

Catchment Sensitive Farming

South East River Basin District Strategy 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 South East and Thames River Basin Districts 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 but also 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 (CS) 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 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 have been developed to target both Countryside Stewardship 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 WPA 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.

The South East and Thames River basin districts cover 26,389 km² from Hampshire and the Isle of Wight, to the Cotswolds, South Hertfordshire and Essex in the north and Kent in the east. The chalk downlands are a prominent feature in many areas, but the landscape and geology is varied and includes the Weald in Sussex and Kent and clay soils in the north.

Agricultural land use varies depending on soil type, slope and drainage, but large areas are devoted to autumn sown, and some spring sown cereals. These are normally grown in rotation with combinable break crops, predominantly oilseed rape, with field

beans and peas in some locations. Intensive horticultural production takes place in parts of Kent (fruit and vegetables) and the Chichester Plain (mainly vegetables).

Dairy farming takes place in all of the CSF target areas, but the number of herds has declined significantly in recent years. However, some of the remaining herds are now very large in size, and have the potential to cause significant diffuse pollution problems. Beef and sheep farming occur widely throughout the RBD.

Horses are kept widely and collectively can contribute to DWPA in certain localities. Rural highways, rights of way and farm tracks can be major pathways for run-off and conduct water and pollutants both to and from agricultural land

Diffuse pollution from sediment and phosphate is widespread within the South East and Thames River Basin Districts and is having adverse impacts on the Rivers Itchen and Lambourn Natura 2000 site and riverine SSSIs such as the Rivers Test and Kennet. Localised impacts on Surface Water Drinking Water Protected Areas (DrWPAs) have also been detected, for example at the Hardham Water Supply works in the Western Rother catchment. Sediment and phosphate pollution is also a major reason for failure of water bodies to achieve Good Ecological Status (GES) under the Water Framework Directive. Ground waters make a major contribution to the region's drink water supplies, and a number already fail the EU standard for nitrogen. Others are affected by rising levels, and are likely to fail in the future unless action is taken. Nitrate from diffuse pollution of ground water and surface water, supplemented by point source pollution of surface waters, has a significant impact on the Natura 2000 sites in the Solent where it contributes to eutrophication of mudflats and adversely affects internationally important wintering populations of wildfowl and waders, as well as smothering marine and coastal protected area habitats with excessive growth of macroalgae. Pesticides at levels exceeding the EU standard have been detected in an increasing number of surface, and occasionally ground water bodies, and have become a major concern for water supply utilities. The most widespread pressure is from metaldehyde, but certain herbicides are also a problem in catchments such as the Upper Cherwell and Mimms Hall Brook (Colne). Faecal Indicator Organisms (FIOs) from agricultural livestock have been identified as a pressure for bathing water at Bembridge on the Isle of Wight, but this is not a widespread issue in the Thames and South East RBDs.

River Basin Management Plan (RBMP) 2015 evidence can be viewed via the following link for both the South East and Thames River Basin Districts: <https://www.gov.uk/government/collections/river-basin-management-plans-2015>

High Priority Water Quality Areas, pressures, status, number of holdings in RBD are listed in Section 2.1.1

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

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 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 Catchment Sensitive Farming Officers (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, 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.

South East & Thames River Basin District Delivery & Mechanisms Overview

CSF will work with a number of partners and stakeholders including the following:

- **Natural England Area Teams** – The South East and Thames RBDs include all, or parts of, the territories covered by 5 NE area teams: South Mercia (7), Essex, Herts, Beds, Cambs, Northants (8), Thames Valley (10), Dorset, Hampshire, Isle of Wight (13), and Sussex and Kent (14). CSF is represented in all of the area delivery plans, and our objectives contribute towards Natural England outcomes in appropriate focus areas including Chichester and Pagham, Sheltered Coast, Solent and Poole Maritime and the New Forest. We will work closely with our area team colleagues ensuring a shared understanding of local diffuse pollution issues and that CSF activity is fully integrated into wider Natural England delivery. This includes water specialists embedded within the area teams where we will continue regular communication through local and national networks and on a one to one basis.
 - **Environment Agency** – we will work with the area teams including Environment Management, Environment Planning, Fisheries & Biodiversity and Flood & Coastal Risk Management, to ensure joined up delivery of Water Framework Directive measures, and in particular, avoid duplication of farm visits.
 - **Catchment Based Approach (CaBA)** – we will support the following Catchment Partnerships through participation at meetings and local coordination of on the ground delivery: Arun & Western Streams (Arun & Rother Rivers Trust), Cotswolds (Farming & Wildlife Advisory Group South West), East Hampshire (Groundwork Trust), Isle of Wight (Island 2000 Trust), Kennet & Pang (Action For River Kennet), Loddon (Loddon Farm Advice Project), Brighton Chalk Ground Waters – in Adur & Ouse Catchment (ChAMP), Test & Itchen (Wessex Chalk Stream & Rivers Trust).
- Water Companies** – we will work in formal and informal partnerships with Affinity Water, Portsmouth Water, Southern Water Services, South East Water, Sutton and East Surrey Water and Thames Water ensuring effective communication and coordinated delivery.
- **Local Steering Groups** - Additionally, each CSFO organises or supports a local group comprising farmers and other local stakeholders.
 - **Metaldehyde Stewardship Group** – Mimmshall Brook pilot hot spot project in The Colne WFD management catchment.

Thames & South East River Basin District Partnerships

- Thames & South East River Basin District Liaison Panels
- Thames Catchment Steering Group made of up representatives from the Environment Agency, Water Companies, National Farmers Union (NFU), CLA and agronomists and other advisers.

In Thames & South East RBDs, CSF will work with the following partners on partnership

projects in the catchments described below:

- Isle of Wight CSF catchment partnership with The Environment Agency and The Hampshire & Isle of Wight Wildlife Trust to deliver CSF in The Isle of Wight WFD management catchment.
- Downs and Harbours Clean Water CSF Partnership with The Environment Agency and Portsmouth Water to deliver CSF in The East Hampshire WFD management catchment and the western part of the Arun & Western streams management catchment.
- Loddon Farm Advice CSF Partnership with Affinity Water, South East Water and The Hampshire & Isle of Wight Wildlife Trust to deliver CSF in the Loddon WFD management catchment.
- Thames Water in the River Enborne (Kennet & Pang WFD management catchment), and the River Ray (Cherwell WFD management catchment).

South East Water in the following catchments:

- Lower Thames (Lower Thames Maidenhead to Sunbury WFD management catchment).
- River Ouse (Adur & Ouse WFD management catchment).
- River Cuckmere and Wallers Haven (Cuckmere & Pevensey Levels WFD management catchment).
- River Eastern Rother (Rother WFD management catchment).
- River Teise (Medway management catchment)
- Ground Water Safeguard Zones at Woodgarston, Pembury, Hartlake, Boxalls Lane, Borough Green, Stockbury and White Waltham.

Southern Water Services in the following catchments:

- River Test (Test & Itchen WFD management catchments).
- Western Rother (Arun & Western Streams WFD management catchment).
- Weir Wood Reservoir and Burham water supply works (Medway WFD management catchment).

- River Brede and Beauport water supply works (Rother WFD management catchment).

River Kennet Southern Streams collaborative project with The Action for the River Kennet (ARK) Rivers trust in the Kennet & Pang WFD management catchment.

Thames & South East River Basin Districts Legacy & Reduced Area Catchments

In response to the new targeting, CSF can only provide a reduced level advice and support in The Medway, Eastern Rother & Walland Marsh and Pevensy CSF Phase 3 catchments. The project is developing a phased approach to maintain and enhance the improvements secured to date. A handover package will be provided to help direct future work effectively.

CSF are working with partners including South East and Southern Water in all of the catchments above to ensure the benefits are maintained and enhanced, by providing a package of targeting information and advice to help direct future work effectively.

