River Clun Special Area of Conservation

Evidence Pack

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Further information

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Contents

1. Site Details

From River Clun SAC

The River Clun is a tributary of the River Teme, which is the second largest tributary of the River Severn, draining a hilly, predominantly rural catchment of Silurian and Devonian rocks. The site includes only the lower reaches of the river and extends upstream from the confluence with the Teme to Broadward Bridge near Marlow.

This section of the river holds a population of the freshwater pearl mussel *Margaritifera margaritifera*, one of the few lowland populations left in the UK. The freshwater pearl mussel larvae attach to the gills of salmon and trout before eventually detaching and settling in the riverbed gravels where they grow to adulthood.

2. Reasons for European Site Designation

The Special Area for Conservation (SAC) is designated for the following features:

- S1029 Freshwater pearl mussel, *Margaritifera margaritifera*

Links to Conservation Advice:

- Conservation Objectives
- Conservation Objectives Supplementary Advice

3. Nutrient Pressure and Water Quality Evidence

Nutrient pressure(s) for which the site is unfavourable:

- Nitrogen
- Phosphorus

Water Quality data is reported against the relevant Site of Special Scientific Interest (SSSI) units within the SAC.

Table 1 – Site attribute with water quality targets

Unite name	SSSI Unit	Monitoring point ID	WQ Target		WQ Monitoring Data[1]		Compliance with target – Pass/Fail and % reduction needed to achieve the WQ target	
			SRP (g/l), annual mean	TON (mg/l)	OP, reactive as P (g/l), mean	TON (mg/l)	SRP	TON
River Clun	6	R. Clun Confluence with R. Teme MD – 20349700	10	1.5	39.6	4.01	FAIL 75% reduction needed	FAIL 63% reduction needed

Freshwater Pearl Mussels are sensitive to changes in water quality, with nutrient enrichment impacting long term adult survival and juvenile recruitment. Recent water quality monitoring shows nutrient concentrations within the River Clun SAC to be exceeding the targets for Soluble Reactive Phosphorus (SRP) and Total Oxidised Nitrogen (TON). Any nutrients entering the catchment upstream of the locations which are exceeding their nutrient targets, will make their way downstream and have the potential to further add to the current exceedance. For the River Clun, the catchment map includes the entire upstream catchment.

4. Additional Information

Habitat type impacted by nutrients – Rivers and Streams

The River Clun SAC is legally underpinned by the River Teme SSSI.

SSSI interest features include:

[1] Water Quality Monitoring data from EA WIMS database. Orthophosphate (OP) is a reasonable approximation to Soluble Reaction Phosphorus (SRP). TON is Total Oxidised Nitrogen. Following the rivers common standards monitoring guidance the mean of 3 years of data for the period April 2017 – March 2020 was used.

- Invert. assemblage W114 stream & river margin
- Invert. assemblage W122 riparian sand
- Otter, *Lutra lutra*
- Population of Schedule 5 mollusc - *Margaritifera margaritifera*, Freshwater Pearl Mussel
- River supporting habitat
- Rivers and Streams
- Twaite shad, *Alosa fallax*
- White-clawed (or Atlantic stream) crayfish, *Austropotamobius pallipes*

