Catchment Sensitive Farming

Phase 3 Delivery Report (April 2011 - March 2014)

A clear solution for farmers

CATCHMENT SENSITIVE FARMING

Contents

Introduction

Catchment Sensitive Farming (CSF), established in 2006, encourages farmers in priority areas to take action to improve the quality of England's rivers and lakes through reducing Diffuse Water Pollution from Agriculture (DWPA). This helps the UK Government meet the requirements of the Water Framework Directive (WFD) and Biodiversity 2020 targets.

CSF works through local CSF Officers (CSFOs) and partners in 79 catchments across England to implement voluntary measures to improve farming practices in the long-term. Such improvements have led to significant environmental and farm business benefits.

This report describes the purpose and activities of CSF covering Phase 3 of the project from April 2011 to March 2014. It complements a detailed evaluation report which describes the environmental impact of the project.

All of the activities in this report are framed around a 4-stage process to inform farmers of local water quality issues and help farmers take action to accrue both environmental and business benefits. The 4 stages are as follows:

- Farmer engagement
- Increased awareness
- Taking action
- Improvements in water quality

This approach has been tightly targeted to WFD Protected Areas and water dependent Sites of Special Scientific Interest (SSSIs) which are failing water quality objectives.

The approaches outlined in the report are based on long experience of both this project and others, in farmer engagement, the development and implementation of tools to help farmers take action and to evaluate the impacts of the work. The overall theme is one of adaptation to local circumstances and to developments in policy and evidence. Thus, while the core of the project is of CSF Officers and partners locally based in catchments and working with local farmers, how they work and the mix of engagement approaches they use, has reflected local needs. Such approaches have also evolved to meet new circumstances. This adaptive approach is also reflected in the national management of the project and our ability to take opportunities as they have arisen.

A farm advice project such as CSF only works by having strong local roots through involving a wide range of stakeholders in catchments and working through farmer-led catchment steering groups to guide the deployment of advice, grants and other

tools to help farmers take action. This has allowed a great deal of flexibility to shape our delivery to meet new challenges informed by the best local evidence.

Taking the local and flexible approach, CSF works with a wide range of partners both formally and informally. Catchment Partnerships help us to work with others, including eNGO's and Water Companies delivering to farmers in catchments sharing knowledge, experience and practical delivery approaches. Nationally, we have Strategic Partnerships working with industry bodies and the Rivers Trusts to develop their capacity to deliver in the future and to deliver key messages to farmers. Informally we work with a wide range of partners, increasingly through the Catchment Based Approach, which was launched in June 2013 as a locally led initiative to shape future catchment planning.

Lastly, CSF uses a wide range of tools to deliver to farmers; a range as wide as the catchments in which we work and the farmers with whom we work. Key amongst them is the Farm Advice, Training and Information (FATI) framework through which farm advice is procured. The other key element is the CSF Capital Grant Scheme, which helps farmers invest in small-scale infrastructure improvements, such as yard works, riverbank fencing, pesticide handling and tracks to reduce pollution. In addition, CSF Officers deliver advice directly and work closely with EA colleagues to bring together voluntary measures with regulation.

Project Overview

A significant theme of the project is to bring together those most able to take action to address common issues. This applies at the project level, through aligning Natural England, Environment Agency and Defra, at the farm scale through building awareness of local issues and helping the farming community to do something about it.

The project is one of a suite of measures aimed at improving the quality of England's rivers and lakes to improve their environmental quality and to help meet the challenges of the Water Framework Directive and Biodiversity 2020 targets. Such measures include the voluntary (such as CSF), and the legislative and cover the rural and urban environments[1].

In an issue as complex and diverse as water quality it is essential that the measures are integrated as far as possible to maximise efficiencies and synergies and to provide a straightforward approach to those who may need to take action. Throughout Phase 3, CSF has sought to do this through extensive partnership working, local and national co-ordination of measures and integrating delivery at the farm level.

A key element of farm level integration has been to align Environmental Stewardship with CSF measures which has been assisted by the move of CSF staff to NE (see page 42) and the local management of CSF staff in local NE teams.

How does CSF work?

CSF works by offering advice and incentives (including dedicated grants) to farmers in catchments where diffuse pollution from agriculture is causing rivers and lakes to fail their water quality objectives. This targeting of work is underpinned by the latest national and local evidence.

CSF Officers and partners engage farmers directly to raise their awareness of DWPA issues and what they can do to address them. In doing this extension work, they promote the farm business and resource efficiency benefits to farmers of taking action, alongside the improvements to the environment.

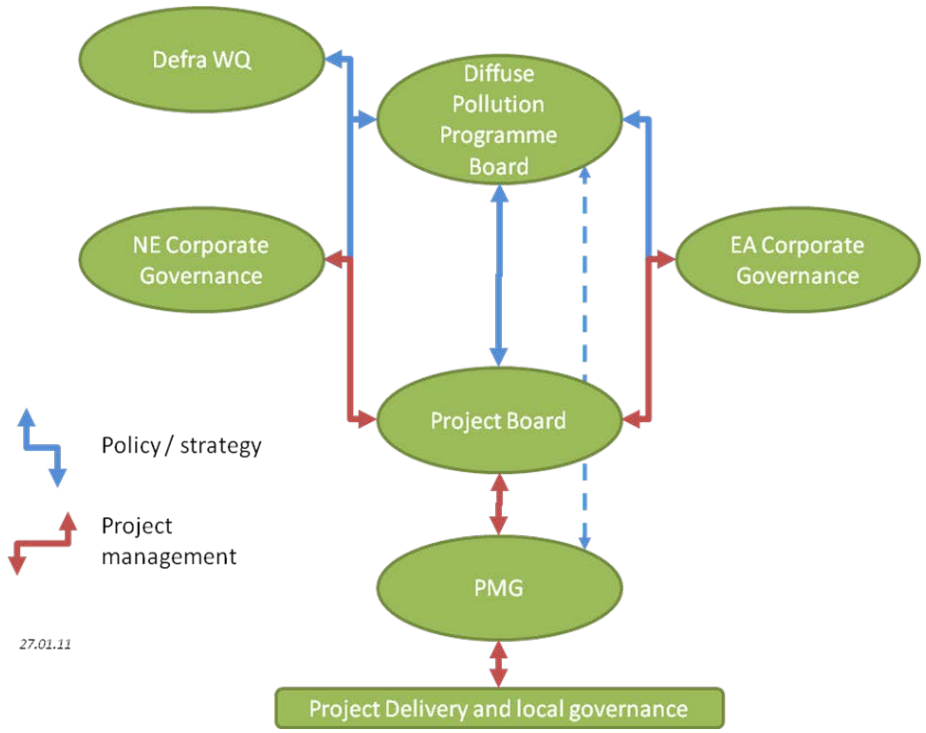
The wider CSF objectives are also promoted through formal national partnerships with the agricultural industry and an NGO, and through a network of informal partnerships.

[1] *Further details can be found here*

Ways of working

CSF is jointly delivered by Natural England and Environment Agency funded by Defra Water Quality. Since inception, it has been a distinct project with operational management through a Project Management Group and strategic issues managed through a Project Board. All three organisations have been involved at both levels. This project structure is very closely linked to the Water Quality Sub-programme Board in Defra and to Natural England and Environment Agency corporate management (Fig 1).

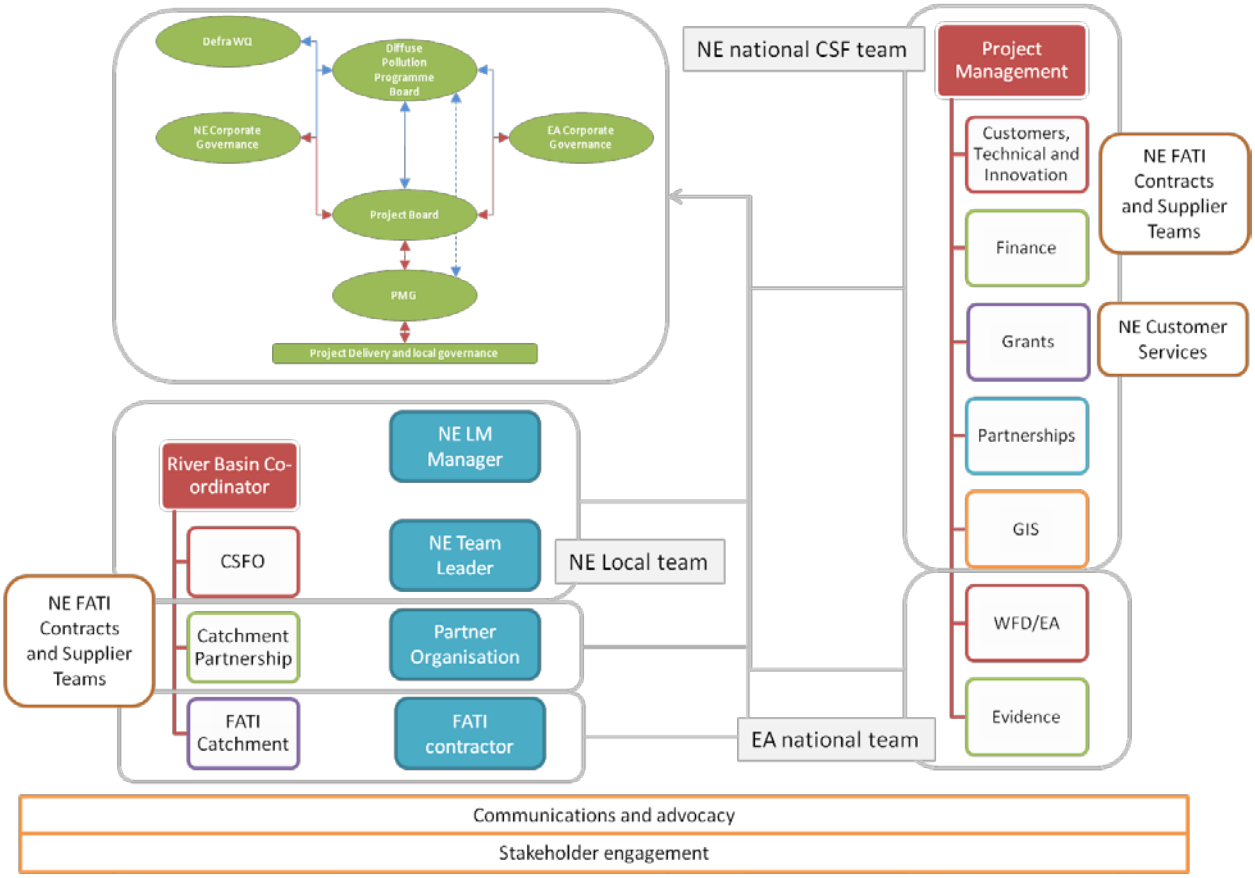
Fig 1



This approach has enabled a robust approach to be taken to manage risk and to ensure a close fit between policy and strategy and delivery. The practical benefits of this have been seen in the ability of the project to trial approaches, such as the NVZ enhanced advice work in the South West in 2012 , CSF support of the Catchment Based Approach and the Great Farm Challenge.