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 DQPA 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)(ha)	Status (new in 2015, on-going, legacy)	Number of farms in WPA	Protected Area	DWPA Pressures
Arun & Western Steams	61,751	On-going	348	Surface Water Safeguard Zone. Natura 2000 site failing for DWPA. Waterbodies failing GES. Groundwater Water	Sediment, Phosphate, nitrate and pesticides in surface water. Nitrate in ground water.
East Hampshire	55,425	On-going	333	Natura 2000 site failing for DWPA. Waterbodies failing GES. Groundwater Safeguard Zone.	Sediment, phosphate and nitrate in surface water. Nitrate in ground water.
Isle of Wight	32,655	On-going	298	Natura 2000 site failing for DWPA. Designated bathing water. Water bodies failing GES.	Sediment, phosphate and nitrate in rivers. Faecal indicator organisms for Bembridge bathing water.
New Forest	41,897	New in 2015	230	Natura 2000 site failing for DWPA.	Phosphate and nitrate in surface water.
Test & Itchen	173,528	On-going	896	Groundwater Safeguard Zone. Natura 2000 sites and SSSIs with units failing for DWPA. Surface Water Safeguard Zone. Waterbodies failing GES.	Sediment, phosphate, nitrate and pesticides in surface water. Nitrate in ground water.
Cuckmere & Pevensey Levels	0	Legacy	0	None.	n/a
Rother	4,174	On-going but mainly legacy	49	Surface Water Safeguard Zone. Waterbodies failing GES.	Sediment, phosphate and pesticides in surface water.
Stour (Kent)	20,620	On-going	128	Ground Water Safeguard Zone. Waterbodies failing GES. Failing shellfish water.	Sediment and phosphate in surface water. Nitrate and pesticides in ground water. Faecal indicator organisms for Stour Estuary shellfish water.
Roding, Beam & Ingrebourne	22,456	On-going	98	SSSI catchment with units failing for DWPA. Waterbodies failing GES. Groundwater Safeguard Zone.	Sediment and phosphate in surface water. Nitrate and pesticides in surface water. Nitrate and pesticides in ground water (localised).
Vale of White Horse (Cotswolds)	33,172	On-going	154	Surface water Safeguard Zone. Waterbodies failing GES. SSSI catchment with units failing for DWPA. Groundwater Safeguard Zone.	Phosphate in surface water. Also, sediment, nitrate and pesticides in some surface water sub-catchments. Nitrate in ground water.
Adur & Ouse	5,858	New in 2015	21	Ground Water Safeguard Zone.	Nitrate in ground water.

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
Kennet	101,639	On-going	475	Natura 2000 site and SSSI with units failing for DWPA. Ground Water Safeguard Zone. Surface Water Safeguard Zone. Waterbodies failing GES.	Sediment and phosphate in surface water. Pesticides in surface Water (Enborne only). Nitrate in ground water.
Loddon	37,312	New in 2015	217	Ground Water Safeguard Zone. Waterbodies failing GES. Surface Water Safeguard Zone.	Sediment, phosphate and pesticides in surface water. Nitrate in Groundwater.
London	6,205	New in 2015	41	Groundwater Safeguard Zone. Waterbodies failing GES. Surface Water Safeguard Zone.	Sediment, phosphate and pesticides in surface water. Nitrate in groundwater (south of London).
Lower Thames (Maidenhead to Sunbury)	2,174	New in 2015	16	Waterbodies failing GES.	Sediment and phosphate in surface water.
Mole	5,204	New in 2015	18	Ground Water Safeguard Zone. Waterbodies failing GES.	Phosphate and sediment in surface water. Nitrate in ground water.
Thame & South Chilterns	9,524	New in 2015	73	Groundwater Safeguard Zone. Waterbodies failing GES. Surface Water Safeguard Zone.	Sediment phosphate and pesticides in surface water. Nitrate and pesticides in groundwater.
Wey	12,270	New in 2015	77	Groundwater Safeguard Zone. Waterbodies failing GES. Surface Water Safeguard Zone.	Sediment phosphate and pesticides in surface water. Nitrate and pesticides in groundwater.
Darent	1,790	New in 2015	4	Groundwater Safeguard Zone. Water bodies failing GES.	Nitrate in ground water. Sediment in surface water.
Medway	7,469	On-going but mainly legacy	49	Ground Water Safeguard Zone. Waterbodies failing GES. SSSI catchment with units failing for DWPA. Surface Water Safeguard Zone	Sediment, phosphate, nitrate and pesticides in surface water. Nitrate and pesticides in groundwater.
Cherwell	37,920	On-going with substantial new target area (Ray)	315	Waterbodies failing GES. Surface Water Safeguard Zone. Ground Water Dependent Terrestrial Ecosystem.	Sediment, phosphate, nitrate and pesticides in surface water. Nitrate in ground water (localised).
Evenlode (Coswolds)	40,857	On-going	247	Waterbodies failing GES. Surface Water Safeguard Zone.	Sediment, phosphate, and pesticides in surface water.
Colne	7,346	On-going	47	Ground Water Safeguard Zone. Waterbodies failing GES.	Sediment and phosphate in surface water. Pesticides in ground water
Upper Lee	35,011	On-going	188	Ground water Safeguard Zone. Waterbodies failing GES. Surface Water Safeguard Zone.	Sediment, phosphate and pesticides in surface water. Nitrate in ground water.

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 farms per NE Area Team	Number of priority farms per NE Area Team to be engaged in 2016/17
Area 7 (South Mercia)	Evenlode, Vale of White Horse (Cotswolds)	240	48
Area 8 (Essex, Herts, Beds, Cambs, Northants)	Upper Lee, Colne, Roding Beam & Ingrebourne, London (Cobbins Brook)	218#	44
Area 10 (Thames Valley)	Cherwell, Thame & South Chilterns, Kennet, Lower Thames Maidenhead to Sunbury), Mole, London (Wandle)	545##	109
Area 13 (Dorset, Hampshire & Isle of Wight)	Test & Itchen, New Forest, Isle of Wight, East Hampshire, Loddon, Wey	1334*	267
Area 14 (Sussex & Kent)	Arun & Western Streams, Stour, Rother, Adur & Ouse, Medway, Darent, Cuckmere & Pevensy Levels	256**	51

Includes approx.104 priority holdings in Arun & Western Streams WFD Catchment covered by the Area 13 based Downs & Harbours Partnership

** Excludes approx.104 priority holdings in Arun & Western Streams to be covered by Area 13 based Downs & Harbours Partnership

18 holdings included from the London WFD catchment

6 holdings included from the London WFD catchment

2.2 Resources

Water Management Catchment	Delivery Approach (CSFO, Partnership)	Resource (CSFO (FTE), details of the partnership)
Arun & Western Streams	CSFO, but the western part of this catchment will be covered by the Downs and Harbours Clean Water Partnership. This division respects existing boundaries that worked effectively in Phase 3.	CSFO input 0.27fte; partnership input 0.27fte. The Downs and Harbours partnership is jointly funded by CSF, the Environment agency and Portsmouth Water. Portsmouth Water employs the catchment officer. It is expected that a newly agreed partnership between CSF and Southern Water Services will also operate in this catchment from September 2016 onwards. Details TBC.
East Hampshire	Partnership delivery by the Downs and Harbours Clean Water Partnership.	Partnership input 0.5fte. The Downs and Harbours partnership is jointly funded by CSF, the Environment agency and Portsmouth Water. Portsmouth Water employs the catchment officer.
Isle of Wight	Partnership delivery by the Isle of Wight Catchment Sensitive Framing Project.	Partnership input 0.45fte. The Isle of Wight partnership is jointly funded by CSF, the Environment agency and The Hampshire and Isle of Wight Wildlife Trust. HIWWT employs the catchment officer.
New Forest	CSFO.	CSFO input 0.35fte.
Test & Itchen	CSFO and partnership.	CSFO input 1.34fte, with an additional 0.1 fte if the Woodgarston ground water catchment is added to the existing CSF/South East Water partnership. It is probable that a newly agreed partnership between CSF and Southern Water Services will also operate in this catchment from September 2016 onward. Details TBC.

