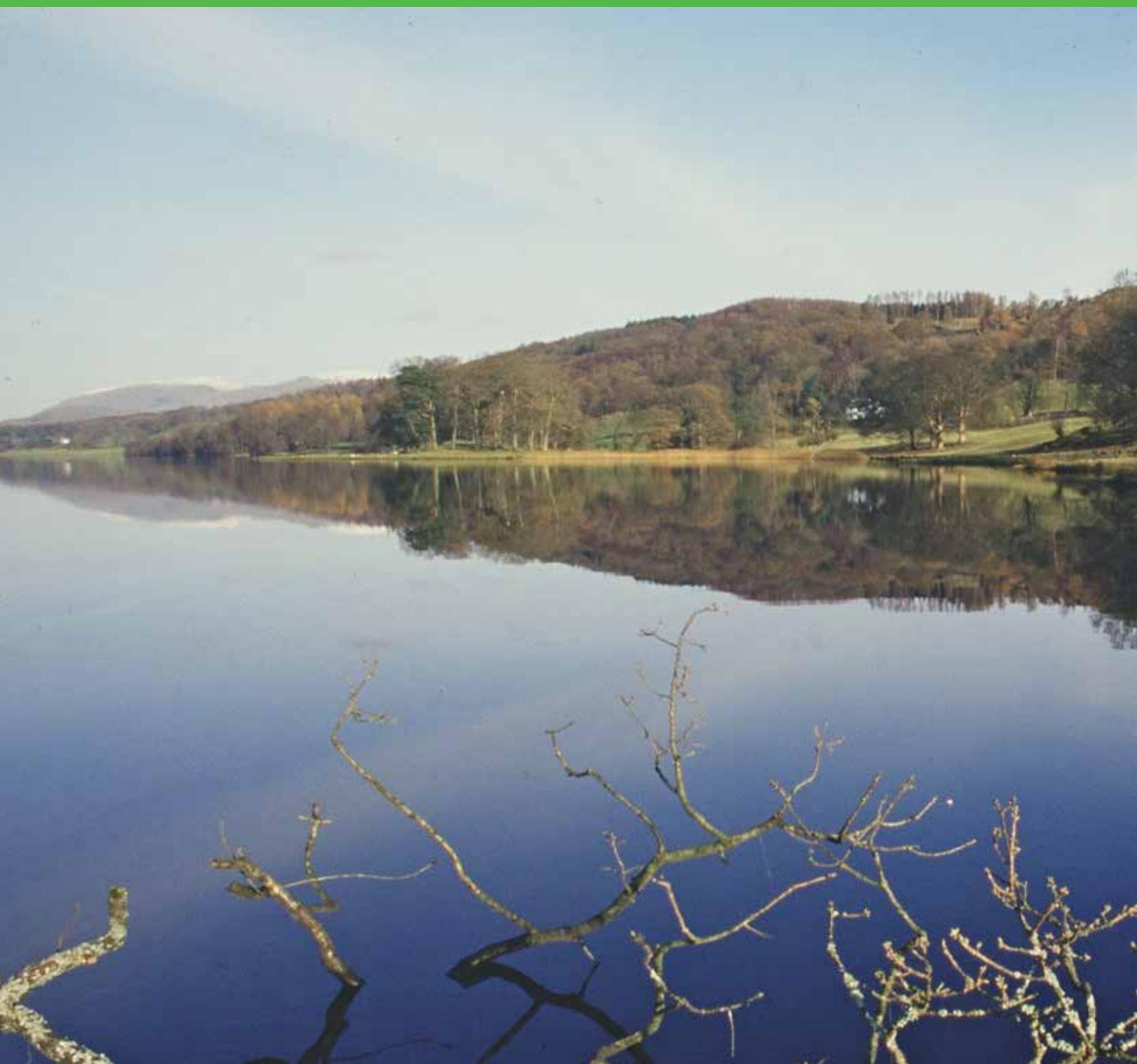


# Catchment Sensitive Farming

North West River Basin District Strategy  
(including South Solway 2016 to 2021)



**A clear solution  
for farmers**

CATCHMENT SENSITIVE FARMING

September 2016

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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 the North West River Basin District (excluding the Weaver Gowy and Upper Mersey, which are included in the Severn Trent strategy) and includes the South Solway (part of the Solway Tweed 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. A map showing the areas covered by this strategy is available in Appendix 1.

The CSF programme helps farmers take action to address agricultural diffuse 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.

In the North West, Bassenthwaite Lake catchment was a pilot to Catchment Sensitive Farming, and since 2006 the Rivers Eden, Waver and Wyre have been Priority Catchments. The Rivers Wampool, Kent, Leven and Ribble became CSF Priority Catchments in 2009, at the start of Phase 2, with a catchment partnership in the Upper Lune with the Yorkshire Dales National Park Authority.

In Phase 3 we considered the entire River Basin Districts, and continued to focus on key target areas within the Priority Catchments and new areas where CSF resource is likely to make the biggest difference to the contribution of Diffuse Water Pollution from Agriculture (DWPA), with the addition of target areas in the River Ellen, River Ehen, River Keekle, Lower Lune, River Keer and River Duddon.

We also looked at other means to extend the reach of CSF beyond the Priority Catchments. This was achieved through collaborative grants, and continued partnerships, both formal and informal. In 2012 we incorporated the catchments of the Alt and Crossens, and the River Dane by contracting in catchment coordinator time and advice visits via our Farm Advice, Training and Information (FATI) Framework, now superseded by the Farm Advice Framework (FAF).

Phase 4 now includes the Mersey Estuary WFD Management Catchment, with Water Priority Areas focussed on the Ground Water Safeguard Zones of Prenton and Winnick & Houghton Green for Nitrate and Water Framework Directive (WFD) failures. See table 2.1 for more details. Water Priority Areas have also expanded to cover additional Ground Water Safeguard Zones in Cheshire within the Weaver Gowy WFD Water Management Catchment, which for the ease of management falls within the Severn Trent RBD Strategy.

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 sites, Bathing Water, Shellfish Waters and Drinking Waters) and Good Ecological Status. 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 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), the Environment Agency (EA) & 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, including 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 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 pollutant, modelled farm losses and priority environmental receptors. 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. 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.

Agriculture dominates the landscape of the North West, accounting for 80% of land use within the RBD. Diffuse pollution from rural areas is a significant pressure across the North West and Solway Tweed RBDs, with further improvements to farming practices needed to protect water quality.

The diffuse pollution pressures from agriculture in the North West and Solway are wide ranging and include sediment, phosphate, Faecal Indicator Organisms (FIOs), nitrates and pesticides.

- **Sediment and Phosphate** are a key concern across a number of Natura 2000 and SSSI sites, and, more generally, with respect to achieving Good Ecological Status (GES) of rivers and lakes. Sediment covers gravel river beds which are important for fish breeding and contributes to their unfavourable condition. Phosphate levels are the regulating factor on algal growth (in rivers) which can choke river life through the process of eutrophication. Phosphate inputs from manures and fertilisers increase the amount of phosphate that attaches to the soil, which can then be transported by rainwater across the surface or through the drain network. Sources vary, but evidence suggests that runoff from both arable and grassland fields is significant in the North West, particularly where there are areas of poaching and poor soil structure, exacerbated by wet field conditions typical of the area, with the added risk of widespread slurry and manure application throughout the year. Other sources/pathways include farm tracks, yards and drains. A number of Natura 2000 sites and SSSIs have Diffuse Water Pollution Plans which contain actions to address DWPA. These are listed in table 2.1.1
- **Faecal Indicator Organisms (FIOs)** originating from livestock manures, and

where livestock have direct access to water courses, are a significant problem in the North West RBD, where high rainfall patterns can carry contaminants quickly downstream. Weather patterns can significantly affect the movement and connectivity of FIOs from their source to the Bathing Waters. FIOs also have a significant impact on Shellfish Waters across both the North West and Solway Tweed River Basin Districts, impacting shell fisheries located in Morecambe Bay and the Solway Estuary, including the newly designated Shellfish water in the Duddon Estuary (designated in March 2016).

