

# Catchment Matters

The newsletter from the Parrett Catchment Project

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## Communication matters

Welcome to Issue 5 of *Catchment Matters* from the Parrett Catchment Project (PCP), the quarterly bulletin for members, supporters and everyone who wants to hear about the work underway in the Parrett catchment to reduce flood risk and bring water levels under control. Also, out now is Issue 2 of *Catchment Matters: Farming Edition*, available from the PCP office or website.

Sharing information between members is a key benefit of partnership working, but it's something that in practice is not so easily achieved. To assist we are developing the [PCP website: www.parrettcatchment.info](http://www.parrettcatchment.info) as an information source, where members can submit and access useful information, progress updates, PCP policy responses and technical information. A *Presentation CD* is also available from the PCP office. Updated quarterly this assists partners in explaining the whys and wherefores of the Parrett Catchment Project within your organisations and/or to external groups.

## Rising to our next challenge



45% of our SSSI's on the Somerset Levels are in 'favourable condition'.



The demographics of agriculture on the Levels has changed dramatically over the last 13 years. As the number of farms have decreased the size of those remaining have increased. © FWAG

With the JAF 'Farming Water' projects well underway the PCP partnership's attention is now turning towards strategy component no. 4: *Creation and enhancement of wetland habitats*, and with very good reason.

Although listed in PCP's action strategy as a mid to long-term action, pressures from UK government and Europe, together with global climate uncertainty, are requiring an urgent focussing of minds and effort towards the Somerset Levels and Moors. In short these are:

1. The [socio-economic changes](#) that will inevitably result from the reform of the Agri-environment scheme and other support mechanisms;
2. The government target to achieve [95% of Special Sites of Scientific Interest \(SSSI's\) in 'favourable condition' by 2010](#) under the Habitats Directive. At present approximately 45% of the SSSI's in the Parrett catchment are in 'favourable condition'. English Nature and the Environment Agency will receive full support from the PCP in their work to achieve this standard;
3. The need for inland and coastal waters to be managed on a river basin scale and to reach 'good status' by 2015 under the [EU Water Framework Directive](#). A number of sub-catchments in the Parrett catchment are 'at risk' of failing WFD objectives.

As we face the pressures of global climate change with the increased risk of flooding, and

socio-economic change from the Agri-environment reforms, it has become clear that the restoration of natural wetland ecosystems is vital for the protection of our environment and also for the benefit of local livelihoods.

PCP believes the wetland ecosystem must play a central role in the social and economic development of the Parrett catchment. The EU Directives and subsequent UK policy will drive forward the restoration of wetland ecosystems on the Levels and Moors, and integrate the way in which our rivers, wetlands and coastal ecosystems are managed.

PCP will assess what is required to ensure thriving 'wider wetlands' for the long term. Partners will help to achieve favourable conditions through the delivery of the PCP action strategy and the EA's Parrett Catchment Water Management Strategy Action Plan (PCWMSAP).

On some moors, the lowering of penning levels in watercourses during the winter can result in low winter levels detrimental to life in those wetlands. Such areas have been identified, prioritised and solutions agreed, ready for implementation.

Through the PCWMSAP, partners have committed themselves to meet the requirements of the national, regional and local Biodiversity Action Plan through the development of a wise use concept in the wider wetland landscape of the catchment, and the instigation of specific management actions.

*Many of the PCP's ideas can be carried out on the ground using existing policies and resources, but there are policies that need to be improved or modified to help us deliver our objectives.*

## Lobby group consultations

The PCP Lobby Group's mission is to achieve national and regional policies that will further the delivery of PCP's components by responding to formal consultations as well as taking every opportunity to raise the issues in national and regional fora.

On the lobby group's agenda at the moment are three key consultation documents:

"[Making Space for Water](#)" is the consultation on a new Government strategy for flood and coastal erosion risk management in England for the next twenty years (deadline November). The last national Strategy for Flood and Coastal Defence was published in 1993 and now needs revising. The full consultation document is available from [www.defra.gov.uk/corporate/consult/waterspace](http://www.defra.gov.uk/corporate/consult/waterspace).

Developing measures to promote catchment-sensitive farming in England (within the [Catch-](#)

[ment-Sensitive Farming Programme: taking forward the Strategic review of diffuse water pollution from agriculture](#).) DEFRA invited views on the approach and possible measures to improve water quality through catchment-sensitive farming.

Formal Consultation on the draft new [EU Rural Development Regulation](#) (deadline Nov 12th). The draft new EU Rural Development Regulation was published by the European Commission on 15 July 2004. The Regulation forms the second pillar of the Common Agricultural Policy. PCP needs to ensure that measures to encourage farmers to retain water on their land are included in the final version of the Environmental Stewardship scheme.