Water Management Catchment	Delivery Approach (CSFO, Partnership)	Resource (CSFO (FTE), details of the partnership)
Cuckmere & Pevensey Levels	This is a legacy catchment with no further engagement beyond April 2016, but newly agreed partnership delivery.	No CSFO input, with up to an additional 0.5fte from a partnership between CSF and South East Water. It is probable that a newly agreed partnership between CSF and Southern Water Services will also operate in parts of this catchment from April 2016 onward. Details TBC.
Rother	This is predominantly a legacy catchment, but here will be There will be some partnership delivery beyond April 2016.	CSFO input 0.07fte with up to an additional 0.5fte from a partnership between CSF and South East Water. It is probable that a newly agreed partnership between CSF and Southern Water Services will also operate in this catchment from April 2016 onward. Details TBC.
Stour	CSFO.	CSFO input 0.19fte.
Roding, Beam & Ingrebourne	CSFO.	CSFO input 0.15fte.
Vale of White Horse (Cotswolds)	CSFO.	CSFO input 0.23fte.
Adur & Ouse	CSFO and partnership.	CSFO input 0.03fte with up to an additional 0.5fte from an existing partnership between CSF and South East Water.
Kennet	CSFO supported by a collaborative agreement and partnership.	CSFO input 0.59fte plus a collaborative agreement with local rivers trust (ARK). An additional 0.12fte from a partnership between CSF and Thames Water.
Loddon	New catchment partnership.	Partnership input 0.33fte. This partnership is under negotiation but would be between CSF, Affinity Water, South East Water and the Hampshire Wildlife Trust.
London	CSFO.	CSFO input 0.06fte split between NE areas 8 and 10 as there are priority holdings both north and south of central London.
Lower Thames (Maidenhead to Sunbury)	CSFO.	CSFO input 0.02fte.
Mole	CSFO.	CSFO input 0.03fte.
Thame & South Chilterns	CSFO.	CSFO input 0.11fte.
Wey	CSFO.	CSFO input 0.12fte.
Darent	CSFO.	CSFO input 0.01fte.
Medway	Predominantly partnership with CSFO support.	CSFO input 0.07fte. A partnership between CSF and south East Water will supply an additional 0.5fte. It is probable that a newly agreed partnership between CSF and Southern Water Services will also operate in this catchment from April 2016 onward. Details TBC.
Cherwell	CSFO and partnership.	CSFO input 0.17fte, with an additional 0.3fte from a partnership between CSF and Thames Water.
Evenlode (Cotswolds)	CSFO.	CSFO input 0.37fte.
Colne	CSFO.	CSFO input 0.07fte.
Upper Lee	CSFO.	CSFO input 0.28fte.

2.3 Communication actions for South East & Thames River Basin District

About your catchment	Your main audiences	Stakeholder engagement	Successful communication activities	How did you measure success?	Key milestones 2016-2017
<p>Internationally famous chalk rivers</p> <p>New Forest – largest area of lowland heath and pasture woodland in Western Europe</p> <p>The Solent providing habitat for internationally important populations of wintering waders and wildfowl, marine and coastal habitats including internationally important sea grass beds</p> <p>A significant proportion of the Regions public water supplies originate from ground water aquifers</p> <p>Large variety of farming systems in use</p> <p>High pressure from development on both land and water together with an already dense rural population</p>	<p>Priority farms including: Large arable mixed and dairy farms Field vegetable and fruit producers Outdoor pigs and poultry producers Commoner holdings Larger equine enterprises Environment Agency Natural England NFU CLA Agents, agronomists & other advisers Local authorities South Downs and New Forest National Park Authorities Water companies Rivers trusts CaBA Groups CFE FAS</p> <p>Priority farms</p>	<p>1:1 site visits Workshop events Demonstration sites Clinic sessions Newsletters Personal letter and follow-up phone Attendance at stakeholder meetings (including by non-CSF colleagues) Farm tours Steering groups Raising awareness, information sharing and relationship building with stakeholders as existing or potential funding providers</p>	<p>1:1 advice Local events with recognized speakers CSF national partnership events Soil organic matter and soil biology themed activities Cover crops demonstration sites Catchment newsletters (especially by e-mail) Water treatment works tours Farm infrastructure tours e.g. Bio Bus Relationship building with potential and existing funding providers Attendance at <u>specialist</u> trade shows e.g. Fruit Focus</p>	<p>Attendance at events and positive feedback Uptake of advice Response to newsletters Initial engagement with new priority holdings New partnerships formed and revenue raised to support CSF activities Uptake of relevant options and capital works in mid-tier CS agreements Local media e.g. South East Farmer</p>	<p>Main windows for 1:1 advice and farm events are April-June and November-March CS application window Steering groups to be reformed around new priority areas and 1 meeting held by March 2017</p>

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 Andrew Fielder on 07789 650662 or e-mail 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

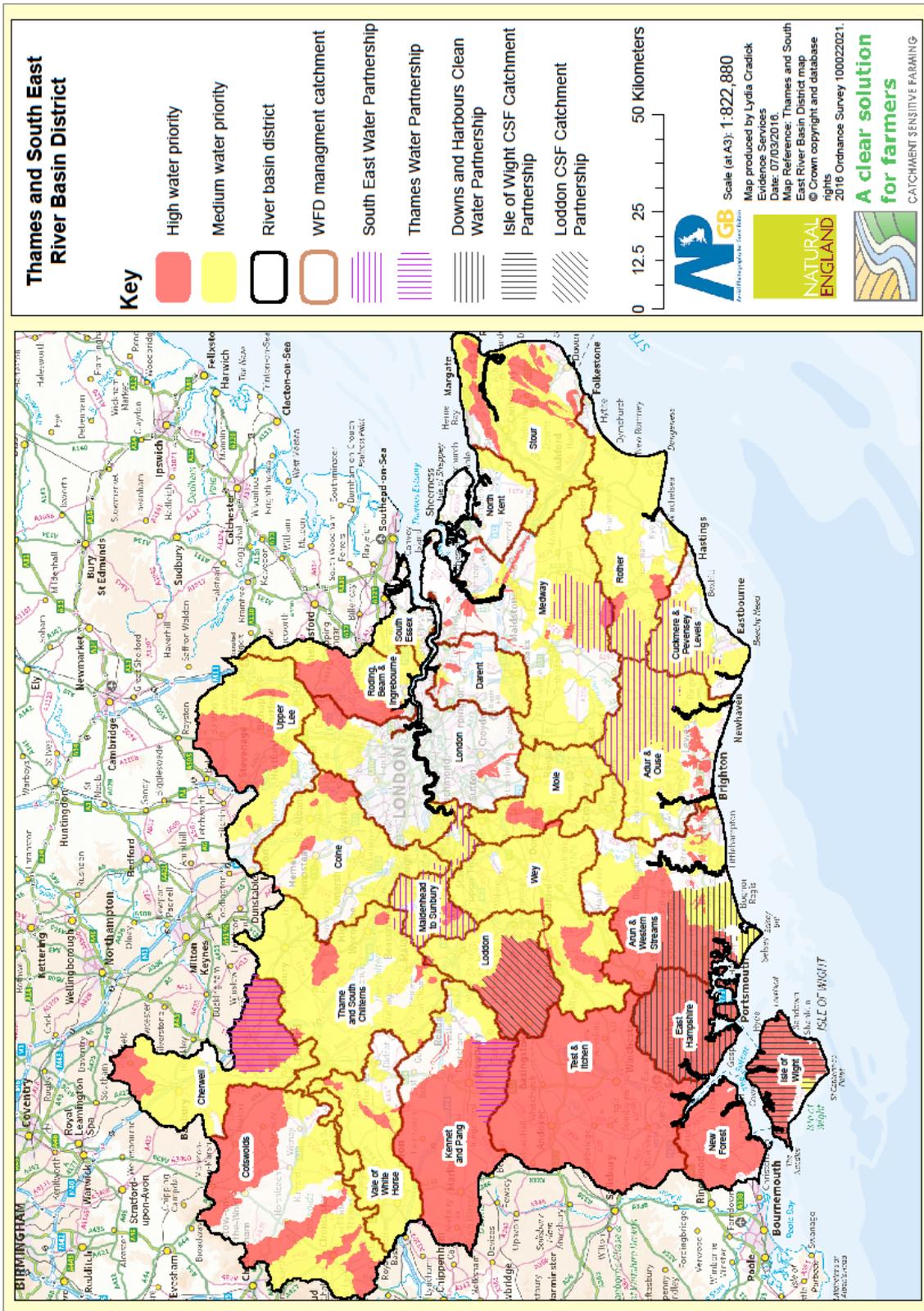
Non-priority	these are farms that have been identified through desk-based modelling to Farms have the lowest risk to water quality. General advice on best practice will be made available to farms in this group. .
Phase 4	This the fourth phase of CSF from 2016 to 2021.
PMG	Project Management Group
PR19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