At the outset of Phase 3 in 2011, the shared ownership of the project was reflected in the broadly equal distribution of regional delivery staff across both NE and EA. One of the recommendations of the Defra review of Arms' Length Body functions in 2010, was to focus farm advice delivery activity in NE with EA focussing on regulatory functions and related activities. In 2012 28 regional delivery posts were transferred from EA to NE under the Single Delivery Project (page 42). Whilst acknowledging the upheaval created by this move, it has strengthened the unified approach to project delivery and integration with other land management measures. The current management and reporting arrangements are shown in Fig 2.

Fig 2



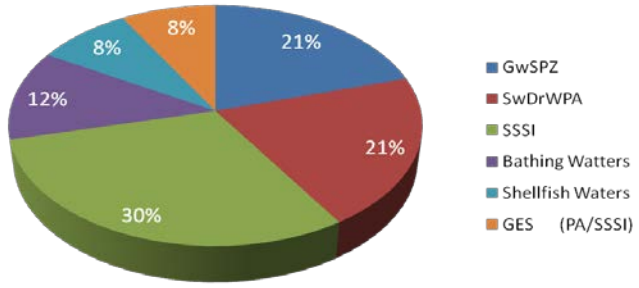
In 2006, CSF started as a trial to demonstrate the efficacy of the voluntary approach in improving water quality through farmer engagement in targeted areas. By the start of Phase 3 (2011), the approach had been demonstrated to deliver improvements in water quality through sustainable changes on farming practices. As a consequence, the approach was developed and expanded from 50 to 79 catchments through direct project delivery and working with partners.

The project has had to reflect the changing evidence base over the life of Phase 3, especially through EA investigations and the Demonstration Test Catchment network[2]. This has meant CSF has retained an explicitly experimental element to its work which sits alongside the delivery in catchments. Examples of the tangible results of this include the trial work on enhanced advice on slurry storage and NVZ in the South West in 2012, the FATI catchments (see page 28), development of new advice products, including business advice, and testing new approaches to delivering grants targeted to specific Protected Areas.

[2] *http://www.demonstratingcatchmentmanagement.net/*

From the outset, the project has needed to be targeted to address specific, high priority issues in particular catchments. Given the size of the diffuse pollution issue this targeting approach has meant the project's resources have been used in the most effective manner. Protected Areas defined by WFD have been the priority (Bathing Waters, Shellfish Waters, Drinking Waters and Natura 2000 sites) along with Sites of Special Scientific Interest[3]. The project works in these areas where there is high confidence agriculture is a key reason for the sites failing water quality objectives.

Fig 3



It is recognised, however, that in some catchments there are significant local issues preventing water bodies achieving Good Ecological Status (GES) which require the project's attention. To allow for this, at any one time, up to 5% of the CSF resources have been devoted to addressing non-Protected Area issues.

Reflecting the need for resources to be used in the wisest manner, CSF activity in each catchment is tailored to address the pressures affecting the Protected Areas. This means that all activities to engage farmers and help them take action are directed to the specific measures required to reduce the pollutants affecting the condition of the Protected Area. For example, CSF work in a Bathing Water catchment will be directed to the reduction of Faecal Indicator Organisms (FIOs). The associated measures offered to farmers will include those designed to prevent run-off from yards and excluding stock from rivers. They will not usually include measures, for example, to reduce pesticides.

CSF delivery is described in a number of documents outlining the specific approach taken at River Basin District (RBD) (CSF Strategy) and catchment (Catchment Delivery Plan and Catchment Summary) scales[4]. These describe why catchments have been targeted and the associated evidence base. From that they identify the

[3] *SSSIs are not WFD Protected Areas unless they are also Natura 2000 sites. However, in this report the term 'Protected Areas' includes SSSI's.*

[4] *Available at http://publications.naturalengland.org.uk/category/6919090*

approach in each catchment and the associated target areas where CSF interventions will have the most significant benefit.

This targeting of resource in the most critical areas has produced significant outcomes in terms of farmers' awareness and action and the associated water quality outcomes (page 24). Work during Phase 3 has shown, however, the wide range of other ecosystem service benefits the project's work has achieved, not all of which have been water related. These are fully described in the Phase 3 Evaluation Report which has been published at the same time as this report.

The project has also demonstrated the significant benefits to growth and farm business efficiency from the adoption of CSF measures. An assessment of the quantifiable benefits of CSF, such as the indirect investments in farm infrastructure through the grant scheme, has indicted the project contributes £50m annually to farm business efficiency and an equal amount to overall growth. Much of this benefit has derived directly from the savings farmers make through the adoption of measures. These include reductions in fertiliser costs through nutrient planning and better use of pesticides. Other on-farm benefits include reductions in the risk of regulatory non-compliance.

CSF has also been shown to provide wider benefits which cannot, as yet, be quantified, including reducing local flooding incidents and the consequent costs of maintaining the rural infrastructure.

Each section in this report outlines the key areas of project delivery. It is not comprehensive, but presents the key features of each work area, the resources used and the activities undertaken. The outcomes of the work are described in the associated Evaluation Report.

Advice Delivery

The principal objective of Catchment Sensitive Farming is to raise farmer awareness and encourage voluntary action to reduce Diffuse Water Pollution from Agriculture. The farming community varies considerably across the 79 priority catchments in England: from sector, size, business structure and even down to farmers as individuals. The role of our Catchment Sensitive Farming Officers is key to advice delivery, particularly in building trust through an understanding of local farming issues, what the pollution pressures are and how local farmers may be motivated to implement measures to reduce pollution.

Local delivery campaigns owned at a local level

River Basin Co-ordinators (RBCs) and CSFOs develop tailored, local Catchment Delivery Plans which articulate the evidence for DWPA, its impacts on Water Framework Directive objectives and Natural England SSSI objectives. This allows resources to be distributed to local targets according to need and based on sound evidence.

CSFO engagement with farmers and stakeholders with a particular interest in resource management helps to generate ideas and solutions. Often these farmers and stakeholders have been assembled into formalised Catchment Steering Groups to provide expert guidance on farming issues, methods and approaches relevant to the locality. Alternatively, CSFOs may choose to meet with interested parties on an informal basis or have a 'virtual' collection of farmers and other experts that can be called upon when needed. This philosophy of engagement and ownership by the local farming community with CSF, encourages change and is an important element in the success of CSF. It also fits well with future interactions with the Catchment Based Approach (CaBA) and the industry-led Campaign for the Farmed Environment (CFE). With over 14,000 targeted farmers managing over 1.2 million hectares of land actively engaging with CSF to date, this locally driven approach works.

Within each phase of CSF, delivery plans are derived from a sequential process which challenges delivery in previous phases, using local information and evidence provided by the CSF Evidence Team. In this way, plans are tested and revised, determined by what approach has worked or needs revision.

Fig 4

Implementation of measures

One of the main aims of CSF is the implementation of mitigation measures across target farms. These measures are proven to be effective at reducing the problem pollutant(s) and have been summarised within the CSF table of measures. It is the implementation of these measures that delivers water quality outcomes, and upon which CSF is judged to have been successful.

Local innovation

Catchment Sensitive Farming Officers have a number of tools at their disposal to support farmers in their decisions to implement mitigation measures. These tools can vary considerably and CSFOs are encouraged to develop local relationships to develop local delivery campaigns, as opportunities arise. Some examples of this locally driven activity includes:

- The use and commissioning of localised evidence sources to inform results and delivery, often with universities, water companies and local EA colleagues
- Joint events with levy boards, producer groups, machinery suppliers, CFE, Farm Advice Service, water companies and Rivers Trusts
- Interaction with local fertiliser merchants to develop compound fertiliser mixtures to better target nutrient supply to crop needs
- Local advice delivery campaigns following regulatory inspections and referrals from the Environment Agency
- Updates and interaction with local farm advisers and agronomists.

National Level Efficiencies and Tools

However local CSF campaigns are, the project also provides a series of standardised tools and funding arrangements through a national structure. The most significant of these include:

Farm Advice Training & Information (FATI) Framework

This is a national contract framework to allow the procurement of private sector delivery advisers who have the expertise to deliver standardised one-to-one and group events within catchments. CSF have procured over £3.5m of advice delivery through the FATI Framework.

The contract is managed on a regional or 'Lot' basis by Natural England contract managers and is supported by a very robust contract management system and rigorous quality control. The rules and oversight of this Framework cannot be overstated, and during Phase 3, the contracts team have had to provide evidence for the following audits:

- European Court (x1)
- National Audit Office (x3)
- Internal Natural England audit (x1)
- RPA Process Review (x1)
- RPA Inspections (x7)

This Phase of CSF has seen over 300 group events and almost 5000 individual one-to-one specialist visits being commissioned through the Framework. Individual visit specifications have been agreed in advance with the Defra RDPE team and have been expanded throughout the project to encompass all the topic areas relevant to farmers and DWPA issues. The following training products, available through FATI, have been delivered:

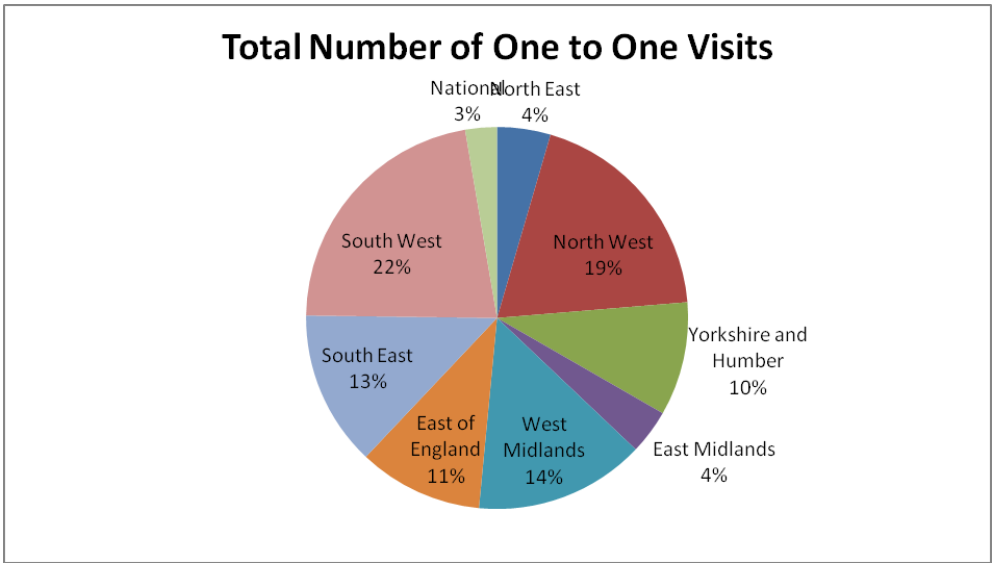
One-to One Farmer Training Product	**Numbers Delivered (Phase 3)**
Whole Farm Plan (a general review and audit of the farm in terms of DWPA issues, often delivered by CSFOs, but a useful tool when CSFOs cannot cope with volumes and extra resource can be purchased)	905
Nutrient Management Plan (preparation and review undertaken by FACTs qualified specialists)	1541
Farm Infrastructure Audit (comprehensive review of farmyard issues primarily associated with manure storage and	1120

management)	
Slurry/manure handling and storage (overview of manure storage and management linked with farm business advice to evaluate recommendations)	167
Water Management Plan (recommend measures to address source, pathway and receptor for pollution in a holistic manner considering water flow)	302
Specific sector-based training (for high risk land uses or specialised agriculture)	34
Machinery testing and calibration (to improve the efficiency of fertiliser, manure and pesticide applications in order to reduce a potential source of pollution)	381
Soil husbandry (for improving skills on soil structure/ texture analysis and implementation of measures to ameliorate and reduce soil capping and compaction)	612
Pesticide use, planning and agronomy (working with farmers and agronomists to implement cultural measures in plant protection to reduce DWPA)	15
Pesticide handling and application (consider measures relating to equipment, storage, washing and handling of pesticides)	227
Biobed and pesticide facilities (design assistance in developing more sustainable wash down areas, particularly using newer technologies)	275
Soil/manure sampling (best practice on the sampling methods and use of soil sampling and analysis)	1,362

These activities were delivered across England, but actually procured and organised on a regional basis. The breakdown by region is illustrated within the diagram below.

