal. Suggested EA should run a public campaign to ID areas where river</p>	✓	✓		✓	Not a cause of PA failures					

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Promote vegetarianism											
Improve forestry practices via advice and guidance. Interventions include: - succession strategies to replace conifers with broadleaf or alkaline inducing species - buffer strips / deciduous barriers on periphery - ponds - bunding - clearing leaf litter - improved methods of cutting	Mark Prior and Deborah Elton (FC) EA and FC should be exploring opportunities to work better together in developing best practice and advising the forestry industry. DCC are running a project to recover leaf litter from gutters (Jacqui Hodgson).	WRT would like to expand liming trials on Dart.				✓	If targeted upstream of PAs				
Reduce pollution from boats in estuaries											
Restrict mooring permits to boats meeting standards	Harbour Authorities should be promoting, influencing and enforcing this.	AONB – would support HAs with information for harbour boards and slipways that promotes good conduct.	✓	✓		✓					
Enforce holding tanks for boats	EU Requirement that new boats must have holding tanks (Dave Curno).		✓			✓					
Provide local pump out facilities		RYA – promote via Green Blue Project.	✓	✓		✓					
Follow the Dutch system	Similar to UK and based on EU requirements (Dave Curno)		✓			✓					
Limit access at sensitive times			✓								
Limit engine size and licence boat users				✓							