



River Asker Community-led Project
Summary of achievements

2018 - 2021





This project was delivered Dorset Wild Rivers, by a partnership of the Dorset Area of Outstanding Natural Beauty, Dorset Wildlife Trust and Farming and Wildlife Advisory Group SouthWest, with the support of the Dorset Catchment Based Approach, Environment Agency and Wessex Water, and in conjunction with residents of Loders, Uploders and Askerswell.

Funders:



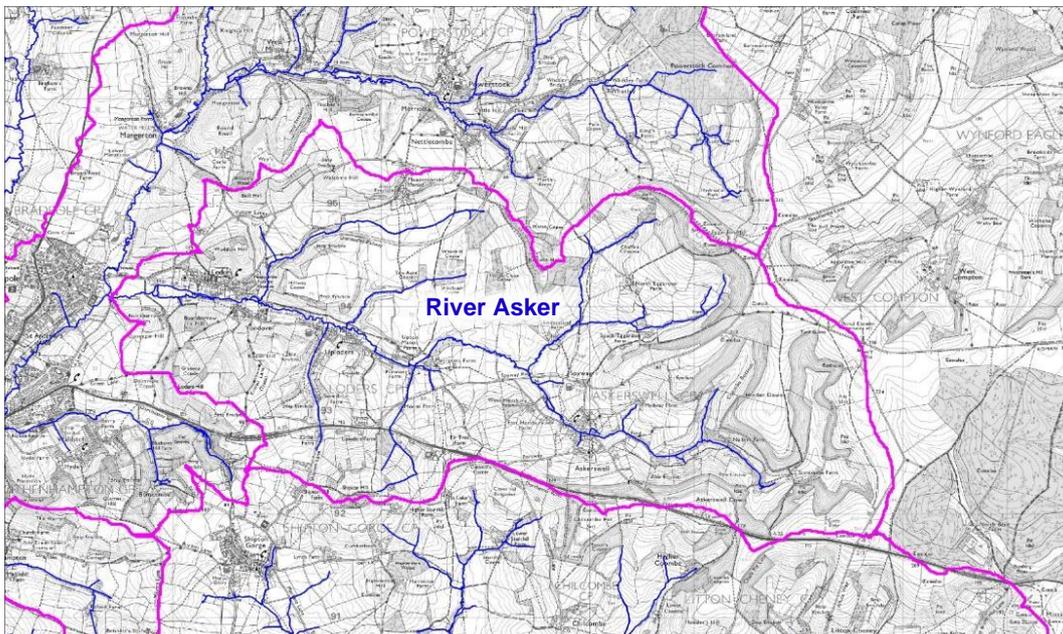
Report version: FINAL

Date: 09/06/2021



Background

The River Asker is classed as 'Poor' by the Environment Agency, because of issues affecting fish populations and in-stream and bankside vegetation. In 2018, a partnership of the Dorset Area of Outstanding Natural Beauty (AONB), Dorset Wildlife Trust (DWT) and the Farming and Wildlife Advisory Group South West (FWAG) approached Loders Parish Council and Askerswell Parish Meeting to see if there was appetite to try and address these issues and move the River Asker back into a more favourable condition. At a Parish Council meeting on the 16th January 2018, the community-led approach proposed by the partnership was given support. This report summarises progress over the past three years, from January 2018 to March 2021.



Map of the River Asker

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Key

	River
	Catchment boundary

Delivery model

From the outset, the community was central to the delivery of the project. The partners did not want to parachute in with a set idea of what was needed, deliver, and then move on. This is not an approach that leads to sustainable improvements in the water environment. Instead, the partners based their approach on a successful project led by the FWAG in Gloucestershire: Water Integrated Local Delivery – WILD.

WILD sets out a phased approach to delivering environmental improvements, whilst empowering communities. We set out to deliver the following elements: community engagement; establish a working group; evidence gathering; identify, prioritise, and deliver action. These are described in a little more detail in the next section.



Achievements

Community engagement and the working group

The first step, as mentioned, was to get agreement from the Parish Council that a project focussing on the water environment was something they could support. We requested an agenda item at Loders Parish Council meeting for the 16th January 2018, and this was accepted.

At the 16th January meeting, we set out the case for investment in the River Asker. The project was supported, and a working group was established with interested councillors and members of the public who had attended the meeting. This totalled 17 people. The first actions were to set out the main issues in a 'State of the River Asker' report and to widen the group to include those from Askerswell, the parish at the headwaters of the river, and the farming community.