- **Excess Nitrates** are initially being addressed through the Nitrates Directive, with Nitrate Vulnerable Zone (NVZ) designations across much of the southern half of the North West RBD, and more localised designations in the Derwent, Eden and Wampool. Nitrate sources include livestock manures, when stored poorly or applied inappropriately or in excess to crop requirements; incorrect or poorly timed application of nitrogenous fertiliser; and release from ploughed out grassland. Rising trends in Nitrates have been identified in a number of groundwaters in Cheshire which have been designated as Safeguard Zones.
- **Pesticides** are being detected in drinking water sources at a number of Surface Water Safeguard Zones, and are also impacting on the Good Ecological Status of rivers and their invertebrates. One of the key issues in the NW Surface Water Safeguard Zones is MCPA, a herbicide associated with grassland weed control. This is generally applied from May through to July, when rainfall events can result in exceedances at water treatment works. MCPA has been measured exceeding drinking water standards by United Utilities (UU) at the Franklaw drinking water intake. There have also been occasional exceedances at intakes on the River Eden and the River Dane.

Please refer to Section 2.1 for more detail on specific failures within each water management catchment.

A map showing the area covered in this plan is available in Appendix 1

The North West and Solway Tweed River Basin Management Plans can be viewed at <https://www.gov.uk/government/collections/river-basin-management-plans-2015>

[Environment Agency's catchment planning data explorer](#) provides evidence on pollution pressures and reasons for not achieving WFD objectives

Maps showing the areas targeted by pollution pressures are available in Appendix 2

## 1.3 Delivery Approach and Mechanisms

### Overview

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

- The implementation of Countryside Stewardship 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, which 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 Table 2.1 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, co-funded 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 (AoNB) 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.

### **Solway and North West River Basin District Delivery & Mechanisms Overview**

In the North West and Solway we will aim to deliver action where they can provide an effective means to reduce DWPA across the Water Priority Areas. The following plans

contain relevant actions for CSF:

- River Basin Management Plans, and local planning work developed through the Catchment Based Approach
- Diffuse Water Pollution plans for N2K and SSSI sites
- Bathing Water Action Plans
- Safeguard Zone Action Plans
- Shellfish Water Action Plans

We will also work closely with NE and EA to deliver reductions in DWPA through the Countryside Stewardship scheme, NE local area plans and focus areas, river restoration strategy work and flood resilience work.

We will continue to work with a range of partners and stakeholders to deliver actions across the North West and Solway Tweed RBDs. The key partners and stakeholders that we will continue to work with are summarised below:

- the farming community, through local steering groups and their representatives such as Cumbria Farmer Network, National Farmers Union and Agricultural Agents, providing support and information to assist farmers in taking action to reduce DWPA, as part of the action required from all industries to meet the objectives of the Water Framework Directive
- the Environment Agency Catchment Coordinators and catchment lead groups and stakeholders on the Catchment Based Approach
- NE and partner projects which deliver the actions of the Diffuse Water Pollution Plans for N2Ks and SSSIs failing due to DWPA
- the Turning Tides partnership's LOVEmyBEACH campaign and work closely with the engagement officers to address issues impacting on Bathing Waters and investigate further opportunities with partners and the EA
- United Utilities on their Catchment Wise approach through projects such as Ellenwise and Tidal Ribble & Wyre projects, and partnership working with the Reaseheath project officer on the Cheshire Safeguard Zones partnership work, continuing to develop opportunities to address impacts on drinking water in areas such as the Lower Eden Safeguard Zone
- colleges and universities, and interest groups to support learning and learn from the latest research in the relevant work areas, and continue to work with and

support the Demonstration Test Catchment (DTC) project in the Eden

- Cumbria Woodlands, Woodlands Trust and Forestry Commission to identify and implement opportunities for woodland to reduce DWPA
- The National Trust and its tenants to encourage and support a reduction in DWPA on National Trust owned farms - we will continue to encourage infrastructure improvements through close working relationships with National Trust advisors and their tenants, highlighting opportunities through 1:1 advice and the capital grants scheme, and working alongside emerging NT projects in the area
- Rivers Trusts, other NGOs and government agencies such as the National Parks and AONBs to maintain good communications, share information and work towards common objectives
- Natural England, Environment Agency and Forestry Commission to maximise opportunities for water through Countryside Stewardship within multi objective agreements, facilitation fund projects or other opportunities as they arise

CSF will further develop work in relation to:

- the Life Integrated Project for the NW River Basin District, linking with the NE Life Project Officer and others to work up core actions of innovative approaches to addressing diffuse pollution
- the Cumbria Catchment Coalition, which looks to coordinate catchment activity across a number of bodies in Cumbria, including better integration and delivery of actions for rural diffuse pollution, led by Eden Rivers Trust
- the Cumbria Flood work, and support the EA appointed Catchment Directors in the development of Catchment Flood Plans where relevant, and continue to look for opportunities to 'slow the flow' to reduce surface water runoff and associated diffuse pollution from agriculture

The existing Catchment Partnership with the Yorkshire Dales National Park Authority to deliver a programme of advice in the Upper Lune has shifted geographically in line with the new Countryside Stewardship Water Priority Areas. The area now excludes much of the Upper Lune but expands to cover a much wider area to the East of the Yorkshire Dales National Park. Contact will be maintained through the Lune CSFO with both the Yorkshire Dales Project Officer, and the farmers in the Lune, although this will be largely reactive and through wider communications to ensure good practice established under the Phase 2 Lune Catchment Partnership is sustained. Further details of the Partnership and areas covered are detailed within the Humber River Basin Strategy.

## **North West River Basin District Legacy & Reduced Area Catchments**

The River Dane will no longer be targeted as a Water Priority Area. United Utilities have employed a project officer through Cheshire Wildlife Trust to continue the work with farmers in this area, which is a Drinking Water Safeguard Zone failing due to MCPA. For ease of delivery the River Dane, which lies within the Weaver/Gowy management catchment in the North West RBD, will be handled by the Humber RBD.

### **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 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.

Further information can be found in the Communications Plan, Table 2.3.

## Section 2: Detailed Approach

### 2.1 WFD Water management catchments covered by this strategy

WFD Water Management Catchment	Water Priority Area (WPA)(ha)	Status (new in 2015, on-going, legacy)	Number of farms in WPA	Protected Area	DWPA Pressures
<b>Eden &amp; Esk</b>	25.49x10 <sup>4</sup> ha	Some ongoing areas, with large expansion to target areas in 2015	1734+	<p>N2K with units failing for DWPA -River Eden &amp; Tributaries</p> <p>DrWPA surface water safeguard zone - River Eden (lower) - Blea Water</p> <p>DrWPA groundwater Safeguard Zone - Bowscar</p> <p>SSSIs with units failing for DWPA -Cliburn Moss -Moorthwaite Moss -Mungrisedale Mires -Temple Sowerby Moss -Thurstonfield Lough</p> <p>Waterbodies failing GES (various)</p>	<p>Phosphates, Sediment</p> <p>Pesticides, Colour Colour</p> <p>Nitrate</p> <p>Sediment, Phosphate, Nitrate</p> <p>Sediment, Phosphate, Nitrate</p>
<b>Waver &amp; Wampool</b>	3.69x10 <sup>4</sup> ha	Ongoing	387+	<p>Bathing waters – Silloth</p> <p>Shellfish Waters – Silloth, Solway</p> <p>SSSI with units failing for DWPA - Biglands Bog</p> <p>Waterbodies failing GES (various)</p>	<p>FIOs</p> <p>FIOs</p> <p>Sediment, Phosphate, Nitrate</p> <p>Sediment, Phosphate, Nitrate</p>
<b>Derwent NW</b>	8.79x10 <sup>4</sup> ha	Previously targeted, although target areas have expanded in 2015	551+	<p><u>Bassenthwaite &amp; R Derwent</u> N2K with units failing for DWPA - Derwent &amp; Tributaries</p> <p>- Bassenthwaite Lake</p> <p>SSSI with units failing for DWPA -Mungrisedale Mires</p> <p>DrWPA Surface Water Safeguard Zone -Thirlmere</p> <p>Waterbodies Failing GES (various)</p> <p><u>R Ellen</u> Bathing water – Allonby</p> <p>Shellfish Waters - Silloth</p> <p>SSSI with units failing for DWPA - Over water</p> <p>Waterbodies failing GES (various) - Lower Ellen only</p>	<p>Phosphate, Sediment Phosphate, Sediment</p> <p>Nitrate, Phosphate, Sediment</p> <p>Colour</p> <p>Phosphate, Sediment</p> <p>FIOs</p> <p>FIOs</p> <p>Nitrate, Phosphate, Sediment</p> <p>Phosphate, sediment Pesticides</p>