Overall one-to-one visits by region

Fig 5



1. **Farm Events Team** through CSF Phase 3, we have used this centralised and efficient service for organising events, mailshots and newsletter distribution. The Farm Events Team have managed over 130,000 pieces of mail for CSF, organised the logistics for 147 events and also collect and compile feedback from our customers.

2. **Soil Analysis Framework** uses Grant in Aid at a national level for CSFOs and FATI contractors to train farmers on the taking and interpretation of soil sampling. This was set up mid-way through Phase 3 to improve efficiency and to date has funded 3124 samples.

3. **Capital Grant Scheme** is an important tool in the engagement of farmers. This allows funds allocated through the productivity strands of RDPE to be used for both business and environmental benefits. The close relationship of the grant scheme with advice demonstrates the synergies and additions that can be made when these strands are combined.

4. **Partnerships** at a national and local level have allowed CSF to deliver advice to a broader range of audiences in cost-effective and innovative ways. Partnerships are discussed in more detail below.

Partnerships and Collaborative Agreements

At the end of Phase 2, an evaluation of CSF partnerships was undertaken to review project delivery, identify improvements and gather feedback from partners. This review showed that the partnerships contributed well to CSF objectives and the CSF Project Management Group therefore agreed to extend the Catchment Partnerships and National Partnerships for an additional two years from April 2011 to March 2013.

The Blue Anchor Bay Catchment Partnership with the Environment Agency was not extended, as 100% of farmer engagement had been achieved. The EA local team and water company continue to address bathing water failures in the catchment.

An existing partnership between Natural England, Environment Agency and Portsmouth Water Ltd (the Downs and Harbours Clean Water Partnership), was extended as a CSF Catchment Partnership to address SSSI and drinking water failures in the catchment.

The Agriculture and Horticulture Development Board (AHDB) were approached to develop a National Partnership project covering all the farming sectors on the theme of soil management, to replace the previous partnership with HGCA on precision farming.

To address infrastructure issues, the Capital Grant Scheme was extended in Phase 3 to be made available to farmers in catchments covered by Catchment Partnerships. Data on farm engagement and advice delivery was captured in the CSF Reporter Database, so that the Catchment Partnerships could be evaluated alongside the CSF priority catchments.

A new approach to partnership working was piloted in Phase 2: this involved setting up smaller, short-term collaborative projects with local and national partners, to support CSF advice delivery. Each partnership developed a plan of activities for advice delivery during 2011-13. The Memorandum of Agreement for each partnership was extended to formally agree the activity plan and contributions from each partner for this period.

Catchment Partnerships

Between September 2011 and March 2014, the 9 CSF Catchment Partnerships, led by local partners, provided advice on reducing diffuse water pollution to a total of 2197 farmers in 10 catchments. This was achieved through a total of 846 farm advice visits and 95 training events attended by 1290 farmers.

In 2012/13, 632 applications for the CSF Capital Grant Scheme were received from farmers in the Catchment Partnerships areas and 430 grants, worth £4.84m were awarded.

Catchment	Partner(s)	CSF contribution £	Partner contribution £
Upper Great Ouse	EA	£50,000	£83,913
River Nene	EA and River Nene Regional Park	£ 44,181	£ 23,990 (RNRP) + 24,510.50 (EA) total: £48500.50
Isle of Wight	EA and Hampshire and Isle of Wight Wildlife Trust	£42,288	£52,973
Downs and Harbours	EA and Portsmouth Water	£37,634	£143,943
Rivers Chelmer and Blackwater	EA and Essex and Suffolk Water	£55994	ESW £54498 EA £18504
River Nidd	AONB, Yorks Dales Rivers Trust and Yorkshire Water	£42616.40	£40899.00
Semerwater and Upper Lune	Yorkshire Dales National Park and Rivers Trust	£45,327	YDNPA £34,293 YDRT £11,225
River Leam (upper Avon)	EA and Severn Trent Water Ltd	£75,000 (11-14)	STW £88,000 EA £7,298 (11-14)
Rivers Taw and Torridge and North Devon Streams	EA and Devon County Council (Biosphere project)	£49,950	DCC £7040 EA £58,000
Upper Great Ouse	EA	£50,000	£83,913

National Partnerships

The 4 National Partnerships provided support to CSF on the themes of nutrients, soil and pesticide management and mitigation measures to reduce diffuse water

pollution from agriculture. This was done through training CSF staff, technical support, running joint farmer training events and agricultural shows with CSF, media activity and developing and distributing advice materials through partners and partner websites.

Partner(s)	Theme	CSF contribution £ 2011-13	Partner Contribution £ or in kind 2011-13
Professional Nutrient Management Group (Agricultural Industries Confederation, British Grassland Society, Country Land and Business Association, National Farmers Union, Linking Environment and Farming)	Nutrient Management 'Tried &Tested'	£100,000	£105,500
Rivers Trusts	DWPA mitigation	£96,550	£100,600
Voluntary Initiative on Pesticides (VI)	Pesticide best practice	£99850	£120,300
Linking Environment And Farming (LEAF)	DWPA mitigation	£25000 (12-14)	£25000 (12-14)
Agriculture and Horticulture Development Board (AHDB)	Soil and nutrient management	£98,700	£107,524

Key outputs from each National Partnership include:

- Rivers Trust updated 45 DWPA information sheets which have been downloaded 7000 times from www.theriverstrust.org/pinpoint/ and 89 advisers were trained in DWPA and sediment

- Professional Nutrient Management Group developed new Tried & Tested guidance: 1,500 copies 'Think Manures, 10,000 copies 'New to Nutrient Management' and 10,000 copies of new 'Feed Plan for Sheep and Cattle', 3,000 FACTs brochures, all available on www.nutrientmangement.org.uk (average 3000 visitors per quarter to website)

- Agriculture and Horticulture Development Board delivered 66 local and 5 national joint events with CSF, attended by 2697 and 9978 farmers and advisers respectively. Two new publications were developed and distributed to 42,500 farmers

- Voluntary Initiative developed a new Grassland weed control leaflet and revised H2OK booklet - 21,000 and 17,000 printed and distributed respectively; trained 35 CSFOs in pesticide management. Agronomists provided pesticide monitoring bulletins, spray-warning texts and 7 workshops

- LEAF delivered 3 joint events with CSF and 4 video case studies

Collaborative Projects

In 2011/12, a total of 11 collaborative projects were delivered and allocated a total of £59,256 by CSF (under £10,000 per project). This included 7 projects with local partners for catchment-based projects and 4 with national partners.

In 2012/13, a total of 19 collaborative projects were delivered and allocated a total of £87,745 by CSF (under £10,000 per project). This included 11 catchment projects and 8 national projects.

In 2013/14, a total of 18 collaborative projects have been set up and allocated up to £116,000 by CSF (under £10,000 per project). This includes 10 catchment projects and 8 national projects.

The catchment-based projects are mainly in CSF catchments; to support CSF delivery through farmer engagement and advice delivery in sub-catchments, where partners are already working with the farming community or to provide partner expertise, such as working with Wildlife Trusts on ditch-management and river ecology to supplement CSF advice.

The national projects provide CSF training, development of guidance and technical support, but mainly delivery of joint events with CSFOs. In 2013/14, over 50 joint events will be delivered with AHDB sector bodies and the Soil and Water Management Centre (Harper Adams University College) on precision farming and soil/nutrient management.

Collaborative Projects with Catchment Partners

1. Dorset Wildlife Trust
2. Avon Wildlife Trust
3. Suffolk Wildlife Trust
4. South West FWAG
5. Action for the River Kennet
6. Arun and Rother Rivers Trust
7. Life and Livelihoods Group (Clun)

8. River Nene Regional Park
9. West Cumbria Rivers Trust
10. Ribble Rivers Trust
11. Trent Rivers Trust
12. Anglia Rural Training group
13. Action for River Kennet
14. Norfolk Rivers Trust
15. Water 21

Collaborative Projects with National Partners

1. Harper Adams University College (Soil and Water Management Centre)
2. LEAF
3. Control Traffic Farming (Europe) Ltd
4. Agriculture and Horticulture Development Board sector bodies:
- HGCA
- EBLEX
- HDC
- Potato Council
5. Defra – contributions to developing Manner NPK toolkit and Spring Nitrogen advice
6. Wildfowl and Wetlands Trust
7. Royal Agricultural Society of England
8. British Horse Society

Partnerships have become an established delivery mechanism for CSF in Phase 3, and CSF farmer surveys indicate Catchment Partnerships are now well recognised in catchments with farmers valuing the advice provided. Making CGS available in the Catchment Partnerships has been welcomed by partners and farmers, and enabled better outcomes through addressing infrastructure problems causing DWPA.
The National Partnerships have developed some valuable advice resources, enabling CSF advice to be more widely available, including through partner websites. Through joint events, the partners provide expert speakers, event promotion and match-funding for events, making it a more cost-effective way of delivering high-quality events.

The Collaborative Projects have provided a more flexible way of setting up smaller partnership projects to supplement CSF activity in catchments, in a cost-effective way and provide technical support and farmer engagement.

Overall, partners have remained committed and supportive of CSF. However, there have been some issues where partners have not been able to continue to commit as much financial or staff resource to the partnership project as planned. This creates uncertainty for project delivery and takes time to re-negotiate agreements.

Customers

The voluntary uptake of measures to reduce Diffuse Water Pollution from Agriculture requires the building of trust between Catchment Sensitive Farming and its' customers. In order to encourage this approach, CSF recognised from the outset that excellent customer service was essential.

To measure and better understand the attitudes of our customers, CSF developed a comprehensive annual telephone survey which forms part of CSF's core evidence base. Through Phases 1 and 2, this survey confirmed that over 80% of farmers receiving CSF advice believed their knowledge of water pollution had increased and that they had taken, or intended to take, action to reduce pollution. Over 90% indicated that CSF was the best way to learn about water pollution.

