

CASE STUDY

"WILD PROJECT" (UNITED KINGDOM)

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1 Introduction: What is the case study about?

1.1 Brief description of spatial scale of the case study, geographical setting and context

The WILD project covers about 26,000 ha the higher and central parts of the Upper Thames catchment that falls within the Thames river basin in Central and Southern of England. The catchment includes stretches of the River Thames extending from its source South East of Cirencester at Kemble to Lechlade where watercourses from the plateau of the Cotswolds join the clay lowlands around Swindon.

Figure 1: Location of WILD project area



The area contains a wide variety of habitats and landscapes and provides high quality game and coarse angling in both rivers and still waters. Some watercourses are stocked by their owners and angling associations, to supplement wild stock levels. The geology of the Upper Thames catchment is dominated by limestone that provides significant groundwater resources and the aquifers within the catchment have been classified into the Water Framework Directive groundwater bodies. Most of the area is rural and dominated by farming (72%), with woodland under 10%. Arable land use makes up 43% of the catchment, 29% is grassland and a further 15 % is urban including Swindon, Cirencester and smaller market towns. Agricultural impacts on the catchment in a number of ways, including pollution, run off, discharges and eutrophication. The whole Upper Thames catchment has been designated a Nitrate Vulnerable Zone since 2002. Similarly there is an impact from industry and new and existing developments such as discharges, pollution, run off and eutrophication.

There are three main interconnected issues within the WILD initiative: the water environment, the biodiversity and landscape and the local Community. The water environment covers issues such as water quality, water flow, biodiversity (including invasive species), flood protection and amenity and is dominated by the implementation of the Water Framework Directive (WFD), issues of drinking water quality and localised flooding. WILD involves a partnership between the Environment Agency, Farming and Wildlife Advisory Group (FWAG), Gloucestershire Rural community Council (GRCC), Cotswolds Water Park Trust (CWPT) and



CCRI, with a wider partnership involving Thames Water, local councillors and agricultural advisors and key farmers and landowners. The central objective of WILD is the improvement of the water environment through an integrated approach that meets the needs of WFD (good ecological status of all water courses) and also provides a range of other multiple benefits (economic and social as well as environmental).

1.2 ESBO focus, potential benefits and synergies

WILD is centred on meeting the objectives of WFD, which aims to protect and improve the quality of the water in Europe: with minimum standards for water quality and the ecological status of water courses. As a result WFD provides a statutory framework and timetable for making improvements to the whole water environment and introduces new stricter standards for water quality and ecology. However, the Directive also contains a specific objective that encourages the active involvement of stakeholders and communities in planning and action, a trend that is present in planning more generally (Healey, 1998). In this sense there is the potential for institutional change in the way that catchments are governed and understood by a wider range of stakeholders than has hitherto been the case.

The significant water issues in the Upper Thames are point and diffusion source pollution (agriculture, industry, urban development and road infrastructure) physical modifications, invasive non-native species and water flow. The geology of the catchment is important as the clay soils increase run off while the limestone ones impact on ground water. So there are many different routes for water in the catchment (groundwater, spring, seasonal watercourses etc.). Also the Cotswold Water Park, and the Sites of Special Scientific Interest (SSSIs) within it, are susceptible to a lowering in water quality.

The government initiative Catchment Sensitive Farming (CSF) has been present in the Upper Thames since 2006, expanding its area in 2012, in order to work with farmers to encourage voluntary action to reduce diffuse pollution through advice, action and awareness. In March 2011 Defra, the government department with responsibility for the environment, launched CaBA. CaBA is an integrated catchment management initiative that Defra define as being able to offer a 'more locally focused decision making and action' framework to support 'improvements to the water environment and support river basin management planning as part of WFD activities (Defra 2013).

The WILD project area is set within the Cotswolds and the Upper Thames Clay Vales Natural Character Areas (Natural England 2015). The National Character Areas (NCA) have been developed in the UK so highlight areas that share similar landscape characteristics, and which follow natural lines in the landscape rather than administrative boundaries, making them a good decision-making framework for the natural environment. The Upper Thames Clay Vales Natural Character Area is a broad belt of open, gently undulating lowland farmland on predominantly Jurassic and Cretaceous clays. There is little woodland cover (3%). The Cotswolds form the best-known section of the predominantly oolitic Jurassic Limestone belt characterised here by a high, open wold with rounded hills cut by a series of often wooded valleys. Smaller settlements in the valley bottoms and on the gentler valley sides at springlines. Settlements are linked by a complex network of roads and public rights of way. The area supports mainly arable farming with some pasture, producing a field pattern of large, regular fields with few hedgerows or trees.



The whole area is internationally important lowland meadows and limestone grassland require enhanced management alongside improved care of adjacent land, and its wetland habitats, and also wet grassland, require appropriate hydrological regimes to be secured and an ecological network that is resilient to climate change. These areas also offer opportunities to manage floodwaters and improve water quality. The Cotswold Water Park SSSI was assessed as unfavourable declining, as a result of pollution from agriculture, urban run-off and discharges, eutrophication and shading from trees. Some river valley meadow and pasture are regionally important for wading birds such as curlew and lapwing, including breeding populations and large wintering numbers. Limestone grasslands are important for herb and species-rich swards and populations of butterflies and farmland birds. As a result the landscape offers a wide range of ecosystem services to society: provisioning services (food provision, water availability and genetic diversity), regulating services (climate, soil erosion and water quality/flow regulation) and cultural services (history, recreation, biodiversity and geo-diversity).