WFD Water Management Catchment	Water Priority Area (WPA)(ha)	Status (new in 2015, on-going, legacy)	Number of farms in WPA	Protected Area	DWPA Pressures
South West Lakes	5.95x10 <sup>4</sup> ha	Previously targeted, although target areas have expanded in 2015	392+	<u>Ehen &amp; Keekle</u> Bathing waters – Seascale  N2K with failing units for DWPA -River Ehen  Waterbodies failing GES  <u>Duddon</u> Bathing waters – Walney & Haverigg  Shellfish Waters – Walney South  SSSI with units failing for DWPA -Stanley Ghyll  Waterbodies failing GES (various)	FIOs  Phosphate & Sediment  Phosphate, Sediment, Nitrate  FIOs  FIOs  Nitrate, Phosphate, Sediment  Nitrate, Phosphate, Sediment
Kent & Leven	11.19x10 <sup>4</sup> ha	Previously targeted, although target areas have expanded in 2015	797+	Bathing waters – Morecambe Bay, Walney & Haverigg,  Shellfish waters – Morecambe Bay, Morecambe Bay East, Morecambe Bay (Leven), Walney Roosebeck, Walney South  N2K with failing units for DWPA - River Kent & Tributaries  - Leighton Moss & Haweswater  SSSI with units failing for DWPA -Blelham Tarn -Elterwater -Esthwaite Lake -Little Langdale Tarn  Selected protected aquatic species - Kent - Leven  Waterbodies failing GES (various)	FIOs  FIOs  Phosphate, Sediment Nitrate, Phosphate, Sediment  Nitrate, Phosphate, Sediment  Nitrate  Phosphate, Sediment
Lune	7.20x10 <sup>4</sup> ha	Ongoing	671+	Bathing waters – Morecambe Bay  Shellfish Waters – Lune (Broadfleet), Lune (Plover Scar), Morecambe Bay East  Waterbodies Failing GES (various)	FIOs  FIOs  Phosphate, Sediment, Nitrate

WFD Water Management Catchment	Water Priority Area (WPA)(ha)	Status (new in 2015, on-going, legacy)	Number of farms in WPA	Protected Area	DWPA Pressures
Wyre	4.46x10 <sup>4</sup> ha	Ongoing	466+	Bathing waters – Fleetwood Shellfish waters – Lune (Wyre estuary) DrWPA Surface water Safeguard zone – Barnacre reservoirs - Langthwaite reservoir Waterbodies failing GES (various)	FIOs FIOs Pesticides, Colour Eutrophication / Algae Phosphate, Nitrate, Sediment
Ribble	6.42x10 <sup>4</sup> ha	Previously targeted, although target areas have expanded in 2015	707+	Bathing waters – Blackpool North, Blackpool South, Blackpool Central, St Annes, Southport DrWPA surface water safeguard zone -Alston No1 Reservoir -Dean Clough Reservoir Waterbodies failing GES (various) -Skirden Beck & River Calder	FIOs Eutrophication / Algae Nitrates, Phosphates, Sediment Pesticides
Douglas	3.59x10 <sup>4</sup> ha	Targeted as part of Ribble, although target areas have expanded in 2015	405+	Bathing waters – Blackpool North, Blackpool South, Blackpool Central, St Annes, Southport Waterbodies failing GES (various)	FIOs Nitrates, Phosphates, Sediment
Alt & Crossens	1.63x10 <sup>4</sup> ha	Some past targeting through FATI catchments	130+	Bathing waters – Blackpool North, Blackpool south, Blackpool Central, St Annes, Southport Waterbodies failing GES (various)	FIOs Nitrates, Phosphates, Sediment
Irwell	0	No past or present targeting	0	n/a	n/a
Mersey Estuary	0.29x10 <sup>4</sup> ha	No past targeting, but 2 safeguard zones targeted in 2015 as new areas	23	DrWPA groundwater Safeguard zones – Prenton, Winick & Houghton Green Waterbodies failing GES	Nitrate Nitrates, Phosphate, Sediment
Upper Mersey	0.54x10 <sup>4</sup> ha			See Severn Trent RBD strategy for details	
Weaver Gowy	4.16x10 <sup>4</sup> ha	<i>Meres and mosses were targeted in the past, but some new areas targeted in 2015</i>		See Severn Trent RBD strategy for details	

## 2.1.1 Natural England areas covered by this strategy

Natural England Area Team	WFD Water Management Catchment relating to NE Area Team	No. of priority farms per NE Area Team	Number of priority farms per NE Area Team to be engaged 2016/17
2 Cumbria	Eden & Tributaries	400	80
	Waver & Wampool	160	32
	Derwent NW	330	48
	South West Lakes	235	32
	Kent & Leven	478	64
4 Cheshire to Lancashire	Lune	402	80
	Wyre	297	64
	Ribble	424	32
	Douglas	243	24
	Alt & Crossens	78	24
	Irwell	0	0
	Mersey Estuary	23	4
	Upper Mersey	See Severn Trent RBD strategy for details	
	Weaver Gowy	See Severn Trent RBD strategy for details	

## 2.2 Resources

Water Management Catchment	Delivery Approach (CSFO, Partnership)	Resource (CSFO (FTE), details of the partnership)
Eden & Tributaries	CSFO	1.0 CSFO
Waver & Wampool	CSFO	0.4 CSFO
Derwent NW	CSFO	0.6 CSFO (Ellen)
South West Lakes	CSFO + partnership 2016/17	0.4 CSFO (Duddon) (+ collaborative agreement 2016/17)
Kent & Leven	CSFO	0.8 CSFO
Lune	CSFO	1.0 CSFO
Wyre	CSFO	0.8 CSFO
Ribble	CSFO + partnership 2016/17	0.4 CSFO (+ collaborative agreement 2016/17)
Douglas	CSFO	0.3 CSFO
Alt & Crossens	CSFO	0.3 CSFO
Irwell	-	0
Mersey Estuary	Partnership / FAF	with United Utilities, plus some CSFO support
Upper Mersey	CSFO / partnership	See Severn Trent RBD strategy
Weaver Gowy	CSFO / partnership	See Severn Trent RBD strategy

## 2.3 Communication actions for South Solway (Solway – Tweed RBD) and North West River Basin District

About your catchment	Your main audiences	Stakeholder engagement	Successful communication activities	How did you measure success?
<b>Bathing Waters</b>	Farmers, LoveMyBeach / Turning Tides Partnership – EA, local authorities, NFU, Rivers Trusts	Work with LoveMy Beach 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 CSF partnership projects	Article with NFU showing positive actions farmers had taken. Joint farmer meetings. Materials for LoveMyBeach website.	Positive feedback. Number of attendees. Pledges of advice uptake
<b>Flooding</b>	Farmers, MPs, Defra, EA, Local authorities, NE, NFU etc.	Incorporate Natural Flood Measures into dwpa discussions. Links with Catchment Directors in pilot areas. Specifically continue working with community at Stockwathdale, which is now a pilot area.	CSFO working with local farming community at Stockwathdale	Positive feedback – selected as pilot area
<b>Drinking water</b>	UU, Farmers, EA, NFU	Work closely with UU to identify key messages / issues that may need a reactive response	Specific targeting of advice and workshops	Attendance at events
	UU, Ag Students	Great Farm Challenge competition	Successful pilots with Severn Trent	Uptake by colleges
<b>Natura 2000 / SSSI sites with dwpa issues</b>	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
<b>Countryside Stewardship</b>	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
<b>Farmers: buy-in, ownership and steer</b>	Farmers, agricultural industry, and others as appropriate	Regular Steering Group meetings or focus groups within geographical areas, with focus on farmer input and feedback.	Small farmer focus groups	Positive feedback, value of input from farmers to help shape plans and other comms. Influence on farmer engagement