Formal feedback has also been sought from those farmers who received advice through private contractors within the CSF Farm Advice Training & Information (FATI) Framework. The overwhelming response of farmers using this method of feedback has been very positive.

Customer Service Excellence

In 2012, Natural England's Land Management function applied for Cabinet Office Customer Service Excellence accreditation. Catchment Sensitive Farming, being part of this function, were keen to be involved in order to demonstrate the positive interaction with customers to date. Evidence submitted to the CSE process was both practical and constructive, however further evidence was required if CSF were to receive accreditation.

CSF needed to formalise its customer service standards and ensure the mechanisms (detailed below) for receiving feedback were as comprehensive and as accessible as possible to all customers and stakeholders:

1. Locally-based catchment steering groups were revitalised and a requirement made for all CSF Officers to ensure community ownership and oversight of delivery

2. CSF Officers to provide feedback forms to all customers during advice delivery visits

3. Feedback forms supplied to all new CSF Capital Grant Scheme agreement holders

4. CSF national stakeholder group revitalised

5. CSF customer service standards agreed and integrated with NE's Land Management standards

6. Previous data collection processes maintained

7. Customer service reporting and feedback responses integrated with NE's Land Management report cards

8. Provide evidence for, and actively engage with, Customer Service Excellence auditors.

As a result of these mechanisms, CSF:

- Continues to receive positive feedback through the farmer telephone survey (summarised within the Evidence section)
- Is a significant component in the achievement of the Land Management Customer Service Excellence Accreditation

Feedback from CSF Farm Advice Training & Information (FATI) Framework

Event Type: 1 to 1

No of Events	Total Capacity	Total Attendance	No of F/B forms received
3587	3587	3587	3452

Av. % Attendance (of Capacity):	100.00
Av. % Rating Good or better:	98.38
Av. % Improved Understanding:	97.04
Av % Applying new skills:	97.74

Event Type: Group

No of Events	Total Capacity	Total Attendance	No of F/B forms received
179	2372	2400	2102

Av. % Attendance (of Capacity):	100.39
Av. % Rating Good or better:	98.43
Av. % Improved Understanding:	93.41
Av % Applying new skills:	96.63

Feedback from 2012/13 Capital Grant Scheme Agreement Holders

- 913 respondents
- 90% fairly/ very satisfied with quality of information and correspondence
- 90% fairly/ very satisfied with general competence of staff
- 89% fairly/ very satisfied with advice supplied through CSFO (5% ticked N/A)
- 88% fairly/ very satisfied with clarity of scheme requirements
- 85% fairly/ very satisfied with how well staff understood business
- 85% fairly/ very satisfied with service provided from processing team
- 72% fairly/ very satisfied with length of application process

This feedback has resulted in extra resource being allocated to the CGS processing team; however problems do still exist in the quality of some applications being received by farmers and their agents.

Feedback from CSFO feedback forms

Views	The ease of getting hold of someone	How well staff understood your business	The usefulness and practicality of any recommendations made	Efficiency in resolving any queries	The quality of info	The competence of staff
Fairly/ Very Satisfied	97.56%	98.78%	95.12%	69.51%	95.12%	97.56%
Neither/ NA	2.44%	1.22%	4.88%	30.49%	4.88%	2.44%
Fairly/ Very Dissatisfied	0	0	0	0	0	0

Evidence

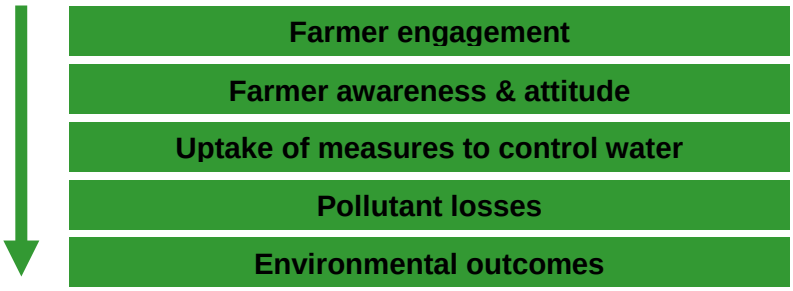
Catchment Sensitive Farming is an evidence-based project, with evaluation forming a key part of the project's wider evidence base. Evaluation is fully integrated within the CSF Project. It is designed to measure progress towards the achievement of project objectives and assess the effectiveness of measures adopted in bringing about desired changes. Fundamentally, it allows the project sponsor, Defra, to judge how effectively resources have been used and to inform decisions about the future of the project.

Evaluation is intricately linked with evidence for effective (spatial) targeting; evidence to encourage farmer engagement (e.g. evidence of water quality issues); and evidence to support day-to-day management of project delivery (through Key Performance Indicators). The project's Evidence work stream is delivered by the CSF Evidence Team within the Environment Agency.

This section provides an overview of the approach used to evaluate CSF. The results of our Phase 1-3 evaluation are presented in a separate report (http://www.naturalengland.org.uk/ourwork/farming/csf/evaluation.aspxn).

Within CSF, evaluation is considered on five levels.

Fig 6



Combining evidence from these five levels provides an overall *weight of evidence* for the benefits of CSF.

Farmer engagement

Being a voluntary project, the impact of CSF is dependent on effective farmer engagement. This element of our evaluation is based on a comprehensive dataset of farmer engagement and advice delivery held within a bespoke database, the CSF Reporter.

Farmer awareness & attitude

Increasing farmers' awareness of, and changing attitudes to, water pollution are key aspects of CSF. They help ensure a high quality of advice uptake by farmers, greater

long-term commitment and sustainability. We commission annual independent farmer surveys to provide evidence of trends in awareness and attitudes.

Uptake of measures to control water pollution

CSF uses a standard list of control measures (within CSF Reporter) to provide a structured way of measuring CSF advice delivery. Subsequent follow-up visits allow us to quantify the extent to which advice is implemented.

Pollutant losses

We use environmental models to estimate reductions in pollutant losses resulting from CSF advice. The Catchment Change Matrix (CCM) was developed by the CSF Evidence Team specifically for this purpose. Starting with modelled baseline pollutant losses, the CCM uses estimates of pollutant reductions for the applied control measures[5] and calculates their cumulative impact.

Environmental outcomes

CSF 'enhanced' Environment Agency routine (river) water quality monitoring in selected CSF catchments to improve the accuracy and precision of pollution estimates. Statistical analysis of data from the Enhanced Water Quality Monitoring Programme (EWQMP) provides us with the evidence of water quality improvements resulting from CSF. This analysis is complemented with analyses of data from existing Environment Agency ecological and groundwater monitoring programmes.
EWQMP data are also used in the development and calibration of water quality models. We use these models to estimate CSF outcomes for a range of delivery scenarios (e.g. complete advice coverage within targeted areas). This approach also allows us to assess outcomes with respect to specific Water Framework Directive water quality targets.

The control measures promoted through CSF provide a range of ecosystem service benefits over and above those for water quality. An initial high-level assessment of these benefits also forms part of our overall evaluation.

The national-scale assessments outlined above are complemented with a set of case studies. These provide specific examples of the environmental improvements resulting from CSF.

[5] An inventory of methods and their effects on diffuse water pollution, greenhouse gas emissions and ammonia emissions from agriculture, Newell-Price *et al.*, 2009.

Capital Grant Scheme

During Phase 3, the Capital Grant Scheme (CGS) continued to provide an important financial incentive for land managers in priority catchments, enabling them to engage with CSF and make relatively low-cost infrastructure investments for the main concerns within each priority catchment. With increased funding available during Phase 3, the number of priority catchments has increased from 50 to 79, thus extending the availability of the grant scheme.

Farm improvement works are funded with up to 50% grant aid, up to £10,000 per holding, and more than 40 types of project are eligible for funding. The main items eligible for funding are roofing over livestock yards, silage and manure stores; clean and dirty water separation including concrete yard renewal; new livestock and machinery tracks; pesticide handling facilities and fencing livestock out of water.

From 1st April 2011 to 31st March 2014, the scheme contributed to approximately £71.6m of improvements; with uptake highest in the South West. These grants have been matched with a similar amount of funding from the local farmers and land managers involved; demonstrating their impressive commitment and representing a total investment of up to £143.2m into the environment, farm infrastructure and local businesses across the catchments. In 2011, £1.2m of the grants paid was funded under the Water Frame Work Directive (WFD).

The grant scheme is reviewed annually by Natural England and its partners and offers a number of recommendations each year both on the administrative side and in respect of technical issues. Any enhancements or changes are made where appropriate.

One major change during Phase 3, which was a requirement under RDPE, has been the change of payment methodology from a fixed price basis for each capital item, to payment on the basis of the actual cost of each capital item - up to and no more than - the published guide prices.

The other main change was the introduction of special projects and collaborative applications to increase the flexibility of the grant scheme to address specific diffuse water pollution problems and to encourage an integrated approach to addressing these concerns. A small amount of the main budget (less than 5%) has been used to fund these projects.

Securing agreement for funding under the Capital Grant Scheme is not guaranteed. The scheme is awarded on a competitive basis to eligible farmers and acceptance dependent on the quality of all applications. Target areas and key pollutants have been identified within each priority catchment and set out in a Funding Priority Statement. Over 6,200 farmers and land managers have received a grant during Phase 3.

Feedback from Catchment Sensitive Farming Officers indicates that many farmers initially engaged with the project because of the Capital Grant Scheme. The influence of the scheme therefore went well beyond the improvements it directly funded. Farmers' enthusiasm for the scheme, and a willingness to commit their own money, were reflected in the scheme being significantly oversubscribed with more than twice the number of applications received in 2013 than in previous years.
The grant scheme is delivered through a network of CSFOs as well as a number of local and national partnerships.

Work funded by this scheme over recent years is already providing cost savings for thousands of farmers, helping bring work to local businesses and enhancing local environments throughout England by improving water quality. Catchment Sensitive Farming is an excellent example of what can be achieved through partnership working.