Project Officers working on WILD are active in engaging with local communities, farmers and landowners to encourage them to get directly involved in understanding local water courses and their management. The project area covered 19 parish councils and over 22,000 ha of farmland to identify small but collectively important issues impacting on the water environment including some that impact directly on the local sewage systems that impacted on local communities during times of flooding.

Four different groups were asked which ESBO the WILD project had focused on and were able to choose 3 from the full list. The results are shown below.

Table 1: ESBOs by survey

ESBO	Parish/ Community	Local Authority	Partner	Farmer	total
Water quality	6	3	3	6	18
Water availability				2	2
Flood protection	7	2	4	6	19
Soil functionality				2	2
Soil protection				5	5
Species and habitats			2	5	7
Pollination			1	1	2
Biological pest and disease control				1	1
Landscape character & cultural heritage		1	3	1	5
Outdoor recreation				1	1
Educational activities		1	1		2
Health & social inclusion		1			1
Rural vitality	3	4	1	2	10

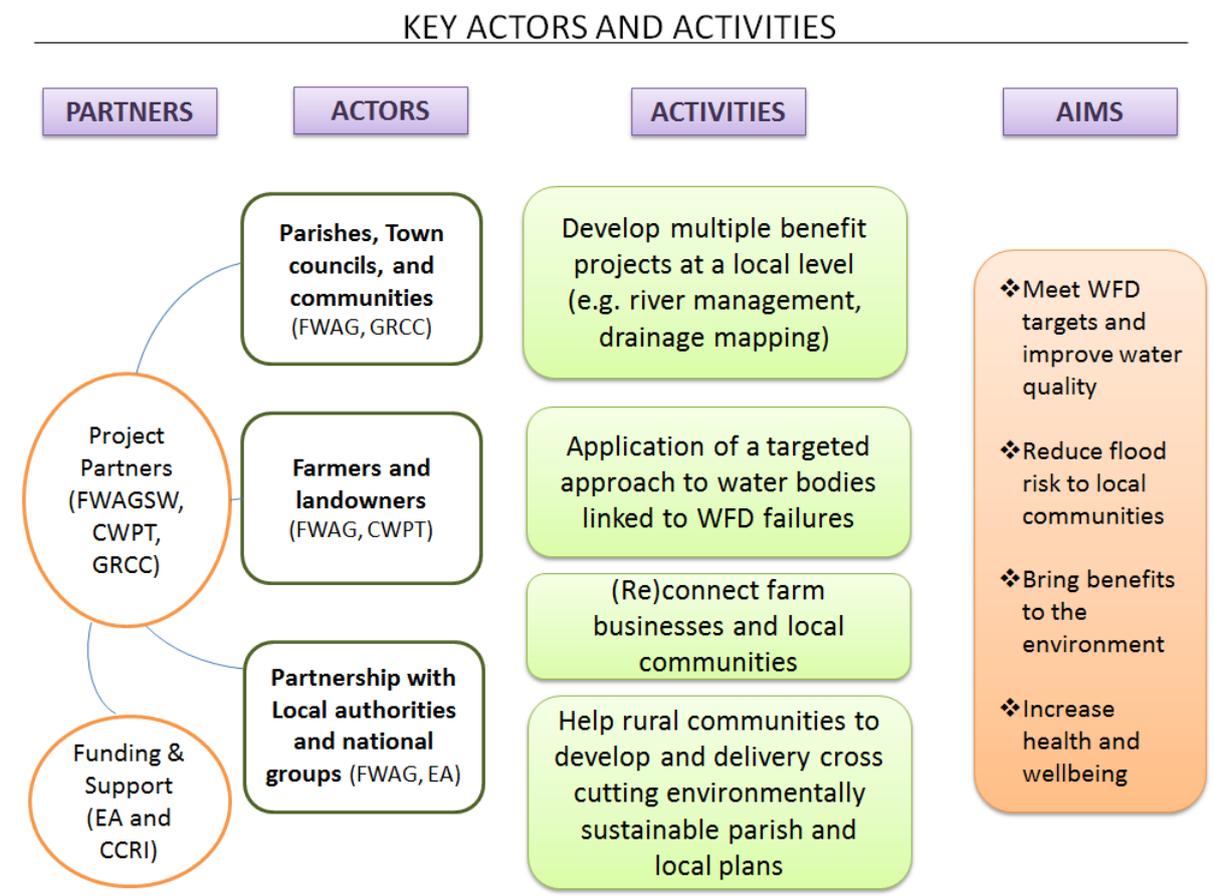


The table shows a wide range of ESBOs as selected by the four different surveys. The farmers in particular were quite diverse in their responses, highlighting the importance of two soil ESBOs, as well as water quality and flood protection that reflected the response in the other three surveys. The parish and local authority responses were likely to see rural vitality as a key ESBO for WILD. It is perhaps no surprise to see the narrower response from the local authorities (who have responsibility for flood protection) and the parish and town councils who are both likely to be keen on issues of rural vitality. The breadth of the response from the farmers suggests that they believe a range of factors underpin the challenges to meet WFD objectives, as well as the range of issues covered by the WILD project.

1.3 Key actors and activities

The WILD Project has three main delivery partners (FWAGSW, GRCC and the Cotswold Water Park Trust), one key funding partner (the Environment Agency). Each partner takes responsibility for different aspects of the project but no partner works on their own. This is shown in Figure 1.

Figure 1: Diagram of key actors and WILD project activities



GRCC and FWAGSW have worked in combination with local communities to enable them take steps to mitigate against flooding whilst at the same time improving water quality, bringing benefits to the environment and increasing the health and the wellbeing of the diverse range of volunteers. All key partners in WILD work with existing administrative arrangements



through parish, district, county and brings all the opportunity to develop projects of multiple benefit together at a local level.