Following this meeting, we have held several open events, written articles and used word-of-mouth to reach out to the wider community and get further engagement in the project:

- 16th April 2018 – progress update to the broadened working group. 22 attended. Actions from this meeting included finishing the report, looking into community monitoring, and getting the local school involved.
- 9th July 2018 – training volunteers to undertake invertebrate monitoring. Eight attended. A demonstration for those interested but not available for the training was held on the 18th September 2018. Six attended.
- 4th October 2019 – rivers day at Loders C of E Primary School, with storytelling, bug hunting and river adventures for Years Five & Six.
- 10th December 2018 – progress update and presentation of the final 'State of the River Asker' report. 27 attended.
- Several articles along the way in the Eggardon & Colmers View Parish Magazine.

A steering group was established to oversee delivery, and consists of a member of Loders Parish Council, a member of Askerswell Parish Meeting and a member of the farming community. This met for the first time on 19th July 2018 and has met on an *ad hoc* basis ever since.

By December 2018, we had 48 on the working group email list and as of March 2021 the number is 74.

Evidence gathering and identifying & prioritising action

The summer of 2018 was spent updating the 'State of the River Asker' report, with useful input from the Environment Agency and Wessex Water, particularly in aquatic macroinvertebrate monitoring data and runoff modelling. In addition to the desk-based analysis, DWT undertook several walkover surveys of the river to identify specific issues and opportunities. The results of these surveys were included in the report. Further additions were added following a visit from the Wild Trout Trust in February 2019. The final full version and summary were published in May 2019 and can be viewed here: www.dorsetaonb.org.uk/.

The main issues affecting the River Asker and set out in the report were summarised as:

1. **Artificial barriers:** this impacts fish populations and causes sedimentation of the riverbed
2. **Shade from riparian trees:** this impacts aquatic plants and riparian plants.
3. **Catchment land use:** this has the potential to impact the duration and severity of flood waters and is a source of phosphate-contaminated sediment.
4. **Agricultural phosphate from diffuse sources:** this impacts aquatic plants.
5. **Invasive species:** this impacts riparian plants and causes bank erosion, which is a source of sediment.



The identified issues can be addressed by a number of interventions, and these were also set out in the report:

1. **Barrier removal or bypass:** this would benefit the fish populations in the river, by opening up a greater length of river for spawning and reducing the amount of sedimentation.
2. **Shade management of riparian trees:** this would open up areas that are heavily shaded, allowing aquatic and riparian plants to thrive.
3. **Agricultural land management change:** this could reduce sediment runoff and therefore phosphate pollution. It could also improve rainwater infiltration and therefore delay and reduce flood peaks.
4. **Natural Flood Management:** by slowing the flow of water over land in the headwaters of the River Asker, through gully blocking, installation of woody debris dams and tree planting in appropriate locations. This would delay and potentially reduce flood peaks and reduce sediment runoff.
5. **Installation of fencing, cattle drinking bays and cattle crossing points:** this would reduce the amount of poaching, which is a source of sediment.
6. **Habitat improvement & restoration:** this would restore the natural dimensions of the river where it has been altered, therefore allowing natural process, such as gravel scouring, to occur. This would allow aquatic plants and fish species to thrive.
7. **Invasive species control:** *Plants:* this would allow native bank flora to thrive and reduce the potential for bank erosion, which is a source of sediment. *Animals:* mink control would reduce pressures facing the native water vole, which is fast-declining nationally.
8. **Monitoring & education:** This would give the community early warning of pollution incidents, and an opportunity to inform the relevant authorities. It would also allow the community to monitor the effectiveness of any interventions undertaken. It would also create a sense of ownership and pride in this important habitat.

These overarching issues and interventions provided the framework for all future activity within the catchment and are described below.

Action

Barrier removal or bypass:

The weir behind The Loders Arms in Loders is a significant barrier to fish migration and the furthest upstream migrating sea trout can travel, leaving approximately eight kilometres of potential spawning sites unavailable. Video evidence from residents show fish trying and failing to move upstream. A group of interested residents have explored the options for fish ladders or bypass channels to improve the situation. This was backed up by expert advice from the Wild Trout Trust. The next steps are to engage with the landowners and undertake a detailed options appraisal with cost / benefit analysis. This is currently being planned but has been impacted by the coronavirus pandemic.

We have scheduled fish surveys at three locations at various times over the past three years, to improve our understanding of the fish population. This is in addition to the Environment Agency monitoring that is already undertaken. However, poor weather conditions each time have led to postponement. We hope to undertake the surveys in September 2021.

