Catchment Sensitive Farming

Northumbria River Basin District Strategy 2016 to 2021





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Section 1: overview

1.1 Introduction, aims and objectives of CSF

This document outlines the proposals for Phase 4 of Catchment Sensitive Farming (CSF) work in Northumbria River Basin District between 2016 and 2021. It describes the outline evidence of the water quality issues, the mechanisms and measures CSF will deliver and the resources we will use to support and achieve our objectives and underpin partnership and liaison arrangements.

The CSF programme helps farmers take action to address agricultural diffuse water pollution using advice and incentives. Since 2006 CSF has been working in specific Priority Catchments where agriculture is having the most significant impact on rivers, lakes and estuaries. Programme evaluation has demonstrated the effectiveness of CSF's approach in reducing pollutant loads and improving water quality. CSF Phase 4 builds on this previous work and brings several new features which improve the effectiveness of the programme at addressing diffuse water pollution working with a wide range of partners.

The key features of the approach are as follows:

- The basic unit of CSF delivery is the Water Framework Directive Water
 Management Catchment. Within each catchment are areas defined as a high
 priority for water quality for the Countryside Stewardship scheme. These are the
 priority areas for CSF, which are termed here Water Priority Areas (WPA).
- CSF will mainly be working in the Water Priority Areas. We will look for
 partnership opportunities to increase the intensity of our work in these areas
 and to extend the approach to other areas.
- CSF deploys measures to address water quality objectives for Protected Areas (Natura 2000 (N2K) sites, Bathing Water, Shellfish Waters and Drinking Waters) and Good Ecological Status (GES) of lakes failing diffuse water pollution from agriculture.
- The incentives element of CSF will be provided through Countryside
 Stewardship (which now incorporates the CSF Grants Scheme), using mainly the
 Mid-Tier with Higher Tier where there are opportunities to do so. Water capital
 items are available, as part of the Mid-Tier process or with land management
 options in Mid-Tier and Higher Tier.
- We will provide advice through direct delivery by CSF Officers and contracted through the Farm Advice Framework.
- We will be as clear as possible over what we can achieve in terms of environmental outcomes. We will then assess our progress and continue to evaluate CSF alongside the water elements of Countryside Stewardship.

- We will develop partnerships with a wide range of organisations, including Natural England (NE), Environment Agency (EA) and Forestry Commission (FC), where we have shared objectives. Some of this partnership work may be outside Water Priority Areas where funding allows.
- We will maximise the gains of CSF work beyond water quality, including farm business benefits and resilience to hazard and ecosystem services including flood mitigation, climate change adaptation, fisheries, and land biodiversity.
- Where opportunities allow, we will develop pilots to test new ways of working and to assist in the transfer of research findings to widespread practical application. Opportunities will be sought to integrate piloting work into the wider work described in this document.
- This plan is underpinned by a series of local, catchment-level plans which describe in detail the approach along with the underpinning evidence base.

1.2 Evidence

Overview

The Water Priority Areas (WPA) have been developed to target both Countryside Stewardship (CS) and CSF using a range of evidence. Water Priority Areas represent the places where diffuse water pollution from agriculture (DWPA) is a significant water quality issue and where CS and CSF can be most effective to help achieve Water Framework Directive (WFD) outcomes. A range of evidence has been layered to create a thorough understanding of each Water Priority Area in each water management catchment, including DWPA pressures, farm types, soil and rainfall.

From this the Environment Agency CSF Evidence Team has developed a prioritisation to focus advice and some specific Countryside Stewardship grant funding to priority farm holdings, where the evidence suggests most WFD outcomes could be achieved. Local knowledge and ground-truthing in the River Basin District (RBD) will be part of the process and where local initiatives occur, then these can form part of CSF delivery.

Please refer to Section 2.1 for more detail.

The Northumbria CSF Phase 4 River Basin Strategy is integrated with the Environment Agency River Basin Management Plan (RBMP) process. CSF is a mechanism by which waterbody objectives can be achieved in waterbodies identified as a priority for DWPA. Data for every waterbody in England is available on the EA catchment data site; this includes the 2015 status of individual waterbodies and the reasons for not achieving good status, thereby justifying the priority placed upon them by

CSF targeting. CS is identified within the RBMP as mechanism to implement the measures to achieve the water body objectives for 2027 and beyond.

The Northumbria River Basin District extends south from Berwick-Upon-Tweed to the North York Moors. The RBD extends to the Cheviot Hills and the North Pennines in the east. It is characterised by some large river systems; Tweed, Coquet, Tyne, Wear and Tees which rise in the uplands and flow east across the coastal plain to the North Sea. The big river systems are interspersed with some smaller rivers and coastal streams particularly in Northumberland Rivers Water management Catchment.

Further detail on the condition of water bodies, the pressures affecting them and the actions that are being planned to address these pressures can be found in the Northumbria River Basin Management Plan

The Environment Agency catchment planning data explorer provides evidence on pollution pressures and reasons for not achieving WFD objectives.