Through a series of meetings the WILD project highlighted a clear need for more joined up thinking at the local level is to reduce overlap, duplication and single issue delivery by different institutions within the catchment. This outcome was a consequence of local members of the Upper Thames Catchment Partnership (UTCP) feeling that there were ‘multiple voices’ from the statutory agencies (Environment Agency, Natural England) and other national groups (Thames Water), sending mixed messages on how to tackle issues such as ditch clearance and improving habitats. As a result of this WILD partner works closely with the CSF initiative as the two groups involved the same membership. Critical to this is the presence of a specialist facilitator, provided by FWAGSW who is the lead partner in the WILD project. This has enabled the application of a similar process to each water body linked to WFD failures. Through the catchment and local meetings there is a process by which farm businesses and communities can reconnect and engage with national organisations like the Natural England (NE) and the Highways Agency regarding common issues. Central to the involvement of local communities is the involvement of the Gloucestershire Rural Community Council (GRCC) who help rural communities in developing and delivering cross cutting environmentally sustainable parish and local plans. In this sense the project connects up the landscape through contact with local authorities, those with statutory responsibilities and farmers and communities across the catchment.

1.4 Main mechanism(s)

The key mechanisms within WILD have been:

Engagement:

- Farm Visits – a total of 298 farm visits over 3 years covering 118 farms/estates with advice provided for 22,692 hectares of land impacting on and within the project area. This represents nearly all eligible agricultural land within the project area.
- Appointment of 20 Farmer Guardians covering over 10,000ha to act as key contacts in the discussions between farmers and agencies like the Environment Agency but also Natural England and Thames Water.
- All communities now engaged in integrated water management as part of Parish Planning - 16 parishes and 3 towns engaged in main WILD Project and in receipt of Water Plan. Three are now linking to Neighbourhood Planning and work.
- Volunteer hours committed (21,600 hrs average 2880 days over 3 years @£75/ day = £216,000), not including associated health benefits.
- Over 15 Events held for farmers and Parish Councils

Facilitation:

- WILD acted as an intermediary or honest broker in the development of a Payment for Ecosystem Services (PES) framework with Thames Water and approximately 500 farmers in developing a sustainable pesticide management approach on different sub-catchment in the Upper Thames.



- Use of new agri-environment scheme (Countryside Stewardship) under the Facilitation Fund covering 3,000 ha and including woodland management (30ha) and wetland management, fencing etc.
- Nearly 60 km of potential river enhancements identified and shared with partners and a total of 300km ditches surveyed.
- Working with communities over 1500 issues and opportunities concerning water flow that impact on the water environment have been mapped and digitised.

Environmental enhancement:

- 30 km of ditches sympathetically managed
- Shade reduction & tree pollarding works conducted on 8555m
- Large Woody Debris deflectors and fagots installed in 5,580m
- New and improved fencing installed on 2455m
- Five livestock drinking bays installed with modified

Guidance:

- Preparation and circulation of The Community Guide to the Water Environment circulated nationally in collaboration with community NGO and case study on Integrated Planning tool.
- Ditch Management Guidelines produced and circulated amongst all members of the Upper Thames Catchment Partnership

1.5 Key regulatory mechanism(s) and governance arrangements

Water Framework Directive: The Upper Thames Catchment Management Plan feeds directly into the Thames River Basin Management Plan (RBMP). As outlined the CaBA approach is crucial to WILD with a focus on farm advisers and some capital funding as this is a priority catchments. There are also additional resources through the Nitrates Directive and Nitrogen Vulnerable Zones. While the EA retains powers to set/oversee controls on pesticide and fertiliser usage / practices these have been reduced in WILD as the emphasis is on consensus and engagement rather than regulation and inspections. Focus is on increasing agri-environment scheme uptake and accessing limited capital grants through this source.

In this sense there is a clear link between WFD and the Rural Development Programme, England which includes the Countryside Stewardship scheme (since 2015). Like its predecessors it is a menu-based competitive scheme for all England, but with a more targeted approach. It is anticipated that CS will cover 35-40% of the total eligible area in England by 2020, compared to 70% in 2015 achieved by the predecessor scheme Environmental Stewardship. Within the WILD project area the Catchment Sensitive Farming initiative is active and this would influence the uptake of water related agreements under CS.

