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# Delivering multiple benefits through an integrated local delivery framework

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## Abstract

The Cotswold Water Park WILD Project (Water with Integrated Local Delivery) is a three year project set within the Cotswold Water Park, it aims to improve water quality and biodiversity in order to meet the demands of EU legislation.

The aim of the WILD project is to address these issues across the entire catchment, connecting up the landscape like a jigsaw and delivering the following benefits to landowners and local communities:

- Improved riparian biodiversity and habitat management.
- Improved management of SSSIs.
- Reduced diffuse pollution from agriculture.
- Reduced point source pollution.
- Assistance in the provision of clean drinking water e.g. reducing pesticides such as metaldehyde.
- Increased sustainable productive land management.
- Increased cross compliance.
- Increased flood and drought mitigation.

One of the aims of WILD is to integrate and deliver the aims and objectives of partner's strategic programmes relevant to the project area using the integrated local delivery

Step 1 – What geographic area will your project cover?

- Step 2 Engage with all of the community to begin assessing knowledge and collecting data
- Step 3 Put your locality in context
- Step 4 Think creatively in problem solving
- Step 5 Prioritising actions and opportunities

The presentation outlines the basis behind WILD and the potential contribution of the approach in other contexts.

#### 1 Introduction

The Cotswold Water Park WILD Project (Water with Integrated Local Delivery) is a three year project set within the Cotswold Water Park, it aims to improve water quality and biodiversity in order to meet the demands of EU legislation.

The Cotswold Water Park is within the Upper Thames River Catchment and covers an area of 40 square miles between Swindon and Cirencester. The park contains 150 lakes which are the result of gravel

extraction; this has created a complex patchwork of agricultural land, working gravel quarries, nature reserves and leisure areas.

Under European legislation (the Water Framework Directive), it is required that EU member states bring all inland and coastal water bodies into good ecological status by 2015. Good ecological status requires a holistic view of the river ecosystem looking at the biodiversity, chemical and morphological features of the river.

The Upper Thames Catchment Management Plan shows that currently only 1/3 of surface rivers within the catchment are meeting the required standards, with areas of failure including:

- High phosphate levels.
- Poor fish populations, spawning grounds and habitats.
- High levels of phytobenothos (microscopic algae).
- High water pH.

These problems are caused by many factors including:

- Inappropriate placement of dams, weirs and sluice gates.
- Siltation, increasing flood risks and damaging fish spawning beds.
- Sewage discharges.
- Diffuse water pollution from agriculture.

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# 2 Objectives of WILD

There are 4 objectives to the WILD project:

- To deliver Good Ecological Status by carrying out direct actions, informed by catchment walkovers and advisory visits, in water bodies in the WILD project area in line with the (draft) Upper Thames Catchment Management Plan using the Integrated Local Delivery framework, achieving GES in top priority water bodies.
- To create a framework to address other negative drivers impacting on water quality in the medium (2021) and long term (2027) to achieve Good Ecological Status in all surface and ground water bodies in line with EU Directives. To embed and enable local delivery so that the protection of water quality becomes self-sustaining.
- To integrate and deliver the aims and objectives of partner's strategic programmes relevant to the project area using the integrated local delivery (www.ccri.ac.uk/ild) approach.
- To assess the effectiveness of the project to inform future funding programmes and decision making.

# 3 The Integrated Local Delivery Approach

#### Step 1 – What geographic area will your project cover?

Communities know most about their local area and have a clear sense of where they feel boundaries lie. However, it is very useful to consider how the area is understood by others, such as Local Authorities and Government agencies. For this reason, it is generally best to conduct the project within a Parish boundary. As the water environment does not respect boundaries, it is often useful for parishes to work together along waterbodies. For this reason, a scalable project template has been developed that allows the framework to be scaled up to across the catchment, and help you manage water in a more joined up way. This may also help with accessing resources and sharing the work.

#### STEP 2 - Engage with all of the community to begin assessing knowledge and collecting data

Communities often have all the knowledge and resource that is needed to protect the local environment, so start by giving all the people that live within the chosen area the chance to contribute. By talking with local people it is possible to bring together the community's collective knowledge of the water environment on a large-scale map. Making contact with your local Rural Community Council or Farming and Wildlife Advisory Group member, will ensure you have the right advice on what processes you can use.

Know what assets you have – start by taking note of and mapping where water is stored and flows. Organised walks across the parish can also be a useful exercise to make a note of features and identify local issues. This can involve working with people who have local knowledge – local farmers, local council officials, other experts who may be living in the community. It is often a good idea to talk to people who have lived in the community the longest – their knowledge of how things work, or used to work, could be invaluable. This way a wealth of local knowledge is captured, which should be mapped at large scale for ease of reference.

Every patch of land is owned by someone and every national, regional and local agency of Government will have someone who is responsible for some aspect of the local environment in each locality. Understanding this land ownership and the management responsibilities is a first step to creating dialogue and build a team with the right people.

How do we collect the data and in what form? This is very much up to you, but a simple way is to collect the information in a central place held by the parish or ward council. Information can be stored in a simple document, with notes identifying possible actions and people or organisations that you might need to contact. A photographic record can also be valuable for documenting all the issues in a Parish. If possible, the photos should be kept within grid references using an Ordnance Survey mapping website. XY coordinates can also be useful for uploading issues/actions onto mapping systems.

It is important to remember that wildlife is protected and that some actions will require a survey in case any protected species are present. Recording the presence of protected species can also help to get funding for actions from different sources.

#### STEP 3 – Put your locality in context

Every piece of land and its management has a potential role to play in improving the environment, supporting communities and driving the economy. Looked at the right way, the things a community decides to do can deliver important Government policies locally; this can unlock Government money

not otherwise available. Understanding where local actions contribute more widely can help community plans gain support and resources for local projects.

