

Public consultation: feedback

River Sowy & King's Sedgemoor Drain enhancement options 2016 4 February 2015

A priority action in the 20 year action plan is to enhance the ability of the River Sowy relief channel and King's Sedgemoor Drain (KSD) to take flood waters. This will help reduce flood duration in other Parrett and Tone moors.

On 10 December 2014 we published our public consultation report 'River Sowy & King's Sedgemoor Drain Enhancement Options 2016'.

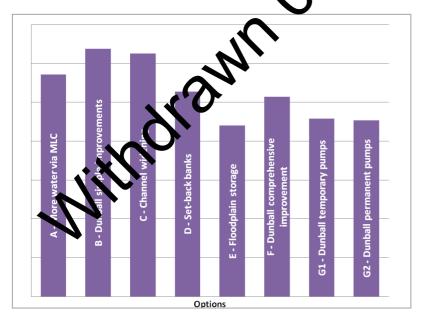
The report explained the benefits of the Sowy & King's Sedgemoor Drain (KSD) flood relief system, and summarised the options to enhance the operation of the system with a view to starting work in 2016 (for consultation). It also explains that we anticipate up to £6M funding to enhance the Sowy-KSD system during 2016, but that this isn't enough to build all the enhancement options described in the report. The options are reproduced below for ease of reference.

We held a public event at Othery village hall on 10 December to present the options report, and launched an on-line survey to capture public preferences to help us prioritise the 2016 improvement options. The survey closed on 9 January 2015. This briefing note summarises the survey results.



Survey results

We received 101 responses to the survey; this acludes feedback from the paper questionnaires filled out at the Othery public meeting, which were added to the on-line survey.



Of the responses, 50 were complete, and 51 were partially complete, that is not all questions were answered. Thank you to all those that took part in the survey.

Considering all responses, the enhancement options were prioritised in the table (to the left).

Options prioritisation:

Opinion on which options should be prioritised is fairly evenly spread, but there is a slight preference for:

A: Enhanced operation – more water via Monk's Leaze Clyce.

B: KSD simple improvements at Dunball

C: Channel widening

It is evident that no option has a clear majority of support, and therefore we cannot reasonably decide which options to take forward from this survey alone. However, this is still useful and gives us an indication

of the options to focus on in more detail. We will include these views when prioritising which options to deliver.

Several respondents commented on the Sowy 'throttle', a bridge-like structure built into the river Sowy just downstream of Monk's Leaze Clyce at Aller Moor. The structure gives an element of flow control in combination with the embankment at Middlemoor. It also allows access across the river. It was designed, in consultation and agreement with the landowner, to throttle back flood flows and enable flood water to be temporarily stored on Middlemoor near Combe. This has generally proved effective in minimising the impact of flooding on agricultural land in the vicinity under typical annual flood conditions.

We will be improving the current throttle structure by replacing its gravel surface with a concrete slab, making a more robust right of way across the river.

Under extreme flow conditions such as we experienced last winter, the throttle is 'drowner' out, as flows pass over the top of the structure. For this reason, removing the throttle is currently a lover priority. However, if it is determined that widening or altering the channel in this reach of the Sowy is a priority, we will review the performance and suitability of the throttle.

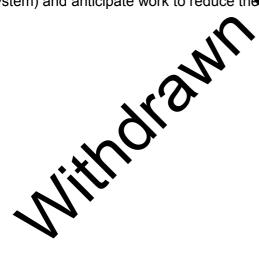
Next steps

In 2015 we will investigate the options further to ensure we understand their relative effectiveness and which options can be delivered within the available budget and time frame. We will carry out ground investigations and environmental assessments as part of this process.

We will share the 'pros and cons' of the options with the 20 Year Flood Action Board and Somerset Rivers Authority to propose a preferred way forward. We expect to hold a public event in autumn 2015 to present further details. It is likely that the schemes will require practing permission so there will be further consultation opportunities through winter 2015/16 within the clanning process, prior to construction in summer 2016.

Improvements planned for 2015

We continue to work with Somerset County Council of ensure water can be passed beneath the A372 at Beer Wall and will link the watercourses with the new culverts under the road. After a winter break, this work will continue through 2015. We also intend to upgrade Chedzoy New Cut Sluice (Penzoy river system) and anticipate work to reduce the concrete restriction beneath the southbound A38 at Dunball.



Summary of options

	Options	Requirements	Cost	Benefit/Risk
A	Enhanced operation	Agreement of landowners & stakeholders to open Monk's Leaze Clyce whilst spillways are running. (The clyce is normally closed when the spillways run)	Costs of associated options as described	Average >5day reduction in flood duration in Parrett and Tone moors. Requires that pumps are positioned at Dunball if flood risk to the Sowy-KSD floodplain is to be minimised, or that river widening (option C or D) compensates for the need to pump.

The following options (other than option E) complement option A by minimising flooding through the Sowy-KSD floodplain.							
В	KSD simple improvements at Dunball Choose between option B or F	remove concrete obstruction from A38 bridge (if not already done)channel/bridge flumingwidening constricted channel	£4M to £7M	Protect highways network. More efficient outlet at Dunuall. Modest flood reduction impact at the top end of the KSD system.			
С	Channel widening (by up to 30%): - up to 2m wider on Sowy - up to 8m wider on KSD	- Over 9km of Sowy - Over 9km of KSD (this may not be necessary if pumps at Dunball) - Could increase flow capacity to around 20m³/s, though 30m³/s may be possible	£4M to £7M	Less flooding in Sowy KaD floodplain. Fewer summe floods. Greater operational flexibility i.e. we can put through note vater without creating more flood finite or plain Impact of conservation sites and schapology from ground works. Impact on conservation requirements. Impact on stewardship payments if less water is on the land.			
D	Bank raising or extension in the lower section of the system	- infill low spots (as part of channel widening) - more extensive raising or extending banks		As for option C Additional structures required (and will need operation and maintenance to drain flood water back into channel if trapped behind embankment			
E	Floodplain storage / water spreading	Potential storage downstroam of Beer Wall based on conservation areas Agreement from landowners	TBC	Obtaining agreements takes time. Storing water here has limited value during bigger and longer floods. Benefit to wildlife & eco-tourism through improved conservation opportunities.			
F	KSD comprehensive improvements at Dunball	- bridger vir nsion / replacement - fully vicening constricted channel - mrit vernents to Dunball basin - up crade/expansion of tidal sluice	>£10M	As for Option B but larger scale Costs are significant Would provide robust foundation for other system improvements in future			
G	Dunball pumps	- temporary pumps (15m ³ /s), or - permanent pumps with total capacity from 10 to 40m ³ /s	- temporary: ~£0.7M p.a* -pumping station: £5M - 20M	Similar benefits to Option C May be alternative to channel improvements in KSD (option F) High energy/operational/maintenance.			

An all swal ce \$30% is included as a contingency to manage unforeseen risks (other than pump stations), but does not include operation, vaintenance or compensation costs. Options are not presented in a priority order. The flood mitigation benefits of options are not equivalent.

^{*} Temporary pump costs are based on winter 13-14 experience and assume a requirement of 10 weeks in operation per annum. If pumps were held in the UK, costs could be reduced. Pump hire costs would not be met from the Local Growth Fund, but from another Environment Agency budget.