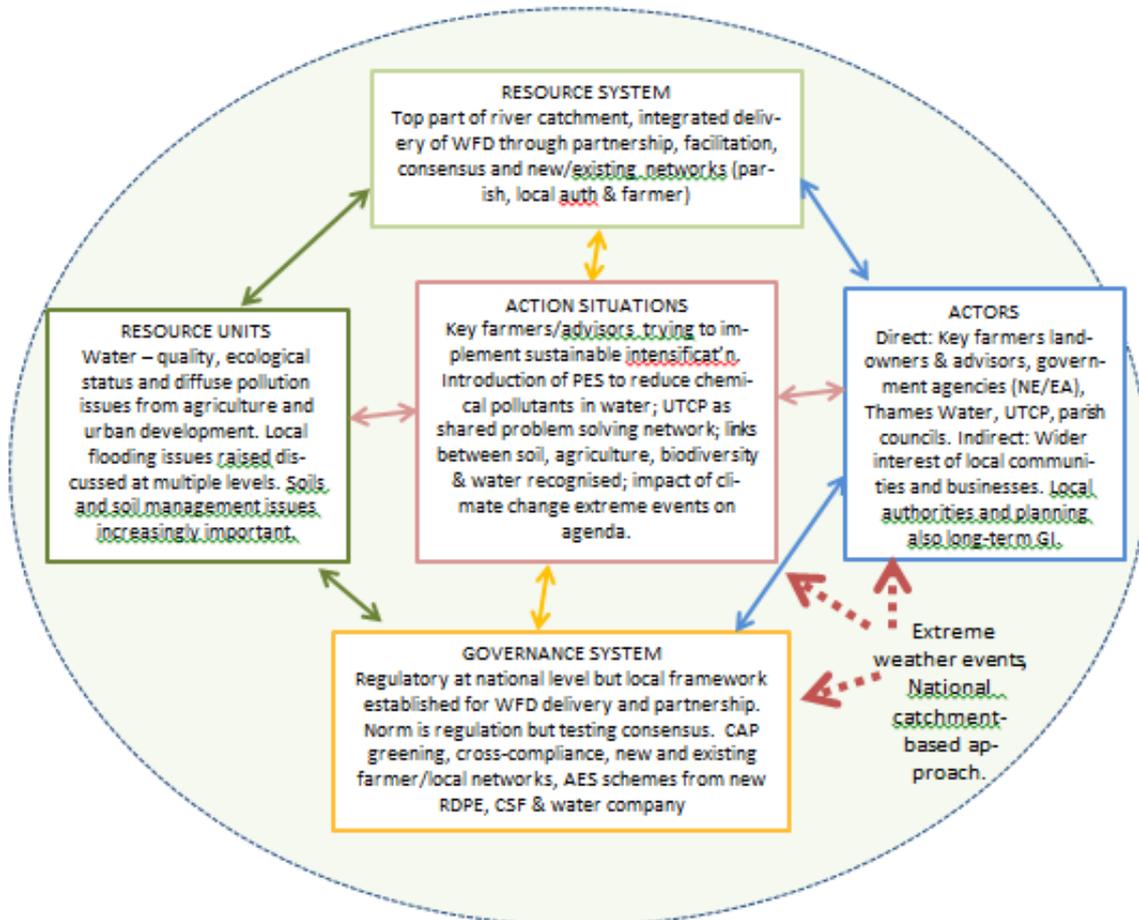
CAP Pillar 1 area payments: cross-compliance and ‘greening’ factors through Ecological Focus Areas (permanent pasture and crop diversity obligations) where several events have been held for farmers to maximise the environmental aspects; the increased awareness in issues of



cross-compliance has been key on issues such as poaching and soil management plans as well as basic environmental maintenance. In a sense WILD is a further development on the sector-led 'Campaign for the Farmed Environment' in terms of promoting environmental practice via advice and information, to avoid new controls.

2 Definition of the social-ecological system (SES) studied

2.1 Figure of the SES, using the SES Framework



2.2 Description of other important variables chosen

Water quality is a central ESBO to WILD and this focused mainly on WFD, which underpins WILD but is also supported by CSF activities. These are a mixture of technical group events and 1:1 visits by CSF officers working in conjunction with WILD. CSF link into the River Basin District Liaison Panels through the Environment Agency RDB Agriculture Leads and have Natural England representation. The key issues involve nitrate, metaldehyde and other pesticides, including propyzamide, carbetamide. The surface waters issues involve sediment and phosphate from both agriculture and development.

Flood protection is key ESBO, from all perspectives but with slightly different emphasis. Parish and community concerns were for the flooding of property and businesses and while farmers



noted this they also highlighted the increase in developed land and the impact this has on the flooding of farm land.

Partners and farmers felt species and habitats were core to WILD but not local authorities and parish/communities. Parish/communities and local authorities were much more likely to see rural vitality as being a key aim of WILD.

Farmers were keen to see WILD as a project that highlighted soil protection, and to some extent, soil functionality. This is increasing in importance within the area and the source of many farmer-to-farmer discussions. Events showing good practice are popular and there are some good examples locally involving organic and non-organic farms.

2.3 Discussion of the SES

The main outputs have been list in 1.4. The key outcome and impact is in the creation of a stronger link amongst a range of stakeholder on the connection are between land and water. From an agricultural perspective, the motivation for farmers to be involved is to learn more in a less threatening environment. For those small landowners outside the regulatory framework there is the opportunity for essential work to be undertaken. For those within the CAP framework they can learn more about the funded opportunities and determine a route through the complex avenues of funded activities and cross compliance.

The key governance framework in WILD is the reduced inspections and regulatory actions taken by the Environment Agency. Over the 3 years 2 letters warning of inspections have been stopped and instead the engagement and behaviour change approach has been taken. There is some evidence of behaviour change and increased awareness, around margins and soil protection. The farmer engagement is strong but confusion around the new AES remains and the amount of communication associated directly and indirectly with WILD.

The community angle is strong and associated farmland with communities, a connection that has been lost over the past 30-40 years. Parish councils traditionally concentrate on issues that are close to the built up area and linear access routes. In WILD that have identified issues concerning the movement of water and then discussed this with farmers and landowners, or national agency like the EA, NE, local authority or Highways Agency.

The involvement of Thames Water has led to the introduction of a Payment for Ecosystem Services (PES) initiative as a way of engaging directly with farmers regarding concerns of water quality and how to reduce levels of particular chemicals. The PES operates in different water bodies and uses different approach in each. Most use the approach of subsidising farmers to use an alternative product that does not impact on water quality. In other areas effort is used to increase advice and support. In one water body there is an outcome-based agreement where the farmers are paid for water of sufficient quality at the end of the year, but payments are reduced for breaches of agreed standards.