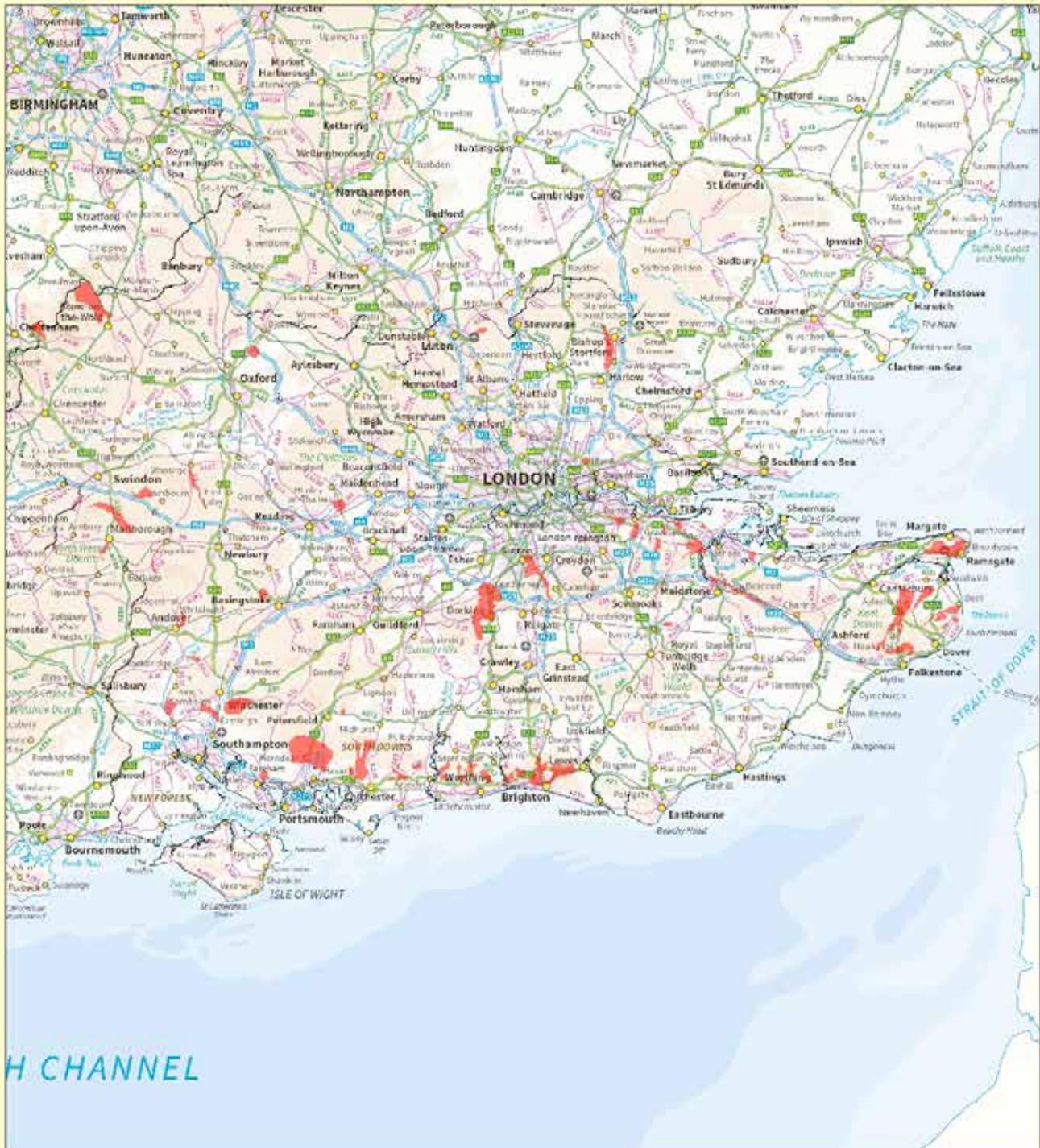
Appendix 2

WFD agricultural pollutant pressures for CSF advice and Countryside

Stewardship (Taken from Countryside Stewardship targeting evidence 2013)



Thames and South East Groundwater Nitrate Priorities



Key

Groundwater Nitrate Priorities © Environment Agency

GWN BC_NE



0 20 40 80 Kilometers



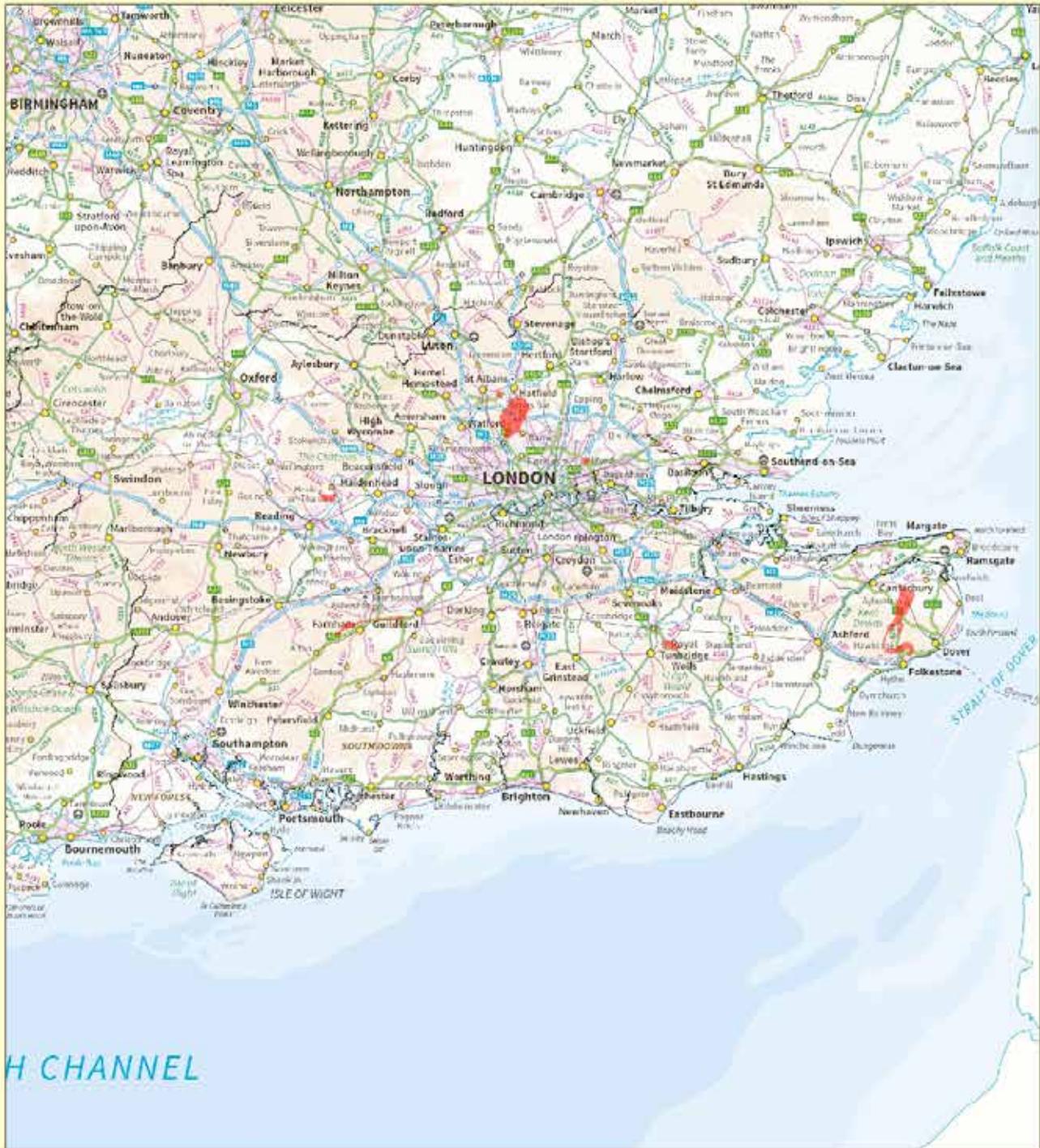
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CATCHMENT SENSITIVE FARMING

