

ITEM 8

Somerset Rivers Authority Board Paper

Title: Sowy/King's Sedgemoor Drain Enhancement Project

RECOMMENDATION

The SRA Board is asked to:

1. Note the progress of the project with regard to being legally compliant under the Habitats Regulations Assessment
2. Note that all partners will need to support the mitigation measures proposed

Purpose of the item

To provide the SRA Board with an update on making the scheme legally compliant with the Habitats Regulations, and outline key mitigation measures identified to achieve compliance.

Background and context

At the January SRA Board meeting, the Board agreed to:

- Endorse the Environment Agency continuing to work with Natural England to develop the Sowy/KSD project to the point it can be compliant with Habitats Regulations, and then go out to tender as soon as possible;
- That the SRA Chairman would chair a meeting in February, with representatives of the Environment Agency, Natural England and the environmental NGO's, to resolve outstanding issues with the aim of deciding whether the Sowy/KSD project can achieve legal compliance.

Progress Update

Natural England (NE) chaired three workshops to progress the Habitats Regulation Assessment of the scheme (on 3rd & 8th of Feb; 1st March), kindly attended by experts from RSPB, Somerset Wildlife Trust, IDB and the Environment Agency. The same organisations joined the SRA Chairman on 22nd Feb to further consider the issues.

Outcome of Workshops

The focus of the workshops was to identify the impacts of the proposed scheme on designated conservation sites, the supporting habitat associated with them, and propose mitigation options. The main impacts of the scheme are due to the potential to remove flood extent within the Sowy corridor, both surface area wetted, and reduced frequency of events in some areas.

The area under consideration is large: over 20 square kilometres. We do not have comprehensive data for habitat type and use over the majority of this area, and modelling of fluvial flood changes due to the scheme is limited to representative flood events only. Acquisition of such data would take several years to complete.

Conclusions

The scheme can be legally compliant provided certain mitigations are put in place as part of the project's delivery. Physical works and changes in water level management will need to be made

before the enhanced Sowy-KSD system could be operated. It will require all SRA partners to assist delivery of mitigation.

Broadly, it is considered that the land within conservation designations is largely unimpacted by the scheme. This is due to flood extents being very similar in these areas with the scheme in place, and that favourable conditions are mostly met by penning water under Water Level Management Plans (WLMP) and conditions set by agri-environment schemes. There is an assumption that the WLMPs and associated infrastructure will be maintained.

It is considered that the majority of impact i.e. less frequent flooding, is on non-designated land west of the Greylake reserve, in Aller Moor (Sutton Hams), north west of King's Sedgemoor and north of Westonzoiland airfield.

There remains uncertainty over the impact of very small flood events that may occur once or twice a year, illustrated by the few days of patchy flood water adjacent to the river channel experienced in early February this year. Such events are considered significant for over-wintering birds by members of the NGO community, who are very concerned at the potential reduction in the frequency of the 'splashy conditions' they create. However, there is no definitive proof that a lessened frequency or extent in a particular area would be of significant detriment, or not.

Consequently, the mitigation developed is precautionary, to reflect the uncertainties in our knowledge of the conservation sites and protected species behaviours and requirements, and in the change the scheme may bring in fluvial flooding regimes.

Proposed Mitigation & Impact on Programme

A summary of provisional mitigation proposals is presented below. The mitigation would protect around 420 Ha of potentially impacted land, but will require the support of all SRA partners, and landowner negotiation. Mitigation will need to be delivered before the scheme is fully operational. In outline, capital costs could be in the region of £300-400k (subject to survey and appraisal), and up to £200k for monitoring:

- a. ***Deliver a revised design option known as the 'enhanced-Greylake' scheme:*** By not repairing banks adjacent to the Greylake RSPB reserve (Sutton Hams) an area of around 170 Ha is mitigated, roughly 40% of total mitigation. Achievable within programme.
- b. ***Repair or add new control structures.*** Four structures in scope. Achievable within the programme, provided approvals are granted e.g. on IDB or riparian ditches, and potentially planning permission. This provides around 80 Ha of mitigation (19% total mitigation).
- c. ***Amend Water Level Management Plans.*** To mitigate for less frequent flooding, around 100 Ha (24% of total required) of land would benefit from controlled penning in winter (Dec-Jan), to ensure ditches retain a reasonable depth of water – importantly it would not mean deliberately flooding fields. This is likely to require changes to WLMP's owned by IDB.
- d. ***Long term monitoring programme & adaption.*** Required over winter months to monitor habitat and flood patterns. Scope yet to be fully defined, but focused on areas where mitigation has not been adopted (around 70 Ha; 17% of total mitigation). Estimated cost of up to £20k p.a. for 5-10 years. If monitoring demonstrates the scheme has had a negative impact, it may be necessary to make adaptive changes, to be considered further.

Next Steps

To discuss stakeholder engagement with SRA Management Group and jointly put together a plan to achieve support from all SRA partners, stakeholders and affected landowners

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