The final connection is around soil, better soil management is seen as impacting on a range of ESBOs, notably water quality, water availability, flood protection, pollination, species and habitats as well as landscape character. Linked to this there is considerable interest in grass seed mixtures benefiting soil organic matter and soil functionality. There is interest from a renewable energy group who wish to access extensive sources of grass to generate gas through a biomass plant.



3 Status of the SES and potentials

3.1 The status of the ESBOs and SES

Figure 2 in section 7 shows the current condition of the catchment according to WFD, most of the catchment is moderate with only a few areas either good or poor. For the EA this is an ideal catchment to prioritise as there are identifiable actions that can be taken to meet WFD objectives. Large issues like sewage treatment works are being tackled in the longer term, notably around Swindon. Of the seven groundwater bodies, six are classed as being Poor Chemical Status (with failures relating to nitrates and ammonia). These six groundwater bodies are on the oolitic limestone that flows into the WILD project area, again confirming that the project needs to expand in future years in order to meet all original objectives.

The main WFD failures seem to be point source and diffuse pollution according to EA data but quite a few are still unknown (see figures 3 and 4 in section 7). Monitoring activity is being increased and it is accepted that in many areas the full benefits of WILD will not be known for some time.

There is some concern that larger issues, like the discharge from sewage treatment works and urban development, is not being tackled and that farmers are an easier target. Also the activities tend to benefit the land owner as the capital value of the land is increased due to the fencing and land management but with no real benefit to the tenant.

3.2 Relationships between farming and forestry and the case study

These quotes from the parish survey highlight the value of connected activities between different stakeholders:

We linked up with the local farmers in a way which was constructive AND effective. We then helped clearing the ditches which had not been cleared for many years.

We are hoping the Town Council will develop a project for clearing ditches, unblocking culverts etc. The co-operation with Thames Water is particularly valuable to us as they are working out a drainage strategy for our community.

The local authorities took more of an overview perspective in their responses, characterised by this one:

To enable communities to have a voice regarding water quality issues/concerns in their parish/town and to improve understanding of who is responsible for what and how they can effectively engage with landowners, stakeholders and statutory bodies.

Bringing stakeholder/stat partners together with communities and landowners in a positive manner - solutions based approach. Mapping work by walking the land has saved time and money for Highways etc. to locate issues at specific locations for them to then investigate.

It is worth noting the mention of solution-based approach and efficient use of financial resources in the second quote. Once realised this is a key motivational factor, however in other responses it is noted that collaborative approaches take time to appear.

As an example of the interaction this local councillor offered this example:



As a local councillor I am primarily interested in reducing the flood risk. In the Churn basin to the south of Cirencester, the WILD team have been instrumental in getting landowners to clean out their ditches and water course and thereby have substantially reduced the risk from flooding, whilst at the same time improving water flows and thereby the quality of the water.

The partners recognised the difference that WILD has played when compared to the conventional approach of regulation and compliance inspections.

It has the feel of a "hearts and minds" campaign to involve local communities. Infinitely preferably to legislation.

It has created a positive response from farmers with them willing to get involved with the project and make changes on the farm, rather than a regulatory approach which tends to make people keep quiet and worry that they may be in breach.

3.3 Key motivational, institutional and socio-economic factors

The impact of poorly managed roads and associated ditch systems in exacerbating localised flooding and sewer surcharging are not underestimated in WILD. This is a recognition that small isolated instances, even if only every few years, impact on sustainable growth. Where infrastructure is inadequate water may flow down roads into communities and businesses causing sewage system ingress, pot holes and health and safety issues. Effective delivery is dependent on those with key responsibilities, knowing what these are and how to execute them. The information on riparian responsibilities has been central to the delivery of WILD project with respect to ditch ownership and maintenance responsibilities.

The range of approaches used by Thames Water in its PES developments shows the range of options when working with farmers and landowners on different water. The effectiveness of different arrangements and economic mechanisms implemented need to be evaluated but seem to be working well. These are understood to include:

- Product substitution (replacing Metaldehyde with Ferric Phosphate):
- PES payment for clean catchments
- Funding CSF officer for advice and training.

3.4 Levels of provision, trends and determinants

WILD is replicating the shift from a sectoral based approach covering flooding, drinking water, abstraction and irrigation quality towards one that is taking 'an integrated approach that covers many disciplines' such as spatial planning, ecology, hydrology and water management (Rijke et al., 2012a, p.369). Increased integration around the governance of water resources has coincided with a heightened awareness of the various goods and services that ecosystems provide society (Fish 2011). Key elements include the provision of clean water and the regulation of water flow and these were identified in the MEA (2005) and the UK by the National Ecosystem Assessment (NEA) (NEA 2012 and 2014). The UK NEA also highlighted the need for a systems approach, which has in turn influenced the development of the catchment-based Approach (CaBA) (Defra 2012). Both are frameworks that reveal the shift towards a



territorial or catchment-based approach, which seeks to recognise the links between the ecosystems and society (MEA, 2005).

Blackstock et al (2010) sort to identify good practice in collaborative catchment management and concluded that relationships and procedural aspects were key. Bissett et al. (2009), go on to identify three overarching principles for good practice in catchment management:

- Integration – where common issues, objectives, types of information or stakeholders in a catchment are identified and involved so multiple goals can be achieved.
- Collaboration – where different stakeholders work together to agree actions and achieve goals.
- Adaptation – where the planning process can anticipate, accommodate and respond to change.

This provides a good context in which to assess the impact of the WILD project.

