### Gladstone Area Water Board

Gladstone Fitzroy Pipeline Pre-construction industry briefing

21 October 2021



### **Acknowledgement of Country**

In the spirit of reconciliation, the Gladstone Area Water Board acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.



### Housekeeping

- Restrooms
- Evacuation process
- Questions please hold until the end. If you are joining online, please email your questions to gfpenquiries@gawb.qld.gov.au



### Introductions

- Project Sponsor CEO Darren Barlow
- Project Leader Hugh Barbour
- Project Advisor Grant Flekser
- Corporate Counsel Kristine Palm
- Project Delivery Director Julian Hemms
- Commercial Manager Paul Rigo
- Legal Advisor Minter Ellison Julie Whitehead
- Owners Engineer To be appointed
- Transaction Advisor To be appointed
- Probity Advisor O'Connor Marsden & Associates Iain McIndoe



### What we'll cover today



- Probity
- Gladstone Area Water Board an overview
- Water security Gladstone Fitzroy Pipeline
- Project background
- Scope of works
- Procurement process and contract models
- Timeline
- Next steps
- Questions





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### Gladstone Area Water Board An overview

Gladstone Area Water Board (GAWB) is a commercialised Water Authority with the purpose of ensuring the supply and security of water to industrial, commercial and urban customers in the Gladstone region.



#### 1973

GAWB established as a Project Board under State and Regional Planning and Development, Public Works Organisation and Environmental Control Act 1971-73

Became a registered service provider under the *Water Supply (Safety and Reliability) Act 2008.* 

2008



Our business goals are centred around meeting water needs, commercial results, corporate responsibility and capability.



#### **GOAL 1: MEETING WATER NEEDS**

To understand, facilitate and effectively deliver the water requirements of current and future customers through initiatives related to security, reliability, quality and price. **GOAL 2: COMMERCIAL RESULTS** To ensure GAWB's profitability and build the value of the business.

#### **GOAL 3: CORPORATE RESPONSIBILITY**

To commit to improving the economic wellbeing of the Gladstone community, our people and the environment through GAWB's services and the operation and maintenance of its assets.

#### **GOAL 4: CAPABILITY**

To provide sustainable outcomes by investing in our people, effectively managing our resources and risk, maintaining systems and sharing knowledge.

GAWB's 2020-25 Strategic Plan contains key strategies across four areas of focus for the business, underpinned by a strong organisational culture.







#### Our vision

Together delivering safe and reliable water services to enhance the livability of our region.

#### Our mission

We are a leading water provider that supports our customers, community and people.

We provide an essential service that promotes the economic development and enhances the lifestyle of regional Queensland.

#### Our values



We work together. Always.



We look after ourselves and each other.

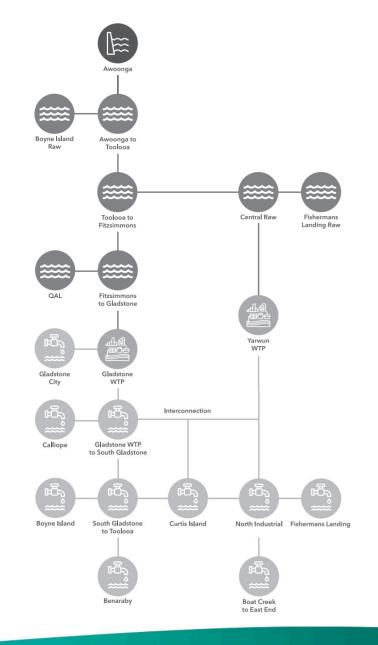




We deliver. You and I.

GAWB owns and operates Awoonga Dam on the Boyne River, along with a network of delivery pipelines, water treatment plants and other bulk water distribution infrastructure.

GAWB has a water allocation of 78,000 mega litres per annum (ML p.a.) from Awoonga Dam, granted under the Water Act, and is a bulk water supplier to the Gladstone region.







Gladstone is a major industrial region of significant importance to the Queensland economy, providing direct and indirect employment for about 13,000 Queenslanders.

 $\checkmark$ 



More than any other regional city in Queensland, Gladstone has a significant multiplier impact on the economies of other geographical areas of the state.

The security and reliability of water supply to industrial customers is integral to the operations of multi-billion dollar industrial plants with over 80% of all water supplied in Gladstone for industrial use.

Large customers of GAWB such as Rio Tinto, Queensland Alumina Limited and Boyne Smelter are heavily reliant on water to run their operations. During 2018-19, 91% of the water reservation was used.

All large industrial customer processes rely on a continuous water supply. If the water ceases, even for a short period of time, customers would be forced to shut down.