Appendix

Component SSSIs

Map of component SSSIs of River Clun SAC

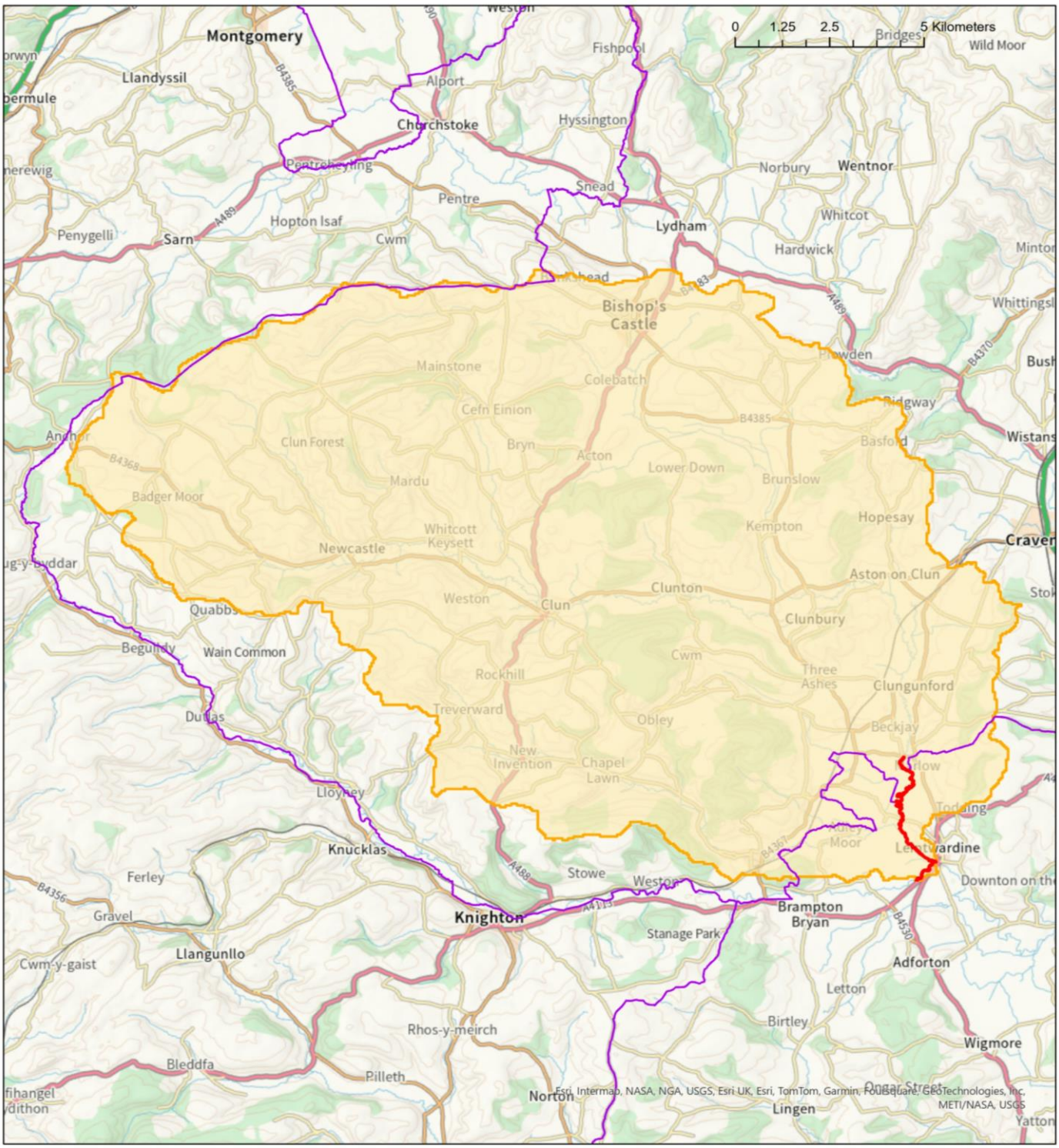
Catchment Area Update (2024)

Natural England has undertaken a review of all the Nutrient Neutrality catchment areas. This review has considered updated surface water catchment data and evidence held by both Natural England and the Environment Agency. Consideration has also been given to data and evidence provided by other parties such as Local Planning Authorities. The information below summarises changes.

This catchment remains unchanged following review.

Publishing of catchment area data

The Geographic Information Systems (GIS) data is available on Defra Data Services Platform.



Area where Natural England's Nutrient Neutrality advice applies for River Clun SAC

European protected sites requiring nutrient neutrality strategic solutions

- Local Authorities
- Component SSSIs of impacted designated site
- Surface water catchment area of relevant designated site due to nutrient pollution

Produced by Nutrient Mitigation Scheme Team

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List of abbreviations

OP – Orthophosphate

SAC – Special Area of Conservation

SRP – Soluble Reactive Phosphorus

SSSI – Site of Special Scientific Interest

TON – Total Oxidised Nitrogen

WQ – Water Quality

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