3.5 Relevant governance arrangements and institutional frameworks

The willingness to adjust traditional governance arrangements has demonstrated the value of facilitation and integrated advice. As a result there is increased awareness of the role and remit of all the organisations (national, NGO, local) involved in managing the water environment. The evidence from the mid-point evaluation of changes in behaviour change amongst the farming community towards WFD and related objectives has been maintained.

The invitations to communities to be proactive, working in a coordinated way with statutory bodies would be considered a good example of joint problem solving. As a result there is increased awareness in communities of the roles and responsibilities of riparian owners. This has resulted in local issues, often linked to poor land management being resolved through landowners, agencies and local communities working together, supportively towards an agreed outcome, namely WFD.

The WILD approach would suggest that bringing multiple stakeholders together and developing a greater understanding amongst a wide range of interests together to access the benefits of an integrated approach to deliver at the catchment scale. A good example is the information exchange and development of Farmer Guardians approach for the management of the water environment and associated habitats by the farming community.

Reporting such projects is key, and a project template that is transferable to other areas in terms of enabling delivery for multiple stake holders against their statutory duty, integrated advisory, facilitation and reporting structures.

4 Conclusions derived from analysis in Steps 1 and 2

4.1 Key findings on the particular SES and its potentials

Using Bissett's three overarching principles for good practice in integrated catchment management (Bissett 2009), WILD shows elements of:

- **Integration** – within WILD there are common and complex issues and clear steps have been taken to provide a range of types of information for all stakeholders within the



WILD project area. There is some evidence that multiple goals have been met but that there is room for improvement in terms of the communication approach as some stakeholders remained confused as to where the project started and ended and what was or wasn't part of this initiative. Given that WILD was developed because of the complex regulatory and legal landscape it is important to be transparent about integration.

- **Collaboration** – there is clear engagement between different stakeholders work through site visits and locally discussed and agreed actions. As a result the goals set at the outset of the project have been achieved. Most important is the increase in the level of trust between interest groups and stakeholders.
- **Adaptation** – there is clear evidence of change in attitudes and behaviour amongst a range of stakeholder. Agencies and private interests recognise the value of individuals and community groups offering up information and knowledge. Local knowledge is valued to a far greater extent. As a result the planning process can anticipate, accommodate and respond to change.

As a result the WILD project is able to demonstrate the value of facilitation and integrated advice with a doubling of initial financial investment by the EA in water improvement across the WILD project area. This investment has been provided by 'in-kind contributions' from farmers and local communities and other agencies like Natural England and Thames Water. The increased communication has resulted in increased awareness of the role and remit of all the organisations involved in managing the water environment, which has led to evidence of changes in behaviour amongst the farming community towards WFD and related objectives. Awareness within communities has also increased, especially concerning the roles and responsibilities of riparian owners. This is beneficial when considering the need to work together in pursuit of WFD objectives. Communities within the project area are increasingly confident that they are able and willing to work in a proactive and coordinated way with statutory bodies using a shared problem-solving approach.

In terms of meeting WFD objectives, WILD has achieved some improvements to the ecological status of water bodies. However, as would be expected in a three year project there is more work to do and the benefits of much of the work would not be expected to be seen until 2021. There was more evidence of positive change on the chemical aspects but again these results are early in the cycle.

In respect of the PES, the process is working well but the arrangements have only been in place for one year. The winter just past was not a bad one for Metaldehyde presence in water and in the Upper Thames there was only one period of high levels of water contamination. It was thought this was via a farm that had not signed up for the product substitution. Further monitoring is planned, including assessing the views of farmers of landowners to the agreements they are involved in.

WILD represents an adjustment to the dominant framework of sector-based policies being implemented on the ground by government agencies (EA) and private sector (Thames Water). In this respect five aspects are critical:



- **Engagement** – WILD only works because of the level of engagement secured, this has been achieved through facilitation with farmers and local communities and the willingness of agencies and the private sector to embrace engagement.
- **Communication** – by accepting the role of the facilitator as the key means of communication there is a challenge on this role to disseminate exactly what WILD is and what it is aiming to achieve. There is some evidence of success there but also some evidence of continued confusion in terms of how WILD fits with the conventional governance framework, issues of overlap and links with other initiatives.
- **Knowledge** – it is clear that expert or agency knowledge provides the starting point on which discussions are initiated and the local knowledge of farmers and local communities is added thus enriching the outcomes in many instances. What happens to this collective knowledge in the coming years will be critical but there is evidence of a more rounded understanding and acceptance of the issues that would not have been possible in the current sector-based framework.
- **Consistency** – with a wide range of stakeholders who experience WILD in different forms, times and to varying depths, there is a need for a consistent message and to feedback changes and developments. There is evidence that where WILD has been effective this has been reported back to stakeholders but challenges remain and progress across all areas is inconsistent. Work is most active on WFD and related agri-environment aspect. Engaging those more distant from the central aim, for example around development and planning, is difficult to achieve in a 3 year timeframe. There is some concern amongst farmers that the integrated process is being used to install higher environmental standards than is necessary, with no payment coming back to the farmer for this.
- **Trust** – positive progress on all of the above will help the development of trust. There is clear evidence of increased trust and cooperation but some scepticism remains among local stakeholders.

4.2 Governance arrangements and institutional frameworks

The multi-sector arrangements that have been developed for WILD have worked, but this has required the development of the facilitator to bridge the gap between the different sectors. This is universal accepted as being undertaken with considerable enthusiasm and also being very time consuming. However the benefits have been a great pooling of money from across a number of budgets, both government and private and the wider 'in-kind' contributions of local communities and farmers/landowners.

