

A dark blue vertical bar on the left side of the page. A blue arrow points to the right from the top of this bar, containing the year '2020'.

2020

plains
water ltd

Submission

The Droughtmaster Project

Several thin, curved lines in shades of blue and grey originate from the bottom left corner and sweep upwards and to the right across the page.

The Lachlan Water Strategy
November 2020

Submission

- The Droughtmaster project seeks inclusion in the Lachlan Water Strategy under the Option 6 Assessment
- The Droughtmaster project provides Government with a unique opportunity to access private sector innovation, competition, skills and capital to co-fund some of the substantial ongoing water infrastructure requirement in Regional NSW, as opposed to government funding the entire water infrastructure requirement on its own.
- The Droughtmaster project requests that the words private sector Innovation, competition and co-funding be included in the Lachlan Water Strategy Plan in relation to infrastructure delivery, particularly utility delivery, to avoid the risk of early obsolescence of the Plan, should the private sector not be specifically included, and to align the Plan more closely with the announced policy settings of the NSW Premier, InfrastructureNSW and the Department of Premier & Cabinet. Specific Droughtmaster project alignment with those, and other agencies Goals is set out at Annexure 3 of this Submission.
- Direct private sector investment in the water infrastructure component of the Droughtmaster project is above \$220,000,000, supported, as requested by Government, in a Public/Private Partnership process. On-farm, and other associated investment, is expected to double this private sector investment requirement.
- Success will be measured in Government by the Value-for Money outcomes as assessed in the Benefit/Cost Ratio assessment, as well as the substantial National Economic Benefit, and the ultimate Engines of Growth the Droughtmaster project enables.
- The Engines of Growth include a sharp increase in agricultural and mining output in the NSW Riverina, including in the Lachlan Catchment, and the flow on effects to regional NSW communities, including specifically Aboriginal communities, that the Droughtmaster project alone enables.
- Inclusion in Option 6 in the Lachlan Water Strategy can be subject to compliance with the existing conditions noted in the Draft Strategy, as well as the inclusion of the terms of the Public/Private Partnership.

Contents

Page

Droughtmaster Project Summary	4
Scale & Target Market	5
Stock & Domestic (S&D)	6
Mining	7
Horticultural Development	8
Water Use	8
The Needs & Demands	9
The Operating Environment	9
Process & Requirements	10
Impact of Climate Change	11
Aboriginal Engagement	12
Community Consultation & Cost/Benefit	15
Integration with the Lachlan Strategy	17

Annexures

Aboriginal Jobs Prioritisation Matrix
Droughtmaster Project Procurement Plan Summary
Mining Sector Correspondence with Indicative Jobs per Megalitre
Cost/Benefit Analysis Extract: Goal Definition and Alignment with Government Goals, Objectives and Strategies