Thames and South East Groundwater Pesticide Priorities



Key

GWVSC_RE
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0 20 40 80 Kilometers



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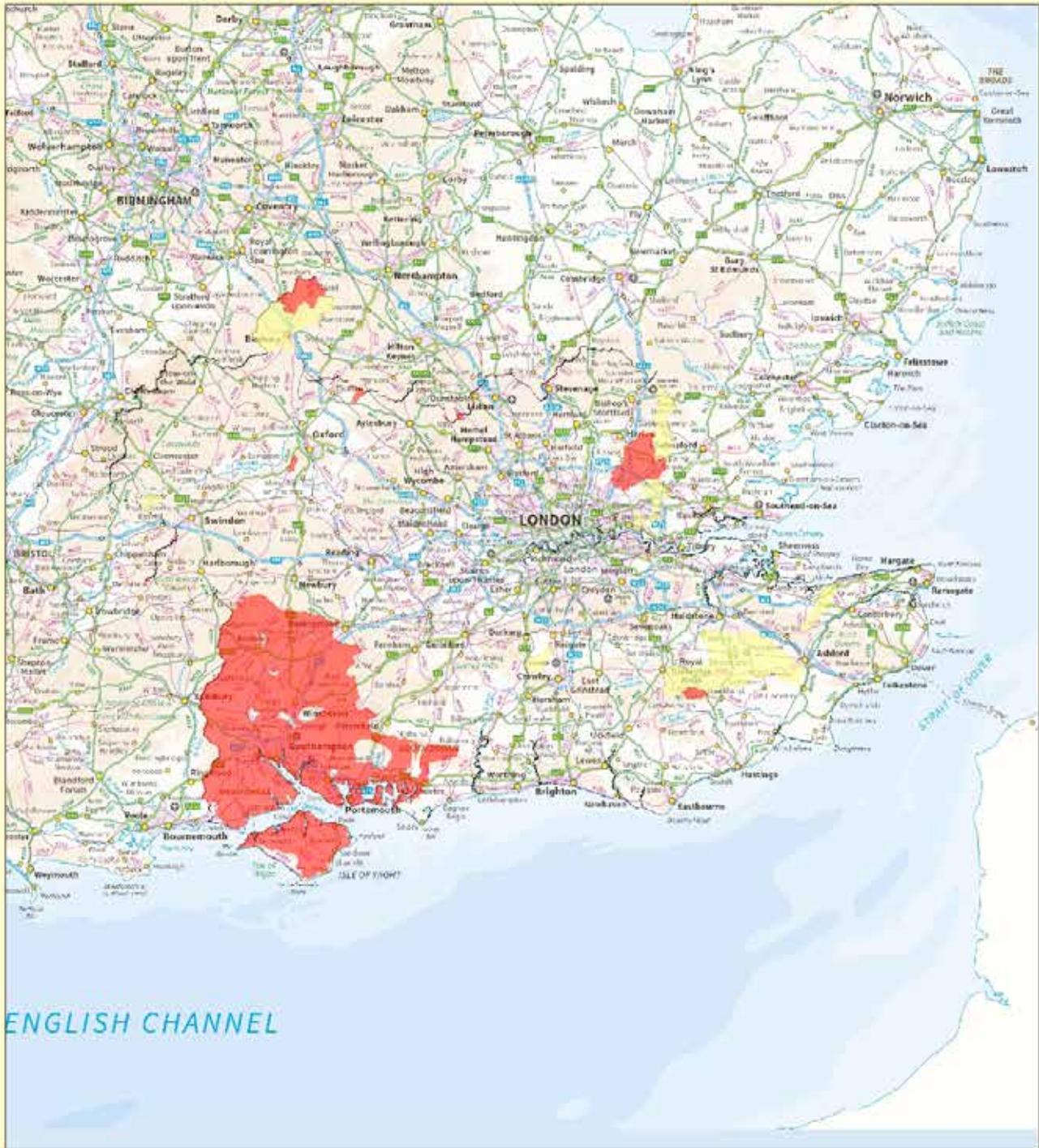


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Thames and South East River Nitrates Priorities



Key

River Nitrates Priorities © Environment Agency

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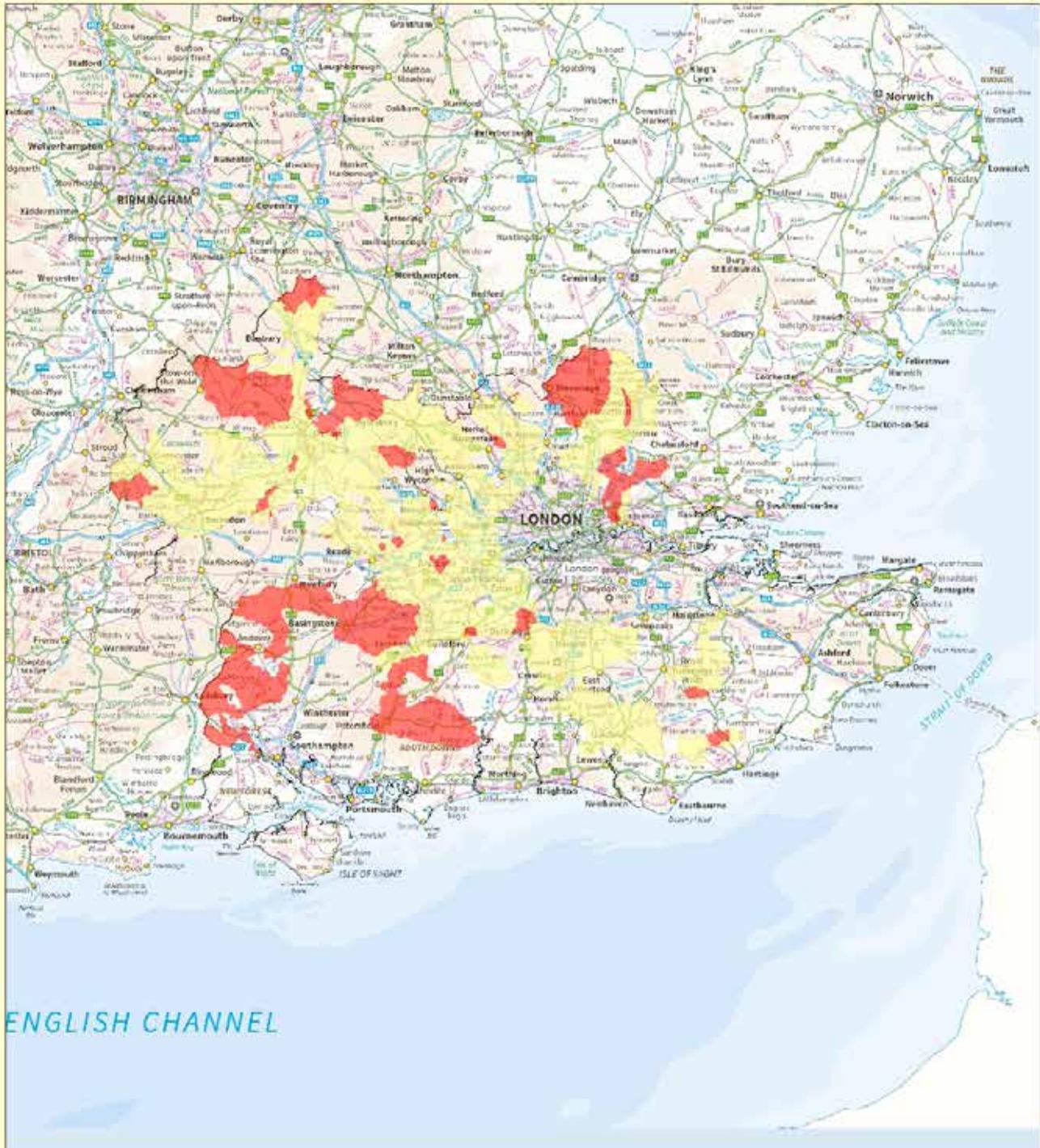
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Thames and South East Pesticide Priorities