## 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 Emma Bullock, [emma.bullock@naturalengland.org.uk](mailto:emma.bullock@naturalengland.org.uk) or e-mail [CSFphase4planning@naturalengland.org.uk](mailto:CSFphase4planning@naturalengland.org.uk)

## Glossary

AHDB	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
DTC	Demonstration Test Catchment
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

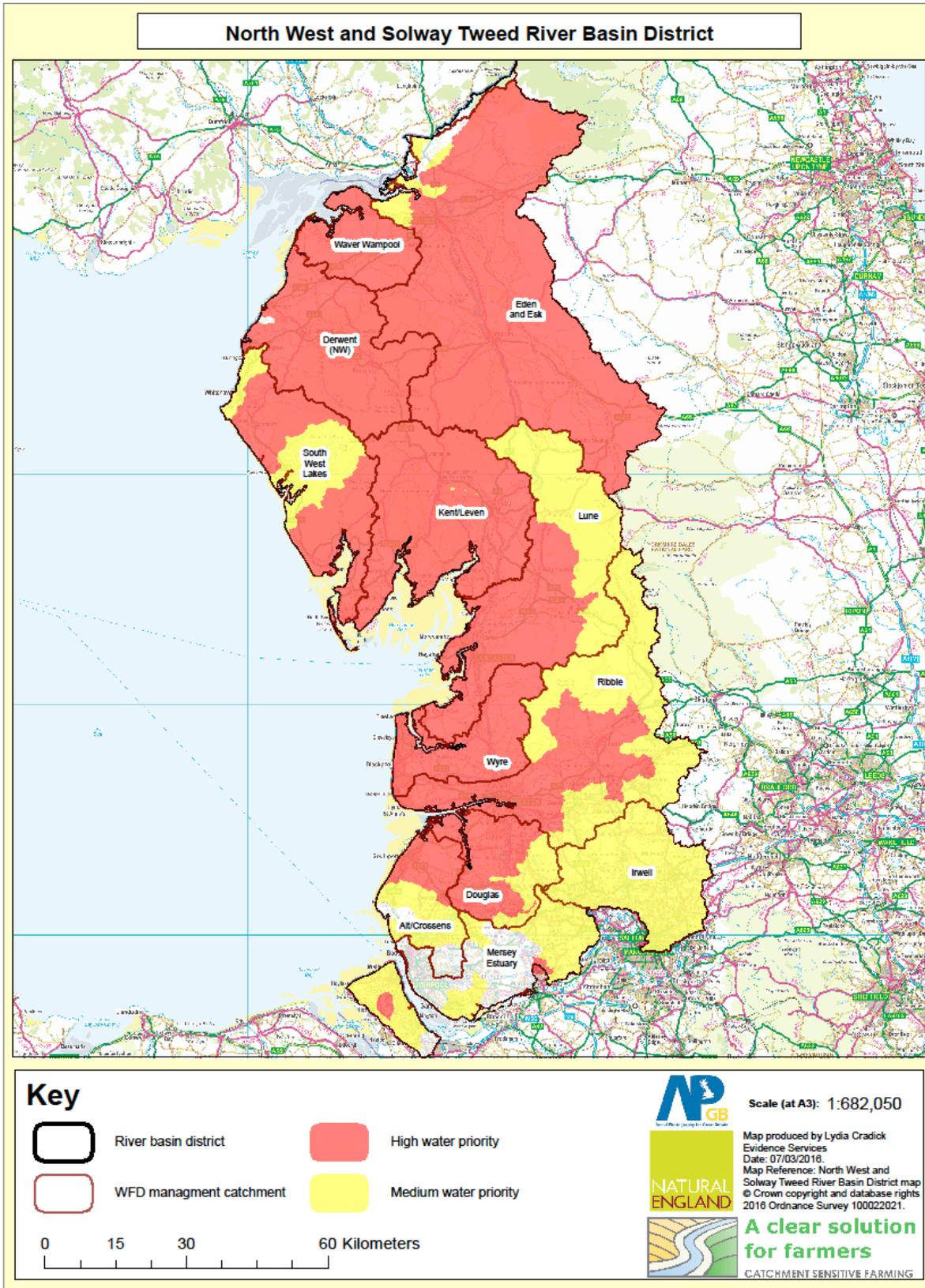
Non-priority	these are farms that have been identified through desk-based modelling to Farms have the lowest risk to water quality. General advice on best practice will be made available to farms in this group.
Phase 4	This the fourth phase of CSF from 2016 to 2021.
PMG	Project Management Group
PR19	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 proactive 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

