

East Peckham Flood Relief Partnership



EAST PECKHAM FLOOD RELIEF PARTNERSHIP

What is the Partnership?

The East Peckham Flood Relief Partnership (EPFRP) was set up by Tonbridge and Malling BC to co-ordinate a multi-agency approach to: -

- Identify the causes of flooding,
- To research possible solutions and
- To oversee measures to reduce the risk of flooding in the future.

TMBC's Cabinet meeting, on 8th January 2003 (just 9 days after the last flood on 30th December 2003), agreed this approach and, importantly, also decided to allocate £250,000 for investigations and projects. This financial and community leadership commitment has been absolutely vital to the success of the partnership. Without this, little of the investigative work and specialist advice could have been achieved and we would not be in the position that we are now in; that is, with a good understanding of the causes of the flooding and of what needs to be done to protect the village.

The partnership brings together considerable expertise from a wide range of agencies and includes representatives from:

Tonbridge and Malling BC (TMBC)
Kent County Council, Highways Department
Upper Medway Internal Drainage Board (UMIDB)
Southern Water
Environment Agency
East Peckham Parish Council
East Peckham Flood Group

The first EPFR partnership meeting was held on 28th January 2003 and meetings have been held approximately every three months since then.

One of the first decisions made was to establish a Technical Sub Group. This comprises engineers and experts from each of the agencies and has been the 'engine room' of the partnership.

Through this Sub Group, the various agencies were able to work together in a way that brought a joint approach to finding best practical solutions and cut out the unnecessary bureaucracy that could so easily have hampered progress. The Sub Group commissioned experts, Weeks Consulting, to assist and support their work.

What has been done since January 2003?

Each of the agencies carried out early work to make practical and immediate improvements to the way that water is managed and, at the same time, started planning for future projects. These works included:

- Jetting and clearing of surface water sewers (TMBC)
- Renewal of drainage system in Old Road (KCC)
- Clearance of watercourses and ditches¹ (TMBC & UPIDB)
- Topographical survey of entire surface water drainage system (KCC)
- Modelling of highway drainage system (Weeks)
- Residents' survey (Parish Council and EPFG)
- Provision of sandbag containers at Curran Hall and the sports ground (TMBC)
- Improving emergency contractors' staff cover during holiday periods (TMBC)

The Partnership contributed £20,000 to the Farming and Wildlife Advisory Group (FWAG). FWAG is an organisation that offers advice from to farmers and other landowners on agricultural practices and land use initiatives. FWAG have been meeting with local farmers and providing free advice as a result of the Borough Council contribution during 2003 and this will continue into 2004. This initiative is important to East Peckham in influencing farming practices to reduce flash flooding and surface run-off and also to encourage good maintenance of water courses.

Also, from January 2003, East Peckham Flood Group held monthly, open meetings to feed back information from the partnership to residents and produced and circulated a monthly newsletter to a mailing list of 350 residents. The cost of producing this newsletter was met by TMBC and local volunteers undertook delivery.

This group also worked to help and support to residents worried about flooding, provide information about flood protection measures and emergency planning and produced and circulated leaflets to all households in the village giving practical tips in the event of a flood. This complements the Environment Agency's leaflet.

¹ in particular Church Lane and re-excavation of ditches and culverts from Smithers Lane to Coult Stream.

Options Study and Project Appraisal

The Technical Sub Group then carried out investigations and surveys and concluded that there were 12 projects that had potential to improve the village's defences against flooding. Each of these options was considered in detail, including how they in turn might affect other areas, either positively or detrimentally.

To give some idea of the investigations carried out, the group considered the results of: -

- An extensive GPS survey carried out by the Environment Agency
- A topographical survey of the Coult Stream, site of the proposed dam, borrow pit and flood relief channel
- A topographical survey of threshold levels of more than 300 homes
- A habitat survey
- Hydraulic modelling of Coult Stream and the route of the floodwater from Addlestead Road through to Old Road.