How transferable the WILD approach is, is open to question and would require further examination. Most people from across the 4 surveys see this as beneficial and achievable but some say it is most applicable at a small scale, perhaps to tackle specific, maybe complex, challenges. Others see it as being a better way forward more generally and that policy need joining-up at the local level. However, there is no agreement as to what the 'local level' is and there are differences about what should be included in the join-up.

Where WILD has not worked is to tackle the more economic aspects. Identifying the economic benefits of this approach is particularly difficult. Most EA projects have a clear cost-benefit



approach but WILD does not conform to the traditional measures and this is proving a challenge in terms of reporting back the 3 years project. Also some farmers feel that WILD is being used to secure greater environmental gain than the baseline of cross compliance requires – without and payments going to farmers for the income foregone aspect. Including areas like housing development and planning into WILD and the links to water quality have been tricky. However highlighting that the issues of water quality are relevant to areas other than agriculture has been a success, for example in 2012 all of the Upper Thames was highlighted as being at risk from agricultural diffuse pollution (nitrates and phosphates) where as it is now less than half. It is possible that run off from agriculture actually dilutes the phosphate coming from urban developments and sewage treatment works.

The governance arrangements are to a large extent dependant on the national policy agencies and Thames Water to embrace the approach of engagement. National the policy is through CaBA to move in this direction but this is a new area for Thames Water. There is no guarantee that this will continue but the discussions are that it will. At the local level there is the Upper Thames Catchment Partnership and this represents the local stakeholders with representation from national bodies.

The follow-on phase for WILD is being discussed and has yet to be finalised. It will continue in some shape or form but this needs to be clearly identified and disseminated. The impact on policy is largely in terms of interpretation and implementation at the EU and national level. Locally and regionally is as much about disseminating and understanding of the flexibility or lack of it in terms of implementation and identifying areas where there is potential for combining policies in order to secure multiple benefits.

4.3 Reflections on the case study methodology used and potential improvements

Securing responses to the four surveys has been a challenge. Also accessing evidence on the impacts and what has changed over the 3 years is still in progress. It is not always clear, as ever with projects that seek to join up across different sectors, what can be attributed to WILD and what might have happened anyway.

Stakeholders were keen to be involved but the timing was tight – even though they were known to the CCRI team. The terms used were ones that made sense to the stakeholders. Mostly this was in terms of environmental and social benefits. For farmers and landowners, as well as local authorities, the economic aspects were more important and some examples were given, although the size of the economic aspect is not always easy to identify.

There is more that can be achieved through a more in-depth examination of this cross-sector project, not least in the bringing together of the different stakeholders to tease out the main impacts and the extent and legacy of these impacts.

5 Research and action mandate for Steps 3 and 4

5.1 Agreed objectives of activities to be undertaken with initiative/stakeholders

The planned activities for Steps 3 and 4 would be a drilling down of issues in order to tease out if the WILD project is a local example of polycentric policy. There is the opportunity for such a workshop and associated interviews potentially working through some real examples



in order to identify the evidence and associated data. There is the opportunity to investigate the case of WILD's overall contribution, notably using the extent Cost Benefit Analysis framework used by EA and others. However, in the view of some on the WILD project this does not cover the multiple aspects, but also including the social aspects. This is both a methodological exercise, comparing with both EA and Rivers Trust work, but also identifying the key outcomes and benefits of WILD in the catchment from a multiple benefits perspective.

There is a mandate from the local stakeholders as they are keen to understand and identify the impacts and benefits of the WILD project for thoroughly. Indeed they are keen to work with the PEGASUS team on the dissemination of the results, potentially through a film that has been commissioned and that PEGASUS can contribute to.

A third aspect would be to undertake a detailed analysis of the policies and strategies that WILD has engaged with, and to what extent WILD activities have helped meet these strategic objectives. This has been started in terms of WFD, but there are others linked to flooding, biodiversity, water quality and land management. The role of CAP and environmental policy needs to be clearly and robustly unpicked so that the contribution of WILD to meeting a range of policy priorities can be assessed, and the satisfaction of the respective agencies in the achievements of WILD would need assessing as well.

The weighting and extent of the private sectors connections needs to be examined more closely, this is considered critical for the issue of transferability. The main connection is with Thames Water. Under Steps 3 & 4 we can explore how they see it developing and what it offers them as well as the regulatory framework that surrounds them as private utility company. Likewise the community aspects need further analysis. There are some mini-projects that could be examined in detail across a range of criteria. The role of GRCC and how far their influence has expanded the spread of WILD in to other areas of local governance, such as rural vitality is a key area of enquiry. The social aspects of WILD might be well explored here as well in terms of the volunteers and the links to health & wellbeing.

Finally, the impact of WILD on agriculture and to a lesser extent forestry is important. There is a complex policy landscape in the WILD area and it would be good to see if the facilitation involved helped ease this complexity (or add to it). The initial report gathered some data on this but a workshop with the farmers alone might be a good way of helping WILD plan for the next stage, tackling issues like communication. The role of the 'Farmer Guardians' is an interesting one to explore further as it might be a transferable approach.

The key questions would be:

- How has WILD impact on land management decisions and how long-lasting are these changes?
- The issue of exactly what is transferable from WILD to other areas and what would be the optimum utilisation of this multi-sector approach. Is it best deployed when there are 'wicked' challenges or multi-faceted issues or can it be something with a wider appeal that depends on multi-sector stakeholder buy-in.
- What are the policy recommendations that can be taken from the local-level to the national level about a shift from sector-based policies to area or territory based policies.



