Agenda Item:	**8.2 Late Report**
Committee:	**Board**
Meeting Date:	**20 October 2022**
Title:	**Gawler River Flood Mitigation, Department for Environment, and Water**

Recommendation: NIL

This report to be considered within discussion and consideration of Agenda item 8.2.

This late report provides further information to Agenda item 8.2, of the 20/10/2022 GRFMA meeting, regarding a proposed work plan and actions to be undertaken in the Gawler River Flood Mitigation Business Case being facilitated by the Department for Environment and Water (DEW).

A gap analysis has now been undertaken between the GRFMA Gawler River Stormwater Management Plan (SMP) and the Gawler River Flood Mitigation Business Case.

The gap analysis provides:

- Key components of the Gawler River Stormwater Management Plan (SMP).
- Relationship to the Business Case.
- What's required for the Business Case Gaps between the SMP and Business Case (i.e., business case scope of work.)

Ms. Katharine Ward, Project Manager Gawler River Flood Management Climate Change, Coast & Marine Branch, Environment, Heritage & Sustainability Division, Department for Environment and Water will attend the meeting to talk to both Agenda item 8.2 and the 8.2 late report.

See attachment for the gap analysis document.

Gawler River Flood Management Business Case

Gap analysis and proposed scope of work (v1, 17 October 2022)

Key components of the Gawler River stormwater management plan (SMP)	Relationship to the Business Case	What's required for the Business Case	Gaps between the SMP and Business Case (i.e. business case scope of work) *note this includes actioning recommendations from the ISA Gate 1 independent review*
Information compilation	Critical foundational information	The business case work should ensure sufficiently robust current flood modelling is undertaken to quantify the option benefits and costs. And, long term ownership of the model needs agreeing.	Technical assessments could include: • Alignment of flood models with flood hazard overlay work by PLUS • Impact of the North Para River Flood Mitigation Dam on increased duration of higher Gawler River levels (required for levee seepage analysis and environmental impacts) • North Para Flood Mitigation Dam Break Assessment for height increases • Enough model runs for damage curves and full economic assessment • Impact/Benefits/Viability of different dam height increases (5,10 & 15m) • Existing levees risk assessment (i.e. what happens if they break or have a gap in them?) • Impacts/Benefits of implementing mitigation measures in stages • Climate Change flood levels (this may be covered by the SMP?) • North Para Flood Mitigation Dam Functional Design & Cost Estimate • Increase of outlet velocity from North Para Flood Mitigation Dam Raising - geomorphology and ecological impacts • Northern floodway functional design and cost estimate (construction, compensation, moving assets) • Planning options for land access/ asset management • Economic benefits and value opportunities outside of flooding • Flood damage costs/ avoided damages updated
Assessment of the study area (e.g. hydrology, stormwater network, environmental values, socio-cultural values, climate change)	Critical foundational information		
Flood (hydraulic) modelling	Critical foundational information#		
Stormwater management objectives and targets	Sense check between the SMP and what's in the Options Analysis	The 'case for change', strategic alignment, and benefits, objectives and outcomes were set out in the Options Analysis and only need be refined in the Business Case	
Flood risk reduction assessment	Sense check between this assessment in the SMP and what's presented in the Options Analysis. Detailed assessments in the business case work will build on this.	Rigorous economic assessment - including social, environment, sustainability, and financial detail of options progressed from the Options Analysis	
Presentation of stormwater/ flood management options	Sense check along the way/ update these in the final SMP (as relevant) pending outcome of further business case work	Demonstrate the viability and value of the options assessed; recommend an option for implementation	
Stakeholder engagement	Constituent councils and key stakeholders engaged along the way and insights shared.	Demonstrated support and agreement from key stakeholders for the project/s and that they have confidence that the project/s will meet their needs and requirements. And, the proposed asset owner and operator's requirements have been addressed.	Engagement could include: • Talk to the Australian Government about funding potential • Talk with landholders in the Northern Floodway alignment (e.g. find out how they use of floodway land and what assets do they have there now) • Continue to talk with landholders along the Gawler River with existing levees • Talk with landholders potentially impacted by a dam expansion • More social research • Potential to partner on raising flood awareness (e.g. SAFECOM, DRA)
Implementation plan	Sense check/ update this in the final SMP (as relevant) pending outcome of further business case work	Includes: a funding plan; preferred delivery and procurement approach; and how the project/s will be managed (incl. internal and external authority and support, risk management, change management)	Implementation planning could include: • Review project governance for next phase of the project • Prepare a change management plan • Prepare a risk management plan • Commence market sounding • Provisionally agree a proposed funding model
SMP	SMP finalised at the same time as the Business Case is finished		Business Case report and Infrastructure SA (ISA) Gate 2 Review

Some key modelling assumptions are still to be confirmed with the SMP modelling team, and the outcomes of these questions may influence the business case scope requirements