#### 'Buy Local' procurement practices

GAWB has developed its Agency Procurement Plan which complies with the procurement obligations as set out in the Queensland Procurement Policy (2019).



We include a local benefit test for all significant procurement activities where a weighting of 30% will be applied.



In 2019-20 we contributed approximately \$23 million to the local economy through our local procurement activities and our employment of 88 Gladstone residents.





### Water security - Gladstone Fitzroy Pipeline

### Gladstone's water security



GAWB, in partnership with the Queensland Government, is looking at water security to support the significant, long-term industry in the area which contributes to local employment and the state's economy.

The Gladstone Fitzroy Pipeline is proposed to address the water supply risk from Awoonga Dam, enabling water security for Gladstone's urban and industrial customers

### Gladstone's water security

- Lake Awoonga is a single source water supply for Gladstone, with a primary function to assure water supply for Gladstone's residential, commercial and industrial sectors.
- Lake Awoonga is a deep catchment storage but has a relatively small catchment inflow area.
- Continued drought seasons increase water security risks.



Only 1 inflow event in 10 years has been greater than the 388,000ML required to reach full supply

| Reporting period      | Sum of inflows received<br>(ML) |
|-----------------------|---------------------------------|
| July 2011 – June 2012 | 225,455                         |
| July 2012 - June 2013 | 1,747,616                       |
| July 2013 – June 2014 | 70,270                          |
| July 2014 – June 2015 | 256,002                         |
| July 2015 – June 2016 | 85,671                          |
| July 2016 - June 2017 | 244,927                         |
| July 2017 – June 2018 | 340,967                         |
| July 2018 – June 2019 | 8,523                           |
| July 2019 – June 2020 | 5,439                           |
| July 2020 – June 2021 | 5,305                           |
|                       |                                 |

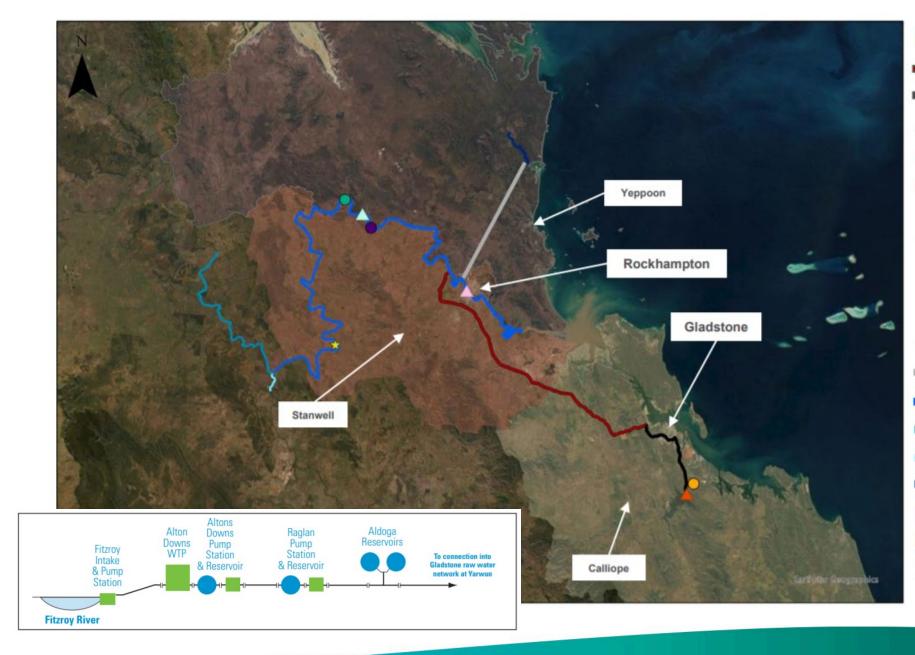
### **Gladstone Fitzroy Pipeline**



The Gladstone Fitzroy Pipeline project comprises a 115 km pipeline, a water treatment plant, reservoirs and pumping stations. The purpose of the project is to ensure long-term water security for Gladstone's urban and industrial water users.

GAWB has been appointed as the delivery management proponent for preconstruction activities for the pipeline.





