



# BUSINESS PLAN

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## 2019-2022

**Gawler River Floodplain  
Management Authority**

Constituent Councils:

*Adelaide Hills Council*

*Adelaide Plains Council*

*The Barossa Council*

*Town of Gawler*

*Light Regional Council*

*City of Playford*

# GRFMA

# Business Plan 2019-2022

## Gawler River Floodplain Management Authority (GRFMA)

### The Gawler River

The Gawler River is formed by the confluence of the North Para and South Para in the town of Gawler, and is located in the Adelaide Plains district of South Australia. The district surrounding the river produces cereal crops and sheep for both meat and wool, as well as market gardens, almond orchards and vineyards. The farm gate output of the Gawler River floodplain horticultural areas is estimated to be at least \$225 million.

### History

The river is subject to periodic flood events.

<b>Desirable Levels of Protection Cost of Flooding</b>	
<b>Flood Frequency (ARI)</b>	<b>Estimated Damages</b>
1 in 10	\$15m
1 in 20	\$24m
1 in 50	\$102m
1 in 100	\$182m
1 in 200	\$212m
Average Annual Damage	\$7.40m
Present Value of Damages*	\$109m



<b>Properties at Risk</b>				
<b>Flood Frequency (ARI)</b>	<b>Number of residential properties within each hazard rating</b>			
	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Extreme</b>
1 in 50	1056	785	483	236
1 in 100	1559	1451	1179	457
1 in 200	1814	1652	1419	615

Following the November 2005 flood, which flooded the Virginia district and township, a series of meetings of the major stakeholders led to the approval of \$20 million in funding from Federal, State and Local Governments to fund the Gawler River Flood Mitigation Scheme (Scheme Works).

The Scheme Works had three parts:

- One The construction of a flood control dam on the North Para River near Turretfield designed to control a 1 in 100-year flood.
- Two The modification of the South Para Reservoir dam wall and spillway to provide 1 in 100-year flood control storage on top of full reservoir storage (completed 2012).
- Three The formalisation of controlled flow paths for floodwaters along the lower reaches of the Gawler River.

Following successful construction of the flood control Dam on the North Para (Bruce Eastick North Para Flood Mitigation Dam) in 2007 and modification of the South Para Reservoir Dam and spillway in 2012, the GRFMA Board has progressed the Gawler River Flood Mitigation Scheme, elements which include:

- further development of the preliminary assessment of possible local area levees prepared in the 2008 Gawler River Floodplain Mapping Study at Gawler, Angle Vale and Two Wells and to develop a levee strategy for Virginia.
- establishment of a protocol with the Floodplain Councils that where development of land in areas identified as 'at risk of flooding' is planned to proceed by the implementation of a local area levee that mapping of the proposed levees on the Gawler River Floodplain Mapping Study Model will be required.
- to develop a funding strategy for flood protection that is delivered by local area levees on the questions of who should own and maintain the levees and whether local area levees are regional works that the GRFMA should fund or are they local works that are the responsibility of the local Council.
- investigate opportunities for funding partners and grants to undertake the necessary assessments and designs.

## **Purpose of the GRFMA**

The Gawler River Floodplain Management Authority (GRFMA) was formed as a Regional Subsidiary under Section 43 and Schedule 2 of the Local Government Act 1999 on 22 August 2002. The Constituent Councils are the Adelaide Hills Council, The Adelaide Plains Council, The Barossa Council, The Town of Gawler, Light Regional Council, and the City of Playford.

The Charter provides for one independent person, who is not an officer, employee or elected member of a constituent council, to be appointed as the Chairperson of the Board of Management of the GRFMA for a term of two years.

The Charter sets down the powers, functions, safeguards, accountabilities and an operational framework and the Business Plan sets down the operational plan and financial plan to achieve agreed objectives.

The Authority has been established for the following purposes:

- to co-ordinate the construction, operation and maintenance of flood mitigation infrastructure for the Gawler River. This purpose is the core business of the Authority;
- to raise finance for the purpose of developing, managing and operating and maintaining works approved by the Board;
- to provide a forum for the discussion and consideration of topics relating to the constituent council's obligations and responsibilities in relation to management of flood mitigation for the Gawler River; and
- upon application of one or more constituent councils pursuant to clause 12.4:
  - to coordinate the construction, maintenance and promotion and enhancement of the Gawler River and areas adjacent to the Gawler River as recreational open space for the adjacent communities; and
  - to enter into agreements with one or more of the constituent councils for the purpose of managing and developing the Gawler River.

A Technical Assessment Panel has been appointed to support the decision-making processes of the Board with delegated powers to provide advice and manage the technical aspects of the design, assessment and construction of the various parts of the Scheme.

An Audit Committee has been appointed to review:

- the annual financial statements to ensure that they present fairly the financial state of affairs of the Board; and
- the adequacy of the accounting, internal control, reporting and other financial management systems and practices of the Board on a regular basis.

The following Policies have been adopted to provide management guidelines for the day-to-day business of the GRFMA:

- Access to Meetings and Documents
- Internal Review of Decisions
- Procurement and Operations
- Dam Valuation
- Public Consultation
- Treasury Management



Further work will be undertaken to complete the Asset Management Plan in relation to the Bruce Eastick North Para Flood Mitigation Dam and associated land. This will provide a longer-term approach to management of GRFMA assets.

To meet the statutory and operational responsibilities the GRFMA will maintain appointment of a part time Executive Officer, and an Auditor, on a contract basis.