Table of costs (including operational and IT costs)

F/Y	GIA	RDPE	Total
2011/12	£ 1,212,855	£ 10,342,695	£ 11,555,550
2012/13	£ 91,068	£ 10,533,828	£ 10,624,896
2013/14*	£ 593	£ 5,862,779	£ 5,863,372
Total	£ 1,304,516	£ 26,739,302	£ 28,043,818

* Up to end September 2013

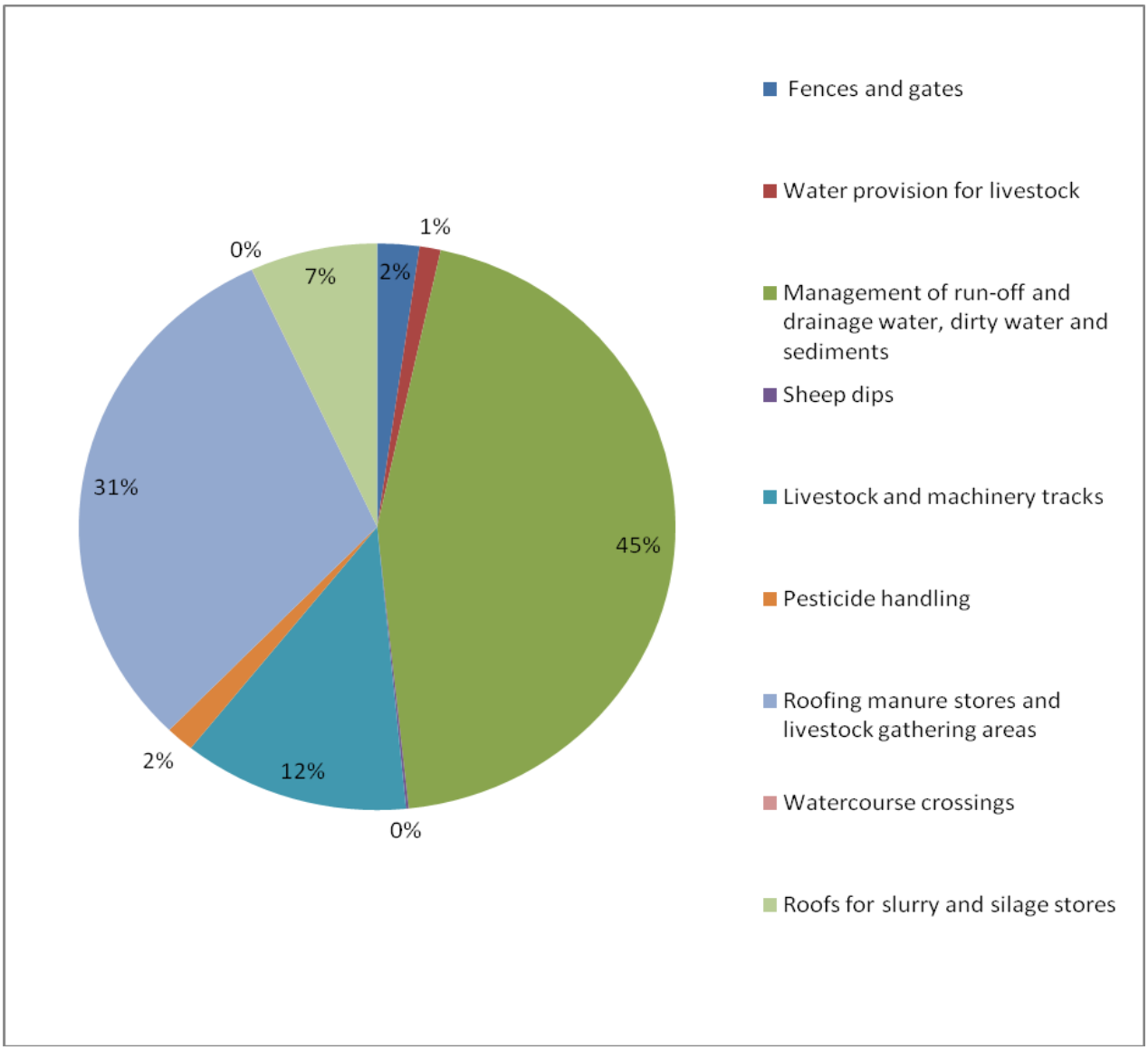
In addition to the grant scheme, the specialist training and advice offered by the CSFOs can save farmers money, leading to better business efficiency as well as bringing positive environmental outcomes. Feedback from agreement holders confirms that without the grants, many would not have been able to carry out works, as the investment would have been too great for the business. The completed work can also have additional benefits such as improved animal health and welfare.

The impact and value of a dedicated grant scheme should not be underestimated as it offers not only a positive impact on farmers and local businesses, but is also an effective engagement tool leading to positive news stories for CSF, Defra and other partners. *See Figure 1 for a summary of improvements receiving funding through the Capital Grant Scheme*.

Natural England's Customer Services team is essential to the smooth running of the application process. Grant scheme administrators deal efficiently with the problems ensuing from last minute applications, as nearly one third arrive in the last week of

the application window. This is exacerbated by many incomplete applications and, despite best efforts, this has resulted in agreement offers being made later than the published aim for the past two years. Overall, the grant scheme has been run and administered very efficiently, with the scheme administrative costs at around 3% of grant spend, thereby providing a low cost and very visible indicator for tackling diffuse water pollution and point source pollution from farms.

Figure 7. Summary of improvements receiving funding through the Capital Grant Scheme (by percentage of total grants in Phase 3)



FATI Catchments

To inform the development of future Catchment Sensitive Farming delivery, the CSF Project Management Group initiated a project to test alternative and/or innovative approaches to address Diffuse Water Pollution from Agriculture.

Three delivery models were identified for evaluation:

1. Catchment Sensitive Farming Officer (CSFO) led catchments
2. Partnership-led catchments
3. Contractor-led delivery in CSF priority catchments – The Farm Advice Training and Information framework (FATI) called 'FATI catchments'

CSFO and partnership-led delivery already form part of the existing CSF offer with CSFOs leading delivery in 65 priority catchments and partners leading delivery in an additional 12 catchments.

This project focussed on creating and managing a delivery model based solely on contractors with no CSFO input.

The existing CSF delivery model will come under a range of external pressures in the future. These include, but are not limited to:

- Increasing and changing demands - Water Framework Directive (WFD) milestones, second cycle river basin management planning and the Catchment Based Approach (CaBA) will all influence the size and nature of a future CSF programme.
- Changing funding streams - the balance of Grant in Aid and RDPE funding may change and new sources of external funding may become available such as PR14. The type of funding available may impact on how it can be deployed.
- Improved impact and value for money – the need to do more with less and ensure past lessons are brought to bear on the future delivery model.

The three delivery models identified have been independently evaluated against the following criteria

i. Efficacy
ii. Cost and resource requirements
iii. Scalability; can the approach be deployed effectively across a wide area?

An evaluation contract has been awarded, which is due to report in March 2014. This evaluation and lessons learnt will provide objective data to feed into the development of future delivery models.

Delivery model iii (above) involved the contracting out of all CSF activity within a catchment, including those activities usually undertaken by a Natural England employed CSFO. The Farm Advice Training and Information framework (FATI) was employed to procure the required contractor activity.

Following consultation with River Basin District Coordinators and CSFOs, a suite of new contract specifications was developed which broke down normal CSFO activity into its constituent parts, with contractual outputs being identified for each specification. The CSFO activities identified were:

1. Catchment coordination/first point of contact
2. Catchment steering groups
3. Providing data for the CSF Reporter
4. Delivery of the Capital Grant Scheme
5. Input into the CSF led meetings and project evaluation
6. Proactive engagement with target farmers
7. Catchment newsletters
8. Catchment review and catchment delivery planning

These activities cover approximately 75% of the CSFO role. They deliberately exclude the following work areas which it was felt would be inappropriate to ask contractors to carry out:

- Advocacy work with regional partners
- Input into River Basin District planning and wider WFD issues
- Facilitation of partnerships and grants with local partners
- Training (suppliers are responsible for training their own advisers)
- Input into NE/EA corporate planning and "business as usual"

Activities 1 to 8 above were used in conjunction with the existing standard range of CSF training activities available under FATI, to address the DWPA issues. All CSF activities between September 2012 and March 2014 within each catchment were delivered under a single mini contract to ensure continuity of adviser. All work was Grant in Aid funded.

The Environment Agency led targeting work to identify up to 8 new CSF priority catchments in which the FATI catchment approach could be tested. Following delays, 6 catchments were nominated.

Advance notice was given to potential FATI suppliers and webinars were held for prospective providers of the work.

FATI mini-tender documentation was developed by the CSF National Team for each catchment, in conjunction with the FATI supplier team. Tendering and bid evaluation was managed by the FATI management teams, with input into the technical evaluation from members of the CSF National Team.

Once established, all contract management and payments to suppliers was carried out by the FATI management teams in liaison with CSF National Team.

The outcome of the targeting and tendering process is shown below:

Catchment	River Basin District	Contractor
Alt/Crossens	North West	ADAS
Dane	North West	ADAS
Cound	Seven	Promar
Somerset Frome	South West	ADAS
Mimmshall Brook	South East	RDS UK
Mole	South East	No tenders received

Prior to delivery commencing, the Catchment Coordinators from the successful suppliers attended CSF induction training (1 day). The contract specification included requirements that Catchment Coordinators should be familiar with Catchment Sensitive Farming, the local area in which they would be working and DWPA.

Each catchment coordinator established a steering group to oversee contractor delivery, agree advice targeting and the Capital Grant Scheme Funding Priority Statement. The steering group also approved any changes to the delivery plan. Catchment reviews, including consultation meetings, were carried out in the Somerset Frome and Alt/Crossens. In the other areas, catchment reviews prepared previously were used to inform delivery and targeting.

Over the 19-month delivery period of the FATI Catchments, a total of 602 farm visits and 52 events have taken place within the 5 catchments. A total of 15 newsletters have been issued. A more detailed breakdown of activity is shown below.

	Cound	Mimmshall Brook	Dane	Alt & Crossens	Somerset Frome
Visits					
Proactive and CGS related visits	56	36	67	95	74
Technical Training visits	68	22	60	74	50
Total Visits	**124**	**58**	**127**	**169**	**124**
Events					
Steering Groups and Consultation Meetings	3	3	3	5	5

Technical Events	7	5	12	5	4
Total Events	**10**	**8**	**15**	**10**	**9**
Catchment Newsletters	**3**	**3**	**3**	**3**	**3**

Local partners have been essential in steering delivery in each catchment and promoting the project within the locality. In particular, within drinking water catchments, Water companies have played a key role in steering groups. Partners involved have included:

- Water companies (United Utilities, Seven Trent Water and Affinity Water)
- Local farmers
- Environment Agency
- CLA
- NFU
- Catchment Based Approach (CaBA)
- Rivers Trusts
- Local Wildlife Trusts and Friends of the River Frome
- Local authorities

Internally, the FATI management teams (Supplier and Contract) have been instrumental in the procurement and day to day management of the suppliers. There has been a close working relationship between the FATI teams and the CSF National Team.

One-off procurement of the FATI Catchments cost £20,200 in staff time. This figure includes the preparation of the new activity specifications for the CSFO type activities.

The total value for all five catchment contracts was £660,000 for the 19 month delivery period. An annualised delivery cost for the 5 catchments is estimated at £430,000. This figure includes all activities including technical training visits and events.

In addition to the contract costs above, there has been 2,459 hours of CSF and FATI team staff time consumed in the ongoing management of the contracts. This equates to £54,000 per year.

Provisional work has been done comparing the costs of the FATI catchment approach to that of Natural England employed CSFOs. The figures below exclude

delivery of technical training, as these are constant and unaffected by the delivery model.

Delivery Model	Cost per farmer inside CSF target area
CSFO led catchment	£178
FATI catchment	£424

The evaluation of the three CSF delivery models is not yet available. This will look at effectiveness as well cost. However the following high level lessons have been learnt from this project.