There is large variation in farming type throughout the Northumbria River Basin District and WPAs we will be working in. The Till (Tweed) WPA is characterised by upland hill farms in the headwaters and intensive arable in the Millfield Plain area. The Northumberland Rivers WPA is characterised by medium to large mixed farms with some intensive arable areas. The Tees WPA is characterised by a more diverse farming types ranging from pigs, poultry to mixed arable farms.

The Northumbria RBD includes four Water Management Catchments; Northumberland Rivers, Tyne, Wear and Tees. For operational purposes this strategy also includes the Till (Tweed) although this is strictly part of the Solway Tweed RBD. Three of the Water Management Catchments contain WPAs where CSF will target resource. The objectives driving prioritisation, total number of holdings in WPAs and the pressures operating in the Water Management Catchments are listed in Table 2.1 and maps are available in Appendix 1. The diffuse water pollution pressures operating in the Till (Tweed) catchment are Faecal Indicator Organisms (FIOs), phosphate and nitrates. The diffuse water pollution pressures operating in the Northumberland Rivers and Tees Catchment WPAs are phosphates and sediments.

1.3 Delivery Approach and Mechanisms

Overview

A number of factors have shaped the approach to CSF Phase 4:

 The implementation of Countryside Stewardship (CS) and associated targeting changes.

- River Basin Planning priorities.
- Evidence from previous CSF evaluations
- Opportunities for closer working with a range of partners and Defra colleagues to achieve common goals.

Phase 4 of CSF gives us the opportunity to optimise our delivery and build on the expertise gained over the last 10 years. This will improve outcome delivery for water quality and other ecosystem services, along with economic benefits for farmers and the wider economy.

Our approach will be outcome-based, working with stakeholders and Defra colleagues to provide national and locally derived benefits over the next 5 years. The CSF evaluation shows the outcome benefits of working for a long period (4+years) in a catchment to drive the uptake of measures. The revised targeting means that, in a small number of cases, we will be reducing the area in which CSF works. In these cases we will work with partners to develop a 'legacy' approach.

All Water Priority Areas are of equal priority. This means that no Protected Areas or Good Ecological Status have a higher priority over another. Most CSF work will be in Water Priority Areas, although there will be cases where we put resources elsewhere, including water measures in biodiversity-led Higher Tier CS agreements and some partnerships.

The overall CSF approach will be to work with farmers who will benefit the most from the measures and mechanism to reduce DWPA (termed Priority Farms). In all cases we will be clear why we are working with specific farmers. One to one advice will be provided to prioritised farmers to support the uptake of Countryside Stewardship and to help farmers to adopt measures to improve farm businesses and the environment. In Water Priority Areas outside Priority Farms, emphasis will be on providing general advice on Countryside Stewardship and land management for water through a variety of mechanisms including group events, newsletters and training to advisers.

Up to 20% of the overall CSF resource can be dedicated to local campaigns and priorities that address specific catchment issues in the Water Priority Areas. This approach could bring together farms referred by EA and NE, local Catchment Sensitive Farming Officer (CSFO) knowledge and scattered Priority Farms to form a more meaningful campaign area where CSF can support water quality improvement.

CSF staffing will be determined initially on the number of Priority Farms in an area. The implication of this is that CSFOs or partners may cover more than one catchment (See Section 2.2 for more details).

In our first year of delivery (2016/17) the focus will be on setting the new direction of the strategy and working with partners and Defra colleagues to help develop a more

detailed programme for the next 5 years. This will include ground-truthing the Priority Farms in light of previous CSF work and any other changes of circumstances that may mean the farm is no longer a priority (e.g. change of business). In addition, there will be work to sequence engagement of the priority farms over the 5 years of Phase 4.

We will be piloting new approaches to link our water quality advice to the wider environment specifically building on our engagement with farmers to help positively influence farm wildlife, woodland creation, climate change mitigation, air pollution and flood risk through Mid and Higher Tier Countryside Stewardship.

CSF is a collaboration between Defra, Environment Agency and Natural England and partnership working is embedded across the programme. This way of working crosses national, area and local teams to deliver our shared outcomes.

CSF Partnerships

CSF seeks opportunities to work with external partners at national, regional and local level to enhance delivery of shared WFD outcomes. CSF partnership working integrates planning; improves delivery of WFD and synergies; ensures join up with partners; avoids duplication; pools resources, information and expertise and adds value to CSF and our objectives.

CSF partnerships include both formal and informal arrangements. Resources for partnerships will be prioritised according to those that best align with CSF outcome delivery. CSF will seek opportunities for sponsorship, funding bids with partners, cofunded partnership projects and no-cost partnerships.

