## 2014/15 Capital Grants: Natura 2000 (N2K) Targeting Plan



This the River Basin District Plans outlining the proposed targeting approach to CSF N2K Capital Grants in 2014/15.

River Basin District	Severn	Plan prepared	30 Oct – 13 Dec 2013
Natura 2000 Catchments covered by this plan	West Midlands Meres and Mosses River Lugg River Wye River Teme	Natura 2000 sites covered by this plan	West Midlands Meres and Mosses: Oak Mere Special Area of Conservation (SAC) Wybunbury Moss SAC Brown Moss SAC River Lugg: River Wye SAC River Wye: River Wye SAC River Teme: River Teme: River Clun SAC
Natura 2000 Catchment(s) <i>not</i> being considered for grants	West Midlands Meres and Mosses	Rationale	The three SAC concerned are all mostly groundwater fed. They are all very small sub-catchments, measured by the number of fields they contain. Discussions with local NE staff have identified none of the capital works as likely to bring about a major improvement in SAC condition. Maize crops are the biggest outstanding issue with each site and this is best tackled through agri-environment schemes.

## **Catchment where grants** River Lugg, River Wye (both are part of River Wye SAC. The Lugg is a tributary of The Wye). will be offered The River Wye, including The Lugg, is being negatively impacted by high phosphate loadings. These loadings come from a variety of sources, including sewage treatment works, industry, domestic misconnections and agriculture/horticulture. In response to this, Natural England and the Environment Agency (EA) are writing a catchment scale Nutrient Management Plan (NMP) to identify county wide solutions for phosphate inputs. Psychic modelling carried out as part of the NMP has indicated that approximately 50% of the phosphate in the catchment arises from agricultural sources. CSF is a key delivery mechanism for reducing phosphorus (P) and sediment contributions from agriculture. Grant items under the N2K scheme will be targeted at improving infrastructure or land use associated with the specific P losses from each holding. **Rationale for offering** Sediment will also be a target. Eroded soil can carry phosphorus to water-courses. grant In addition, early CSF Farm Reports from 2007/08 will be revisited to assess whether recommendations have been actioned or if not, whether there is opportunity to correct continuing issues via the N2K grant scheme. The NMP will also be consulted to identify hot-spots. Water Framework Directive (WFD) water body "Reasons for failure" and Geographical Information Systems (GIS) will both also be used. This N2K site is being targeted over N2K sites in The Meres and Mosses, because diffuse pollution from agriculture is having a greater direct impact on the riverine ecology of The Lugg and Wye.

Description of theme	<ul> <li>Phosphorus is the main pollutant being targeted, plus sediment as a secondary target. Practices which contribute to these losses include livestock grazing (especially near watercourses), field operations and trafficking leading to run-off into watercourses or via soil deposition on roads, inadequate control of yard run-off and inadequate management of manure and silage stores. The grant will aim at reducing these sources of pollution and/or removing the connectivity to the river. In particular, grant items will be promoted to reduce: <ul> <li>Soil washed from river and stream banks damaged by unrestricted livestock access.</li> <li>Effluent from uncovered or inappropriately located solid manure heaps entering streams, field drains etc.</li> <li>Accessing fields during wet conditions in order to store farm yard manure during winter.</li> <li>Contaminated rainfall from dirty livestock yards and handling pens entering clean water drains.</li> <li>Soil/effluent runoff from tracks/gateways used for access/stock movement.</li> <li>Soils washed off from tramlines, gullies or rills in arable crops in to streams/rivers or on to roads during rainfall or flood events.</li> <li>Increased quantities of silage effluent or slurry produced due to rainfall entering stores.</li> <li>Mud deposited on roads has proved a significant issue due to connectivity to streams. Relocation or resurfacing of gateways or installing tracks should help to remediate this.</li> </ul></li></ul>		
Area / holdings to be targeted	The livestock sector will be the main target because of the capital grant items which are available. However, horticultural enterprises or high risk arable fields will also be targeted where applicable. Farms will be predominantly over 20 hectares, due to the scale of risk that larger holdings pose.		
CSF Capital Grant Scheme (CGS) items to be deployed	CSF001Relocation of Gates: to reduce soil lossCSF003Watercourse fencing: restricting access to watercoursesCSF004-5Fencing for buffer strips, marshes, wet grassland, wet woodland and ponds: to reduce soil damageCSF006, 007, 008, 009, 010Water provision for grazing livestock: to reduce the need for livestock access to watercoursesCSF011Cross drains: to reduce run-off or volumes of contaminated water from farm tracks and yardsCSF012Sediment ponds and traps: to reduce sediment lossCSF013Swales with check dams: to reduce run-off and sediment loss		

CSF014	Yard works for clean and dirty water separation: to reduce volumes of contaminated water
CSF016	Resurfacing of gateways: to reduce soil loss
CSF018b	Relocation of sheep pens: to avoid manure run-off into water-courses
CSF021	Livestock and machinery tracks: to reduce sediment loss, their design will need to ensure drainage from the
	tracks will not create an alternative pathway for pollution.
CSF023	Roofing of manure storage and livestock gathering areas: to reduce run-off into water-courses
CSF024	Watercourse crossings: to reduce soil and manure contamination of water-courses
CSF026	Roofs for slurry and silage stores: to reduce effluent volumes requiring storage and spreading