Droughtmaster Project Summary

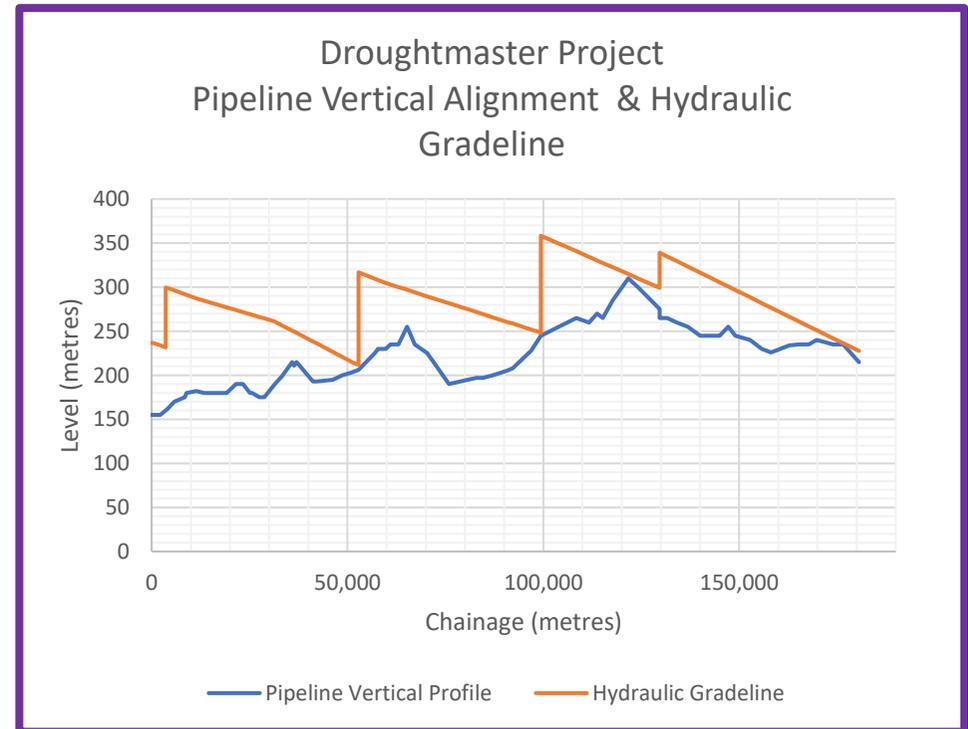
- The Droughtmaster project is being developed to provide high-value permanent and secure water to meet increasing demands for water security in the Riverina and Lachlan regions, including from:
 - ❖ rural properties
 - ❖ towns
 - ❖ agribusiness
 - ❖ industry
 - ❖ mining
- The project's benefits flow to a wide spectrum of the community.
- The Droughtmaster project is of National Significance and in the National Interest, introducing private sector innovation, competition, skills and capital in an infrastructure sector that is otherwise largely a Government sector.
- The Droughtmaster project will deliver new water infrastructure to be a long-term shared community asset with significant quantified benefits for the whole region.

- The project traverses a region currently in population decline and is expected to at least arrest that decline and eventually reverse it. Arresting population decline will result from the elevated level of job creation the Droughtmaster project infrastructure enables.
- The project will actively foster jobs training and creation to retain the region's youth, especially amongst the local community of Aboriginal heritage.
- The Droughtmaster project will distribute high-value/low-volume water with efficient new infrastructure to expand and support regional agriculture, which is an export orientated Engine of Growth, to maximise production and guard against the sharply increasing challenge and risk of climate change.
- The Droughtmaster project meets environmental protection frameworks, including compatibility with Murray Darling Basin licensing through market driven highest and best use objectives. Environmental flows are enhanced by accessing water in an upstream location, thereby minimising losses

Scale & Target Market

- The project will be extensively powered by renewable energy.
- While the water crisis has been ameliorated for the time being, the impact of climate change on the project's environment means the project needs to be completed before the inevitable next crisis.
- The project is 'shovel ready' for the early stage works to begin, including the basis of rebuilding the now dilapidated Ardlethan tin mine pipeline. Services in the field can begin in relation to early stages with pre-procurement of materials, equipment, contracting and professional services required to deliver the project, including from a predominance of Australian production inputs, subject to approvals and permitting at three levels of Government.
- The fully developed project requires some level of Government support, in a coordinated arrangement, with all levels of Government and Government agencies to benefit.
- State Government is requesting that the project proceeds as a Public/Private Partnership (PPP) under the NSW Unsolicited Proposals Framework.