Key CSF partners include (but not exclusively):

- Farmers and farming associations
- Government bodies: Environment Agency, Natural England, Forestry Commission, Agriculture and Horticulture Development Board (AHDB)
- Water companies
- Farm advisers and companies agronomists, farm advisers, vets, machinery/ input distributors, land agents
- Local Authorities, National Parks, Areas of Outstanding National Beauty and Regional Parks
- Environmental organisations such as Rivers Trusts, Wildlife Trusts, Woodland Trust, Campaign for the Farmed Environment (CFE)

- Catchment Based Approach partnerships
- Food and drink industry
- Internal drainage boards

Partnerships and Water Company Working

In most parts of the country, CSF will be working alongside existing catchment projects that involve working with farmers. The number of these projects has increased recently following investments by Water Companies, some of which are delivered in partnership with CSF. In all cases we will seek to ensure water quality messages are co-ordinated across the projects to ensure consistency for farmers and land managers. Opportunities for co-working (sharing events for example) will be taken wherever possible. The following describes how we will work with these projects in different situations:

Project completely outside a Water Priority Area: there will be no overlap with where CSF will be working. CSF will provide advice and assistance where possible to help co-ordinate messages. CSF will help develop the skills of officers working on the project to help them advise on Countryside Stewardship.

Project overlaps with a Water Priority Area: CSF will seek to engage in the early planning of such work where possible to help co-ordinate visits to farms and avoid multiple visits. In addition, where possible, opportunities will be sought for partners in the Countryside Stewardship high water quality priority area to signpost potential Mid-Tier applications to CSF. Joint activities will be held wherever possible. Where a project has differing objectives and/or priorities from CSF we will work across the water priority area, but there will be less reliance on the project to deliver CSF objectives, including Countryside Stewardship work.

Precise working arrangements will be decided locally.

Northumbria River Basin District Delivery and Mechanisms Overview

In Northumbria River Basin District, CSF works closely with colleagues in Natural England, Forestry Commission and Environment Agency local teams to ensure that we achieve integrated outcomes.

CSF delivery planning is integrated with the Natural England Northumbria Area
Team and CSF outcomes are included in the Northumbria Area Team 2016/17
Delivery Plan. In particular DWPA/ WFD actions on land are priority outcomes in
the Borderlands, Northumberland and Teesmouth Focus Areas and CSF is listed
as a priority activity. Table 2.1 documents the number of priority holdings which
will be engaged in each Water Management Catchment in order to achieve
these outcomes.

- CSF works closely with the Environment Agency to ensure that our delivery compliments projects commissioned through the Environment Programme in the Medium Term Plan. This ensures that in areas where we have overlapping objectives to improve water quality such as the Skerne and Leven WPAs we can support delivery of synergistic objectives.
- CSF are piloting a closer working relationship with the Forestry Commission in the Till (Tweed) catchment in order to better integrate the delivery of Woodlands for Water and integrate advice to farmers and landowners in this area.

Northumbria River Basin District Partnerships

CSF will work with a number of partners in formal partnership projects in the WPAs described below:

- Tees River Trust Collaborative Project in the Skerne, Leven, Aldbrough and Skelton Becks WPA in the Tees Water Management Catchment.

 CSF have been working in partnership with Tees Rivers Trust in the Skerne and Leven catchments during 2015-16 to deliver 20 1:1 advice visits and two workshops to raise farmers awareness of diffuse water pollution risks posed by agriculture and potential mitigation measures. Tees Rivers Trust would like to extend this work into the Aldbrough and Skelton Becks during 2016-17 and CSF are currently developing a further collaborative project and exploring potential funding from the the CSF Paretnerships Team.
- Northumbria Water Limited Memorandum of Understanding (MoU) in
 Thrirston Burn (Tributary of Coquet) WPA in the Northumberland Rivers Water
 Management Catchment
 CSF have been working in partnership with Northumbria Water Limited in
 the Consult of the large and division CSF. Places 2 to deliver in int 1st and violence visits.
 - the Coquet catchment during CSF Phase 3 to deliver joint 1:1 advice visits and workshops to raise farmers awareness of diffuse pollution risks posed by agriculture and potential mitigation measures. CSF and Northumbria Water Limited are currently developing a further MoU focusing on CSF Phase 4 priorities to deliver further advice visits and workshops.
- Northumberland National Park Authority Collaborative Project in the Till (Tweed) WPA. CSF have been working in partnership with Northumberland National Park Authority in the uplands of the Till and Coquet catchments to address DWPA caused by tracks. This project was funded by WFD grant in aid (GIA) funding and focused on reducing impacts from upland tracks in these areas by monitoiring the impacts of tracks, piloting innovative track technology and developing estate wide track management plans for landowners.
- Northumberland Rivers Trust Collaborative Project in the River Lyne WPA in the Northumberland Rivers Management Catchment.

CSF are working in partnership with the Northumberland Rivers Trust to deliver 10 1:1 advice visits and to raise farmers awareness of diffuse water pollution risks posed by agriculture and potential mitigation measures in the River Lyne Catchment in 2016-17.

Within the Nothumbria RBD, CSF will work with a range of key partners and partnership projects including, but not restricted to:

- Catchment Based Approach partnerships Tees Catchment Partnership, Northumberland Rivers Catchment Partnership and Tweed Catchment Partnership
- Tweed Catchment Restoration Project Till (Tweed) WPA
- Rivers Trusts River Northumberland Rivers Trust, Tees Rivers Trust, Tweed Forum
- Northumberland National Park Authority Till (Tweed) WPA
- Northumbria Water Limited Thirston Burn and Skerne WPA
- Brightwater HLF Project Skerne WPA
- Catchments in Trust HLF Project Wansbeck WPA
- CS Facilitation Project Skerne WPA

1.4 Advocacy & Promotion

Engaging with farmers and land managers to raise awareness of diffuse water pollution from agriculture and encouraging voluntary action, is the principal communication objective for CSF. The outcome for our communication work is that the CSF work and role is understood and valued.