Key

River Pesticide Priorities © Environment Agency

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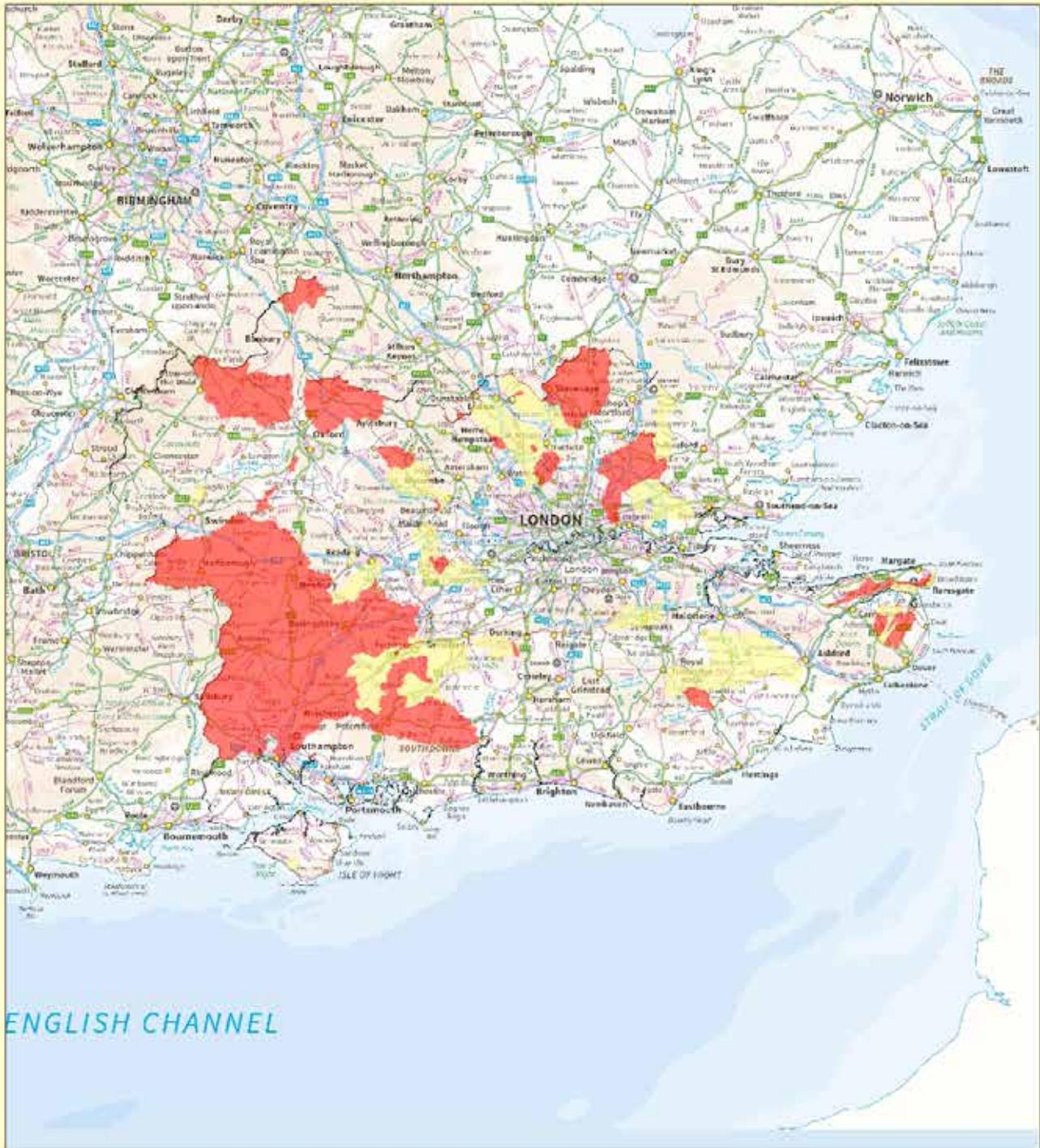
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Thames and South East Sediment Priorities



