

Somerset Rivers Authority Board Paper

Title: Review of Management and Reporting of Work Stream W1

RECOMMENDATION:

The SRA Board is asked to:

- **Approve the Management and Reporting of Work stream W1 to be divided in two and that workstream W1a will be managed and reported by the EA and that W1b will be managed and reported by the IDBs.**
- **Note that the Management Group has asked the SRA Senior Manager to prepare a paper to look at how best to progress the outstanding FAP action to develop an FRM strategy (plus all the remaining actions from W6), including who would lead it.**

Purpose of the item:

To recommend the future approach to the management and reporting of Work Stream W1

Background and context

In early 2014 the Somerset Flood Action Plan was prepared. It comprises a number of work streams. Work stream W1 included all actions relating to dredging and river management. The actions identified are to help achieve the core objective of the flood action plan “to reduce flood frequency, depth and duration.” The actions and their current status are shown in the table below.

To date, the Environment Agency has been responsible for collating information from delivery partners and reporting progress, issues and risks to the SRA Management Group and SRA Board on all actions in W1.

With many of the initial actions in the SRA 20 year flood action plan now completed it is proposed to split W1 into two (i.e. W1a and W1b) to ensure the most appropriate partner has responsibility for reporting to the SRA Board. The IDBs have been asked to consider taking on the management of part of this work stream.

Latest Status

The following table summarises the original actions, their current status and likely future setting (W1a or W1b) if the future management of the work stream is split.

WORKSTREAM W1 DREDGING AND RIVER MANAGEMENT		
W1.1	Initial dredge	
W1.1.1 W1a	Dredge 4km of River Tone upstream of Burrowbridge and 4km of the River Parrett below their confluence at Burrowbridge to 1960's river profile (EA)	Completed 2014. 130,000 cubic metres of silt removed and either stored for bank repair works or taken to adjoining land and spread for agricultural improvement. Significant hydraulic benefit to property and roads affected in 13/14 floods.
W1.1.2 W1b	Maintain newly dredged profiles (IDB)	Ongoing. Land based work completed in late 2015 and early 2016 on the lower 2.2 kms of the initial 8km dredge – 22,000 cubic metres of silt was removed and placed to the back of the flood bank or spread to adjacent land. Alternative methods of sediment management were trialled whilst undertaking the 2016 maintenance on the tidal River Parrett and to inform the emerging dredging strategy (sediment management plan). Ongoing monitoring of silt deposition will identify when and where future maintenance is required. Further Water Injection Maintenance Dredging in 2017/18
W1.2	Additional dredging	
W1.2.1 W1a	Review effectiveness of dredging and identify additional suitable locations across the catchment as appropriate. (EA)	Completed. A total of 10 sites were identified and assessed for overall effectiveness in reducing flood risk locally. Of the 10, the section of the River Parrett downstream of Northmoor Pumping station (the area where initial dredge ended) to the M5 was identified as providing further benefits in reducing water levels. The first stage of a dredging strategy (sediment management plan) is being finalised for the tidal Parrett and Tone and the Lower Brue. This has undertaken further modelling both upstream and downstream of the 4.75km Parrett Pioneer dredge in order to prioritise locations. It has also trialled alternative methods of maintaining the channel to deliver more affordable maintenance dredging. Modelling of the Brue is now underway.

W1.2.2 W1a	Implement additional dredging as appropriate (EA)	Ongoing. Dredging a further 750 metres of the River Parrett downstream of Northmoor Pumping Station was undertaken in mid-2016. 13,000 cubic metres of silt was removed by water based plant and loaded onto a barge (due to restrictions on banks for land based machinery) and removed at Westonzoyland Pumping station and spread to land. Further work is being considered upstream of Burrowbridge and downstream towards the M5 through the development of the dredging strategy (sediment management plan).
W1.2.3 W1b	Maintain additional dredged profiles (IDB)	Ongoing. Ongoing monitoring of silt deposition will identify areas that require future maintenance and frequency.
W1.3	Maintenance of river systems	
W1.3.1 W1b	Maintain rivers and small watercourses to achieve conveyance most effectively to existing standards (EA)	Ongoing. EA have funded and delivered over 100kms of de silting works on watercourses leading to pumping stations as well as removal of silt berms under road bridges around Ilchester. IDB have through SRA funding delivered increased maintenance on West Sedgemoor and Allermoor. SRA are funding a further 10kms of de silting to be delivered by the EA in 2016/17.
W1.3.2 W1b	Additional maintenance. (EA)	Ongoing. Vegetation clearance in rapid response rivers in West Somerset, repairs to Flood alleviation scheme at Isle Brewers, refurbishment of flood bypass channels at Rode Bridge, Delivery of a pump at Screech Owl near Bridgwater to remove excess floodwater in the vicinity of the Boat and Anchor public house and surrounding area.
W1.3.3 W1b	Voluntary rhyesman to inspect and undertake small scale maintenance activities and report to appropriate authority (SCC)	Following feedback from parish councils (who felt that this would be socially divisive), this action was replaced by the action to appoint a Riparian enabling and enforcing officer. Appointee to take up post summer 2017.
W1.4	Small improvements and repairs	
W1.4.1.	Review effectiveness of temporary operations and if appropriate install permanent infrastructure to enable	Completed. Dunball and Northmoor now capable of accepting additional pumps in an efficient and effective manner. Other improvements include infrastructure