Our communication approach will come from the River Basin District level and River Basin Coordinators (RBCs) will consider appropriate communication activities to support the following communication objectives:

- Raise awareness amongst farmers and land managers of the impacts of DWPA.
- Encourage farmers and land managers in catchments to take voluntary action to mitigate DWPA. Facilitate synergy and integration with related programmes and mechanisms to tackle DWPA by ensuring CSF is embedded within River Basin Management and the overall policy framework for diffuse pollution mechanisms.
- Work with stakeholders to develop and deliver partnerships to encourage action to address DWPA.

Section 2: Detailed Approach

2.1 WFD Water management catchments covered by this strategy

WFD Water Management Catchment	Water Priority Area (WPA)	Status (new in 2015, ongoing, legacy)	Number of Farms in WPA	Designated sites and WFD Protected Areas	DWPA Pressures
Till (Tweed)	Till (Tweed)	Ongoing	TBC	Tweed (Till) SAC Spittal Beach Bathing Water	FIO, Nitrate, Phosphate and Sediment
Northumberland Rivers	Eglingham Burn	Ongoing	TBC	WFD GES Failure	Sediment
	Thirston Burn	Ongoing	TBC	River Coquet and Woodlands SSSI River Coquet DrWPA SGZ	Nitrate, Phosphate and Sediment
	Wansbeck	New	TBC	WFD GES Failure	Sediment
	Lyne and Sleekburn	New	TBC	WFD GES Failure	Sediment
Tees	Skerne	New	TBC	WFD GES Failure	Phosphate and Sediment
	Leven	New	TBC	WFD GES Failure	Phosphate and Sediment
	Skelton Beck	New	TBC	WFD GES Failure	Sediment
	Aldbrough Beck	New	TBC	WFD GES Failure	Sediment

2.1.1 Natural England areas covered by this strategy

Natural England Area Team	WFD Water Management Catchment relating to Natural England Area Team		Number of priority holdings per NE Area Team to be engaged in 2016/17	
Northumbria 1	Till (Tweed)	921	225	
	Northumberland Rivers			
	Tees			

2.2 Resources

WFD Water Management Catchment	Delivery Approach (CSFO, Partnership)	Resource (CSFO (FTE), details of the partnership)
Till (Tweed)	CSFO	1 FTE
Northumberland Rivers	CSFO	1 FTE
Tees	CSFO	1 FTE

2.3 Communication actions for Northumbria River Basin District

About your RBD	Your main audiences	Stakeholder engagement	Successful communication activities	How did you measure success?	Key milestones 2016-2017
Bathing Waters	Farmers EA Northumbria water Limited SEPA NFU	Work with EA to promote key actions for Bathing Waters, and the good work that farmers have been doing through CSF to improve bathing water quality. Ensure messages are carried through by partnership organisations.	Article with NFU showing positive actions farmers had taken. Joint farmer meetings.	Positive feedback. Number of attendees. Pledges of advice uptake	Bathing advice signs going up May 16
Flooding	Farmers EA NFU National Trust – Wallington estate	Incorporate Natural Flood Measures into DWPA discussions.	CSFO working with local farming community. Joint Meetings.	Positive feedback. Number of attendees. Pledges of advice uptake	
Drinking Water	Farmers EA NFU Northumbria Water Limited	Work with Northumbria Water Limited to identify key messages / issues that may need a reactive response.	Joint farmer meetings and articles in CSF newsletter.	Positive feedback. Number of attendees. Pledges of advice uptake	
Natura 2000/SSSI with DWPA Issues	Defra, EA, NE, RSPB, NT, etc	Work closely with stakeholders to identify key actions in DWPPs, and continue with appropriate targeted advice communications with farming community	CSFO farmer engagement resulting in progress of actions in DWPP	CSFO engagement in DWPP, Actions updated / complete	Milestones related to the Judicial Review Consent Order for N2K sites
Countryside Stewardship	Farmers, Defra, NE, EA, FC and partners	Presence at MT events, key meetings, newsletters / letters to farmers, drop in clinics, 1:1 advice visits, text messages with key information at key points in process to applicants	CSFO farmer engagement in MT applications and contribution to HT applications	Numbers of high quality MT applications received with CSF input / endorsement	Application window Apr – Sept 16, and follow up work to ensure agreements issued through to Jan 17 start dates.
Farmers	Farmers, agricultural industry, and others as appropriate	Regular Steering Group meetings or focus groups within geographical areas, with focus on farmer input and feedback	Regular Steering Group	Positive feedback, value of input from farmers to help shape plans and other comms. Influence on farmer engagement	Biannual meetings