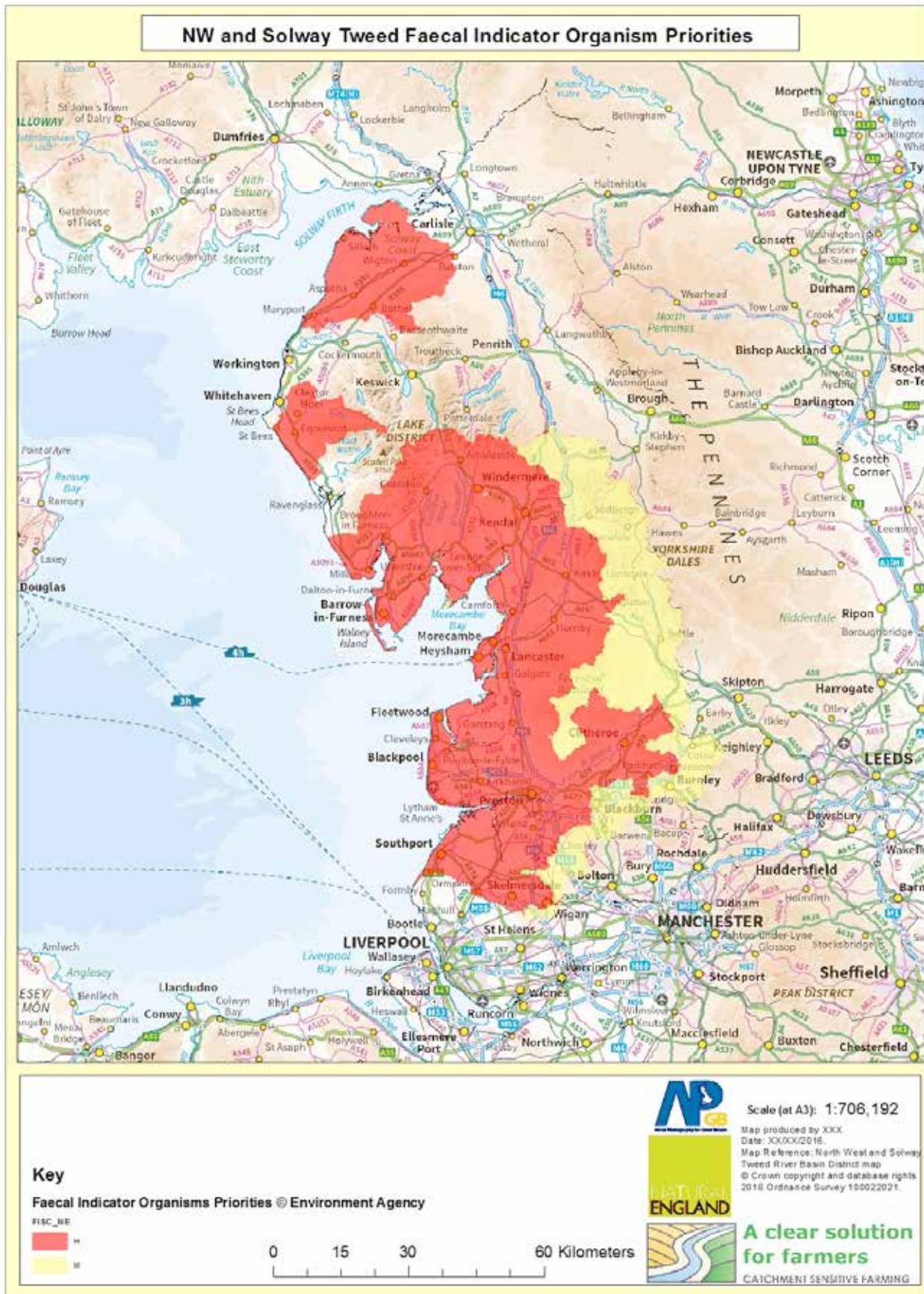
## Appendix 1

### 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)



## NW and Solway Tweed Groundwater Nitrate Priorities



### Key

Groundwater Nitrate Priorities © Environment Agency

OWN SC\_R1E



Scale (at A3): 1:706,192

Map produced by XXX

Date: XX/XX/2016

Map Reference: North West and Solway

Tweed River Basin District map

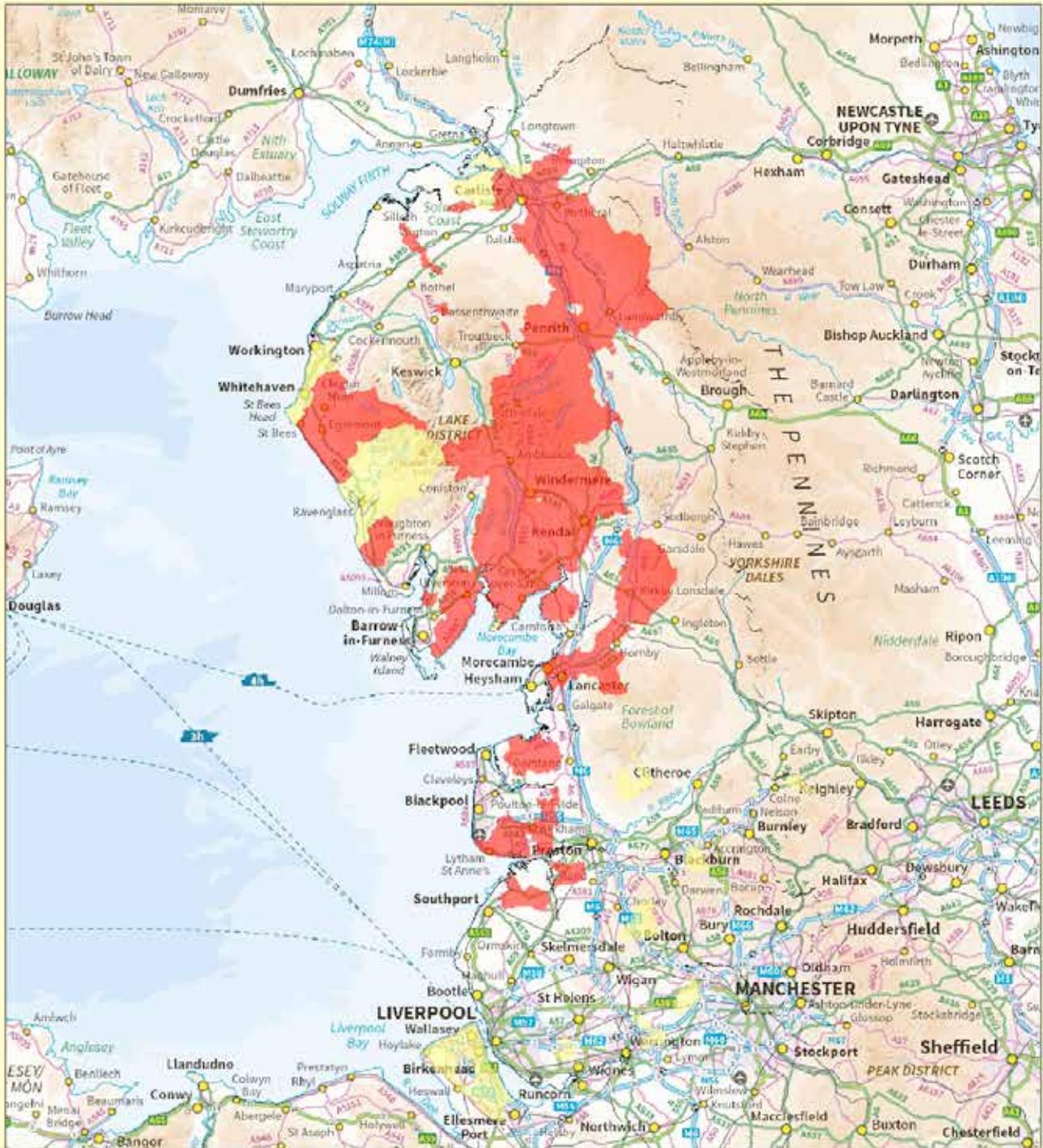
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## NW and Solway Tweed River Nitrate Priorities



### Key

River Nitrate Priorities © Environment Agency

RNNSC\_NE



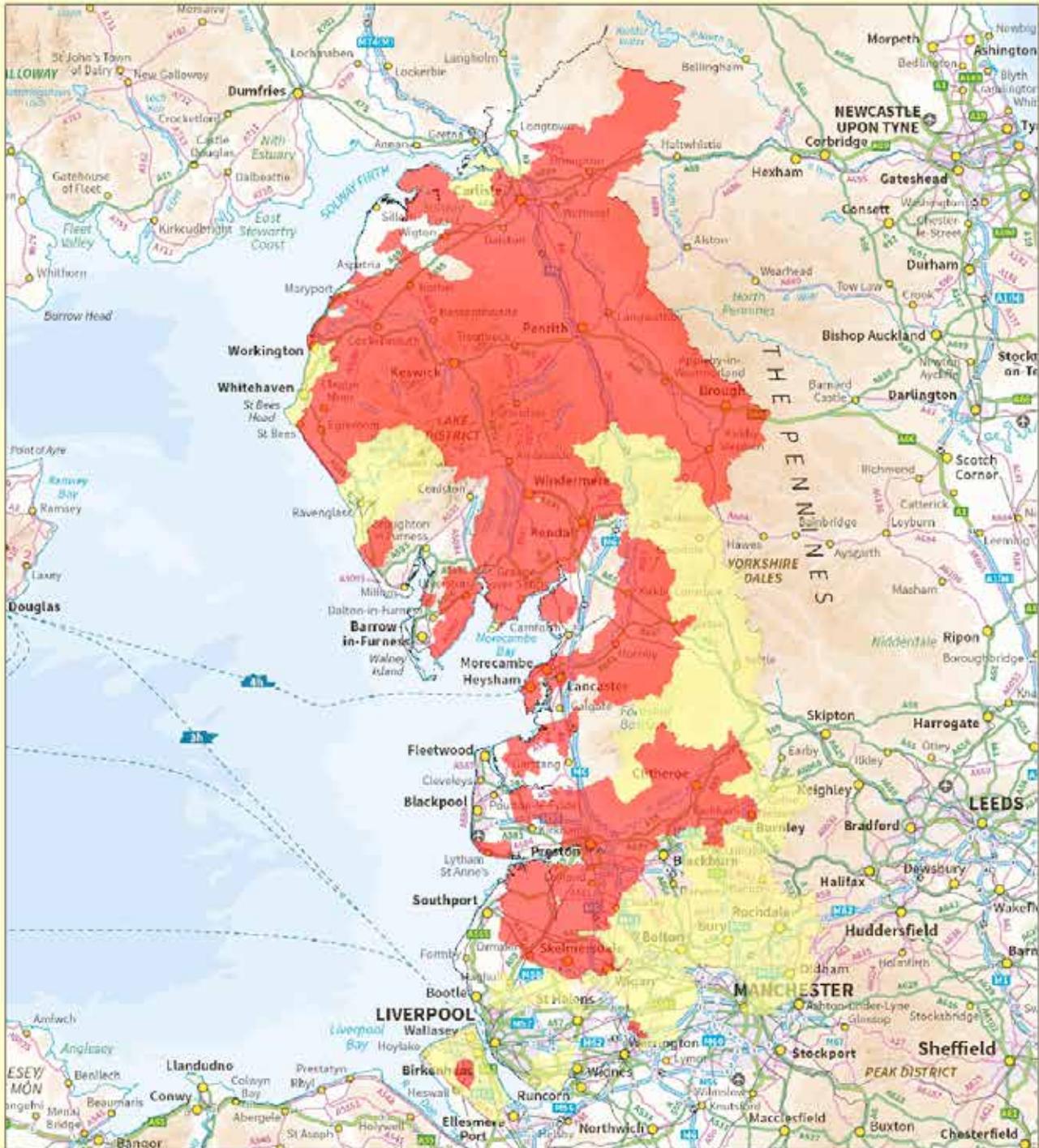
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## NW and Solway Tweed Phosphate Priorities