Key

Sediment Priority © Environment Agency

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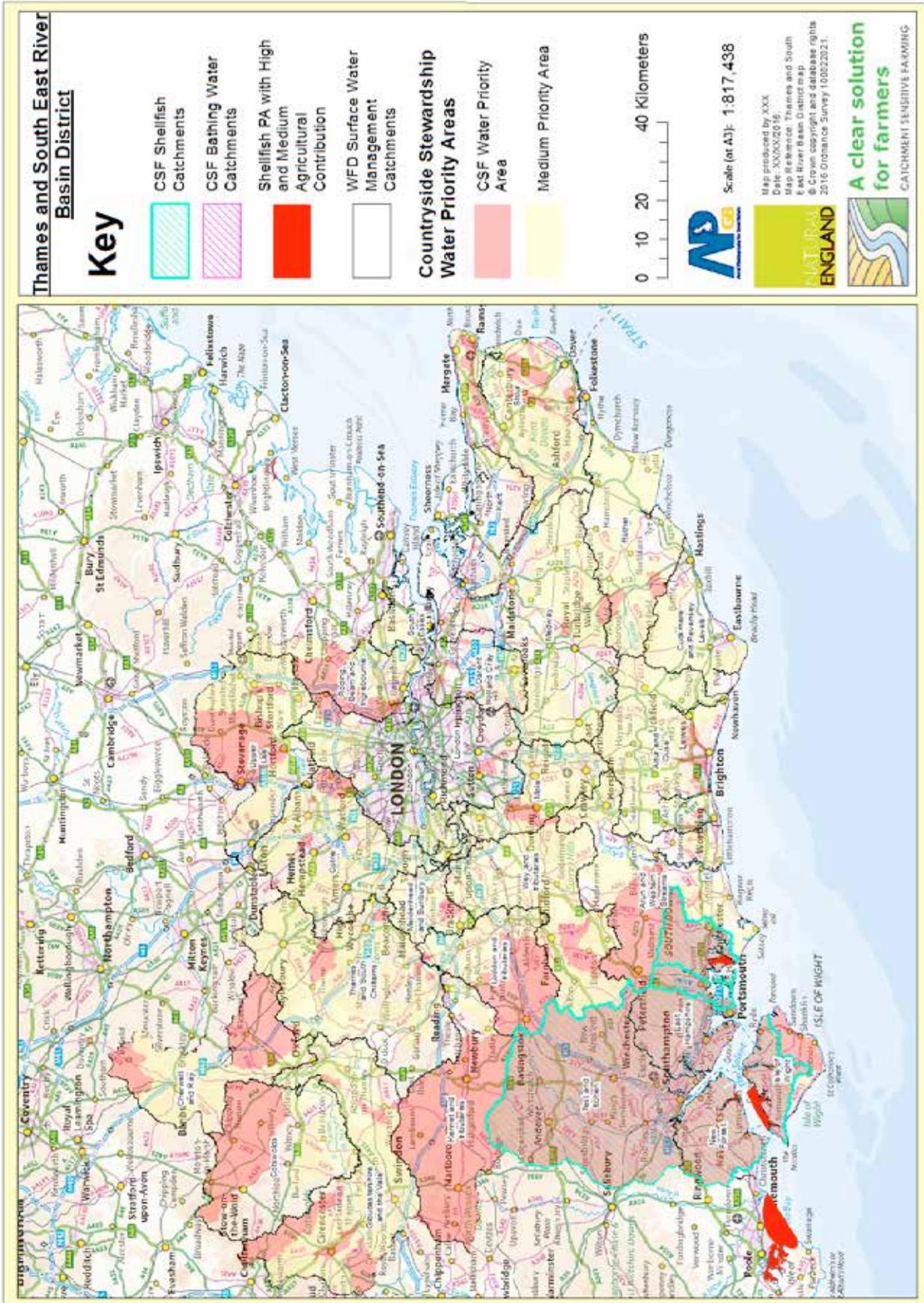
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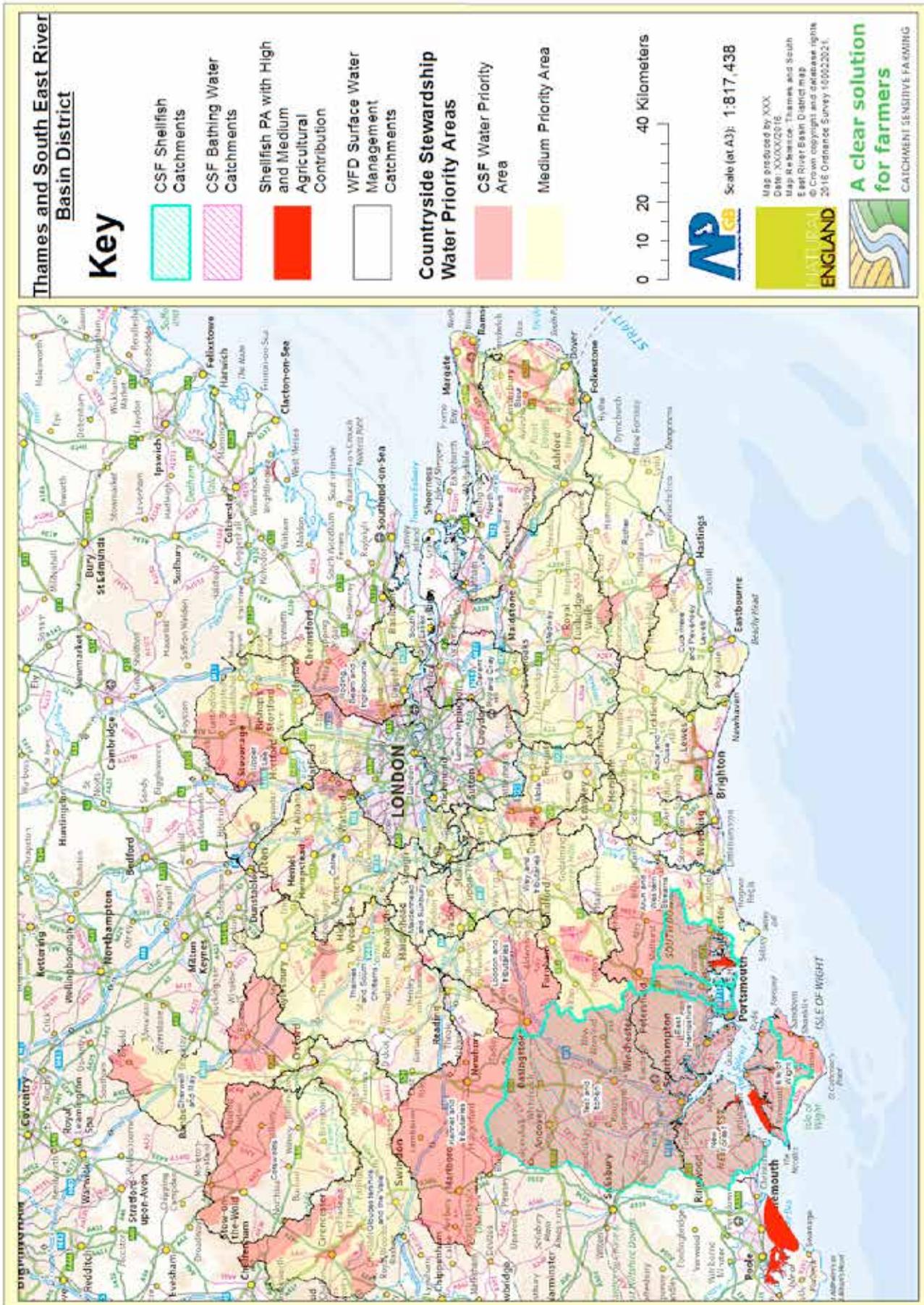



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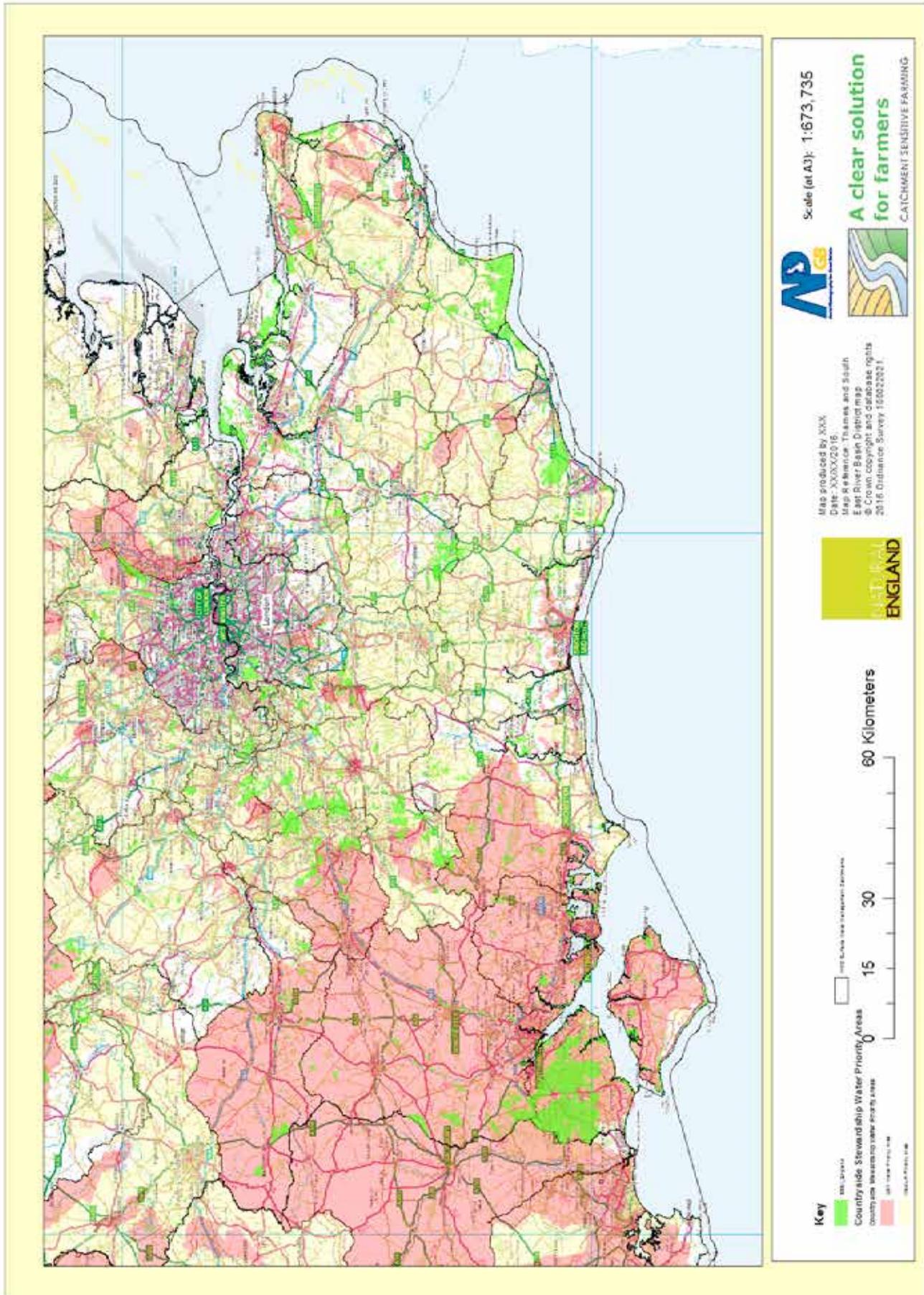
Appendix 3
WFD protected areas (2014 & 2016) and designated sites
WFD Bathing and Shellfish Waters