W1a	temporary pumping stations (EA)	upgrades such as discharge culvert at Northmoor, increased pump resilience such as replacing old diesel engines with modern electric ones.
W1.4.2 W1a	Consider making permanent existing temporary local protection (EA)	Completed. Westonzoyland and Aller have permanent defences in place.
W1.4.3 W1a	Repair and reinstate existing river and flood banks and spillways (EA)	Completed.
W1.4.4 W1b	Review and where appropriate implement small scale ring bank improvements e.g. Thorney village and Thorney Pottery. (EA and IDB)	Ongoing. IDB completed the construction of new and improved ring banks at Thorney Village and Thorney Pottery. Consultation conducted with residents in the Northmoor area 2 years ago suggested there was limited overall appetite for a scheme, but if that changes options will be reconsidered.
W1.5	Operating Plans and Procedures	
W1.5.1 W1b	Review impact of existing water level management plans on 2013/14 flood event (EA)	Completed. Report produced on negligible impact of plans in the 13/14 flood. A review of all existing WLMP's was undertaken in 2014 as part of their 5 yearly review. No new or changed water levels were implemented.
W1.5.2 New Work stream	Develop a Flood Risk Management Strategy for Levels and Moors including actions from other work streams (NE, IDB, EA, SCC, LA's)	Not started. Scope to be agreed with partners. Move to new work stream.
W1.6	Sowy/Kings Sedgemoor Drain Capacity Improvements	
W1.6.1 W1a	Develop options for increasing the capacity of the Sowy/Kings Sedgemoor Drain system (EA)	Ongoing. Challenges around striking a balance between various interested parties.
W1.6.2 W1a	Undertake appropriate road works to enable the River Sowy channel to be widened (EA)	Complete. Works at Beerwall entailing the digging of new channels, construction of two new weirs, culverts under the road as well as road raising.
W1.6.3 W1a	Deliver an effective scheme to increase capacity of the Sowy/Kings Sedgemoor Drain system (EA)	Started. Elements of the work have been completed e.g. Chedzoy Flap refurbishment (funded by IDB precept), removal of "lump of concrete".
W1.7	Accelerate the construction of a Barrier or sluice at Bridgwater	
W1.7.1 W1a	Review design options for Bridgwater tidal barrier/sluice (EA)	Complete. Work delivered by SDC and Black and Veatch consultants. Operational opportunities to manage sediment flux being considered.
W1.7.2 W1a	Discussions to identify approaches to accelerate the build programme and financing of the barrage /sluice (EA)	Complete. Consultation on preferred option Spring 2017
W1.7.3 W1a	Build Bridgwater tidal barrier/sluice. (EA)	Ongoing

The EA have requested that in **W1a**, they would report to the SRA on large capital schemes such as Sowy or Bridgwater Barrier projects along with further capital dredging. It is possible that other Risk Management Authorities would deliver some of that work. In **W1b**, the IDB would report to the SRA on smaller projects and maintenance activities even though in some instances these may be on statutory Main River and other Risk Management Authorities would deliver the work.

The Parrett IDB have agreed to this approach.

The Axe Brue IDB have not yet considered this matter at a full Board meeting however a similar outcome is anticipated.

It is proposed that the Management and Reporting of Work stream W1 is divided in two as indicated in the table above. Also that workstream W1a will be managed by the EA and that W1b will be managed by the IDBs.

Action W1.5.2 To develop a Flood Risk Management Strategy for Levels and Moors has not been started yet although the EA trigger points work was done as part of this action. It is now being promoted more strongly as an important action to help the SRA identify and prioritise future approaches and actions and to work out how to integrate effectively with the plans and strategies of the statutory bodies. Given the scope of the SRA, it is suggested that this action is widened to include the whole of Somerset.

The Board are asked to note that the Management Group has asked the SRA Senior Manager to prepare a paper to look at how best to progress the outstanding FAP action to develop an FRM strategy (plus all the remaining actions from W6), including who would lead it.

4.0 Funding

It is anticipated that these changes will involve some additional IDB staff time working with partners and reporting progress to SRA Board. However time and expenses will be recharged and fully recovered from the SRA.

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Author: Iain Sturdy (IDBs)