Positive: Speed of establishing CSF in a catchment using the FATI approach	Once contract specifications had been agreed it was relatively quick (6 weeks) to 'procure' the catchment coordinator and for delivery to commence within the catchment.
Negative: Integration and communication with the wider business	There has been varying levels of communication between FATI catchments and other neighbouring CSFO led catchments. In some instances, this has worked well, but in other catchments there has been very little contact. The use of contractors does not readily allow integration of CSF with the wider business, in particular with regulatory functions.
Positive: Strategically dynamic	The FATI approach allows a more dynamic approach to delivering CSF. The FATI approach offers the ability to deliver highly targeted, fixed term pieces of work with short lead-in times. Reallocating existing resource within CSF/Natural England relies on business planning processes and agreement with regional/area managers.
Negative: Tactically inflexible	Once contracts were in place they were relatively fixed. New activities could not be added to respond to emerging situations. As an example, it emerged one catchment had been inappropriately targeted, but CSF could not withdraw until the contract had come to an end. Amending the delivery plans (exchanging contracted activities for one another within the contract value) was possible, but administratively intensive.
Positive: Focus on delivery/outputs	The FATI catchment approach has ensured activities/outputs are delivered to a prescribed time-frame and to a specific set of requirements. If activities were not delivered then there was no cost to CSF. FATI is supported by a very robust contract management system and rigorous quality control.

Negative: Un-required, ill targeted advice	Notwithstanding the improved focus on delivery mentioned above, this has at times led to 'delivery for the sake of delivery'. There is evidence to suggest that contractors have carried out activity simply to deliver the required number of contract outputs and not where it is required to improve water quality.
Positive: Access to local advisers already embedded with the local farming community	The FATI catchment approach has proved particularly effective where the FATI supplier retained a local adviser as the Catchment Coordinator. In these situations there were already strong relationships in place on which CSF could build.
Negative: Poor delivery and lack of impartiality	In some instances early engagement was poor and key opportunities to promote ongoing CSF delivery was missed. At times, suppliers focused on delivering an event as a single standalone activity without seeing it as part of larger programme (i.e. using events to sell follow-up technical training visits). There is also some evidence that catchment coordinators have, at times, acted on behalf of the farmers and not the CSF project.

Communications & Advocacy

Raising awareness of Diffuse Water Pollution from Agriculture, and encouraging voluntary action is the principal communications objective for Catchment Sensitive Farming. Our primary audience is farmers and land managers in the 79 Priority Catchments in England.

During Phase 3, we have continued to build on the credibility and trust in the CSF brand which has developed since the project began back in 2006. As an evidence-led project, we also aim to use evidence-led communications which stimulate interest and lead to positive actions 'on the ground'. We aim to share best practice, knowledge and advice to demonstrate our expertise and experience.

Phase 3 Communications Objectives

- Increase the number of farmers/land managers engaging in CSF in Priority Catchments
- Increase the take-up of CSF advice in Priority Catchments
- Increase the number of farmers and land managers taking action to reduce DWPA in Priority Catchments

- Demonstrate and build on CSF's credibility as the largest 'pure' farm advice project in England
- Continue to produce evidence-based communications, particularly at a local level
- Share best practice, knowledge and advice to demonstrate our expertise and experience
- Use advocacy to influence partners and stakeholders
- Work in an integrated way with CSF project Partners (Defra and EA) to produce joint communications activities, where possible/appropriate
- Be consistent in our approach, everything we say and do must be mutually reinforcing

With increasing pressure on budgets and marketing restrictions in place, CSF has revised its communications activities to result in cost savings of over £50,000 in 2012/13 and have worked on a vastly reduced budget in 2013/14. We endeavour to work as part of the wider Defra-family, particularly with regards to attendance at key national agricultural shows. The CSF National Partnerships also allow us to make information on DWPA more widely available to farmers, partners and stakeholders.

Financial Year	Budget (GIA) £**
2011/12	66,550
2012/13	57,681
2013/14*	5,348
TOTAL	128,579

* Up to end September 2013
** Also includes the CSF equipment budget for staff PPE etc.

Since March 2013, our communications strategy has been to work towards:

- Closer alignment and integration with partner communications activities, in order to work in partnership and exploit further opportunities to convey CSF messages
- Developing 'no cost' communications channels and work toward 'digital by default'
- Developing a more web-based presence and a stronger social media platform

One of our main communications tools therefore, is the use of evidence-based case studies, which aim to illustrate the connectivity between farm practices and diffuse pollution, without apportioning blame and demonstrating how CSF advice and incentives can help. We have updated all our case studies in 2013/14 and have developed an online publications catalogue, to make them easily accessible by those with internet access.

Whilst moving to a more web-based presence, which allows us to communicate in a very cost effective way, we do recognise that not all our target audience have access to a computer or the internet. The Defra Farm Practices Survey, March 2013 suggests there 'is still a significant minority of farmers without access to a computer' – around 14%. CSFOs are the single most important factor in determining the level of engagement with farmers (57% of farmers prefer a visit to any other form of communication, *NE Land Management Customer Survey 2013*) and their role in raising awareness and changing behaviours cannot be underestimated.

- CSF's increased web presence has resulted in over 10,000 downloads of digitally available publications
- We have engaged with over 1000 customers at 5 key agricultural shows in 2013/14, in collaboration with our Defra-family partners

- We have received hundreds of positive mentions in national and regional press, as part of our ongoing media activity, and
- We are developing our '#CatchmentSensitiveFarming' Twitter presence, as part of Natural England's Twitter account which has over 60,000 followers.

Main Communication Tools

- CSFO Engagement
- Case Studies
- Media activity
- Website
- Twitter
- Publications Catalogue
- Key national Agricultural Shows with Defra-family partners
- Joint activities with project partners, for example Natural England's Land Management Update magazine
- Joint activities with National Partnerships, for example the launch of the Tried & Tested Feed Plan at Beef Expo 2013

The CSF Farmer Impact Survey, March 2013 shows that overall findings are positive, suggests CSF is performing well and is gradually changing attitudes. Awareness, familiarity and engagement with CSF continue to be good and are improving. The survey included samples of: (i) farmers from across the original CSF Priority Catchments (1-40), some of whom have engaged with the project, and (ii) farmers who have engaged with the CSF project (both within the current Priority Catchments and Catchment Partnerships). It is the seventh survey of its kind and took place between 10 October and 30 November 2012. This seventh survey has been undertaken to assess potential changes in awareness and attitudes resulting from the CSF Project.

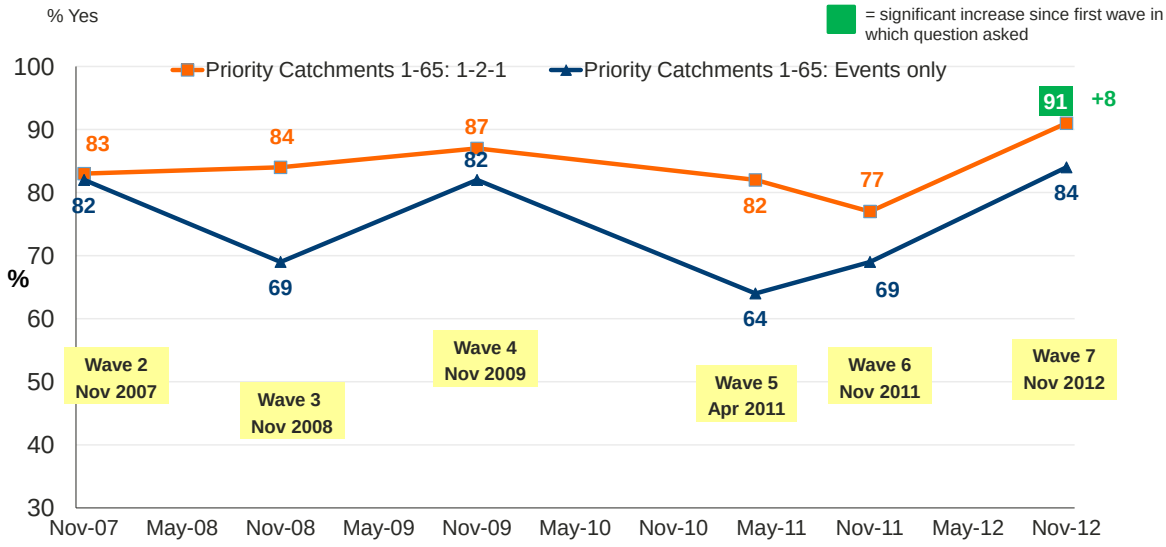
Ipsos MORI interviewed 829 farmers in total, comprising 400 farmers within Priority Catchments 1-40 and whose farms are larger than 10ha in size; 119 farmers in Catchment Partnership catchments who had received either one-to-one advice (78) or attended an event (41); 152 farmers from Priority Catchments 1-65 who had attended a CSF event; and 158 farmers from Priority Catchments 1-65 who had received one-to-one advice visits through CSF. The interviews were conducted via telephone, using Computer Assisted Telephone Interviewing (CATI).

The full results of the Farmer Impact Survey will be published as part of the accompanying CSF Phase 3 Evaluation Report, which should be read in conjunction with this report.

Fig 8

Awareness of CSF Project

Q25d: Have you heard of the England Catchment Sensitive Farming Delivery Initiative, now known as the Catchment Sensitive Farming Project?



Base: All respondents, waves 2-7.

Source: Ipsos MORI

Ipsos MORI
Social Research Institute

Working with Agricultural Colleges

The majority of CSF advice delivery to date has been given to the current farm manager or owner. CSF recognises that young farmers are the future of farming and that if we want to engage with those harder to reach audiences, we should start earlier on in their lives whilst they are still learning and forming their ideas and principles. The CSF Great Farm Challenge allowed us to do this, in collaboration with two of our key stakeholders; Severn Trent Water and the Environment Agency.

In an Environment Agency survey called 'Young in Agriculture', it was reported that environmental concerns do not feature highly among the young in agriculture. Environmental issues such as climate change, greenhouse gases and biodiversity are viewed by the majority of young farmers as the least concerning issues on a list that also included flooding, job security and law and order. This is a key point in understanding that young farmers do not think environmental issues are of considerable concern.

CSF decided to run the Great Farm Challenge in order to influence and engage young farmers in believing that environmental issues are of concern, and with some simple measures they can improve their understanding of, and willingness to act on, DWPA risks.

The Great Farm Challenge involves agricultural students in Higher Education (16-18 year olds) learning more about agricultural diffuse pollution and water quality issues, through a day of on-farm training. It also allows us the opportunity to help improve the student's knowledge and skills in determining soil type, erosion and pollution pathways. All of these skills will help them to understand how and why pollution happens and how they can reduce the risk.

We invited all of the colleges running Higher Education courses on agriculture in the Midlands to take part. Four, out of a possible seven, decided to engage in the project and on-farm locations were chosen with CSFO input and advice. The colleges that took part in the Great Farm Challenge were Walford and North Shropshire College (20 students), South Staffordshire College (30 students), Hartpury College (70 students) and Brooksby Melton College (35 students).

A training day was arranged for each college to take part in the competition. The day consisted of a morning's theory session, focussing on a case study with CSFOs and partners from EA and Severn Trent Water taking them through several scenarios, followed by a farm walk, where the farmer took an active role in explaining his practices on the farm and the students had an opportunity to ask questions which would help with their reports.