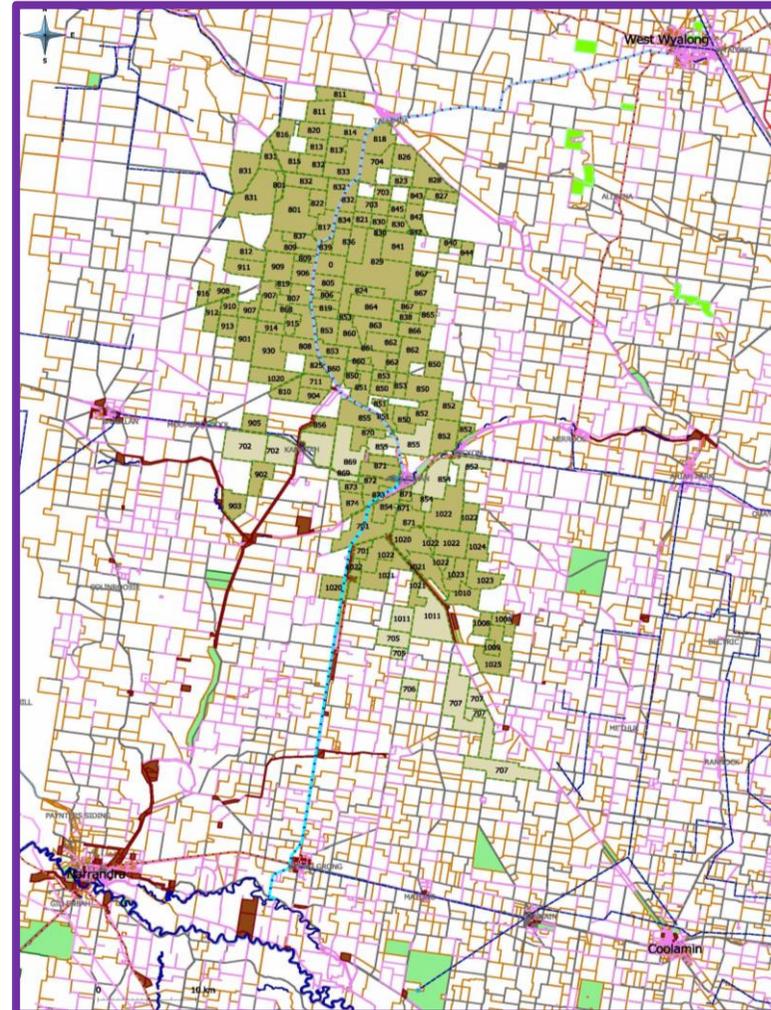
- The project seeks to deliver water security 180kms north of the water source in the Murrumbidgee River and Bundidgerry Channel at Grong Grong, into the Lachlan catchment.
- The assessed infrastructure capital requirement is in the \$220m range with the vertical alignment and hydraulic gradeline shown in the graphic below.



This submission contains confidential information belonging to Plains Water Ltd that is proprietary or privileged. It is provided specifically for the purpose intended of water security strategic planning development and is to remain confidential. Graphics contained in this presentation are illustrative only

Stock & Domestic (S&D)

- The target market includes meeting the stock and domestic (S&D) demand. The Impact of Climate section of this Submission at pages 11 and 12 notes that the current dominant dryland winter cropping regime is likely to be unsustainable in the future, which will require a reversion back to the more traditional livestock farming.
- There are anticipated to be 250 individual properties serviced for S&D water security by the Droughtmaster project, Of these 250 farms along the length of the pipeline (including laterals) almost none have S&D water security. They all rely on rainfall. The graphic adjacent shows the farms in a designated area of the pipeline with all those marked in darker brown not having water security.
- There is no alternative source of surface water or groundwater along the length of the pipeline in commercial quantities and of a generally usable quality. The evidence of this is the Ardlethan tin mine would not have needed to build a 50km pipeline from the Murrumbidgee to Ardlethan in the first place if there had been an alternative source of water.

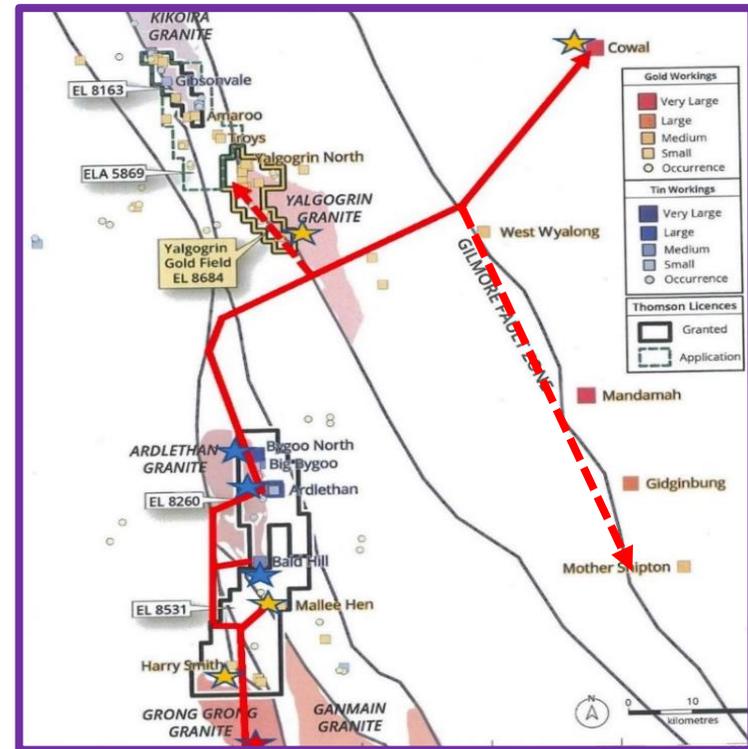


Each of those properties is numbered with cadastral and ownership engagement details in the Droughtmaster project data base.