5.2 Innovations, impact, transferability, potential risks and research bias

The main innovation is taking a systems or territory-based approach to implementing and integrating policy and initiatives. The impact in a three year period is impressive and the WILD project has attracted significant attention both locally and nationally from water quality, AES and rural community perspectives.

The issue of transferability is key and needs further examination but the role and presence of a facilitator appears to be key, preferably one who knows the area and is respected by a range of stakeholders.

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7 ANNEX

7.1 Documentation of research and action progress

- List of stakeholder involved and events with summarised outcomes

7.2 Supporting data and statistics

Figure 2: WILD project area and WFD status of Upper Thames Catchment

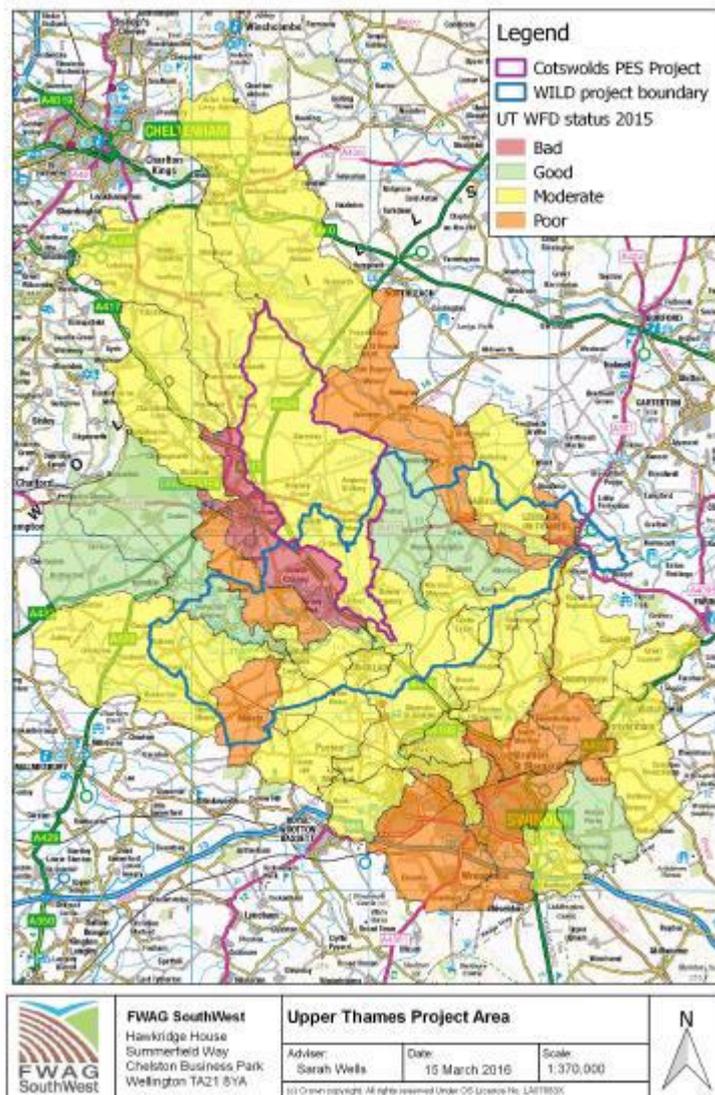
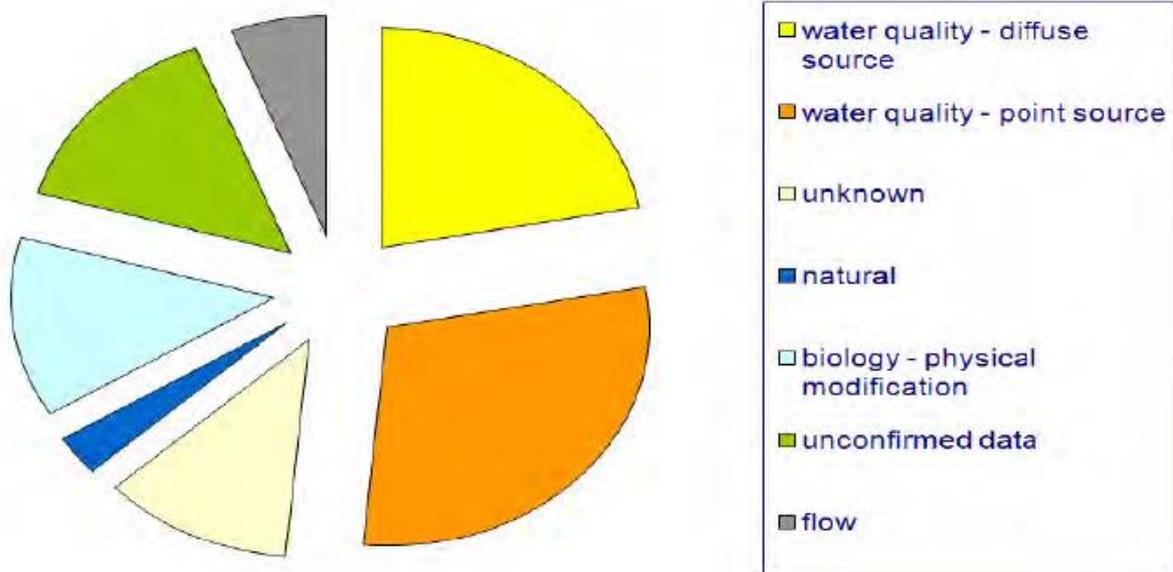


Figure 3: Significant reasons for failures under investigation in the Upper Thames catchment.



Source: EA 2014

Figure 4: Elements being investigated in the Upper Thames catchment. The size of the wedges is relative to the number of investigations into that factor. (EA 2014)