After the workshop and farm walk, students are given three weeks to write up a report on their findings and identify areas of improvement for the farmer in relation to DWPA risks.

The cost of the project is minimal and varies depending on who funds the work and who manages it: CSF, the Environment Agency or Severn Trent Water. This year the project has cost CSF £500 (with a £4,000 contribution from the EA). The major cost of the project relates to staff time in managing and running the competitions.

Feedback was received from all of the events directly from the students, in the form of a feedback sheet. The results from this showed that 100% of the students felt they had learned more about soil, pesticide, nutrient and manure management as a direct result from the events. 81% of the students rated the events as either 'Excellent' or 'Very Good'. 89% of the students rated the comparisons of good and bad practice activity used in the workshop as either 'Excellent' or 'Very Good'.

There has been considerable interest in the Great Farm Challenge project, with a number of potential colleges (through CSFO links) across the country interested in taking part. There has also been interest from other water companies who would like to develop a similar project in their own regions. CSF is currently trialling a CSF-only agricultural colleges' project in the south-east of England.

Staffing

The table below shows the number of delivery staff, their employment status and length of time in role over the four years of Phase 3.

	2010/11	**2011/12**	**2012/13**	**2013/14**
No of Priority Catchments	65 (plus 9 partnerships)	65 (plus 9 partnerships)	65 (plus 9 partnerships and 5 FATI catchments)	65 (plus 9 partnerships and 5 FATI catchments)
Staffing budget	£2,601,600 **NE** £1,163,500 **EA** *(includes EA delivery staff)*	£2,703,889 **NE** £1,038,887 **EA** *(includes EA delivery staff)*	£4,353,382 **NE** £735,893 **EA** *(includes c6 months of EA delivery staff)*	£4,257,127 **NE** £505,300 **EA**
Total Project FTE	**74.35**	**72.85**	**94.55**	**95.22**
RBCs				
Number / FTE	**9** (**8.75** FTE*)	**9** (**8.75** FTE)	**9** (**8.75** FTE)	**9** (**8.75** FTE)
Employment Status	**4** FTA **5** Permanent	**9** Permanent	**9** Permanent	**9** Permanent
Length of time in role	**0** (< 6months) **0** (6 months - 1 year) **6** (1-2 years) **3** (2 years +)	**0** (< 6months) **0** (6 months - 1 year) **2** (1-2 years) **7** (2 years +)	**2** (< 6months) **0** (6 months - 1 year) **0** (1-2 years) **7** (2 years +)	**0** (< 6months) **0** (6 months - 1 year) **2** (1-2 years) **7** (2 years +)
CSFOs				
Number / FTE	**47** (**46.2** FTE)	**43.5** (**42.5** FTE)	**61** (**59.6** FTE)	**64** (**61.65** FTE)
Employment Status	**21** FTA, **26** Permanent	**17.5** FTA **26** Permanent	**16** FTA **45** Permanent	**16** FTA **48** Permanent
Length of time in role	**23** (1-2 years) **24** (2 years +)	**9.5** (<6 months) **14** (1-2 years) **20** (2 years +)	**17.5** (<6 months) **9.5** (1-2 years) **34** (2 years +)	**10** (<6 months) **20** (1-2 years) **34** (2 years +)
CSF Support				
Number / FTE	**5** (**3.9** FTE)	**7** (**4.1**FTE)	**11** (**6.6** FTE)	**9** (**5.14** FTE)
Employment Status	**3** FTA/temp **2** Permanent	**7** Permanent	**10** Permanent **1** FTA	**9** Permanent
Length of time in role	**4** (6 months - 1 year) **0** (1-2 years) **1** (2 years +)	**4** (<1 yr.) **2** (1-2 years) **1** (2 years +)	**1**(<6 months) **3** (6 months - 1 year) **4** (1-2 years) **3** (2 years +)	**6** (1-2 years) **3** (2 years +)

CSF National Team NE				
Number / FTE	**12** (**11** FTE)	**12** (**11.7** FTE)	**14** (**13.6** FTE)	**14** (**13.68** FTE)
Employment Status	**2** Temp **10** Permanent	**2** Temp **10** Permanent	**2** Temp **12** Permanent	**1** FTA **1** STA **12** Permanent
Length of time in role	**3** (< 6months) **2** (6 months - 1 year) **6** (1-2 years) **1** (2 years +)	**3** (< 6months) **1** (6 months - 1 year) **2** (1-2 years) **6** (2 years +)	**0** (< 6months) **6** (6 months - 1 year) **2** (1-2 years) **6** (2 years +)	**2** (< 6months) **7** (1-2 years) **5** (2 years +)
CSF National Team EA				
Number / FTE	**5** (**4.5** FTE)	**6** (**5.8** FTE)	**6** (**6** FTE)	**6** (**6** FTE)
Employment Status	**3** Permanent**2** FTA	**4** Permanent**2** FTA	**5** Permanent **1** FTA	**6** Permanent
Length of time in role	**3** (6 months - 1 year) **2** (2 years +)	**4** (6 months - 1 year) **2** (2 years +)	**2** (6 months - 1 year) **2** (1-2 years) **2** (2 years +)	**1** (6 months - 1 year) **5** (2 years +)

*Full time equivalent

Roles

Role descriptions are available for all project roles; the key ones are described below. Delivery roles have remained consistent from Phase 1 of the project:

River Basin District Co-ordinator (RBC): Senior Adviser. Responsible for advocating CSF and liaising with the EA River Basin Panels to ensure CSF is effectively contributing to WFD priorities, overseeing delivery within the RBD including CSFOs, FATI contracts, Partnerships and increasingly leading for NE on a range of other DWPA related projects including the Catchment Based Approach and SSSI DWP Plans.

Catchment Sensitive Farming Officer (CSFO): Lead Adviser. Key delivery role responsible for overseeing and delivering farm advice within catchments. CSFOs are line managed within integrated local delivery teams and functionally managed by the River Basin Coordinator.

Catchment Sensitive Farming Support: Support Adviser. Supporting delivery in River Basin Districts e.g. producing farmer mailings, GIA procurement, CSF Reporter data entry and event organisation.

CSF National Team: a mix of Senior Advisers, Lead Advisers and Advisers. Responsible for National co-ordination and delivery of the Capital Grant Scheme, Partnerships, Collaborative Agreements, FATI Catchments, Training for CSF staff, internal and external Communications and project promotion, and national projects such as demonstration farms and agricultural colleges work. The EA National Team is responsible for the monitoring and evaluation programme, including enhanced water quality monitoring, the annual CSF telephone survey and the CSF Reporter. CSF budget also pays for a proportion of other roles in NE which contribute to CSF Delivery such as FATI Contracts staff (average 10% of total NE CSF staffing budget); FATI Supplier staff (average 5% of total NE CSF staffing budget), Customer Services staff managing the Capital Grant Scheme (average 10% of total NE CSF staffing budget), 2 FTE Local Land Management Team Leaders and 1 FTE GIS Specialist. A proportion of the total EA CSF staffing budget is also used to pay for other managerial roles within EA (25% of the 2013/14 EA staffing budget was spent on EA head office staff). These are not included in the table above.

Staff Turnover and Recruitment

Staff numbers have increased over Phase 3 to enhance capacity to deliver an increase in project budget in 2011/12 of £1.2m, plus an increase in the Capital Grant Scheme budget.

As the table above shows, staff turnover within NE and EA National Teams, RBCs and CSF Support has been relatively low in Phase 3, with relatively low levels of recruitment. 4 RBC Fixed Term Appointments (FTA) were made permanent 2010/11 and 2011/12 either due to going over 4 years, or EA transfer to NE.

CSFO staff turnover has, however, been high, due to large numbers on fixed or short term contracts, which has at times resulted in reduced delivery.

In 2010/11, approximately 45% of CSFOs were FTAs. These staff left NE on 31st March 2011, when NE had a structural refresh and existing staff were assigned to roles or redeployed. During this refresh, in order to fill vacancies, CSF were assigned/ gained through redeployment approx. 7 new CSFOs, 1 National Team Senior Adviser (finance), and 1 National Team Lead Adviser (communications) and 1 National Team Leader.

In 2013/14 approx. 27% of CSFOs were FTAs, a much reduced rate from 2010/11. We are currently awaiting confirmation of whether these FTAs will be extended to 31st March 2015 covering 14/15 delivery.

Transfer of Delivery Staff from the Environment Agency to Natural England

In 2010 it was decided by EA and NE that delivery of CSF should be held in a single organisation – NE. In 2011/12 a project was delivered to move 25 staff (CSFOs, RBCs

and CSF Support) to NE from EA using the TUPE process. At the end of the project 11 staff actually moved over, as the others found other jobs within EA. The TUPE project cost an additional £1M in Phase 3, costs of which were shared between EA and NE.

The key lessons learnt from this process were:

- The essential requirement for thorough project planning from the outset to include a cost benefit analysis; and before a final decision to proceed is made
- Good relationships, based on regular communication, with all concerned, is critical to success
- High level support, throughout the process, from both organisations involved is essential.

Staffing costs for Phase 3 are shown in the table above. Staffing is the highest cost for the programme accounting for about 70% of total project GIA budget.

The key lessons learnt in Phase 3 with regards to staffing are as follows:

- Longer-term FTA or permanent staff are needed for effective delivery. In the Anglian River Basin Districts, staff churn has been particularly high, with one catchment having 4 CSFOs during Phase 3, and long periods of vacant catchments. This has made it difficult for catchments in this RBD to set up effective steering groups, as there is a perception among farmers that the project is short term and volatile, and therefore cannot deliver real change. When fixed and short term contracts have been extended, confirmation of this has not been given until just a few months before the contract end dates, resulting in staff leaving before the end of their contracts due to uncertainty. It is sometimes difficult for CSFOs on fixed or short term contracts to build meaningful and lasting relationships with farmers.

- During Phase 3, CSFOs have been functionally managed by the RBCs and line managed by local Team Leaders. There has been local evidence that this arrangement has been difficult to manage, as RBCs do not have full control over CSFO targets, and some Team Leaders do not fully understand the CSFO role. This has made performance management difficult in some instances, and requires very close working and communication between RBCs and Team Leaders. However, this means that some RBCs need to communicate with up to eight Team Leaders where CSFOs are in different teams. CSFOs, RBCs and Team leaders have all confirmed that they would prefer single line and functional management in the future.

Training

Catchment Sensitive Farming is committed to the training and development of its staff and places great emphasis on ensuring that staff from right across the project can gain access to relevant training opportunities. The role of the CSFO is quite specialist in comparison to other similar roles within Natural England, and therefore the majority of training is aimed toward them.

The aims of CSF Training during Phase 3 were to:

- Bring new CSFOs to a common standard of knowledge in DWPA related issues and CSF delivery to allow them to carry out their role effectively.
- Train CSF Support and National team staff in their particular specialisms in order to allow them to best support CSF delivery.
- Refine existing CSFO and RBC knowledge in order to develop a deep corporate knowledge of the issues around DWPA and the technical agricultural solutions.