Mining

- The Droughtmaster project traverses a significant mining estate at the southern end of the Lachlan Fold Belt. The graphic adjacent shows the pipeline route overlaid on a mine resource identification map.
- The mining estate generates tin and gold, with the Ardlethan tin mine now operational again and the Cowal gold mine as a Tier-1 asset seeking substantial expansion.
- The entire route along the pipeline marked in red is highly prospective, both for tin and gold, and new development will require a significant water resource, with the Droughtmaster project being the only practical option. Preliminary agreements for supply have been executed, and discussions are otherwise continuing. 35% of the Droughtmaster water resource is allocated to mining.
- The alignment along the dotted red line between West Wyalong and Temora is also highly prospective for gold, with three exploration companies currently active, two of which are major listed miners, with the prospective sites marked. The Droughtmaster project would likely be the only source of mine makeup water for any new developments, other than the hyper-saline groundwater, 50kms to the east of West Wyalong.

- Attached at Annexure 3 is correspondence from the Ardlethan tin mine noting the required 500ML of makeup water accounts for 26 direct FTE jobs. This is an Engine of Growth to reverse population decline and deliver the Shared Value benefits in a small local community. It is likely that water security for mining is amongst the highest value Droughtmaster project applications.
- As the project extends into the mining estate in the Lachlan catchment, high-value outcomes will be magnified.



This submission contains confidential information belonging to Plains Water Ltd that is proprietary or privileged. It is provided specifically for the purpose intended of water security strategic planning development and is to remain confidential. Graphics contained in this presentation are illustrative only

Horticultural Development

- A specialist horticultural development of modest scale, close to the water source at Grong Grong, has been designed to produce a value-added nutraceutical product sold into global markets, positioned as promoting wellness and immunity.
- The primary purpose of the horticultural development is to provide the scale of infrastructure necessary to pump high-value/low-volume water resource 180kms to the north.
- The horticultural development is designed as a Shared Value project, anticipated to be majority funded by the Indigenous Land and Sea Corporation (ILSC), and associated parties as a jobs and training generator for local Aboriginal interests. The ILSC is a division of the Department of Prime Minister & Cabinet, with discussions with the ILSC well advanced.
- Further details on Aboriginal engagement is set out at pages 12 to 14.

Water Use

- The Droughtmaster project fully developed has a design usage capacity of 12,163ML of water per annum. If all of this is sourced from high-security regulated surface water and high-yielding regulated groundwater, it will account for 3.5% of the total regulated Murrumbidgee supply.

- If some of the total requirement is sourced from regulated general-security entitlement, of which there are approximately 2m shares, as it may be in some years, then the relative proportion would be substantially less.
- The project is principally a common-user infrastructure project. The water distributed by the infrastructure could belong to anyone, where the infrastructure operation is contracted for distribution.
- Mechanisms for water access may include entitlement ownership, lease and trade, across a substantial number of stakeholders.
- Of the total of 12,163ML/pa 3,346ML is applied progressively in the specialist horticultural development close to the water source at Grong Grong, noted above.
- 3,717ML are allocated to irrigation of annual crops, with a focus on fodder crops that can more effectively utilise general-security water entitlement. Farming operations to revert to the more sustainable livestock production regimes require supplementary stock feed in addition to secure S&D water, and the project seeks to provide that facility to its S&D customers.

- Further information on the likely requirement for a revision back to livestock farming is set out in the Climate Impacts section at pages 11 and 12.
- The water volumes distributed more than 15kms north of the water source at Grong Grong are all high-value/low volume and are assessed as 4,350ML/p.a. for new and existing mining development and 750ML/pa for S&D applications.

The Needs and Demands

- Port Jackson Partners has produced the research paper *Greener Pastures – The Global Soft Commodity Opportunity for Australia and New Zealand*, commissioned by the ANZ Bank¹
- The Research paper sought to define the requirement for agriculture to meet its full potential by 2050 and determined that the capital requirement in Australia, principally for infrastructure, was \$600Bn, and the requirement to effect generational change in the landed estate over the same timeline was \$400Bn.
- It is likely that of the \$600Bn, water infrastructure makes up a significant proportion and it is certainly the most important. If you don't have water, everything is at risk.