Over the summer of 2003 the Technical Sub Group came to the conclusion that the most effective option was 'option 3', the installation of a dam on the Coult Stream to better control its flow through the village, along with some improvements to the stream itself to ensure adequate running capacity at key points. It is at these pinch points that water would enter the road system and then, unable to get away, travel down Addlestead and Snoll Hatch Roads into the Village where it would settle in pools up to a meter deep until it drained away naturally.

The team also liaised with the Planning Department, as planning permission will need to be obtained for the dam.

Preferred option – dam at land on Bullens Farm

The option that has been chosen as a key focus for action and investment involves constructing a dam on the Coult Stream, in a natural valley at Bullens Farm. This dam will reduce the 1 in 100 year flood flow in the Coult Stream, down stream of the dam, from 4 cubic metres per second to 1.5 cubic meters per second. It will be capable of storing approximately 40,000 cubic metres of floodwater. It will be 4 metres high and 160 metres long and will be built using material excavated from a 'borrow pit' on the farm in the interests of cost efficiency and sustainable construction methods.

The size of the dam will bring it into the scope of the Reservoirs Act. This brings another level of regulation which the Technical Sub Group then worked to make sure would be met. At this stage, Baptie Consultants, government Panel Engineers ('dam' experts), were appointed to review and comment on the design.

Downstream of the dam, drainage into the Coult Stream will be improved and the line and flow of the ditches and culverts that make up that part of the Coult Stream system will be improved to ensure that water stays in channel.

Funding the dam

DEFRA (Department for the Environment, Food and Rural Affairs) is the government department that allocates funds for flood alleviation schemes. DEFRA will fund up to 45% of project costs of the accepted scheme.

A Project Appraisal Report (PAR) has to be submitted before a project can be considered for funding. The PAR involves a technical report and a Cost Benefit Analysis (CBA) that takes into account the ratio of homes at risk from flooding compared with the cost of the proposed alleviation scheme. The DEFRA assessment for schemes is based on a minimum points level for projects to be considered (currently 20) and any bid for funding has to achieve that score. The CBA determines the points' score for our scheme.

The Technical Sub Group then worked to design the dam and cost it. This work has been undertaken meticulously to maximise the chance of the bid being successful.

At this stage the team faced a challenge. DEFRA will not generally accept the same properties being used to calculate points' scores for more than one flood alleviation project. So the group had to leave out of the equation, homes in the village that were in the flood plain of the river Medway - in effect, within the Bourne and Medway flood plains. This is because these homes may well eventually be counted for the CBA for alleviation schemes on these two rivers.

This left about 30 of the original 60 flooded homes available for inclusion in the CBA. When these householders were re-surveyed during October 2003, a reluctance was encountered in persuading local people to admit to their homes having been flooded. It is assumed that this is a result of nervousness about future insurance and property values. This raised a potentially serious threat to the chance of obtaining funding for the dam. So the group then commissioned, at short notice, a further survey to ascertain flood water levels to demonstrate beyond reasonable doubt which properties did and did not flood.

Baptie consultants, with considerable experience on PAR submission to DEFRA have been commissioned to advice on the PAR, to make sure that our application has the best possible chance of success.

What happens next?

The PAR was submitted to DEFRA at the end of February and we expect to know whether or not the bid has been successful by late April/May. Should the bid be successful, plans will immediately be put in place to construct the dam over late summer/autumn 2004.

However it is also quite possible that DEFRA will receive many other strong bids and that ours may not score well in comparison with these. The Technical Sub Group has worked hard to ensure the bid is put together as comprehensively and accurately as possible and engaged specialists to oversee and guide the submission. Should the bid not be successful we shall have to consider other funding options and the dam is unlikely to be built in 2004. All the investigative work has now been carried out and is easily transferable to another bid, so much of the work will have been done but there is not another immediately obvious source of funding. In the meantime constant maintenance and monitoring of the existing drainage system as a whole continues to minimise the risk of flooding whilst progress is made on our key project.

A residents meeting is being held at the Curran Hall on Tuesday 1st April 2004 at 8pm and all are welcome. The Technical Sub Group will be available at this meeting to present their findings and take any questions that residents may have about their work. We do hope that you will be able to attend this meeting and also that you have found this information leaflet helpful and informative.