

Somerset Rivers Authority Board Paper

Next steps: River Sowy – King’s Sedgemoor Drain Enhancements Scheme (Phase 1)

RECOMMENDATIONS

The Somerset Rivers Authority (SRA) Board is asked to:

1. Agree to pausing further work on Phase 1 whilst options to deliver the project at lower risk and lower cost are explored.
2. Agree that all SRA partner organisations continue to work together to take the steps necessary to complete Phase 1 works.

Purpose of the item

At its meeting on 3 March the SRA Board discussed a Sowy-KSD paper with five recommendations. Three of those were dealt with on the day. Two were deferred for further information. The purpose of this item is to revisit the remaining two recommendations.

Phase 1 completed works

Phase 1 of the River Sowy-King’s Sedgemoor Drain (KSD) Enhancements Scheme – as approved by the SRA Board – comprises:

- raising low sections of banks and forming new banks where they did not exist – complete except for 1.8 km of the King’s Sedgemoor Drain left bank.
- Excavations of sections of the riverbanks to create ecological enhancements – complete.
- upgrade works to outfall structures on the side ditches – two of the six outfall structures are complete (Cossington Right Outfall and Chilton Right Outfall).
- desilting works at Parchey road bridge and Dunball railway bridge on the KSD – complete.
- refurbishment works at Egypt’s Clyse, Moorlinch Raised Water Level Area (RWLA) and Westmoor RWLA as strategic mitigation for Phase 1 and future works (comprising the Full River Sowy- KSD Enhancements Scheme), and Oath to Burrowbridge dredge – complete.

Please also refer to the appended plans.

Phase 1 outstanding works

As previously reported, it was not possible to complete all Phase 1 bank raising works by the end of November 2022 as planned. The remaining outstanding works are split into those that are part of currently funded works and those that require further funding and an agreed delivery model.

Outstanding works – all funded:

1. Parchey Tilting Weir Outfall – designs complete, mobilisation and preparatory works started 27 February 2023, and awaiting fabrication of parts ready for installation in late March 2023.
2. Level Rhyne Outfall – the current draft designs have been prepared and require Land Drainage Consent from the Parrett Internal Drainage Board (IDB). Discussions are ongoing with the IDB regarding some further design modifications required to alleviate blockage concerns. The SRA Board approved an additional £47k on 3 March to fund the design modifications to alleviate the blockage concerns
3. KSD Back Ditch Outfall – the current draft designs have been prepared and require Land Drainage Consent from the IDB. Discussions are ongoing with the IDB regarding some further design modifications to alleviate blockage concerns. The SRA Board approved an additional £47k on 3 March to fund the design modifications to alleviate blockage concerns.
4. Construction of Chedzoy Tilting Weir Outfall. The design is currently being worked on, together with Level Rhyne and KSD Back Ditch Outfalls. The cost for the original proposal was estimated at £115k. This design is also subject to the same blockage concerns as the other outfalls. The cost to resolve these concerns, for this structure, and meet IDB's Land Drainage Consent requirements required an additional £65k which the SRA Board approved at the 3 March Board meeting.

Outstanding works - not currently funded

5. Raising of 1.8km of the left bank of the King's Sedgemoor Drain (KSD). The design is already in place for this. The access now required, requires upgrading of 600m of an existing farm track and installation of a field culvert to enable construction plant to pass. Preliminaries such as design and landowner discussions are underway to enable the access track. The estimated cost range for bank raising and the access track is between £0.79m and £1.35 million (most likely being £1.15million).

An assessment of the impacts of not completing item 5 has been undertaken by the Environment Agency: there is no increase in flood risk to properties or main roads. There could be some increased flood risk to agricultural land adjacent to the 1.8km of the left bank

of the KSD. However, there are some wider benefits to be taken account of when considering whether to undertake the bank raising works. Completing the Phase 1 works would give the Environment Agency greater flexibility to manage flood waters by facilitating improved management of the Parrett and Tone catchments and enable pumping to be started earlier and reduce durations of flood events. The Environment Agency appreciate and understand that completion of these works is a priority for the SRA and partners and is also a commitment within the Somerset Levels and Moors Flood Action Plan 2014. The Environment Agency offered to be the delivery partner who completes these works.