- If regional NSW is equivalent to 20% of Australian productive agriculture, then the capital cost of water infrastructure over the period is in the tens of Billions of dollars range.
- The Droughtmaster project provides Government with a unique opportunity to access private sector innovation, competition and capital to fund some of the requirement, as opposed to Government funding the entire water infrastructure requirement on its own.

The Operating Environment

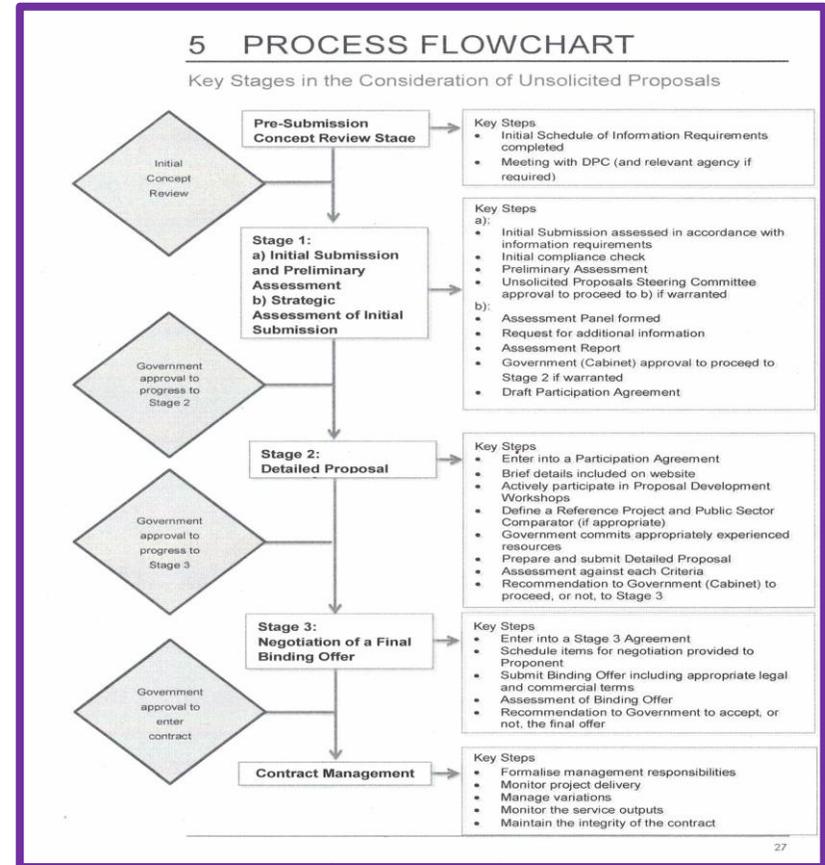
- The Droughtmaster project operates in an environment where water service provision in regional NSW is generally in the jurisdiction of local government. The local water utilities (LWUs) are, for the most part, unregulated politically-directed essential service monopolies, which presents some challenges in terms of private sector integration.
- This operating environment also generates the opportunity to some extent in that the LWU's focus is typically water rather than infrastructure development, which is ultimately left to State Government to underwrite.

¹ http://media.corporate-ir.net/meia_files/IROL/24/248677/ANZ_insight_3_Greener_Pastures.pdf

- The model that most reflects the Droughtmaster project is the Wentworth to Broken Hill pipeline, which is regulated and where the parties involved are State government, with a private sector operator².
- In the forthcoming Droughtmaster project's PPP process, conducted under the Unsolicited Proposals framework, the Wentworth to Broken Hill Pipeline is likely to be the Comparator. In addition to the PPP process, parts of the Droughtmaster infrastructure will be regulated by the Independent Pricing and Regulatory Tribunal (IPART), under the NSW Water Industry Competition Act.
- While the Droughtmaster project does have the capacity to supply town water to towns and villages, there remain issues about integration and distribution, where the LWUs, as unregulated entities do not supply potable water that meets the Australian Drinking Water Guidelines. Determining the supply of potable water is a matter to be addressed subsequent to the PPP process, when counterparts are integrated into the project, in particular .