### Key

Phosphate Priorities © Environment Agency

Phosphate Priority



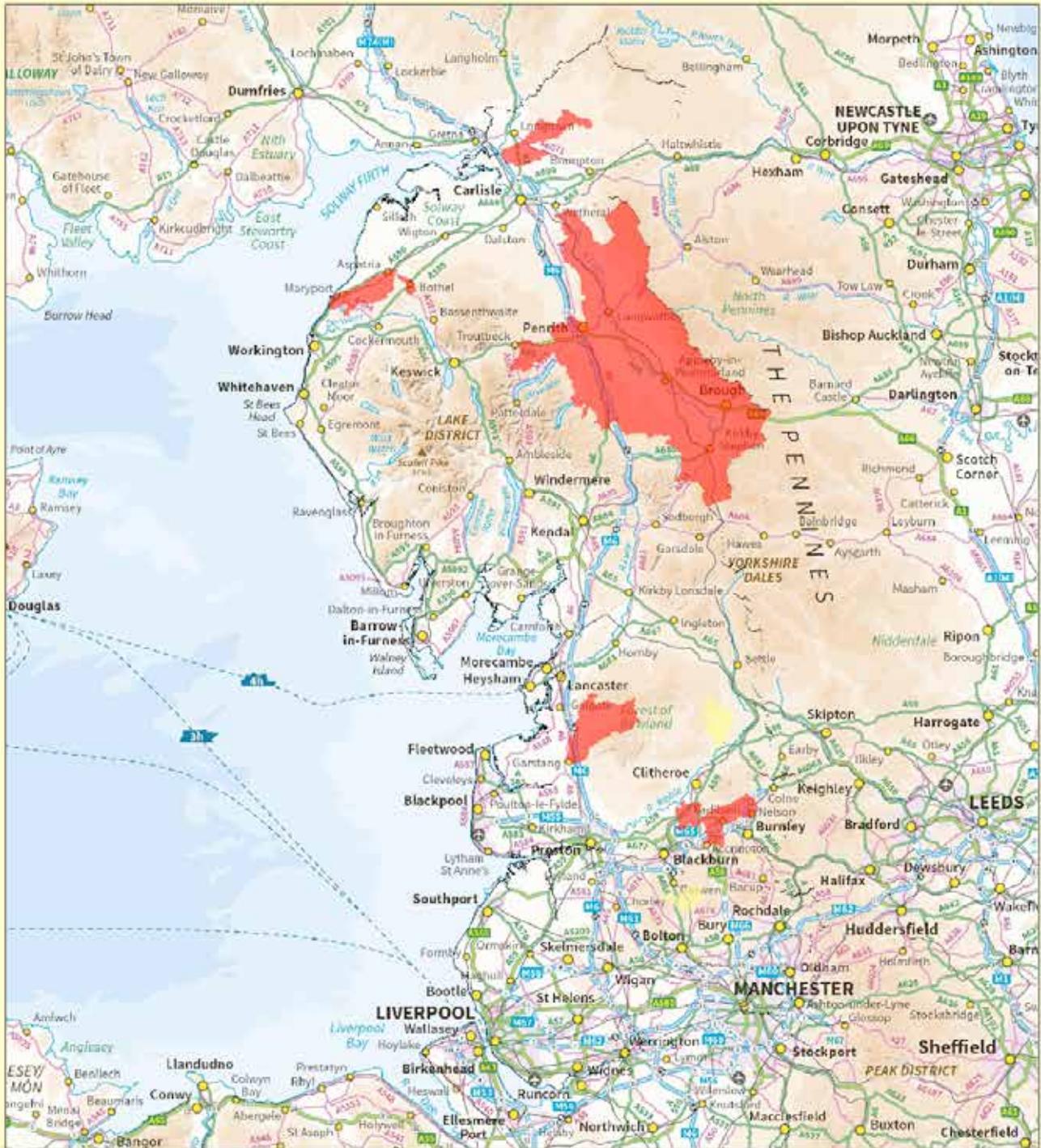
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## NW and Solway Tweed River Pesticide Priorities



### Key

River Pesticide Priorities © Environment Agency

RVP SC\_NE

High

Medium

0 15 30 60 Kilometers



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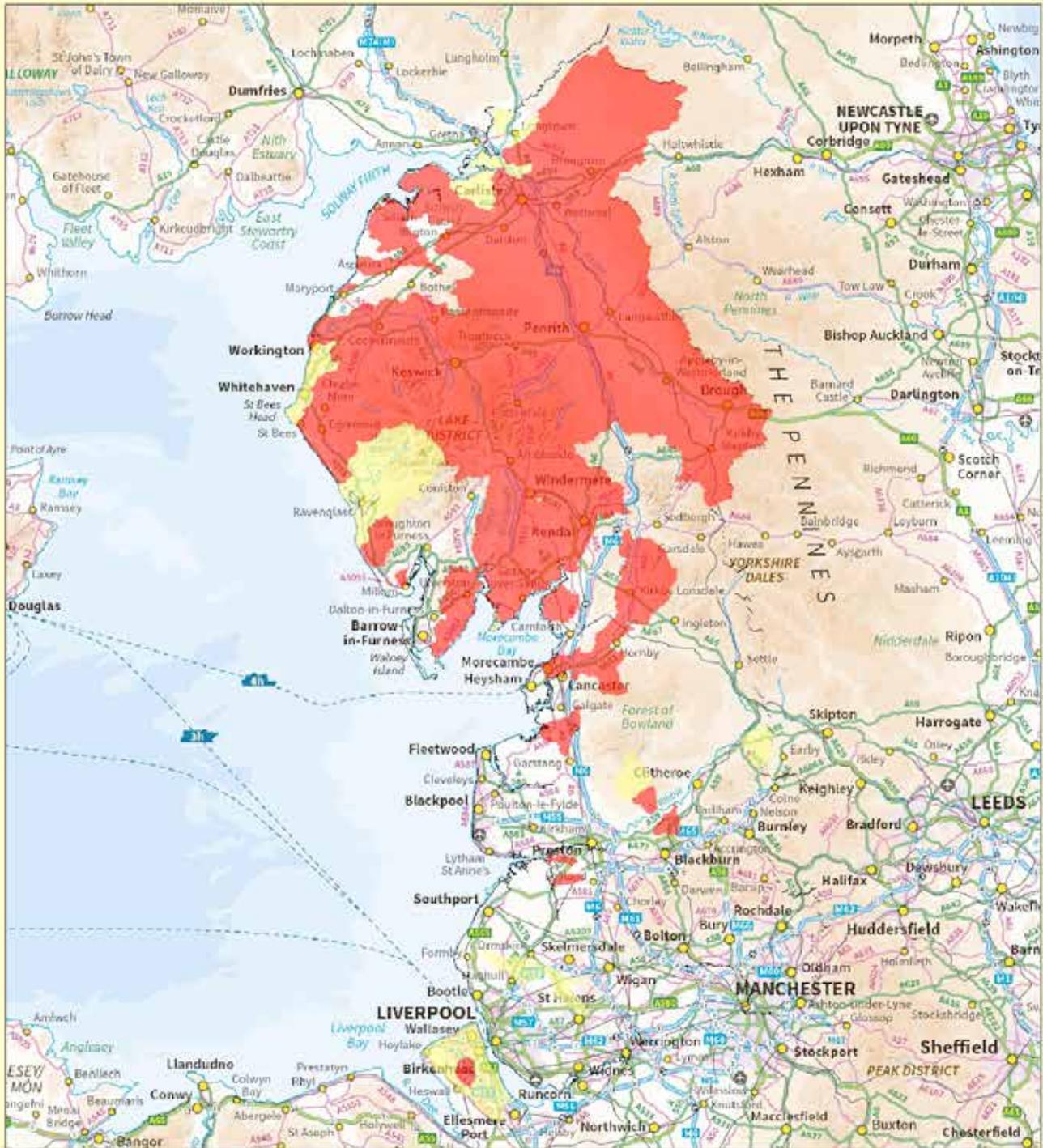
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## NW and Solway Tweed Sediment Priorities



