

CTS No.	31998/19
DATE DUE TO DLO	18/12/2019
ELECTORATE OFFICE	Ipswich Electorate Office
NAME OF CONSTITUENT/MEMBER OF PUBLIC <i>If applicable</i>	Sch 4 - Personal Information
ISSUE	Linking dams across Queensland
RESPONDING OFFICER <i>Author</i>	Name: Darren Thompson Position: Team Leader Business Unit: Water Supply, Natural Resources Division Phone: 3166 0154
FINAL APPROVAL <i>DG/DDG/ED</i>	Name: Trevor Dann Position: Acting Executive Director Business Unit: Water Supply, Natural Resources Division Phone: 3137 4285

PLEASE NOTE: This advice is provided for the information of the Office of the Minister for Natural Resources, Mines and Energy to assist in preparing a response to the Electorate Office

SUGGESTED RESPONSE TO ELECTORATE OFFICE

Linking Dams

- Though the concept of large scale systems similar to those of the Bradfield Scheme have significant challenges, there may be an opportunity to undertake targeted improvements to regional connectivity where demand and supply characteristics are right.
- There are already examples of this type of connectivity that exist across the state where dams and pipelines provide water to where a demonstrated demand for water exists including Burdekin Houghton Water Supply scheme to Ross River Dam, the Burdekin to Moranbah pipeline and the North West pipeline near Mount Isa.
- The Queensland Government is ready to have a conversation with the Australian Government and its new National Water Grid Authority on a range of water infrastructure proposals including the opportunity for further increasing regional connectivity where it makes sense (e.g. available supply within responsible limits commensurate with Queensland Water Plans and demonstrated demand for the water).
- This could include identifying opportunities to explore the concept of connecting bulk water storages to where there is a clear demand for water at a price commensurate with the costs providing the water.
- There are a range of activities currently underway considering water supply needs and proposals across Queensland that can support irrigators and regional communities. Many of these activities and proposals are outlined in the Queensland Government's Queensland Bulk Water Opportunities Statement (QBWOS).
- QBWOS is the bulk water security strategy for Queensland and provides a framework to support and contribute to sustainable regional economic development through a balance between better use of existing infrastructure and planning and investing in new infrastructure when we need it.
- QBWOS includes information on a range of bulk water projects that are currently or recently been the subject of consideration or assessment.
- Further information on the QBWOS can be found at: www.dnrme.qld.gov.au/land-water/initiatives/bulk-water-statement.

Warwick Pipeline Connection Investigation

- The Queensland Government is providing \$1.0 Million (M) to investigate drought water supply options for Warwick—including a pipeline from Toowoomba that would enable access to water from the existing Wivenhoe Dam to Toowoomba connection.
- Seqwater is undertaking an assessment of this pipeline in collaboration with Southern Downs Regional Council and Toowoomba Regional Council.

BACKGROUND BRIEFING FOR MINISTER'S OFFICE – NOT FOR DISTRIBUTION

CURRENT STATUS:

Linking Dams

- The Queensland Government is ready to have the conversation about the Bradfield Scheme concept. This may not be of the same magnitude or scale as what was originally envisioned by Dr John Bradfield, or subsequent advocates of the scheme, however, the Palaszczuk Government is willing to discuss water infrastructure projects that deliver for irrigators and Queenslanders.

Warwick Pipeline Connection Investigation

- The government is providing \$1.0M to investigate drought water supply options for Warwick—including a pipeline from Toowoomba that would enable access to water from the existing Wivenhoe Dam to Toowoomba connection.

KEY ISSUES:

Linking Dams

- When assessed in the past the concept of moving large volumes of water to inland agricultural areas has proven to be very expensive to establish and operate and would likely have a high cost water for the end users.
- These costs would likely be far more expensive than irrigators' current sources of supply and likely exceed their capacity to pay.
- There are also a range of potential significant environmental issues associated with transferring water across rivers and introducing large volumes of water to different river systems. Large flood events are known to have links to various specific of marine and estuarine species and ecosystems.
- Capturing and diverting flood waters for example would require enormous storages and numerous pumping stations pipelines and channels.
- Due to the highly variable nature of rainfall patterns across Queensland, water is not always available in the same locations every year.
- However targeted improvements to regional connectivity may warrant consideration where the right conditions exist including available supply within responsible constraints including water plan requirements and where demand for water exists.