Shade management of riparian trees and habitat improvement:

Between January 2019 and February 2020, six volunteer sessions were held to increase light levels reaching the river through crown raising. The increased light will allow bankside vegetation to flourish,



along with plants in the river as well. In addition, the arisings from the crown raising were used to install bankside habitat, either in the form of log piles on the floodplain, or what are called 'brush mattresses' in the river, which protect vulnerable banks from erosion and provide habitat for young fish and insects. In total, volunteers have contributed 320 hours and delivered over 1.4km of improvements.



A trout trying, but failing, to navigate Loders Weir

© Simon Wilmott



Volunteers helping to let light into the riverbank and create instream marginal habitat

Agricultural land management change:

To deliver improvements to the water environment, it is important to work with those that manage the land. Over 60% of land within the catchment is intensively farmed. Luckily, we have supportive farmers who want to reduce the impact they are having on the river. Working with these farmers, we have planted over 400m of hedge on flow pathways. The hedgerow will intercept water and has greater infiltration potential than the surrounding grass. We have also supported the reversion of over eight hectares of maize fields back to permanent grass. Maize is a particular problem for water quality, as it leaves a lot of bare soil exposed to erosion later in the year, just when there is an increase in storminess. Other work includes supporting 250m of track improvements to reduce runoff entering the river and 4 hectares of subsoiling to improve infiltration followed by creation of riverside buffers to intercept overland flow. We have also installed three silt traps at known hotspots, to intercept any sediment-laden runoff before it enters the river. These total only 55m in length but will intercept flow from a much wider area. Further analysis is required to understand the full extent of the benefits.

One area of interest to farmers within and outside of the Asker Catchment is the work being led by FWAG on herbal leys. FWAG, in conjunction with a landowner in the catchment, have established a field trial looking at the benefits of herbal leys over conventional rye grass crops used for fodder. Herbal leys are more species rich than traditional rye grass silage and include an element of legumes. The theory is that having greater species variety, particular with different rooting depths, will increase the ability of the land to soak up water and therefore reduce flood risk. The trial has also looked at different establishment methods to see which is the most effective. For example, does sub-soiling prior to seeding help increase yield? The initial results look promising. Yields of the herb ley is greater than the traditional rye grass, and at the same time, water infiltration rates have improved significantly. The findings of the trial has resulted in the farmer planting 7.5ha of the crop elsewhere on the farm.



Natural Flood Management:

Working with natural process to reduce flood risk has been a priority for the project, after issues were raised at the initial meeting back in January 2018. To date, natural flood management in the form of leaky debris dams have been installed at a number of locations including Lodersland, Belcombe tributary, Askerswell, Knowle Plantation, New Street Lane tributary, South Eggardon Farm tributary, Ten Acre Copse and Shedbush Copse. Over 40 small structures have been created to slow the flow of water entering the river, and thereby reducing the severity of flooding downstream. The length of stream where interventions have taken place amounts to approximately 3km. Further analysis is needed to understand the area of catchment that has benefitted. There have been five volunteer session delivering Natural Flood Management benefits, with 228 hours contributed.



The field trial showing verdant herb-rich growth on the left and rye grass on the right



Newly installed woody debris dam holding back the flow in the headwaters

Invasive species control:

Himalayan balsam has been pulled from the full length of the river and its tributaries during the autumn of 2020. This amounts to approximately 12km of main channel and a further 12km of tributaries. This sweep of the river will have had a significant impact but will need to be repeated annually for several years to have lasting benefit. The bulk of the work was undertaken by DWT and contractors, but 168 hours of volunteer time have also been put in to help control this harmful weed.

Monitoring & education:

Over the course of the past three years, we have held five community meetings with over 100 people attending. This included a session in the middle of a field one wet afternoon, where 38 of you turned up to hear about the soils of the Asker valley and how it can be managed, along with the benefits of Natural Flood Management.

We held two evening talks in Winter 2020, with expert speakers from the Wild Trout Trust and Dorset Wildlife Trust. Over 110 attended those two events, and more are planned in the future.

Eight volunteers have been trained in Riverfly monitoring and have completed one full survey season. The group are also using video monitors to look for riparian mammals and have seen one otter so far. They plan on increasing their capacity to look at the chemical properties of the water too.



We have also held one water day with Years 5 & 6 at Loders Primary School in October 2019, and plan to do more once we are allowed.

Headlines

- Over 70 people directly engaged with the project, including eight skilled citizen scientists
- 1.4km of habitat improvements.
- 3km of natural flood management covering the headwaters of the catchment.
- 15ha of improved land management and 400m of new hedges for the benefit of the water environment.
- At least 700 hours of community effort.



