

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>									
Retention of water by catchment /											
Habitat creation e.g. riparian wetlands, riparian buffers	Woodland Trust CRF agri advice (WRT)	- DWT - B Lines project, Greater Horseshoe Bat project partnership (AONB/ Buglife) DWT - Avon Project and other projects N. Devon	√	√	√						
Land based solutions 'soft engineering'	Rob Newton (c/o Iain Baines) Environment Agency - Buckfastleigh FAS investigating upstream options				√						
Introduction of healthy beavers	DWT – not in this area				√						
Restore historic hedge banks - across flood plain		Iain Baines - Environment Agency - Area Modelling Lead.			√						
Risk assessment for flooding					√						
Mire restoration in headwaters	Previous Dartmoor Mires	DNPA	√		√						
Farm practices; Plough with contours - reduce runoff, increase filtration, Limit maize planting to reduce winter run off, Agri-environment schemes esp. re soil management & enforcement, Vegetated land in winter	CSF scheme on Aran (Lizbe Pilbeam, NE) Tamar organic group - carbon project EA	Natural England Lizbe Pilbeam CSF, Jon Grimes NELMS	√	√	√						
Better use of grey water, rain water, winter water harvesting	CSF, FFIS Papa pumps - SWW, Bicton College, Earth Hub	Washing of canoeing equipment (Singing Paddles)		√							
Porous urban surfaces, driveways	French partners area working on this (N Pope, Marine Biological assoc.)			√							
Tidal changes affecting siltation/dredging/navigation/flood of coastal area											
Monitor change over long period of time			√								
Abstraction											
On farm water storage and usage (energy store), Papa pumps			√		√						
Improved soil management					√						
Land management advice					√						
Better management of private water supplies	Encouragement and advice is needed (Bob Harvey)				√						

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Public engagement - sustainable use of water Water usage efficiency measures , water meters and 'realistic' pricing		SDAONB - we are carrying out range of community activities to raise awareness	√	√	√						
Identify illegal abstractions through walkovers and surveys / monitoring			√	√	√						
Improve planning - sustainable development	SHDC, Torbay etc - local plan policy South Hams DC local plan (James Doxford)			√	√						
Better understanding of demand		SWW Demand - Paul Merchant water resources plan Efficiency - Rob Wynn ongoing	√	√							
Improved licensing ; Limit withdrawal by licensing small abstraction More detail of multiple uses on licences			√								
Regarding low flow as a consequence - mapping data - interpretation		SWW Upstream thinking Source 4 Business	√								
Water retention through wetland restoration			√								
Regulate abstractions	Singing Paddles ?			√							
Move small communities to mains supply				√							
Devonport leat restoration / improvement		Marcus Salmon, Iain Baines			√						
Reservoirs											
Fisheries benefits; Gravel re-introduction/rehabilitation projects Fish (and other species) passes Water releases at key times/compensation flow - liaison between SWW and river users	WRT/SHRImP, AFA DTRIP 2014-2020 SWW (probable) - Probable SWW funding 2015-2020 (Glenis Peusey) -TFA/WRT working on this (R Furniss SWRA) - Eels voluntary group translocating above weirs etc. Probable SWW funding to look at this 2015-2020 - implement HTT compensation flow (Glenis Peusey SWW)	WRT interested in this work Interested in projects to remove fish obstructions e.g. weirs if historic structures (C Whitton, Devon county historic environment team)		√		√					
Regulation and enforcement	EA					√					
Review historic licences		R Furniss SWRA				√					
Assess impact of small (unregulated) abstractions						√					
Catchment wide assessments and planning for opportunities		- DBRC could be involved in landuse mapping and instream habitat mapping - Water quantity abstraction mapping and ecology (Environ, Abby Bartram, capabilities within Exeter team)				√					

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Impoundments / Barriers											
Fish Easement; Surveys to assess problem for fish migration Review use to check if still required Modify barriers where possible to allow better flow & migration Weir removal	WRT SHRimP / DTRIP (Sniffer) Environment Agency Robert Hurrell - Assessing and modifying structures to improve fish passage	WRT Flete Estate manages Flete weir, tidal flaps and marshes	√	√	√						
Use alternative methods e.g. create wetlands not barriers Design to meet multiple criteria			√	√							
Mitigation				√							
Incentivise/grants				√							
Flooding											
Planning; Don't build on flood plains - EA & Las Planning permission to build driveway Consider during planning process - drainage - landuse pressure e.g. golf course/football pitches/roads House design	EA - Only on main rivers	Marcus Salmon EA - consultee in planning process. Advise that where devt in floodplains can't be avoided must be safe not inc risk. Try to reduce risk. Restrict greenfield.	√	√	√	√					
Wetlands and upland restoration	DWT UST II, Mires projects DNP and ENP - Archaeology and upstream thinking blocking up drains on moors	NE on Dartmoor but not lower catchment	√	√		√					
Flood storage area NFU manifesto - store water Drainage - storage of grey water	Environment agency investigating on R. Yealm contact Chris Jones NFU		√		√	√					
Land management; Soil condition inc. compaction Changing land use			√								
Retreat	SDAONB working with Slapton line project				√						
Create budget for coastal protection - long term					√						
SUDS	Singing Paddles WRT Pilot in Tamar Devon county flood risk team (Mark for SUDS) environment group	EA - advise Devon County and local authorities on use of SUDS (we like SUDS!)		√	√	√					
Population growth & Development											
SUDS schemes inc. retrofit				√							
Education/awareness	- South Devon AONB - Develop opportunities for undergrads and masters students (Stacey D, Plymouth Uni)			√							

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Sustainable development & living Consider water demand in house design/planning approval Improved infrastructure - separate rainwater and waste water Improve domestic water storage butts Consider removing smaller listed structures (e.g. bridges) to protect listed buildings	South Hams, Torbay - local planning policy	EA influencing local plan policies to ensure new development separates SW from combined sewers - Marcus Salmon		√	√						
EA schemes - offsetting work	Devon county and Torbay are lead local flood authorities: bid for FDGiA aid prepare flood risk management and need strategies to identify other sources of funding. EA bids for flood defence grant in Aid and influencing LPAs to obtain contributions from new development towards flood defence improvements										
Sustainable agri-intensification Compensation for farmers to store water on agri land - plant more woodland	N Baldock DNPA - Mires project	Exeter Uni and ADAS		√	√						
Manage flow upstream - reduce urban pressure	Alexis Huggins South Devon Green Infrastructure Project				√						
Groundwater issues											
Improve monitoring and baseline				√							
Improve soil condition				√							
Better regulation	DWT - currently N Devon NIA - capacity could expand			√							
Climate change											
SUDS				√							
Efficiency measures				√							
Awareness raising and education (public)		WRT									
Risk based assessment of impacts - river flows	SWW take account of this in business planning as well as climate change adaptation reporting to Defra	WRT interested in doing climate change risk assessments				√					
Better future resource management	Glenis Peusey SWW - Water resources - this is taken account of in SWW water resource management plans and business plans	Influence reform of abstraction regulation (R Furniss SWRA)				√					
Coastal flooding											
Improved flood defence engineering	EA/EU/Plym Uni (theses): re-establish wetlands area (Avon)			√							
Development control	National Trust - shifting shores (Singing Paddles)	Coastal change management areas (SWDC/AONB)		√							