Warwick Pipeline Connection Investigation

- Seqwater (in partnership with Southern Downs and Toowoomba regional councils) will conduct a feasibility study into options for Warwick—including an approximately 90 kilometre pipeline from Toowoomba to Warwick.
- The investigation is to determine whether a pipeline from Toowoomba to Warwick is the best option to ensure water supplies for Warwick (and potentially Stanthorpe) residents and if so, the size and best route for the pipeline, associated works required in Toowoomba and then move on to the detailed design ready for construction to commence.
- The best option for a continued emergency drought supply to Stanthorpe (if required) will also need to be considered as part of the investigation.

BACKGROUND:

Linking Dams

- The concept of moving water to regional and central Australia to harvest floodwater, relieve droughts and expand irrigation has been suggested on many occasions over the years. The Queensland Government has carried out several investigations of this concept since it was first suggested by Dr John Bradfield in the 1930s.
- These assessments have repeatedly indicated that such a scheme suffers from substantial engineering challenges, environmental issues and would likely not be economically viable.

Warwick Pipeline Connection Investigation

- The Southern Downs Regional Council (SDRC) area has been drought declared since 17 May 2018 and the Bureau of Meteorology is currently predicting the remainder of 2019 and early 2020 to be drier than average.
- While Warwick is currently estimated to have enough water from Leslie Dam until October 2020, lead times for construction of infrastructure have lead to the initiation of the investigation.
- SDRC is currently preparing to cart water from Warwick to Stanthorpe as Stanthorpe's supply source (Storm King Dam) is running very low (11.9 per cent as at 9 December).

Published on DNRME Disclosure Log
RTI Act 2009

CTS No.	32757/19
DATE DUE TO DLO	23 December 2019
ELECTORATE OFFICE	Nudgee Electorate Office
NAME OF CONSTITUENT/MEMBER OF PUBLIC <i>If applicable</i>	Sch 4 - Personal Inf
ISSUE	State planning and investment in water resource security
RESPONDING OFFICER <i>Author</i>	Name Ian White Position QBWOS Program Coordinator Business Unit RUWSP, Water Supply Branch, NR Division Contact Number 3166 0159
FINAL APPROVAL <i>DG/DDG/ED</i>	Name: Bernadette Zerba A/Deputy Director-General Title/Business Group: NR Telephone: 3166 0132

PLEASE NOTE: This advice is provided for the information of the Office of the Minister for Natural Resources, Mines and Energy to assist in preparing a response to the Electorate Office

SUGGESTED RESPONSE TO ELECTORATE OFFICE

- **Confirm** that the Queensland Government is actively involved in a range of activities currently underway considering water supply needs and proposals across Queensland that can support irrigators and regional communities.
- For example the Queensland Government is currently advancing or supporting the following projects:
 - Rookwood Weir near Rockhampton – to boost the water security of the Rockhampton, Livingstone, and Gladstone communities, and provide opportunities for increased agricultural and industrial development in the region (Queensland Government has committed \$176 Million (M) toward construction).
 - Houghton Pipeline Duplication Project near Townsville – to increase water supply security for the community and industry in Townsville (Queensland Government has committed \$215M towards Stage 1 of the Townsville pipeline)
 - Granite Belt Irrigation Project near Stanthorpe – Queensland Government has made a commitment for a conditional funding contribution of \$13.6M to the proponents of this project which will increase water availability to irrigators in the area.
 - Warwick Recycled Water Scheme – a funding commitment of nearly \$2.5M from the Queensland Government's Building our Regions fund which is enabling the local council to expand its scheme to supply recycled water to local industry.
 - Sunwater is advancing the Mareeba Dimbulah Water Supply Scheme channel modernisation project – to increase water supply efficiency and enable more water to be sold to irrigators on the Tablelands.
 - Sunwater is advancing a detailed business case and environmental impact assessment process for raising Burdekin Falls Dam near Ayr in North Queensland.
- The Queensland Government understands the contribution that water supply can make to regional communities and the state economy. The Queensland Government continues to explore opportunities for strategic and other initiatives related to the right kind of water projects. This consideration of bulk water infrastructure proposals is undertaken in accordance with national policy settings, and after consideration of rigorous project assessment and the community interest.
- The Queensland Government is ready to re-examine the Bradfield Scheme concept. This may not be of the same magnitude or scale as what was originally envisioned by Dr John Bradfield, or subsequent advocates of the scheme; however, the Palaszczuk Government is willing to work on water infrastructure projects that deliver for irrigators and Queenslanders.
- Though the concept of large scale systems like the Bradfield Scheme have significant challenges, there may be an opportunity to undertake targeted improvements to regional connectivity where demand and