A newly planted hedge to break up the slope and intercept overland flow.



Over 80 people in attendance at a talk by the Wild Trout Trust in January 2020

Project Management

The project has been supported on the ground by officer time from Nick Gray of the Dorset Wildlife Trust and Tim Bowden of the Farming and Wildlife Advisory Group South West. The project has been overseen by Ian Rees of the Dorset Area of Outstanding Natural Beauty team.

A local steering group has been established to oversee delivery, made up of a representative from Loders Parish Council, Askerswell Parish Meeting, and the landowner community.

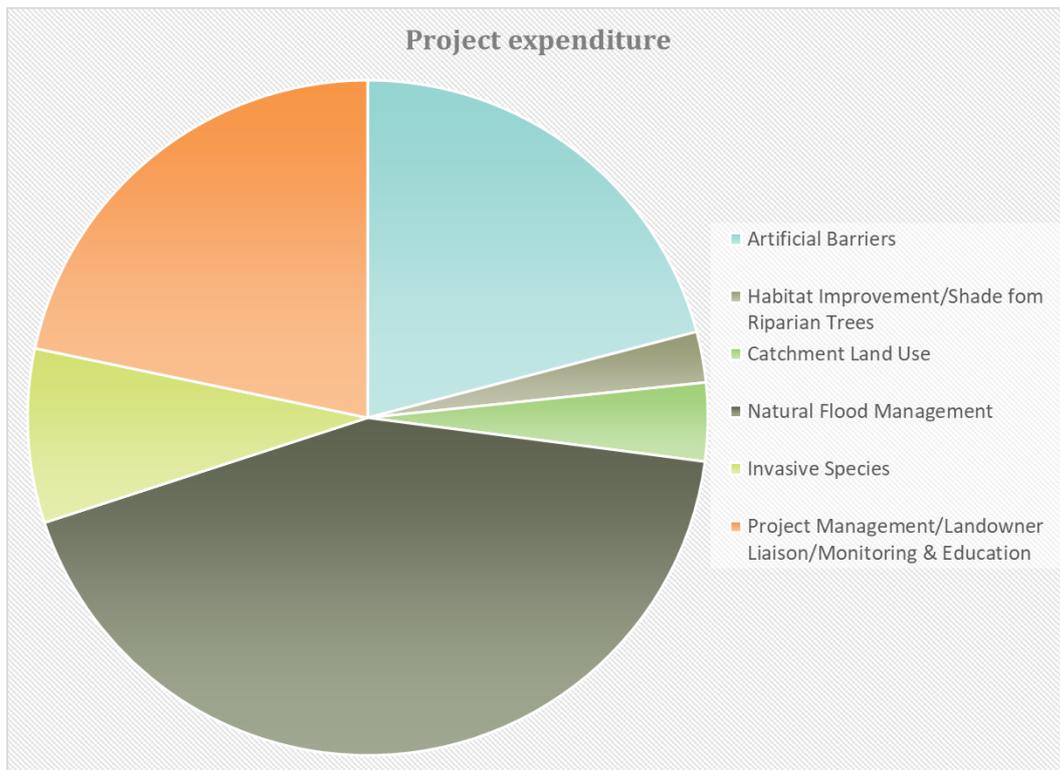
Total expenditure over the course of the three years (including an estimate for final figure for the financial year 2020/2021) is £72,000. Significant funding has been received from the Environment Agency (80%) to enable this to happen along with contributions from Dorset Catchment Based Approach (8%), Dorset Wildlife Trust (6%) and Dorset AONB (6%).

Some areas are more costly to deliver than others. A breakdown of where this funding has been spent illustrates this:

- 21% has been spent on looking into artificial barriers. Specific funding was secured to investigate options, but final delivery has been delayed due to the impacts of coronavirus.
- 2% has been spent on improving habitat.



- 4% has been spent on improving catchment land use.
- 43% has been spent on Natural Flood Management. Specific funding was secured to deliver this, and can be broken down into:
 - 12% on installing natural flood management in the headwaters
 - 11% on intercepting runoff by planting hedges.
 - 4% on retaining water in the landscape at key locations
 - 15% on other activities, such as installing silt traps and project planning
- 8% has been spent tackling invasive species.
- 22% has been spent on landowner liaison, monitoring, engagement, and project management.