2.4 How can you help?

This Strategy has been produced in consultation with our partners, including Environment Agency, Natural England and Defra. It aims to develop a framework over the next 5 years to deliver voluntary action on farms to reduce diffuse water pollution and increase water quality for Water Framework Directive. We're always happy to hear from others that want to share our objectives and may want to contribute to further work. If you would like further information, please contact your River Basin Coordinator Lydia Nixon on 07770 796054

or e-mail <u>CSFphase4planning@naturalengland.org.uk</u>

Glossary

AHD Agriculture and Horticulture Development Board

AONB Area of Outstanding Natural Beauty

CaBA Catchment Based Approach

CFE Campaign for the Farmed Environment

CGS Capital Grant Scheme

CLA Country Land and Business Association

CS Countryside Stewardship

CSFO Catchment Sensitive Farming Officer

CSFRD CSF Reporter Database

CSG Catchment Steering Groups

Demonstration Test Catchment DTC

DWPA Diffuse Water Pollution from Agriculture

EWQMP Enhanced Water Quality Monitoring Programme

FAF Farm Advice Framework

FAS Farm Advice Service

FIOs Faecal Indicator Organisms

FTE Full Time Equivalent

GES Good Ecological Status

GIA Grant in Aid

KPI **Key Performance Indicators**

Legacy areas these are Phase 3 areas where CSF can no longer

> provide advice in phase 4, due to new Countryside Stewardship targeting. The approach will depend on individual circumstance, as CSF endeavours to support

advice through partners.

Legacy Approach See 'Legacy areas'

Local Campaigns This will be unique to each water priority area and

may only be targeted to specific areas and/or types

of farms to improve water quality.

MT Mid-Tier Countryside Stewardship

N2K Natura 2000 Sites

NGO Non-Government Organisation

Non-priority these are farms that have been identified through

desk-based modelling to Farms have the lowest risk to

water quality. General advice on best practice will be

made available to farms in this group. .

Phase 4 This the fourth phase of CSF from 2016 to 2021.

PMG Project Management Group

PR19 Price Review 2019 (Ofwat)

Priority Farms these are farms that have been identified through

desk-based modelling to benefit most from CSF help and advice. Throughout phase 4 advisers will be pro-

active in working with these farms.

Protected Area e.g. Shellfish Water, Bathing Water, Natura 2000 sites,

Drinking Water

RASE Royal Agricultural Society of England

RBC River Basin District Coordinator

RBD River Basin District

RDPE Rural Development Programme - England

RBMP River Basin Management Plan

Reduced Area Catchments Catchments that through new targeting have

significantly reduced in water priority area in Phase 4

SGZ Safe Guard Zone

SSSI Sites of Special Scientific Interest

TFA Tenant Farmers Association

Water quality elements of Countryside Stewardship

Options in CS

Water Quality Issues e.g. sediment, phosphate, nitrate, FIO, pesticides

Water quality items grant measures available through Countryside

Stewardship to reduce diffuse pollution.

Water Quality Objectives e.g. our aims to mitigate the water quality issues

above

WFD Water Framework Directive

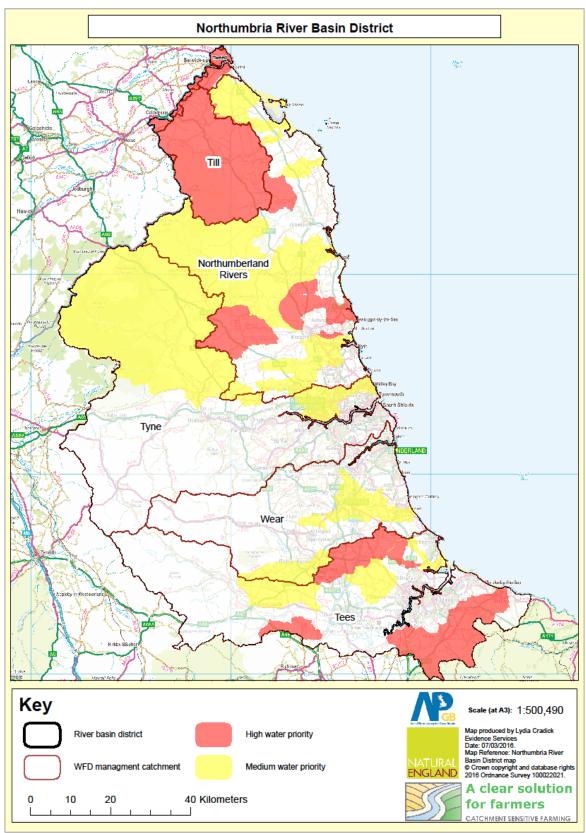
WPA Water Priority Area; this is the area defined as having

the highest priority for improvements in water quality through Countryside Stewardship. In each catchment,