Project Process & Requirements

- The NSW Government has asked that the project proceeds under the Unsolicited Proposals Framework, which is a staged assessment set out in the graphic below.



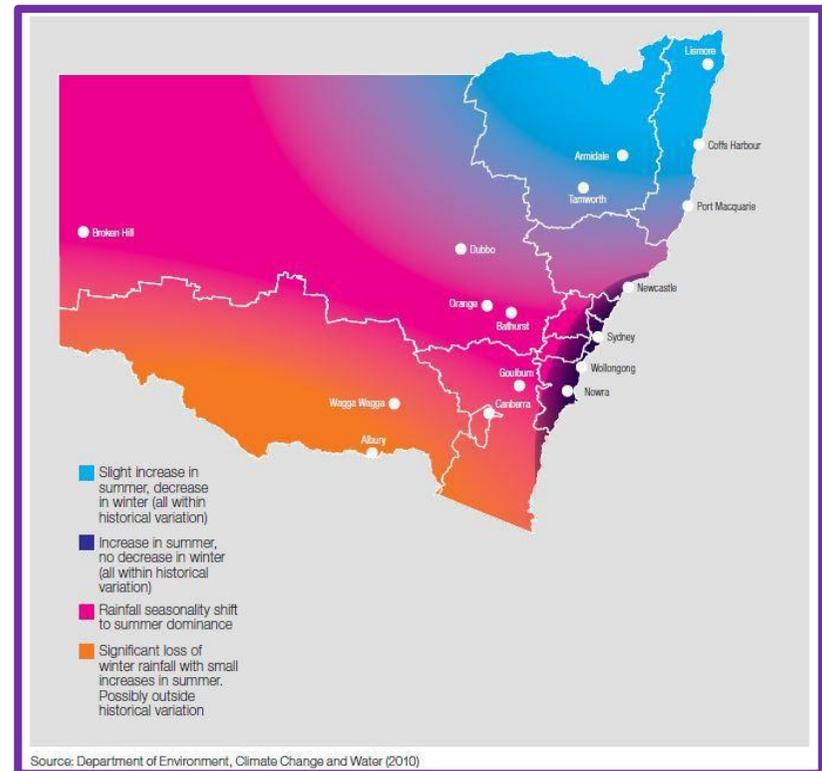
² [Prices for WaterNSW's Murray River to Broken Hill Pipeline services from 1 July 2019](#)

This submission contains confidential information belonging to Plains Water Ltd that is proprietary or privileged. It is provided specifically for the purpose intended of water security strategic planning development and is to remain confidential. Graphics contained in this presentation are illustrative only

- Key Issues in the PPP process are:
 - ❖ Uniqueness – What is so special that Government would bypass a competitive process;
 - ❖ VfM – Will Government get Value-for-Money;
 - ❖ Comparator – Could Government do it better itself, with the Comparator likely to be the Wentworth to Broken Hill Pipeline,
 - ❖ Risk Assessment & Allocation – Political and Jurisdictional risks are the only risks Government can't seek to transfer.
- The project team is well equipped to proceed under this framework. The project team have access to capital and are experienced in complex capital projects. The Procurement Procedure is outlined at Annexure 2.
- The project requires commercially willing creditworthy counterparts. In relation to the large number of S&D farm customers, the project requires an access success rate in the 90% range. The advantage the project has as a private sector developer, relative to a Government developer, is to actively effect generational change.
- The potential scale of the generational change in the landed estate triggered and facilitated by the project is noted under the Needs & Demands section at page 9 above.

The Impact of Climate Change

- The graphic below was developed by the Commonwealth Department of Environment & Climate Change 10 years ago. It predicted a decline in winter rainfall and has been accurate in 8 years out of 10 since. The effect of this, if the trend continues, is to make dryland winter cropping, which is the dominant agricultural regime across the region, unsustainable.