Lessons learned

What worked

- Having a small team that was flexible enough to rapidly respond to changing circumstances and community need.
- The existing relationship between the Environment Agency and the Dorset AONB meant that information and data was easily available. Improvements since the inception of the project have further enhanced delivery, with – for example – good communication between the fisheries department and the project team to ensure that we are not duplicating effort. Also, with the development of the Catchment Based Approach data packages, we also have easy access to much more information than at the start of the project.
- It was important to take time to develop an understanding of the current situation and to feed in community concerns right from the beginning. Our approach was not to present the issues and opportunities as a *fait accompli* but develop these following comprehensive community engagement and site survey.



- Right from the beginning there were a core of community members who have ensured that momentum has never been lost. This strong relationship between community and project delivery team is behind all the successes of this project.
- We offered a range of ways to get involved, from walks & talks, through to citizen science as well as more traditional volunteering opportunities. We also found that there are particular areas of interest that excite the community and opportunities should be maximised to develop this interest. We would like to involve more of the community in volunteering, so need to offer a wider range of activities and a wider range of timings to encourage more participants.
- Despite not having a significant budget at the beginning of the project, a lot can be delivered with a little bit of direction and community commitment. Early successes have led to further investment, particularly by the Environment Agency, that have helped maintain delivery over the course of the three years.

What didn't work

- The project was set up as a pilot to test the community-led approach and has proved very successful. However, as the scale and ambition of the community has evolved, the project team has remained the same. To help deliver more for the communities along the River Asker, and to spread the approach to others within the West Dorset Rivers and Coastal Streams area, it would have been helpful to have a dedicated project coordinator. This would have provided more focus on delivery, better forward planning and more regular and thorough communication and reporting.
- The River Asker project started out as a short-term pilot to see if it is an effective model for delivery. It has certainly worked, but we have not adjusted our approach to meet growing expectations. To a certain extent, we have been fortunate with securing funding to allow ongoing delivery but to effectively deliver into the future, better forward planning is required. The steering group have been pushing for this, but the delivery team have yet to deliver.
- The impact of restrictions caused by the coronavirus pandemic has meant that very little has been achieved on the ground in the last year. We paused activity at an early stage in the proceedings and have not had the opportunity to return to normal yet. We could have achieved more using contractors and updates via email to the working group. However, our core approach is engagement with the community out in the catchment and through walks, talks, demonstrations, and volunteer sessions. Without this possibility, we have chosen to limit delivery on the ground and focussed instead on fund raising and increasing awareness of the success of the community-led approach with other organisations in Dorset.

Lessons for others

- We believe that it is important to take time in the beginning to raise awareness of the opportunity and to allow meaningful engagement with the community. Without this buy-in, success will be a lot harder to come by in the long run.
- The initial stages of the process are not resource efficient, so make sure you allocate enough resource (and by this we mean mostly time) to effectively engage and then investigate the issues raised by the community.
- Take direction from community: share initial findings, but update these with concerns raised by the community; work together to develop solutions; give the community options and let them prioritise action.
- You can achieve quite a lot with not huge resources, at least in the early stages of development. Time taken to explore issues and opportunities, and demonstrate these to the community is essential to ensure buy-in. It also gets the ball rolling and achieves improvement straight away.



The future

The delivery partners are committed to ongoing delivery within the Asker catchment, and – once restrictions allow – will get back out and continue the good work. Priority areas for delivery will be progressing the options appraisal for fish passage at Loders, more invasive species control and Natural Flood Management work and developing resources to help homeowners do the right thing in the garden for wildlife. We will also work with the monitoring group to expand their work to include the chemical properties of the watercourse, as well as the biological elements that they are already looking at.

To take a more strategic approach, the Dorset AONB has formally joined the Dorset Wild Rivers partnership and helped secure resources to deliver this county wide project from Wessex Water. This will allow a more coordinated approach on fund raising and monitoring that will in turn bring in more resources for on the ground delivery.

Over the past nine months, we have also been successful with funding bids to the National Grid and the Department for Environment, Food and Rural Affairs' 'Green Recovery Challenge Fund', which will allow us to continue our work in the short term. We have submitted other bids to the Environment Agency which, if successful, will allow us to carry on delivering for five more years.

Acknowledgements

We shouldn't really identify individuals, because without the support of all 70 or so people signed up to the working group email, this project would not be possible. However, there a few members of the community who have taken a lead and really made this project the success that it is. These are, in no particular order, Geoff May, Michelle Warrington and David Pullan of Loders Parish Council, Howard Atkinson of Askerswell Parish meeting, who also leads the monitoring group, Victor and Arthur Crutchley of the Crutchley Estate, Chuck Wilmott and finally Emily Bourne.

We also need to thank the Environment Agency for their ongoing financial support of the project.