For a copy of PCP's responses visit the PCP website. If you would like to join the group please contact Humphrey Temperley at: [humphreytemperley@hotmail.com](mailto:humphreytemperley@hotmail.com)

## Parrett sluice news



Stakeholders visiting Dunball to discuss potential issues of a sluice

A tidal sluice at Bridgwater has been an aspiration for over a century. Many believe it is now the most sustainable option for the future management of the Parrett, by increasing flood discharges, maximising flood storage and reducing the need to pump. It would be a more economical option than raising 30 km of tidal banks as sea levels rise. By reducing the flood risk and improving the visual appearance of the town, it could transform the economy of Bridgwater.

But, there are a number of serious environmental concerns, and any sluice would have to be designed and managed to enhance the nature conservation interests of the affected moors.

So far the Environment Agency has committed £300,000 to completing the feasibility studies by April 2005 and Somerset County Council, Sedgemoor District Council and Taunton Deane Borough Council are committed to raising £100,000 to look at the wider economic benefits of the sluice. These will provide Wessex Regional Flood Defence Committee with the information to decide whether to go ahead with the project, and apply for national funding.

Meanwhile a local group, the Tidal Sluice Partnership, has been set up to inform the community and seek local partnership funding for the scheme. This group brings together the key partners under the chair of Francis Cornish.

## PCP welcomes new partner



Gants Mill, Bruton - producing their own electricity.

Visit their website  
[www.gantsmill.co.uk](http://www.gantsmill.co.uk)

The South Somerset Hydropower Group was formed in 2001 as a group of 10 mill owners interested in using historic water mill sites for generating electricity. With the aid of grants from the Energy Saving Trust and South Western Electricity Board feasibility studies have been completed, and the first mill is now generating electricity. The remaining mills are expected to start generating in 2005.

Within the PCP area the mills involved are Court and Nimmer mills on the Isle, Carey's and Thorney mills on the Parrett, and Hinton and Hainbury mills on the Yeo.

This is a pilot project for the rest of the country, and already other groups are forming in different areas. When all 10 mill sites are generating it is hoped to produce over 600,000 kWh per year, enough to power 150 average sized houses.

The South Somerset Hydropower Group supports the Parrett Catchment Project in making best use of all the water resources within the Parrett catchment area.

For more info. about the South Somerset Hydropower Group contact Stephen Bartlett at [bartlettthinton@hotmail.com](mailto:bartlettthinton@hotmail.com)

## Update on PCP's flood retention demonstrations

With the lengthy and almost imperceptible phase of negotiations, licences, agreements, tendering and contracts completed on three of the 'Farming Water' demonstrations we are pleased to be able to report that the exciting phase of ground works has now commenced.

In this article we are reporting on two of the schemes that are now underway.

If you would like to find out more about these demonstration projects e.g. what PCP hopes to achieve through them or the project management or engineering aspects do contact us.

Dan Alsop the project engineer is also happy to lead site visits and conduct presentations for groups. All the parish councils affected by these schemes have been offered this service.

### Bower Hinton Scheme

The c. £37,000 scheme at Bower Hinton Farm, Martock, commenced on 7th September 2004. The following 7 days (including 3 days of torrential downpours) saw the contractor (JTT of Exeter), complete scrub clearance and topsoil stripping, dig 60% of the pond, lay the outlet pipe and begin construction of the embankments (see photos 1 & 2).

The pond will be excavated lower than shown in the photos so that it lies well below the normal water table. This will ensure permanent water where reed beds will provide valuable wetland habitat. The 0.4 ha. multi-purpose flood attenuation pond is not linked directly to a stream but will be fed by surface water runoff from a catchment area of approx. 7 ha. The runoff will be diverted into the pond inlet via the silt trap (photo 2). The pond outlet feeds water into the River Parrett. This outlet (photo 1) will stay open most of the year but upon receiving a flood warning from the Environment Agency the farmer will close the outlet, which will remain closed until the flood peak in the River Parrett has passed.

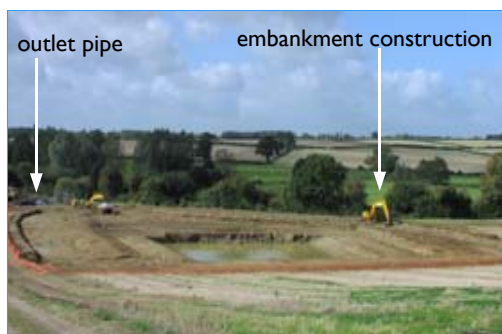


Photo 1. Bower Hinton Farm - view of work, main pond constructed, laying pipes and building banks (14 Sept 2004)



Photo 2. Bower Hinton Farm - main pond holding recent rain; silt trap in foreground (14th Sept 2004)