The Board is required to hold a minimum of 6 meetings per year and to provide the required, Business Plans, Budgets Reports and Audited Statements to its constituent councils required by the Charter and Local Government 1999.

The Board will conduct two reviews each year of its performance against the targets set in this Business Plan that will form part of the report to its constituent councils and will be included in its Annual Report.

## Cost of Operations

The scope of the GRFMA annual budget and operations is small in comparison to the extensive undertakings by constituent councils.

Principally the budget revenue is sourced from predetermined “formulae based’ financial contributions by the six constituent councils, opportunistic funding applications and some interest from financial institutions. Recently any shortfalls in income (over expenditure) have been met from reserves.

Expenditure is principally budgeted on estimated costs of executive management and administrative and governance requirements of the Authority according to its charter. Some costs are incurred with maintenance of the Bruce Eastick North Para River Flood Mitigation Dam site and access.

The contributions of the constituent councils are based on the following percentage shares for capital works, maintenance of Scheme assets and operational costs of the Authority. (GRFMA Charter Clause 10)

## Constituent Council Shares for Contributions

Constituent Council	Capital Works Percentage Share	Maintenance of Assets Percentage Share	Operational Costs Percentage Share
Adelaide Hills Council	1.73%	1.73%	16.66%
The Barossa Council	8.67%	8.67%	16.66%
Town of Gawler	17.34%	17.34%	16.66%
Light Regional Council	8.67%	8.67%	16.66%
Adelaide Plains Council	28.91%	28.91%	16.66%
City of Playford	34.68%	34.68%	16.66%
Total	100%	100%	100%



## Work Priorities 2019/2022



In 2016/17 the GRFMA engaged:

- AECOM to provide a fatal flaw screening assessment for the potential raising of the North Para Dam by up to 10 metres to provide additional flood protection for a 1 in 100 Annual Event Probability (AEP) event to the township of Gawler and further downstream.
- Australian Water Environments to undertake the Gawler River 2016 Flood Review.

Both reports have been subsequently completed and following consultation with constituent councils the GRFMA have resolved that decision on extending the height (10mtr) of the dam be on held over pending the initiatives recommended in the Gawler River 2016 Flood Review report are implemented and outcomes considered. Feasibility of raising of the North Para Dam will then subsequently be considered.

The Gawler River 2016 Flood Review report provides three recommendations for works to be undertaken and provides first stage indicative costs of \$27 million:

- a) proposed Gawler River northern floodway;
- b) upgrade and maintenance of the levee system; and
- c) management of silt and pest vegetation.

The GRFMA resolved to progress the report recommendations in 2019 via submission to the Australian Government's Building Better Regions Fund (BBRF). The application was based on the total of cost elements as identified Table 7.1 items 1 to 5 of the Northern Floodway Project Prospectus, plus a price index escalator and contingency allowance.

These items include the major elements of preliminary works required to be undertaken first so that a more robust assessment of final project design and costs might be understood and considered prior to a further funding application (on the same 50/50 State and Federal Government funding contribution) for subsequent completion of the Project.

This effectively resulted in a total project cost of \$2 Million with the application seeking \$ 900,000 in BBR funding which is to be matched with a \$ 900,000 funding contribution (commitment received) from the State Government. An in-kind GRFMA contribution of \$200,000 was also included. There is to be no constituent council funding requirement.

Recent formal advice has now been received (March 2019) that the application was not successful. The Board will now reconsider options to continue pursuit of suitable funding from the State and Federal Government for the project.

The Authority, in partnership with the University of Adelaide, has received funding via the Federal and State Government *National Disaster Resilience Program* (NDRP), to develop an existing decision support tool (UNHaRMED) to explore how to manage flood risk into the future in an integrated and dynamic approach. The project will commence mid-2019 and conclude in late 2020.

This project will consider:

- Specific pilot studies (such as proposed Dam raise and Northern Floodway proposal) of analysis and developing a methodology for continued use of the program for integrated planning of flood mitigation actions by GRFMA; and
- Providing an example for other local government authorities and floodplain managers in integrated flood risk management supported by integrated risk modelling.

Key project aims are:

- Provide a platform for GRFMA constituent councils to compare flood mitigation options over time in an integrated and transparent manner, as the basis for preparing a master plan incorporating existing mitigation structures and on-going maintenance and operation for constituent councils and the community.
- Enable this platform to be used to engage the community in decision making, improve risk awareness and resilience and willingness to pay for risk reduction depending on risk appetite.
- Integrate social, economic, and environmental risk factors for a broad understanding of the Gawler River Catchment to inform long-term strategic planning.
- Highlight the role of research and science in local government decision-making and provide an example for similar councils and catchment management authorities across Australia.
- Develop a repeatable process to enable continued use of the project outputs and analysis frameworks for Local Government decision making across South Australia.

Review of the GRFMA Charter will be completed in 2019.

Maintenance and operations of the scheme during 2019 to 2022 will include:

- Completion of the detailed Dam Failure Consequence Assessment of the Dam pursuant to ANCOLD guidelines;
- Review of Dam Safety Emergency Plans and Operation and Maintenance Manuals;
- Dewatering and repair of the low-level inlet pipe and stilling basin; and
- Scheduled inspections and environmental management of land associated with the Dams location.
- Investigation into feasibility of a proposal for the establishment of a revegetated zone around the Bruce Eastick North Para Flood Mitigation Dam.