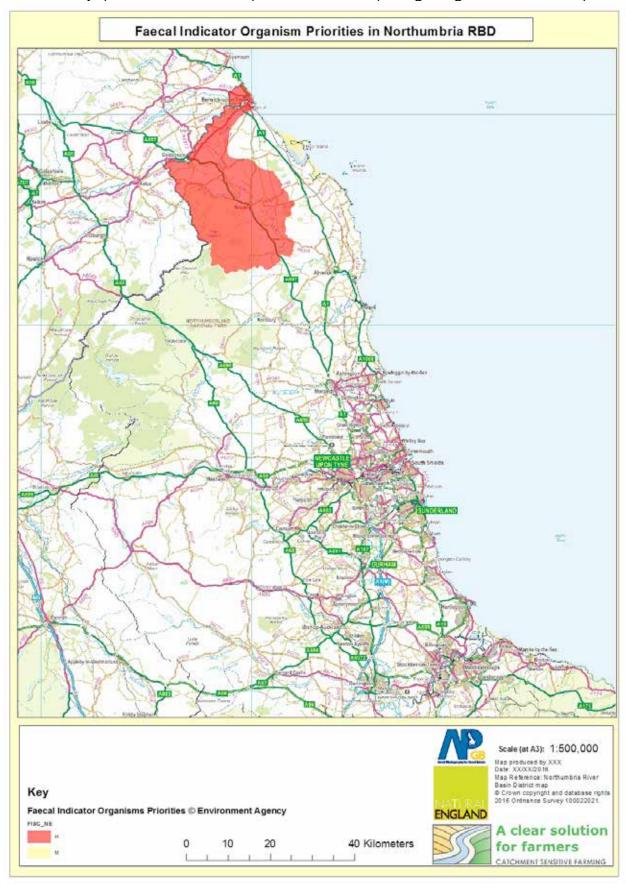
these are the core target areas for CSF Phase 4.

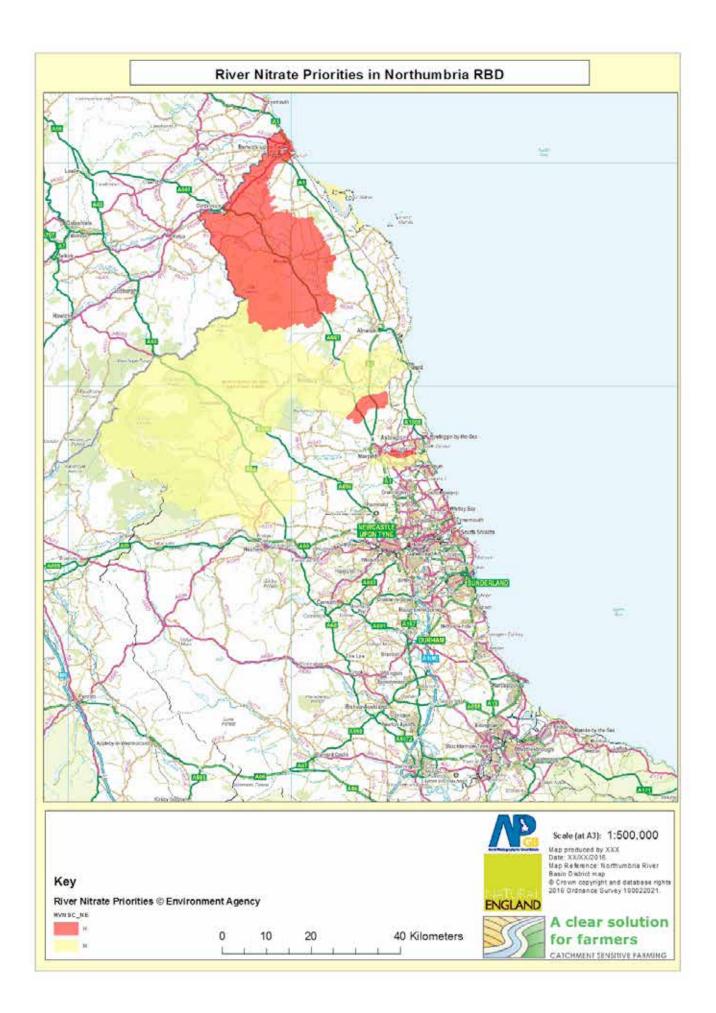
River Basin District Maps

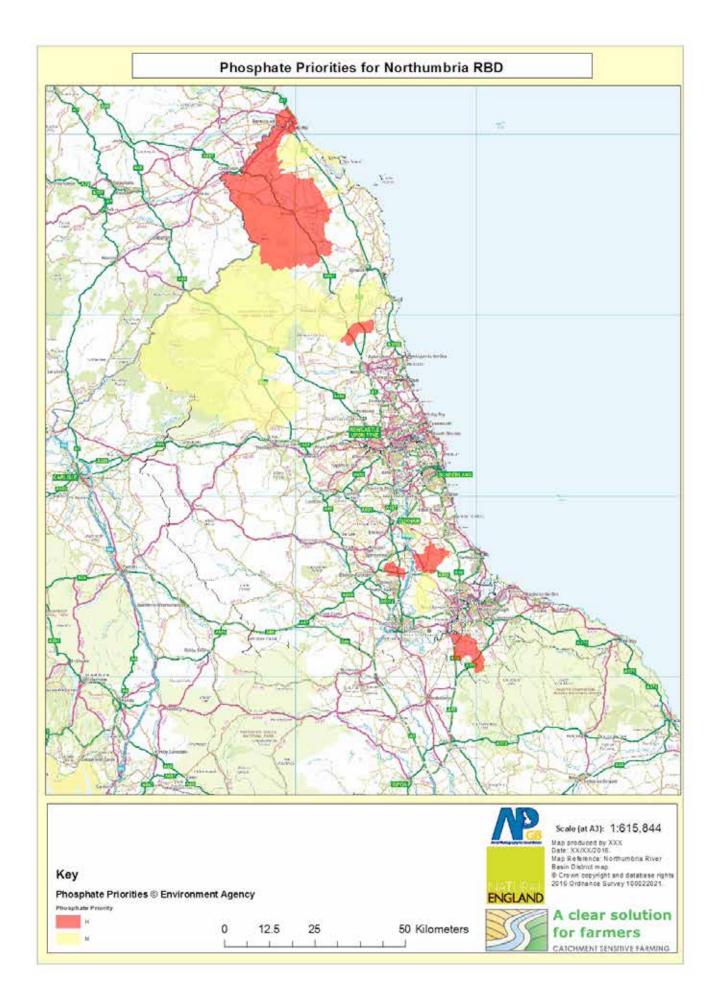
Appendix 1 High water quality priority areas for CSF advice and Countryside Stewardship (Taken from Countryside Stewardship targeting evidence 2013)