*"Farming at Bower Hinton all my life I have often thought how the depth of flood on the moors would be lessened if floodwater could be held back here by a dam and released in a controlled way over a few days."*  
Oct 2002

*I am delighted that this idea has now come to fruition. To see the ground work at Bower Hinton underway, and progressing as quickly as it is, I am sure we will be up and running this winter."*  
Sept 2004

Patrick Palmer (Farmer & SSDC District Councillor)

### Creedy Bridge Scheme

Upstream from Bower Hinton at Creedy Bridge the contractor (SWC of Bristol) has nearly completed scrub clearance and topsoil 'scalping' of a 2KM long strip along the River Parrett in preparation for construction of low level (2ft. high) embankments.

These banks do not intend to keep flood water out but will be low enough to enable overtopping by floodwater which will then be trapped within a retention area. Approx. 15,000 cu metres of flood water will be able to be held within these banks. This water will be released via a hand operated weir once the flood peak has passed.



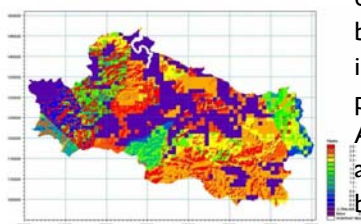
Photo 3. Creedy Bridge - Digger scraping the turf and topsoil in preparation for building the low retention banks along the Parrett. Ham Hill in far distance (14 Sept 2004).



## Modelling the Parrett catchment



Prof. Ian Cluckie (Chair of the Flood Risk Management Consortium) and Jongsook Park (Water & Environmental Management Research Centre, Bristol University).



This study aims to aid better river basin management in the context of the EU Water Framework Directive through understanding the effect of surface heterogeneity (diversity of topography) such as floodplain, wetland and hillside in the hydrologic process within the Parrett catchment.

In order to reflect a wide variety of characteristics of rivers, land cover, land use and precipitation variation over time, a complex physical distributed hydrologic model (MIKE SHE) has been used as a modelling tool, and data including digital maps, meteorological records and soil properties obtained from EDINA, Environment Agency, EU Wise Use of Floodplains project and the National Soil Resources Institute have been utilised.

Initial spatial analysis was carried out using a Geographic Information System (ArcGIS™) for delineating the flood prone areas based on elevation, slope and land use to contribute understanding the spatial diversity of the Parrett catchment.

This study forms part of Flood Risk Management Research Consortium, which was launched in March 2004 and which constitutes the largest research consortium ever commissioned in the UK.

Modelling in order to support the Flood Risk Management community is a key focus for the Water and Environmental Management Research Centre (WEMRC) at the University of Bristol and longer term plans will encompass the whole of the Somerset Levels.

## Are we communicating?

Are we communicating?

Please tell us what you think.

Contact us:

☎ 01823 355281

💻 [PCP@somerset.gov.uk](mailto:PCP@somerset.gov.uk)

In the Stakeholder survey (February 2003) you requested more communications in the form of:

- 1) More frequent newsletters;
- 2) Increased, proactive media coverage;
- 3) Quarterly update through CD-Rom;
- 4) Presentations by Chair /senior reps to Members and interest groups;
- 5) Clear Memorandum of Understanding;
- 6) Public statement clarifying PCP's purpose and remit;
- 7) Website development & maintenance;
- 8) Use of partners journals/newsletters & joint newsletters;
- 9) Emails rather than snail-mail;
- 10) Newsflash emails highlighting new info. on the PCP website.

In response, we reviewed our communications and overhauled our communications strategy. What we now have is a comprehensive programme of public awareness & communication activities that target specific groups (from the River Festival to CD ROM, email bulletins and media activity), with a dedicated Communications Officer to coordinate all these.

We believe that the majority of your requests have been answered. But what we want to know now is what do you think about:

- ? The quality and quantity of communications?
- ? Are you getting enough information?
- ? What would you like more of?
- ? Who's missing out?
- ? How can we improve?
- ? Can you assist us?



## Flood facts

Research carried out for the EA by Surrey University sociologists Jane Fielding and Kate Burningham, who matched the Agency's flood plan maps against census data on social class, has concluded that deprived areas of England and Wales are more vulnerable to flooding. Visit: [www.newstartmag.co.uk/news686.html](http://www.newstartmag.co.uk/news686.html)

For anyone interested in the weather conditions that led to the floods in north Cornwall in August and for a look at all the eye-popping stats, the Met Office has done an interesting summary on their website. Go to: [www.metoffice.gov.uk/climate/uk/interesting/20040816.html](http://www.metoffice.gov.uk/climate/uk/interesting/20040816.html)



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JAF website: [www.JAF.nu](http://www.JAF.nu)