### Key

Sediment Priority © Environment Agency

SO SC\_NE



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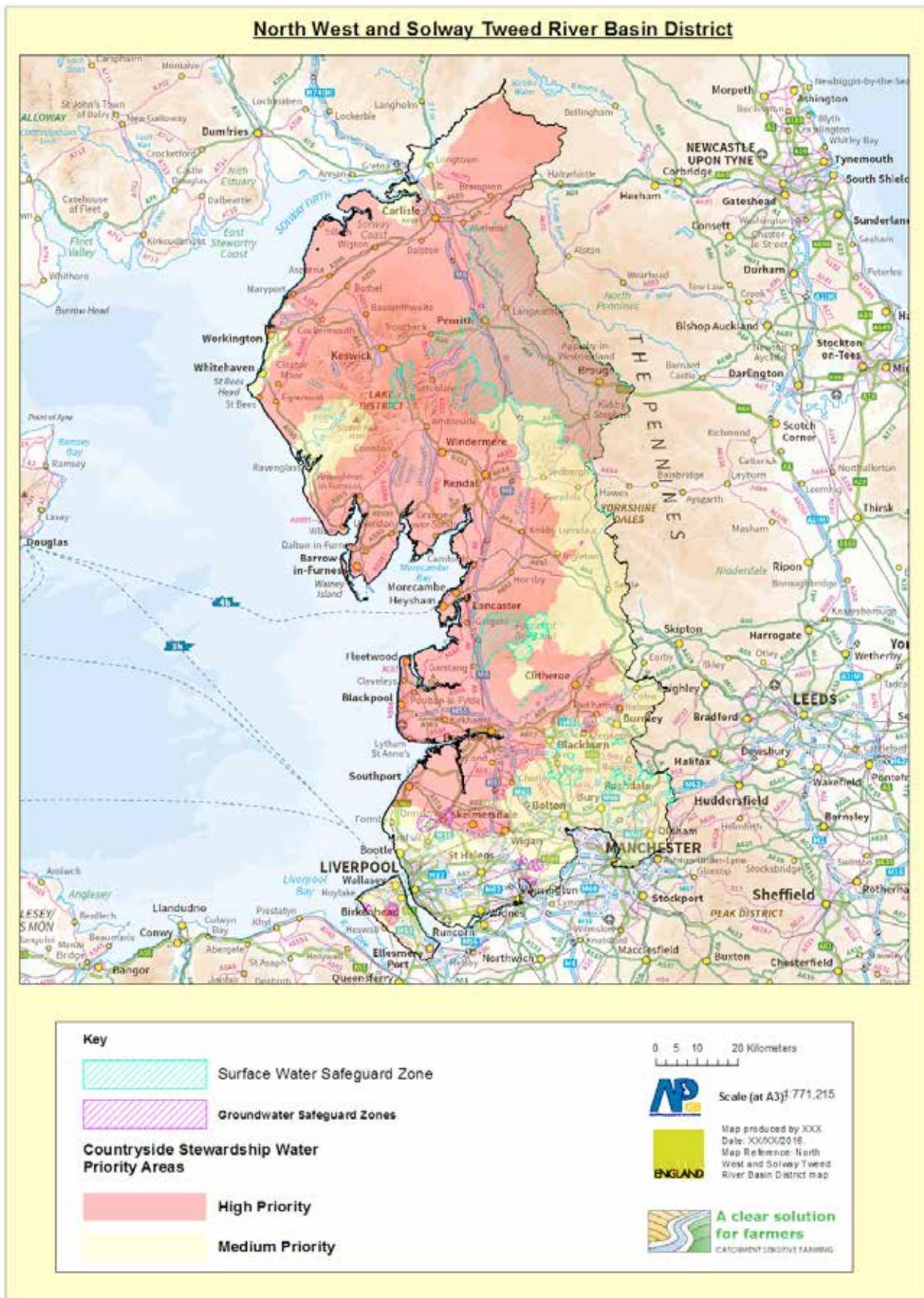
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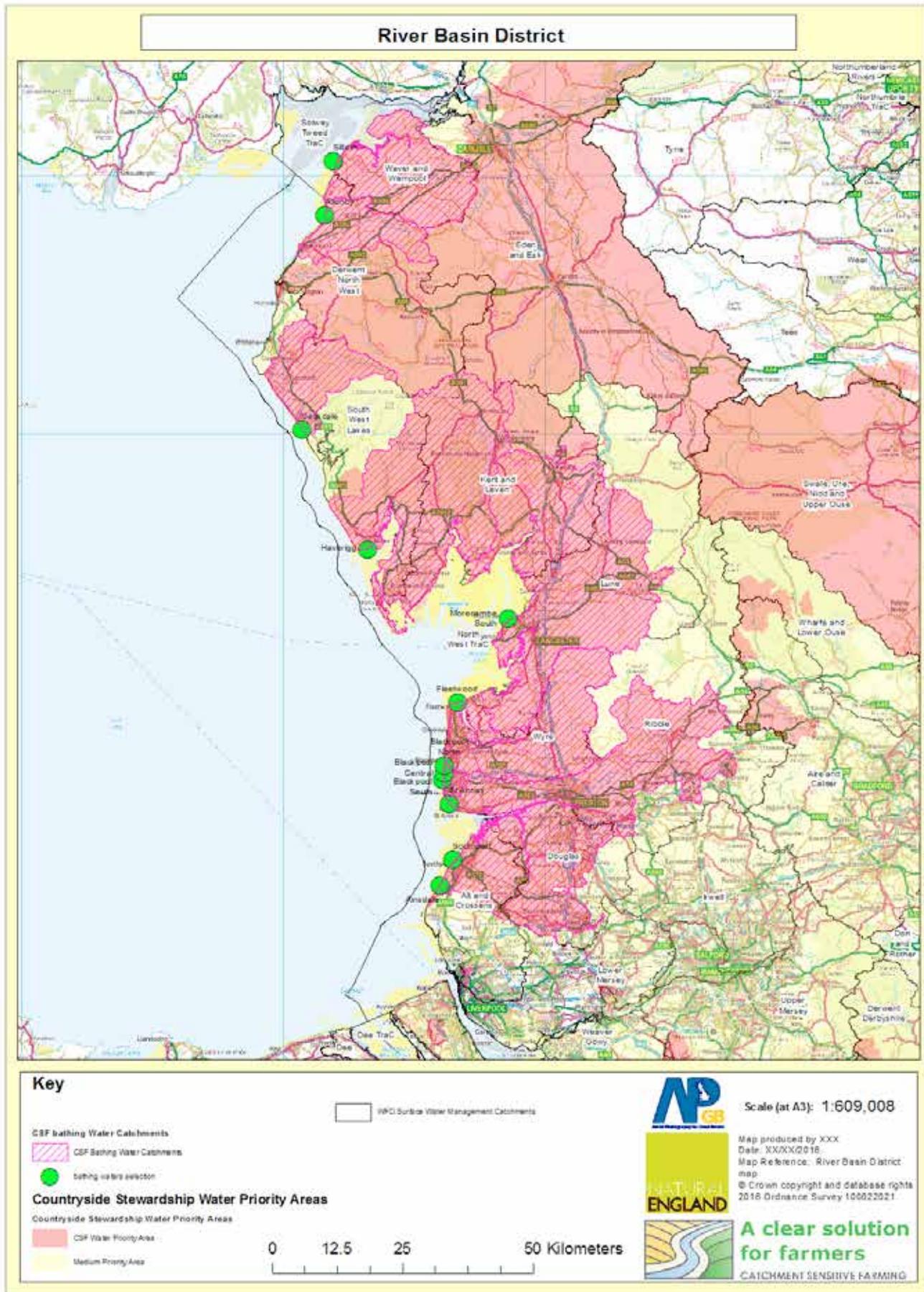
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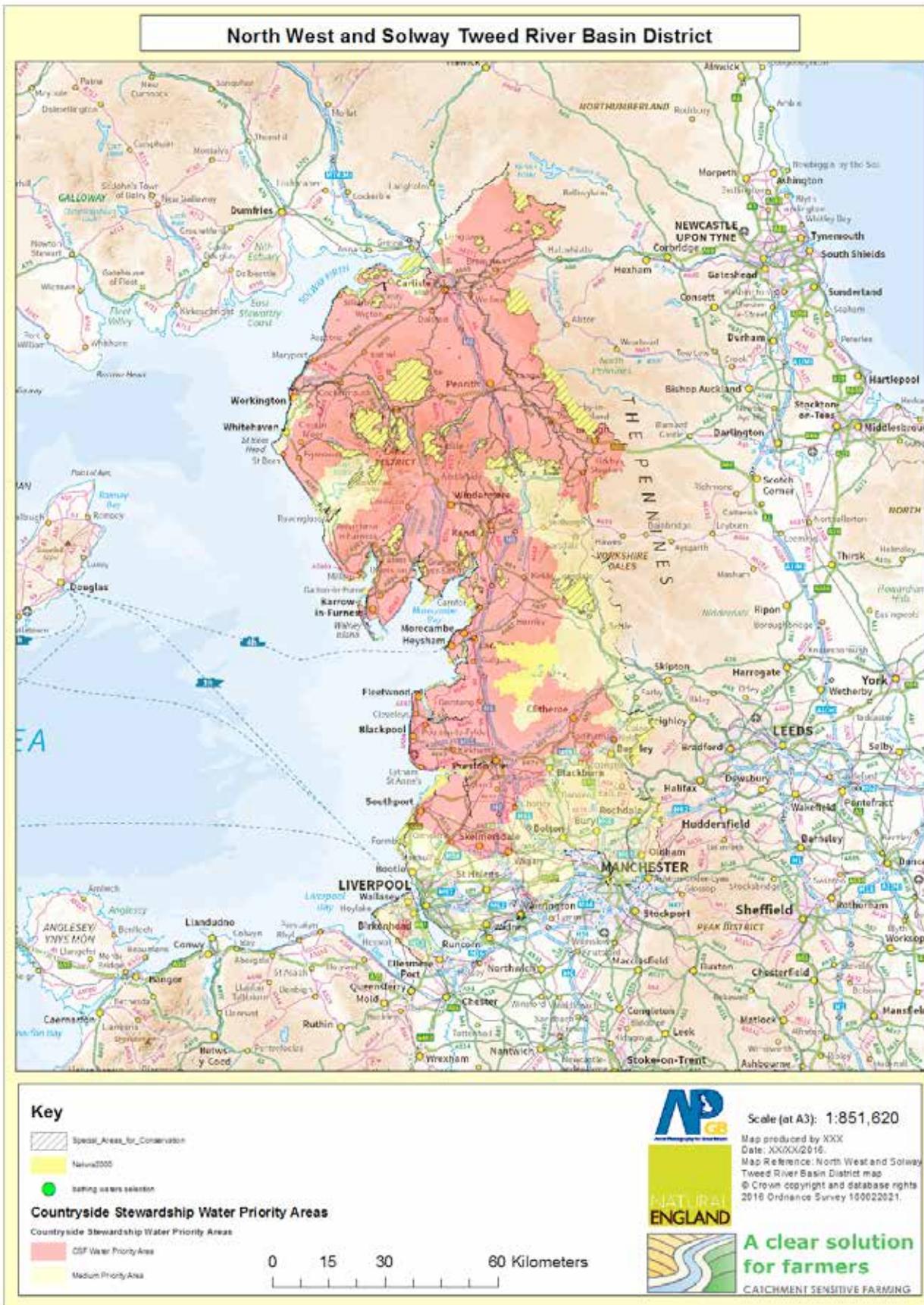
**Appendix 3**  
**WFD protected areas (2014 & 2016) and designated sites**  
**Drinking Water protected areas**