During phase 3 staff numbers have increased in-line with the project budgets; CSFO staff turnover has also been high, due to fixed or short term contracts and voluntary redundancies. As such there have been a lot of new starters who have required induction training as well as further training to bring them in line with the CSF training aims.

Training delivered during Phase 3 was based upon the training needs of CSFOs, as identified through Learning Needs Analysis (LNA), assessment of NE's Skills Framework, dialogue with staff members as a result of quarterly conversations and course feedback.

Each year a new training plan has been created to reflect the latest training needs, as well as building on previous year's courses.

	2011/12	2012/13	2013/14
Course	**Attendance**	**Attendance**	**Attendance**
FACTS	1	4	6
BASIS Soil & Water	4	11	20
Basis Foundation in Agronomy			10
RB209	11	17	10
Group Facilitation		12	15
CGS training day		20	18
Dairy Training			19
NVZ & SSAFO			20

Advance soils			15	
Prince 2	3	1		
Cold Calling	19	4		
On Farm first aid training	7	4		
Hydrology and hydroecology	10			
Mini tendering workshop	5			
Integrated Farm Management	26			
Pesticides	17	15		
Introduction to soils	9	24		
Resource Protection		25		
Agri Awareness		17		
Wildfowl and wetlands		25		
Precision farming workshop		4		
Conference attendances'	20	16	8	
CSF Conference	105	123	130	
EA e-learning	*16*			
Webinars			*150*	
Induction events	*97*	*42*		
Total	**350**	**364**	**421**	***1135***

During Phase 3 we have made every effort to work with partners, internal and external, with regards to delivering joint training opportunities. We were able to secure the use of the Environment Agency's e-learning courses for Natural England staff, gaining access to a wide range of useful training courses. Wider Natural England 4Me courses were also used in training plans during this phase and any spare training places were also made available to colleagues in NE and EA.

Joint CSF and Partnership training events have been delivered, including two events with the Wildfowl and Wetlands Trust looking at water management, as well as Fluvial Geomorphology with the Rivers Trust.

The introduction of CSF best practise webinars into the wider NE Land Management Webinar programme has ensured that, not only CSF staff, but the whole of the land management function have the opportunity to learn more about CSF.

We have also delivered technical training sessions at the annual CSF staff conference, this has included:

- Soils4Profit
- Evidence Training – EA
- Farmland and Forestry Improvement Scheme (FFIS)
- Constructed Wetlands – Wildfowl & Wetlands trust
- Demonstration test catchments
- Woodland for water – Forestry Commission

- Regulation – EA

Cost (£):

F/Y	GIA
2011/12	£67,113
2012/13	£93,931
2013/14	£86,200*
Total	**£247,244**

*Predicted spend at end of 2013/14 financial year

The majority of spend is related to individual courses above, however the training budget has also covered some other small local costs related to training.

Many internal training courses have been delivered at no cost, most notably Best Practice Webinars and e-Learning.

The result of the CSF Training programme has created a larger number of highly trained CSF staff members, in a wide range of different disciplines. Notably, a large proportion of CSFOs/RBCs (76%**) now have FACTs or Basis qualifications, which are widely recognised in the industry and improve their credibility as competent farm advisers.

Despite an 8% cut on GIA to training in 2013/14, the number of staff receiving training is at its highest. The yearly increase in staff attending training shows our commitment to achieving the Phase 3 training aims.

By the end of Phase 3 the CSF training team will have provided training to approx. **1135** attendees. On average each staff member, currently involved with CSF, will have received **£2060** worth of training.

Training has been well received and been delivered at the required level, as highlighted by feedback received after each event.

In 2013/14, 100% of training attendees stated that:

- The training they received met their learning objectives
- That they would recommend the course to colleagues.

**Based on number of attendees against current number of CSFOs/RBCs involved with CSF. Does not account for staff attending multiple courses.

Financial Statement

Overall

F/Y	GIA	RDPE	Total
2011/12	£ 7,178,941	£ 11,503,780	£ 18,682,721
2012/13	£ 7,762,800	£ 12,093,780	£ 19,856,580
2013/14	£ 6,996,736	£ 18,401,557	£ 25,398,293
Total	£ 21,938,477	£ 41,999,117	£ 63,937,594

Partnerships

F/Y	GIA
2011/12	£ 449,188
2012/13	£ 557,948
2013/14	£ 463,269
Total	£ 1,470,405

Advice
Delivery

F/Y	GIA	RDPE	Total
2011/12	£ 494,640	£ 1,161,085	£ 1,655,725
2012/13	£ 673,754	£ 1,559,953	£ 2,233,707
2013/14	£ 432,536	£ 1,572,365	£ 2,004,901
Total	£ 1,600,930	£ 4,293,403	£ 5,894,333

Evidence

F/Y	GIA
2011/12	£ 967,232
2012/13	£ 858,901
2013/14	£ 850,736
Total	£ 2,676,869

CGS (inc Ops costs & Catch)

F/Y	GIA	RDPE	Total
2011/12	£ 1,212,855	£ 10,342,695	£ 11,555,550
2012/13	£ 91,068	£ 10,533,828	£ 10,624,896
2013/14	£ 16,320	£ 16,829,192	£ 16,845,512
Total	£ 1,320,243	£ 37,705,715	£ 39,025,958

FATI Catchments

F/Y	GIA
2011/12	£ 154,599
2012/13	£ 340,242
2013/14	£ 413,956
Total	£ 908,797

Comms & Equipment

F/Y	GIA
2011/12	£ 65,550
2012/13	£ 57,681
2013/14	£ 15,153
Total	£ 138,384

Training

F/Y	GIA
2011/12	£ 67,113
2012/13	£ 93,931
2013/14	£ 72,094
Total	£ 233,138

Staffing

F/Y	GIA
2011/12	£ 3,767,764
2012/13	£ 5,089,275
2013/14	£ 4,732,672
Total	£ 13,589,711

Case studies

Catchment Sensitive Farming uses a wide range of case studies in order to articulate the practicalities of implementing CSF advice and measures to our customers, particularly at a local level. They also help add narrative to our evidence base. We have included just a small sample, which demonstrates the commitment of farmers and businesses, the use of innovative, practical solutions and social responsibility.

Being socially responsible
CSF intervention significantly improves flood prevention in North Yorkshire

Sediment from agriculture is a significant problem in the Yorkshire Derwent catchment (and elsewhere). One particular farm located above Kirkbymoorside was having difficulties with run-off during storm events, which had washed away hedge banks in several fields and allowed run- off water and sediment to aggregate before descending into Kirkbymoorside and adding to flood waters in Manor Vale. This was a major concern to local people and for North Yorkshire County Council and Ryedale District Council. A CSF Capital Grant award was used to construct a series of sediment ponds to retain run off in field; with cultivation practices reviewed across 650 ha of arable land.

This combination of measures has succeeded in reducing the risk of run-off and sediment erosion and enhanced the resilience of the farm infrastructure to cope with extreme weather events.

Simon Dunn, Farm Manager commented

"*Catchment Sensitive Farming turned a major problem into an overnight success for Holt Farms. Not only did the CSF farm visit highlight what was actually happening as regards rainwater run-off but brought to our attention how sediment traps and ponds could work for us. Combine this with farming certain fields without tramlines, drilling across hillsides and not rolling led Holt Farms to come through 2012/13 with no run off issues at all*"

Phil Long, Head of Environment Services for Ryedale District Council commented:

"Manor Vale suffered two localised flooding events, badly affecting a handful of houses in the lower part of the valley. The involvement of David Rees the Catchment Sensitive Farming Officer for Natural England was of immense benefit, working sensitively with the local farmer, together they put in place flood mitigation measures which to date have successfully prevented further incidents despite extreme rainfall and major flooding which affected Ryedale over the winter period."

Innovation to demonstrating commitment to farmers and the importance of evidence in Norfolk
Beware mud on road!

Farmers at a Norfolk CSF steering group felt strongly that they weren't the only ones to blame for sediment getting into watercourses.

So, to avoid unfairly blaming agriculture for all the sediment inputs, the North Anglia team used funding from the Water Framework Directive to investigate another likely major source: namely, roadways. Scientific consultants were commissioned to undertake a survey throughout the Wensum and North Norfolk CSF catchments.

All classified road crossings in the catchments (226 in total) were visited in autumn 2012 shortly after heavy rainfall onto saturated ground. The survey classified the level of visible inputs at each point, and identified that just 6% of road crossings were considered to be at severe risk to local water quality from sediment entering the rivers, showing that much of the problem is focussed in relatively few places. The sediment could originate from highways, agriculture or other sources and has not been quantified by this research.

The work was undertaken with the County Highways department and this new evidence will help to direct limited funds to make improvements where they can achieve the greatest benefits for water quality and the community.

Innovation and influence for clean drinking water: spring cropping trial in the Upper Cherwell catchment

Pesticides propyzamide and carbetamide regularly contaminate the River Cherwell in winter. The soil is a heavy clay, all under-drained with some fairly steep slopes, so it is inevitable that winter herbicide applications end up in the river, exceeding the drinking water standard.

The only way to stop these chemicals getting in to the local surface waters is to either not apply them or not to grow winter crops.

We wanted to show farmers that if the chemicals keep turning up in the water they will be lost from their armoury, and with herbicide-resistant black grass increasing too, this was an opportunity to trial some alternative spring crops.

Five farmers agreed to trial crops of spring rape, beans, linseed, oats and wheat, which were planted in the spring (delayed by the poor weather) with CSF funding the difference between the typical yield of a winter rape crop compared to a spring rape.

The feedback from the trial sites has been very positive. Farmers in the Cherwell recognise that, due to the topography, soil type and under drainage of the farmland in this catchment, whatever goes on the soil surface can quickly end up in the local surface waters so both attitudes and farm practices need to change.

All the farmers involved in the trial have planned some spring cropping, with one farmer delaying all his drilling until the spring. This is an excellent start to a much needed behavioural change, which needs to be rolled out across the whole catchment to prevent the loss of some key herbicides in the agricultural tool-kit, as well as providing clean, pest free water to the local area.

Glossary

AHDB - Agriculture and Horticulture Development Board

CFE - Campaign for the Farmed Environment

CGS - Capital Grant Scheme

CaBA - Catchment Based Approach

CCM - Catchment Change Matrix

CSFO - Catchment Sensitive Farming Officer

CSFRD - CSF Reporter Database

CSG - Catchment Steering Groups

DWPA - Diffuse Water Pollution from Agriculture

EWQMP - Enhanced Water Quality Monitoring Programme

FATI - Farm Advice Training and Information

FTA - Fixed Term Appointment

GIA - Grant in Aid

KPI - Key Performance Indicators

PMG – Project Management Group

PR14 – Price Review 2014 (Ofwat)

RBC - River Basin District Coordinator

RDPE - Rural Development Programme England

RNRP – River Nene Regional Park

SSSI - Sites of Special Scientific Interest

TUPE – Transfer of Undertakings (Protection of Employment)

WFD - Water Framework Directive

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River Wye at Symonds Yat
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www.gov.uk/catchment-sensitive-farming-reduce-agricultural-water-pollution

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