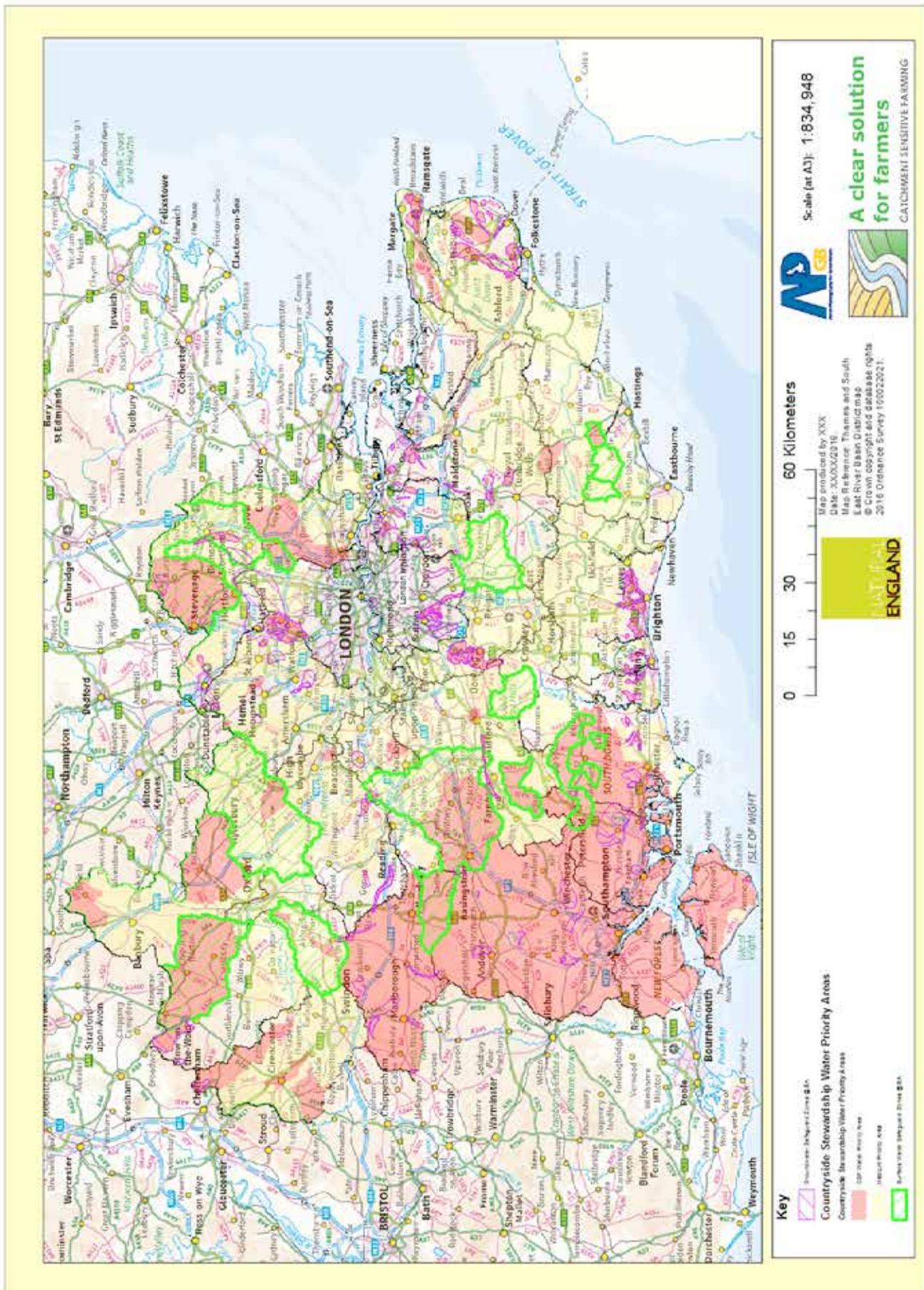
Special Areas of Conservation Natura 2000



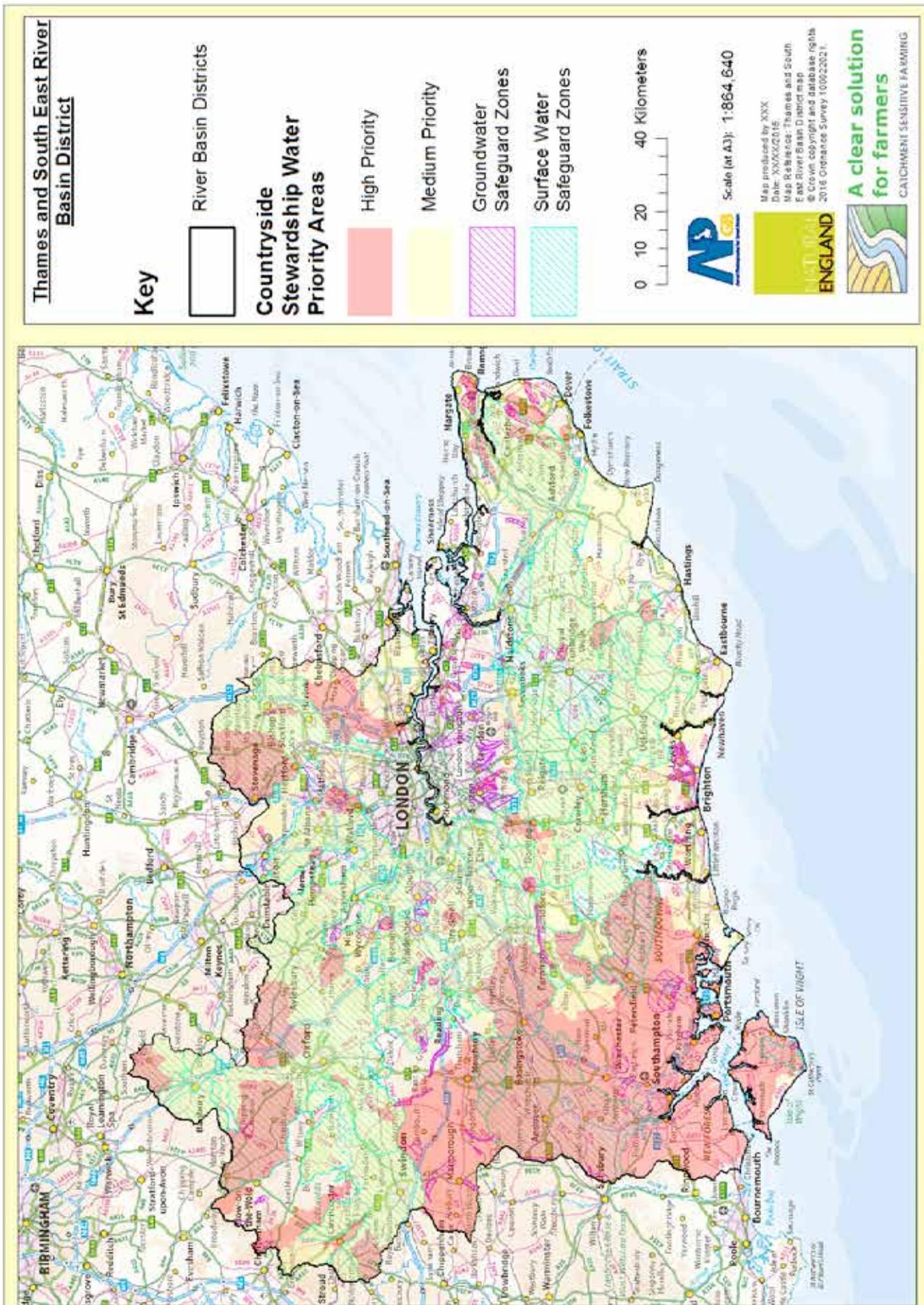
Sites of Special Scientific Interest (SSSI)



WFD drinking water protected areas (surface and groundwater)



WFD drinking water protected areas (groundwater)



Cover photo:
River Beult, Stile Bridge, Linton
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Catchment Sensitive Farming (CSF) is delivered in partnership by Natural England, the Environment Agency and Defra.



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