supply characteristics are right. In fact, there are already examples of this type of connectivity that exist across the state.

- The Queensland Government is ready to have a conversation with the Australian Government and its new National Water Grid Authority on a range of water infrastructure proposals, including the opportunity for increasing regional connectivity where it makes sense (e.g. available supply within responsible limits commensurate with Queensland Water Plans and demonstrated demand for the water).
- In addition there are a range of activities currently underway considering water supply needs and proposals across Queensland that can support irrigators and regional communities. Many of these activities and proposals are outlined in the Queensland Government's Queensland Bulk Water Opportunities Statement (QBWOS).
- QBWOS is the bulk water security strategy for Queensland and provides a framework to support and contribute to sustainable regional economic development through a balance between better use of existing infrastructure and planning and investing in new infrastructure when we need it. QBWOS includes information on a range of bulk water projects that are currently or recently been the subject of consideration or assessment.
- Further information on the QBWOS can be found at: www.dnrme.qld.gov.au/land-water/initiatives/bulk-water-statement.

BACKGROUND BRIEFING FOR MINISTER'S OFFICE – NOT FOR DISTRIBUTION

CURRENT STATUS:

- DNRME did not draft the letter to the editor attached to the Caucus Liaison Request, and makes no comment on its contents, other than to confirm the state committed \$176M toward the construction of Rookwood Weir, \$215M towards Stage 1 of the Townsville pipeline and a conditional grant commitment of \$13.6M to the Granite Belt Irrigation Project (Emu Swamp development).
- In 2018/19, the Queensland Government committed funding to bulk water infrastructure projects:
 - Rookwood Weir (\$352M with \$176M Queensland Government contribution)
 - Granite Belt Irrigation Project (\$84M with \$13.6M Queensland Government contribution)
 - Raising Burdekin Falls Dam (\$16.5M for DBC and EIS)
 - Mareeba-Dimbulah channel modernisation (\$28M with \$16.5M Sunwater contribution to be recovered via water allocation sales)

KEY ISSUES:

- The QBWOS is the bulk water security strategy and direction statement for the state. It sets out the state's objectives for the sector which, in priority order, are:
 - the safety and reliability of Queensland's dams and urban water supplies
 - using existing water resources more efficiently
 - supporting infrastructure development that provides a commercial return to bulk water providers
 - considering projects that provide regional economic benefits.
- The bulk water objectives set out in QBWOS recognise that a significant portion of Queensland's water resources remain underutilised, even in the driest periods. Accordingly, the QBWOS focuses on existing assets and more efficient operations ahead of considering new bulk water infrastructure.

BACKGROUND:

- Bulk water infrastructure requires significant investment and while many proposals for new dams, weirs and other infrastructure have been advanced over the years, these proposals may have difficulty attracting and retaining customers willing to pay the true cost of water yielded from the infrastructure investment.
- DNRME, through its Bulk Water Prioritisation Project, is finalising measures to prioritise further bulk water infrastructure investment by the state, taking into account:
 - potential for regional development
 - current and future local needs, and
 - construction and operation costs.

This project drives evidence-based investment in bulk water infrastructure and enables fair comparison of one bulk water infrastructure investment to another. For more information, keep an eye out for the release of the QBWOS in the New Year.