

Draft position paper for consultation

February 2019

# Priorities for improved flood management in South Australia



## 1 Introduction

The following is a draft position paper for: **priorities for improved flood management in South Australia**. The paper has been developed in response to issues raised following the floods in 2016 highlighting a number of long-standing challenges for effective flood management in South Australia.

The draft position paper explores priorities for improved flood management in South Australia as well as opportunities for alignment with strategies and initiatives currently under development. Your feedback will assist in determining the scope and priorities of an improved approach to flood management.

It is one of three draft position papers which have been developed in parallel and are being released concurrently. The other two papers are:

- **Improving Dam Management in South Australia**
- **Improving Levee Bank Management in South Australia**

Feedback on this document can be provided by responding to the questions and provide any additional input and suggestions using the following Survey Monkey link: <https://www.surveymonkey.com/r/PJ78KWW>

Alternatively, you can respond via email to Ingrid Franssen, A/Manager, Flood Management, Department for Environment and Water: [Ingrid.Franssen@sa.gov.au](mailto:Ingrid.Franssen@sa.gov.au)

Any response needs to be received by **15 April 2019**.

## 2 Background

Flooding is the most costly natural disaster in South Australia. The average annual damages from flooding in the State exceed \$32 million according to *the Independent Review of the Extreme Weather Event South Australia 28 September-5 October 2016* (Burns Review). Floods can impact on people's safety and wellbeing, the economy, the environment, communities and on public services. The 2016 flood caused an estimated \$51 million of damage to agriculture and greater than \$20 million damage to local government infrastructure. A changing climate and increased development on floodplains present ever increasing challenges to manage these risks.

Under the State Emergency Management Plan (SEMP), the Department for Environment and Water (DEW) is the designated hazard leader for flood. DEW therefore undertakes a leadership role for planning of emergency management activities pertaining to flood, and ensures that all activities across Prevention, Preparedness, Response and Recovery (PPRR) to do with that hazard are coordinated. The South Australian State Emergency Service (SASES) is the control agency for flood and will take charge of a flood or severe weather emergency and provide leadership to all other agencies responding to a flood.

The length of time between flood events and the fragmentation of responsibilities between local government, state government, the Commonwealth government and private land owners creates barriers to agreement on collective action to adapt to floods and the changing risk profile.

### 3 Priorities for improved flood management in South Australia

The Burns Review focussed on a number of specific flood management issues, but previous flood events and inquiries have highlighted the need for more holistic and effective flood management in South Australia through an improved state-wide approach. Better flood management can reduce the economic, social and environmental costs of floods, through actions such as avoidance or mitigation of flood risks, better understanding of flood risk, better preparedness and response planning and better flood warning.

An improved state-wide approach to flood management can deliver a number of outcomes:

- identify strengths, weaknesses, opportunities and threats for flood management in South Australia;
- describe current initiatives and how they contribute to flood management.
- identify key gaps and strategies to address these gaps.
- consider all aspects of flood management in an integrated manner and clarify roles and responsibilities, priorities and principles.
- clarify the intersection with water resource management, emergency management, stormwater management and land use planning.
- create a clear business case for targeted investment in flood management, ensuring that foundational gaps are addressed first.
- set a clear state-wide framework that enables everyone to effectively contribute to flood management as it is clear where their role fits.

Victoria developed a comprehensive floodplain management strategy in 2016, which provided much needed clarity and cohesion to flood management. Such a strategic approach to flood management in South Australia could be included in the Flood Hazard Plan that is required to be developed and reviewed biannually under the SEMP and would mean that the Flood Hazard Plan is developed in consultation with all key stakeholders.

There may be an opportunity to align the state-wide approach with the framework to be developed to manage and use Adelaide's urban water resources to 2050 and beyond. One of the outcomes proposed for this framework is that "our communities are flood aware and resilient". This may give the foundation of first principles for flood management but it needs to be acknowledged that flood management issues occur throughout the State, and strategies to address gaps may need to be tailored to other regions.

Another opportunity for alignment is the development of a coastal strategy for South Australia, being developed by DEW's Coast Protection Unit, which could address coastal flooding issues and provide common approaches to coastal and inland flood management. Other opportunities for alignment include stormwater management planning lead by the Stormwater Management Authority, the Northern Adelaide Plains Agribusiness Initiative for the Gawler and Light River areas led by the Department for Primary Industries and Regions (PIRSA), and the Constraints Management Strategy for the River Murray in South Australia, led by DEW.

#### DISCUSSION QUESTIONS

**1. Who should be involved in developing improved South Australia wide approach to flood management?**

Eg. Department for Environment and Water (DEW), South Australia State Emergency Service (SASES), industry groups, local government, landholders other organisations?

**2. What would be your top three outcomes to be delivered by the approach?**

The improved South Australia wide approach to flood management could cover:

- Flood risk assessment,
- Flood risk metrics and their application
- Evaluation of flood risks through flood studies
- Processes for evaluating mitigation options, applying nationally agreed approaches
- Collecting and maintaining flood information including flood data, flood maps and flood intelligence and the sharing of information
- Avoiding or minimising risks through planning and building
- Management of stormwater and urban flooding (including urban watercourses)
- Management of flooding in rural areas, including drainage
- Management of coastal flooding
- Flood warning systems
- Flood mitigation infrastructure (levees, flood detention basins)
- Strategies for critical infrastructure (such as roads, hospitals, schools, aged care facilities, power generators)
- Flood pollution management
- Flood emergency management
- Impacts of climate change

#### **DISCUSSION QUESTION**

- 3. *What would be your top three priority issues to be addressed?***

#### **FINAL DISCUSSION QUESTION**

- 4. *Is there anything more you wish to add in regard to the draft position paper for priorities for improved flood management in South Australia?***