#### Legend

GFP – Unidirectional

- GFP Bidirectional
- Awoonga Dam (GAWB)
- Fitzroy Barrage (RRC)
- Eden Bann Weir (Sunwater)
- Awoonga Water Supply Scheme (GAWB)
- Lower Fitzroy Water Supply Scheme (Sunwater)
- Fitzroy Barrage Water Supply Scheme (RCC)
- Rookwood Weir\* (Sunwater)
  - Rockhampton to Yeppoon Pipeline\*
  - Fitzroy River
  - Mackenzie River
  - Dawson River
  - Water Park Creek
  - Livingstone Shire Council
  - Rockhampton Regional Council
  - Gladstone Regional Council
- Options being modelled by DRDMW/DES

### **Gladstone Fitzroy Pipeline**

The Department of Regional Development, Manufacturing and Water is undertaking a detailed assessment of long-term water security in Central Queensland. This includes investigations into the pipeline to determine the full scope of the project.



| Purpose of the Department's Assessment  |               |  |                              |  |
|---|---------------|--|------------------------------|--|
| Short-term: risk mitigation for Gladstone Long term: water security for Central C |               | ecurity for Central QLD  |                              |  |
| Unidirectional / Bidirectional pipeline   |               |  |                              |  |
| 115km pipeline from Fitzroy River to GAWB Yarwun<br>interconnection               |               | Provision for efficiently retrofitting additional infrastructure to enable flow in both directions |                              |  |
| Capacity per annum  |               | Proposed   | infrastructure               |  |
| 15 gigalitres   | 30 gigalitres | Pipeline and treatment plant   | Pump stations and reservoirs |  |

### **GFP pre-construction activities**



Pre-construction activities will strongly position the Department to quickly respond to water security for the region if drought conditions continue in 2022.

#### The pre-construction activities include:

- appointing key advisors
- addressing land tenure, permits and approvals
- determining long lead time items (if required)
- determining and commencing the preferred procurement strategy.



### Project background

### Project background



- In 2007, GAWB commenced a tender and contract award process with the intention to proceed to project delivery in 2008 to respond to a severe drought.
- The project did not proceed as Lake Awoonga was replenished during a rare and extreme rainfall event.
- The design and strategy was retained, and significant research has continued to be undertaken to ensure the design is robust and to build confidence in this project.
- Long-term water security is a key driver for the project in 2021, with an immediate need to respond to the current drought.



### Scope of works

### Pipeline



#### A unidirectional supply to Gladstone from Fitzroy based on a 30 GL/a design:

- Intake structure and pump station
- 3.1 km pipeline to Alton Downs Water Treatment Plant and Pump Station (WTP to be constructed)
- 72.2 km pipeline to Raglan Reservoir and Pump Station
- 32.2 km pipeline to Aldoga Reservoir
- 8 km gravity fed supply to Mt Miller interconnection

### Pipeline – construction



In general, the Pipeline is an underground construction on average around 1500mm. The current design has considered the various ground conditions likely to be encountered.

- Proposed construction method of micro tunnelling for crossing:
  - Gavial Creek

• Bob's Creek

Inkerman Creek

• Horrigan Creek

- Raglan Creek
- Tunnel entry and exit pits are to be located outside of the riparian zone for each of the crossings

### Pipeline – considerations



- A construction EMP will be required prior to commencement of construction works
- Interface with state-controlled roads and council-controlled roads (prepared road use management plan) (RMP)
- Special Area Plans (SAPS) will be needed for:
  - Lion Creek
  - Twelve Mile Creek
  - Inkerman Creek
  - Marble Creek

- Larcom Creek
- Horrigan Creek
- Raglan Creek
- Construction will be limited to occur between May to September in these locations

### Water Treatment Plant



#### Alton Downs Water Treatment Plant and Pump Station

- Critical processing plant vital to ensuring the removal of any slurry and contaminants arising from the Fitzroy River
- Water is not potable but of a quality reflecting the raw water from Lake Awoonga
- Removal of sludge (waste) still to be determined.
- Operation and maintenance of the WTP may be included as a separable portion with separate evaluation criteria.
- Processing plant will need to be constructed to a high standard with the aspiration of zero defects and high reliability



# Procurement process and contract models

### **Considerations**



Our understanding of construction industry concerns:

- GAWB is aware there are improvements which could be made to the way construction contracts are tendered, negotiated and managed during delivery
- To address this, we will be seeking to utilise standard forms of contract or similar.
- Further we will be proposing a balanced contractual risk allocation and payment structure where appropriate

### **GAWB** approach



#### Our contracting strategy is reflective of the following:

- Which party can best control the risk and/or its associated consequences?
- Which party can best foresee the risk?
- Which party can best bear that risk?
- Which Party ultimately benefits or suffers most when the risk eventuates?

Use of collaborative approaches to payment, reimbursement and a culture that delivers opportunity for both parties that reflect and deliver the outcomes sought.