Until Phase 1 works are complete the River Sowey (Parrett Flood Relief Channel) cannot be operated beyond the existing agreed managed flow regime¹ (17 cumecs) without agreement from other partners including the IDB and landowners, because of possible consequences for their land.

The total cost estimate range for all works to complete Phase1 is be between £0.96 and £1.52 million (most likely £1.32 million). However, the Environment Agency cannot guarantee this price, but will do its best to stick to this budget.

As well as the additional funding required, the delivery partner model for delivering the remaining 1.8km of the KSD bank is still to be agreed. If the Environment Agency is asked to be the delivery partner, then it can only use its framework delivery supplier Kier - the existing supplier who has been commissioned to deliver the works to-date. The value of the works means the Environment Agency is unable to use other suppliers from its smaller operational framework.

If the Environment Agency is to deliver the remaining works, this will need to be agreed by the end of March 2023. If this is agreed any later, this will push Kier's start date for the works later into the year, which reduces the working window due to ecological constraints in the autumn and may increase the risks of working in the wetter season, which has proved very challenging in previous years.

To date, no other SRA partners have expressed an interest or ability to deliver the remaining 1.8km bank raising of the KSD and hence the Environment Agency offering to deliver these works.

Risk Sharing

The Environment Agency requested that a risk sharing agreement be in place by the end of March, or partners are at least working towards a risk sharing agreement by then. Without a risk sharing agreement the Environment Agency is unable to commence work on outstanding item 5 above – raising of 1.8km of the left bank of the King's Sedgemoor Drain. A risk sharing agreement is to cover uncertainties and risks to price increases due to global

¹ This relates to times of managed flow i.e. when spillways are not running and inflow can be controlled via Monks Leaze Clyce.

market volatility and external pressures outside the control of the project. The Environment Agency committed to do its best to stick to estimated costs and to keep the SRA Board clearly briefed on costs as work progress.

Latest Status

At the 3 March SRA Board meeting the following recommendations were put forward:

1. Decide if the Board wishes to complete Phase 1.
2. Note the estimated costs of the remaining unfunded works to complete Phase 1 and approve allocation of up to £1.35m by 31 March 2023.
3. The Board is asked to approve £107k for the further design modifications for Level Rhyne Outfall, KSD Back Ditch Outfall. The Board is also asked to approve £180k for Chedzoy Tilting Weir which is not currently funded.
4. Commit to putting in place a risk sharing agreement by 31 March 2023.
5. Decide if the Board wish the EA to deliver the remaining works. The EA will need to know this by 31 March 2023.

The Board decided unanimously that it did wish to complete Phase 1 and following on from that members also agreed unanimously to approve funding for Level Rhyne Outfall, KSD Back Ditch Outfall and Chedzoy Tilting Weir. Recommendations 2 and 5 were deferred and recommendation 4 was amended to 'using best endeavours and good will to reach an agreement on risk sharing by 31 March'. Recommendations 2, 4 and 5 are intrinsically linked.

Following this meeting on 3 March, officers and the SRA Chair and the Somerset County Council Executive Lead Member for Environment and Climate Change (who are both county councillors and SRA Board Members) held two meetings to investigate whether a risk sharing agreement between the Environment Agency and the SRA could be completed by 31 March. It is important to note that Somerset County Council as Host Authority and Accountable Body for the SRA has to support any risk sharing arrangements recommended by the SRA Board.

At these two meetings, officers from across the SRA partnership had detailed discussions to better establish the likelihood and impact of project risks occurring. Unfortunately, due to the nature of the physical environment the project is being delivered in, and the economic uncertainties affecting the construction industry, it has not been possible to find a consensus on how likely risks are to occur or to put an upper limit on what the financial impact of those risks might be. Without being able to quantify these risks the SRA could exceed its available funds should problems arise once the contractor is onsite. While the SRA Board confirmed that it wants Phase 1 to be completed, this has to be done in a financially prudent way.

Without being able to firmly establish the likelihood and impact of risks coming to fruition it is recommended that SRA partners investigate how the remaining works can be completed in a way that gives a delivery organisation and the SRA a much greater level of confidence in what the likely cost will be.