3a Establishing common ground between different bodies and community and private interests is a key step. No one should have to act against their own interests, but a key challenge is for participants to recognise others' priorities and to have some flexibility in how they carry forward their objectives. Skilled specialist facilitation support can be important.

3b How do we connect with 'Government'? It is an important early step to find out who has the duty for managing rivers, ditches, drains, and water supply in your area. The Government's Catchment Based Approach (CaBA) was developed to help the Environment Agency, Water Companies and Local Authorities get the support for partnership projects being developed at a catchment scale. Other organisations will have priorities that may align with yours. Check what they are and get in contact with them to see if they can help. For example, Natural England might have an interest in improving biodiversity, the Local Authority might be interested in drainage onto land from their highway, or it could be a developer who wants to develop land. These interests also need to be mapped possibly as part of a neighbourhood plan. Further information about your parish/ward can be found in useful links section.

#### STEP 4 – Think creatively in problem solving

The water environment is intrinsically linked with the surrounding landscape. As such it is often possible to provide multiple benefits through land management practices designed to protect water. Investment in local schemes could be designed to provide multiple environmental benefits, and relevant agencies can be approached for support and resource. Wider economic and social benefits could be gained by connecting local people back to the management of the water environment, for example by linking land management for water with diversified and ecologically sound farming practices; by improving recreational access to land; by establishing new 'buyers' for ecosystem services, such as water companies interested in natural solutions to polluted water; through outdoor community volunteer opportunities.

#### STEP 5 – Prioritising actions and opportunities

The most important job, having mapped everyone's knowledge and interests, is to prioritise actions and opportunities, and find a way of tackling them. Imagination and creativity are required to identify perhaps novel solutions, and local communities tend to be better equipped for this than anyone. For example, a traditional response to a local flooding problem might be to ask the Environment Agency or Local Authority to fund works. Funding constraints might make this a difficult thing to achieve. However, local community knowledge may be able to pinpoint a novel solution; for example, a farmer might reduce surface flow by rotating with deep rooting grasses in sloped fields. This may open other funding opportunities from different sources, such as a different agency with environmental objectives.

(FWAGSW and ACRE 2017)

## 4 Key Achievements and Outputs from WILD

• 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 (and includes the holding areas where they extended out of the project area.)

- Appointment of 24 Farmer Guardians covering over 12,638 ha of Upper Thames in wider Wild Project area. Farmer Guardians are key contacts in the discussions between farmers and the Environment Agency but also Natural England and Thames Water.
- Through work with Thames Water 461 farmers are engaged in sustainable pesticide management in the Cole, Ampney Brook, Meysey Brook, Lydiard Brook and Ray and lower Churn covering 23,705 Ha.
- All communities engaged as part of Parish Planning (see Figure 4). Three are now linking to Neighborhood Planning and work has also included 4 parishes and 1 town outside of the WILD 1 project area, showing the demand for a follow on phase.
- Volunteer hours committed (21,600 hrs average 2880 days over 3 years @£75/ day = £216,000)
- 20 Schools engaged in a photographic competition on water and the production of a 2016 calendar with winning photos exhibited across Gloucestershire.
- Preparation and circulation of The Community Guide to the Water Environment circulated nationally in collaboration with ACRE and case study on Integrated Planning Tool.
- Nearly 60 km of potential river enhancements identified and shared with partners
- A total of 300km ditches surveyed, 30 km of ditches sympathetically managed
- Shade reduction & tree pollarding works conducted on 8555m
- Large Woody Debris deflectors and faggots installed in 5,580m
- New and improved fencing installed on 5066m
- Five livestock drinking bays installed with modified design to satisfy the EA and farmers
- 2.7 km of river treated for Himalayan balsam infestation

# 5 Key outcomes from the WILD project

- Demonstrating 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.
- Increased awareness of the role and remit of all the organisations involved in managing the water environment as shown by outstanding and growing volunteer contribution.
- Clear evidence from the mid-point evaluation interviews of changes in behavior amongst the farming community towards WFD and related objectives.
- Communities being enabled to proactively work in a coordinated way with statutory bodies on joint problem solving (Community Voice).
- Increased awareness in communities of the roles and responsibilities of riparian owners and working together, supportively towards an agreed outcome, namely WFD.
- Enhanced management on the Ampney Brook catchment where the early management work is now recognised as being a significant improvement as identified in the before and after pictures.
- Bringing multiple stakeholders together and developing a greater understanding amongst NGOs and agencies of the benefits of an integrated approach to deliver at the catchment scale.
- Information exchange and development of the Farmer Guardians approach for the management of the water environment and associated habitats by the farming community.

- Environmental delivery under the project is embedded for long term benefit to enable better environmental quality linked to sustainable growth across the project area.
- Demonstration of the benefits of partnership working, and that valuing the role of all organisations and individuals working together in shared problem solving through the Integrated Local Delivery framework can deliver more than single issue funding.
- A project template that is transferable to other areas in terms of enabling delivery for multiple stakeholders against their statutory duties, integrated advisory, facilitation and reporting structures.

# (Phelps et al 2017)

## 6 References

FWAGSW and ACRE (2017) A Community Guide to Your Water Environment, ACRE <u>www.acre.org.uk</u>

Phelps J, Short C, Brown P and Richards H (2017) Overview of the Water and Integrated Local Delivery (WILD) Project Phase 1: 1st April 2013 – 31st March 2016, Report to Environment Agency, Countryside and Community Research Centre (CCRI), University of Gloucestershire: Gloucester.