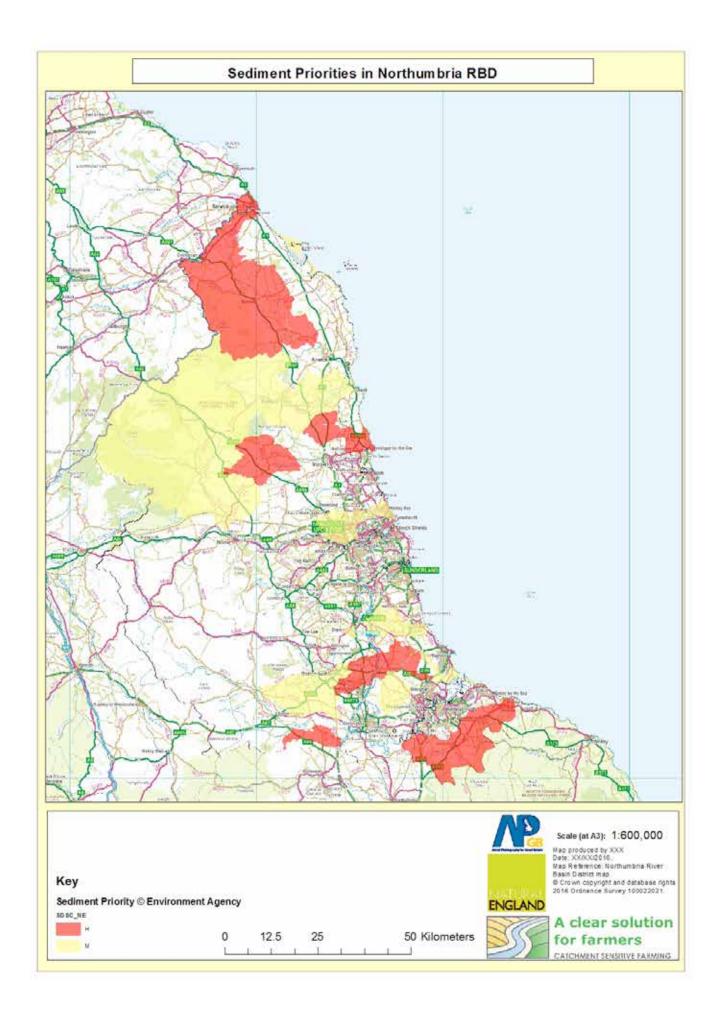


Appendix 2 WFD agricultural pollutant pressures for CSF advice and Countryside Stewardship (Taken from Countryside Stewardship targeting evidence 2013)