The SRA Board has expressly stated its commitment to completing Phase 1 of this project.

Recommendations

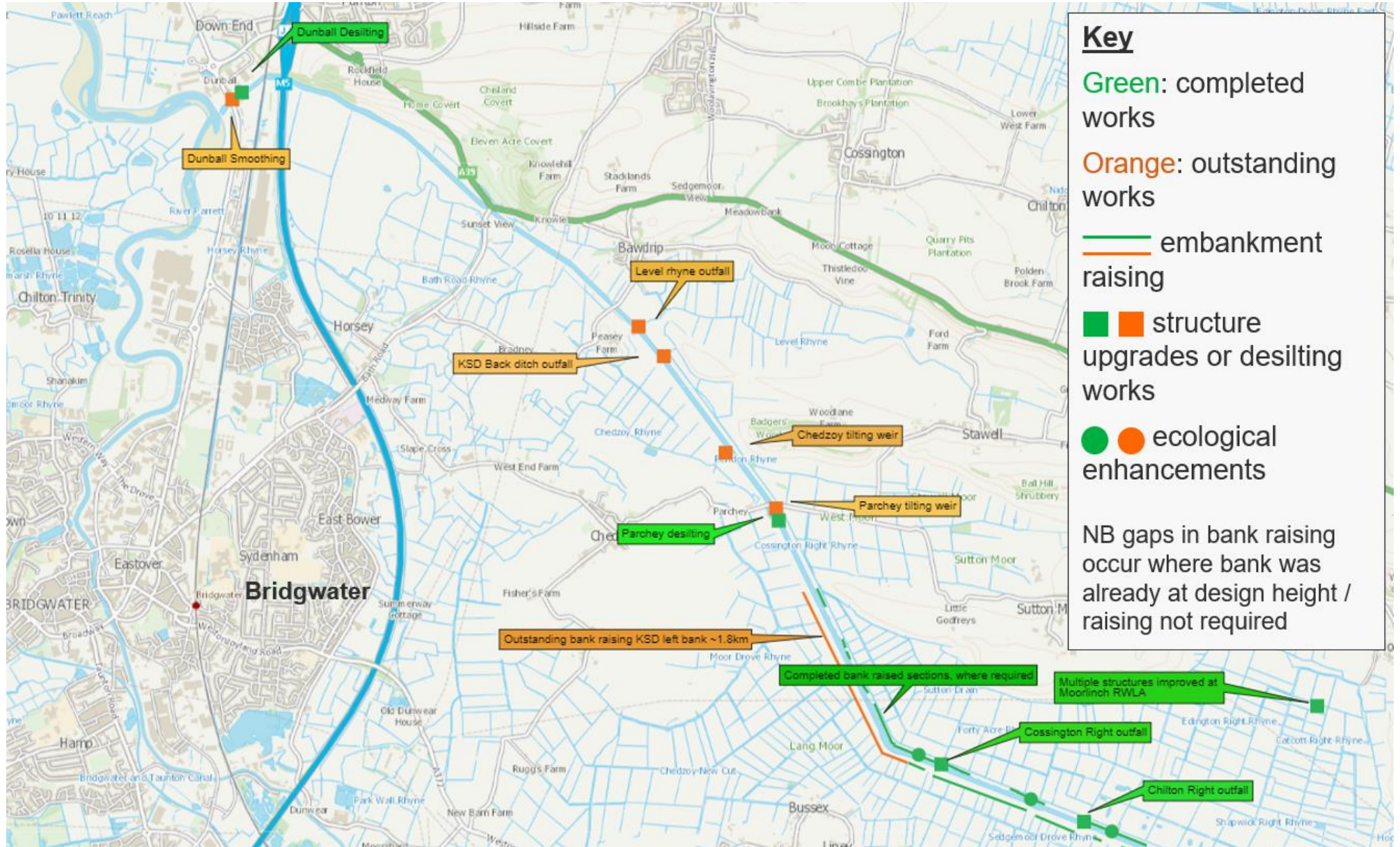
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Date: 10 March 2023

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KSD Works – completed and outstanding to date



Sowry works – completed and outstanding to date