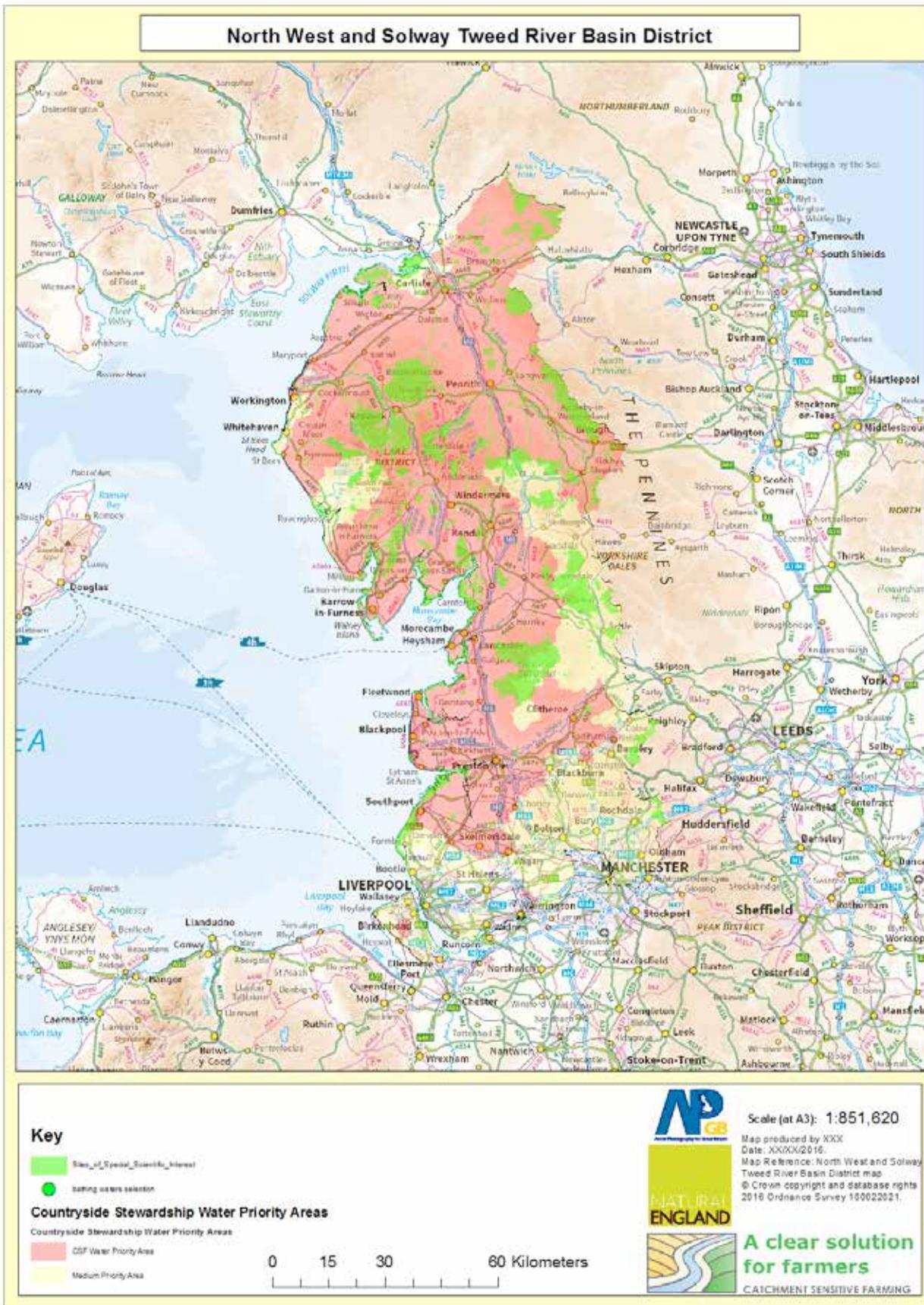
# Water Framework Directive Bathing and Shellfish Waters



# Natura 2000 Special Conservation Areas



# Sites of Special Scientific Interest



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



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Food & Rural Affairs



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