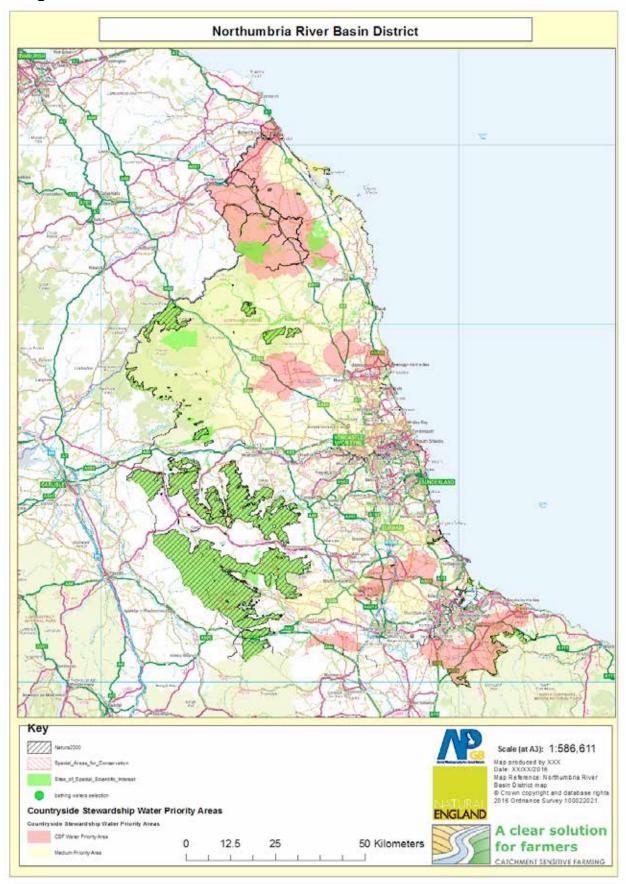




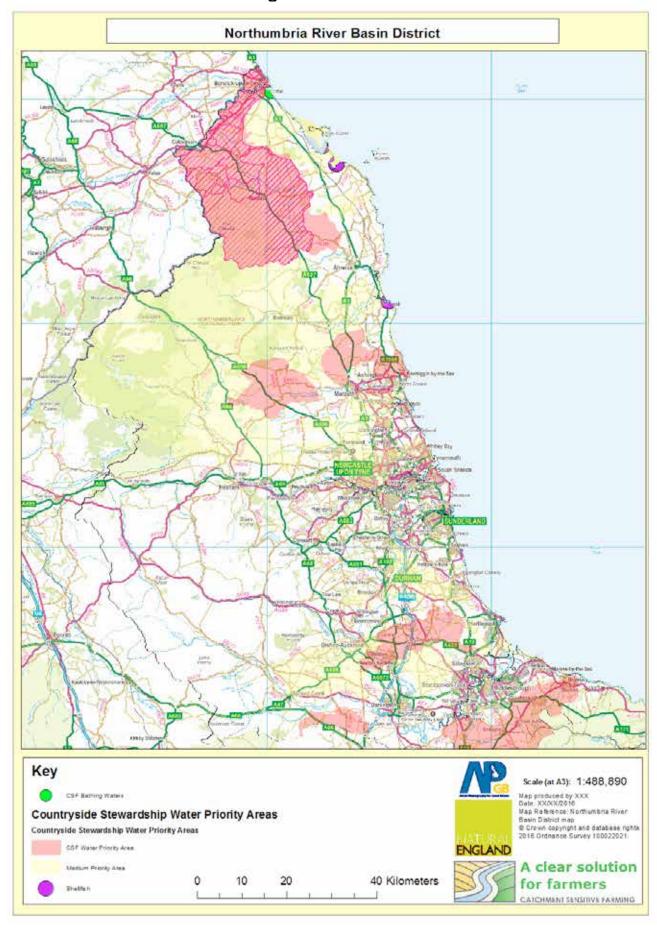




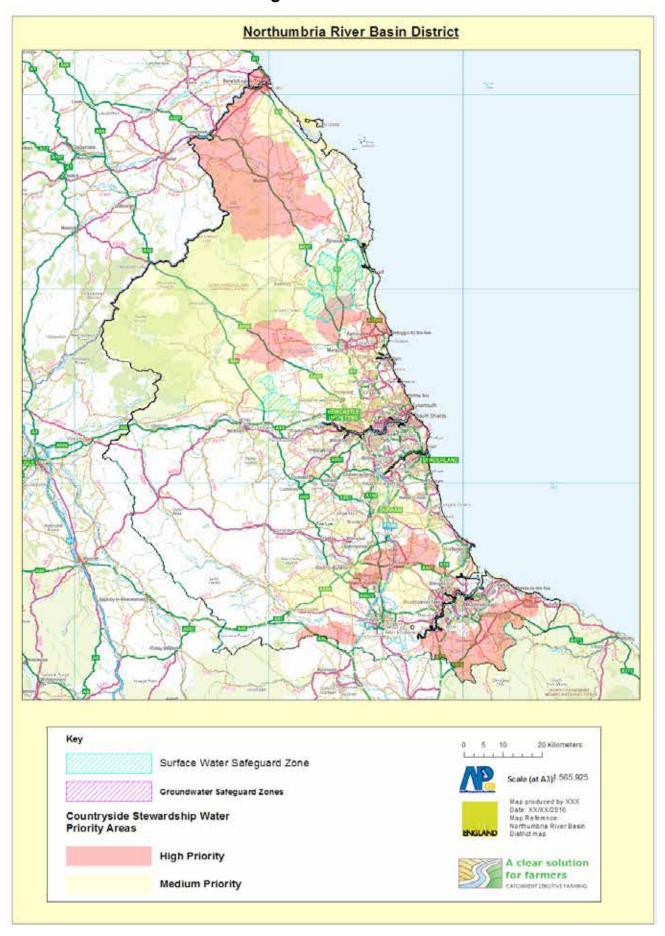
Appendix 3 WFD protected areas (2014 & 2016) and designated sites Designated sites



Water Framework Directive Bathing and Shellfish Waters



Water Framework Directive Drinking Water Protected Areas



Cover photo: Crag Lough, Roman Wall Loughs SSSI, Northumberland © Peter Wakely/Natural England

Catchment Sensitive Farming (CSF) is delivered in partnership by Natural England, the Environment Agency and Defra.