### **Commercial process**



#### Three phase process

- 1. Pre-ECI Phase
- 2. ECI Phase
- 3. Delivery Phase

#### Glossary

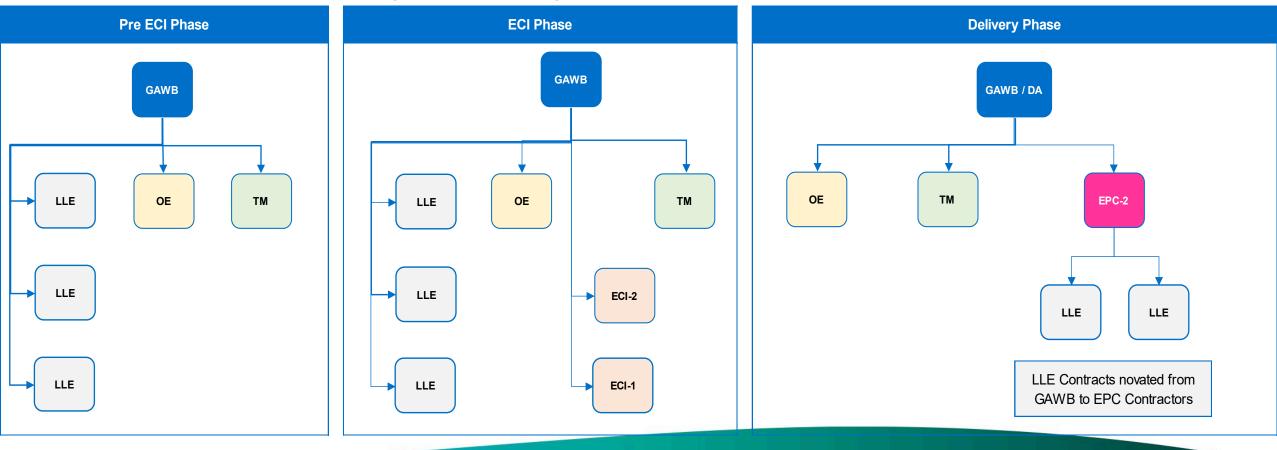
LLE

- DA Delivery Authority
  - Long Lead Equipment
- OE Owners Engineer
- TM Transaction Manager
- ECI Early Contractor Involvement
- ECI-1 ECI Contractor One
- ECI-2 ECI Contractor Two
- **EPC** Engineer, Procure and Construct / Design and Construct
- **EPC-1** EPC Contractor WTP and Balance of Plant
- **EPC-2** EPC Contractor Pipeline

### **Commercial Process**



#### Note: Indicative only and may not reflect actual process



### **EOI Process**

#### **Mandatory Criteria**

| #  | Criteria                     |
|----|------------------------------|
| M1 | Financial Strength           |
| M2 | Financial Capacity           |
| МЗ | Quality Safety Environmental |
| M4 | Local Buy                    |
| M5 | Ethical Supplier Threshold   |



### **EOI Process**

#### **Comparative Criteria**

| #  | Criteria                                  |
|----|---|
| C1 | Relevant Project Experience, track record |
| C2 | Key Personnel                             |
| C3 | Methodology                               |
| C4 | Client References                         |
| C5 | Acceptance of commercial arrangements     |
| C6 | Pricing Tender – (Cost Plans)             |
| C7 | Unique Business Offering                  |



### **ECI Process**



- Interactive workshops and a dialogue process upon appointment to develop 'the deal'.
- We are in the process of appointing the Transaction Advisor and the Owners Engineer.
- We anticipate that the dual ECI process will be focused predominantly on cost and time along with risk and contract.
- We anticipate that innovation in design is limited; we do anticipate that there is opportunity to construct the works more efficiently and this is an area that we perceive will be explored through the ECI process.

### **ECI Process**

#### **Comparative Criteria**

#### # Criteria

- C1 Key Personnel
- C2 Construction Methodology and sequencing
- C3 Contract Agreed terms Risk, Key Result Areas
- C4 Pricing Tender Offer
- C5 Best Value for Money
- C6 Program





### **Timeline and next steps**

### **Timeline and next steps**



| Date             | Milestone   |
|------------------|---|
| 21 October 2021  | Industry briefing event                             |
| 22 December 2021 | Construction EOI issued to market                   |
| 19 January 2022  | Construction EOI period ends                        |
| 3 February 2022  | Construction RFTs issued to two shortlisted parties |
| 31 March 2022    | Preferred construction contractor selected          |
| April 2022       | Construction contract executed                      |

### **Contract approach**



- We are currently assessing whether to combine the entire 116km pipeline and water treatment plant as a single contract or to split these into two separate construction agreements ie:
  - Laurel bank intake and first 3km including the water treatment plant
  - Remaining 113km of pipeline including pumpstations and reservoirs.
- We are currently concluding the payment models that we propose to be included in the forthcoming EOI.



### Questions

# For those attending online, please email questions to **gfpenquiries@gawb.qld.gov.au**



# Thank you

Please direct any enquiries regarding pre-construction activities to **gfpenquiries@gawb.qld.gov.au**