## Catchment 3

Catchment where grants will be offered	River Clun
	The River Teme is designated as a Site of Special Scientific Interest and Unit 6 (lower section of the River Clun) a
	Special Area of Conservation. The SAC qualifying feature is the fresh water pearl mussel. The latest report (Killeen,
	2013) indicates a dramatic loss of individual mussels and those present are exhibiting visible signs of stress due to
	high siltation. The river itself is exhibiting signs of eutrophication (algae are excessive) and poor interstitial oxygen
	levels within sediments and gravel beds. The catchment, which was traditionally an oligotrophic system, currently
	imports high levels of nutrients in fertiliser and feedstuff with consequential enrichment of vegetation, air, soil
Rationale for offering	and water. Higher levels of nutrients have enabled higher stocking levels and increased activity through
grant	mechanisation. There exists an increased potential for soil damage which is at times only diagnosed through CSF
	visits. Compacted soils in grassland may contribute significantly to high runoff. Concurrently, former
	infrastructure required for handling high levels of nutrients is often in a state of disrepair or is inadequate for
	current levels of activity. Environment Agency monitoring indicates phosphate and sediment within river water
	samples are far in excess of levels required for the fresh water pearl mussel life cycle.
	ENSIS records the adverse reason for unfavourable declining condition as including siltation, water pollution from

	agricultural run-off and water pollution – discharge (which is primarily sewage treatment).			
	Natural England and the Environment Agency have commissioned a catchment scale Nutrient Management Plan (under consultation) to identify key sources and pathways of nutrient and sediment loss within the catchment. The plan will be based mainly on existing data sources and modelling. Although the plan will not assess the current status of farms in the catchment, it will estimate potential nutrient generation and high sediment generation hotspots.			
	For the N2K grant in the Clun we plan to utilise the hot spots estimated by the Nutrient Management Plan to identify possible recipient farms. The EA and Shropshire Hills AONB have been consulted. The NFU, CLA and Severn Rivers Trust (catchment hosts for The Teme Catchment-based Approach) will also be consulted and we will review previous CSF activity and grant offers or unsuccessful applications.			
	This N2K site is being targeted over N2K sites in The Meres and Mosses, because diffuse pollution from agriculture is having a greater direct impact on the riverine ecology of The Clun. It is being targeted so that grants can be offered to reduce sediment and nutrient losses to the SAC.			
Description of theme	Sediment, phosphorus and nitrogen losses are the pollutants being targeted. Practices which contribute to these losses include livestock grazing, field operations and trafficking on unstable soils and tracks, inadequate control of yard run-off and inadequate management of manure stores. The grant will aim at reducing the sources of pollution attributable to these practices and/or removing the connectivity to the river. In particular, the grant items will be promoted to reduce:			
	<ul> <li>Sediment loss from unrestricted livestock access to rivers and streams.</li> <li>Direct influx of manure from livestock with access to rivers and streams.</li> <li>Excessive poaching and rutting of land parcel gateways and routes across land during wet conditions.</li> <li>Generation of fast runoff on sloping tracks causing sediment transport onto highways or directly into streams and rivers.</li> <li>The position of gateways in fields which contributes to excessive runoff from the field onto the highway and into drains which lead to the watercourse.</li> <li>Effluent runoff or scoppage caused by rainfall optoring uncovered muck stores.</li> </ul>			

	<ul> <li>Generation of excessive dirty water from rainfall entering livestock pens, loafing or handling areas.</li> <li>Threat of overflow from silage effluent or slurry stores due to rainfall entering uncovered storage facilities (where these facilities comply with current legislation).</li> </ul>		
Area / holdings to be targeted	Farms operating within hotspots identified in the NMP will be targeted. Farms will be contacted by telephone to assess interest. If uptake is low, a second tranche will be drawn up and contacted.		
CSF Capital Grant Scheme (CGS) items to be deployed	CSF001 CSF002 CSF003 CSF004 CSF005 CSF006-10 CSF011 CSF012 CSF013 CSF014 CSF015 CSF016 CSF017 CSF018 CSF021 CSF023 CSF026	Relocation of gates, including gapping up: for reducing soil loss Water gates, to restrict livestock access to watercourses. Watercourse fencing, to restrict livestock access to watercourses. Fencing for buffer strips, marshes, wet grassland, wet woodland and ponds: to reduce soil damage Solar-powered electric fence kits for seasonal fencing: as for 003 and 004 Water provision for grazing livestock to reduce livestock access to watercourses Cross drains on or in farm tracks or within farm yards: to reduce run-off or contaminated water volumes Sediment ponds and traps: to reduce run-off and sediment loss Swales with check dams: to reduce run-ff and sediment loss Yard works for clean and dirty water separation, to reduce volumes of contaminated water Installation of piped culverts in ditches: to protect water-courses from livestock or traffic Resurfacing of gateways: to reduce sediment loss from the field Rainwater storage tanks, first flush rainwater diverters and downpipe filters: to reduce dirty water volume Relocation of sheep pens: to avoid manure run-off into water-courses Livestock and machinery tracks: to reduce sediment loss (with CSF011 Cross drains) Roofing of manure storage and livestock gathering areas: to reduce run-off into water-courses Roofs for slurry and silage stores including self feed silage stores: to reduce slurry or silage effluent volumes.	