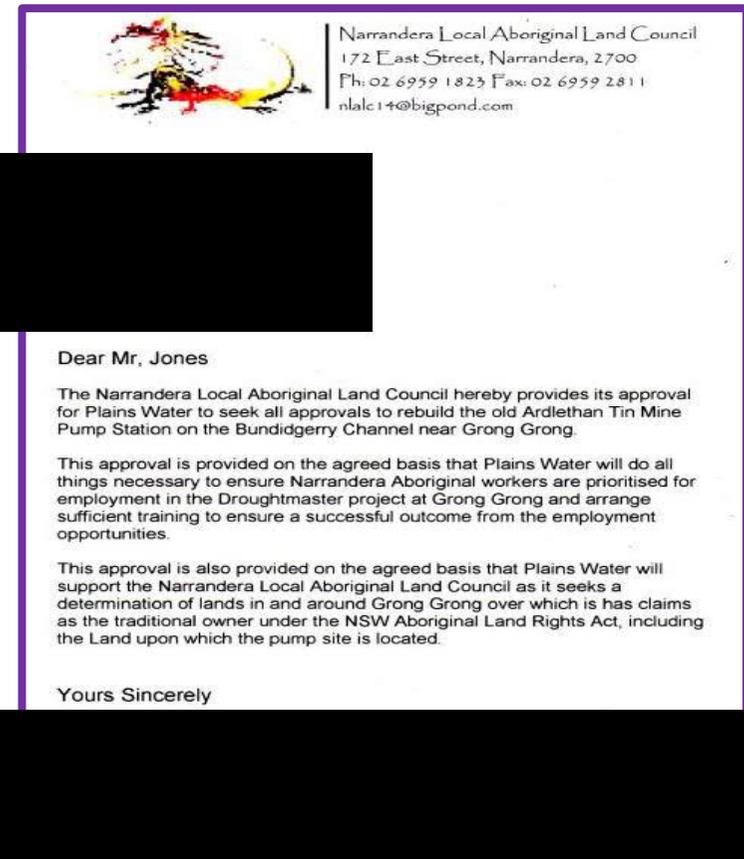
This submission contains confidential information belonging to Plains Water Ltd that is proprietary or privileged. It is provided specifically for the purpose intended of water security strategic planning development and is to remain confidential. Graphics contained in this presentation are illustrative only

- The provision of S&D water security is central to allowing the dominant form of agriculture to revert to the mixed farming regime that it once was, based on livestock. With the addition of irrigated supplementary feed from project developed infrastructure close to the water source, the Droughtmaster project enables the region to build the capacity for a sustainable long-term farming regime to withstand the impact of climate change and transition to an Engine of Growth.
- The overall environmental impacts of the project will be determined in an Environment Impact Scoping Study to be undertaken during the PPP process. There are no significant alternative sources of water likely to be impacted by the project.

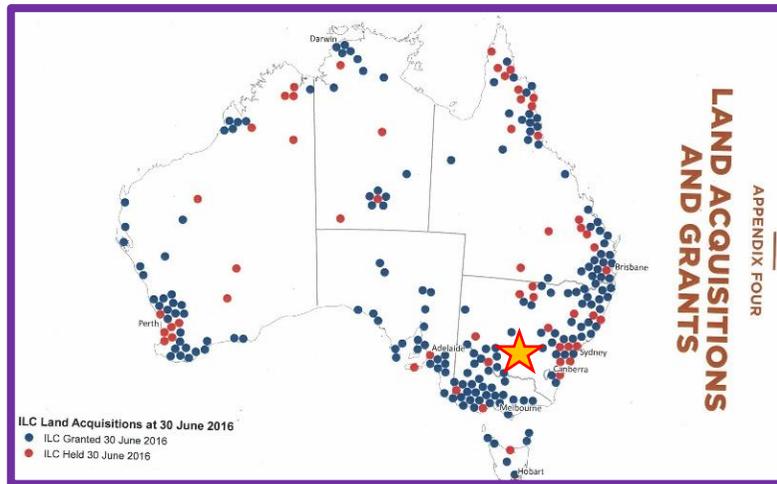
Aboriginal Engagement

- The project has a significant Aboriginal component that has been developed in the context of seeking approval for the infrastructure to traverse land over which there are Native Title Claims. The arrangements are reflected in the correspondence set out opposite.
- There has been no discussion about water as a cultural matter. The Aboriginal engagement has been about local Aboriginal jobs.

- The Indigenous Land and Sea Corporation is in discussions about funding certain project developments that generate jobs, which is the primary criteria for the ILSC involvement
- The jobs that are to be prioritised for Aboriginal interests at the local level are set out in the Matrix at Annexure 1.

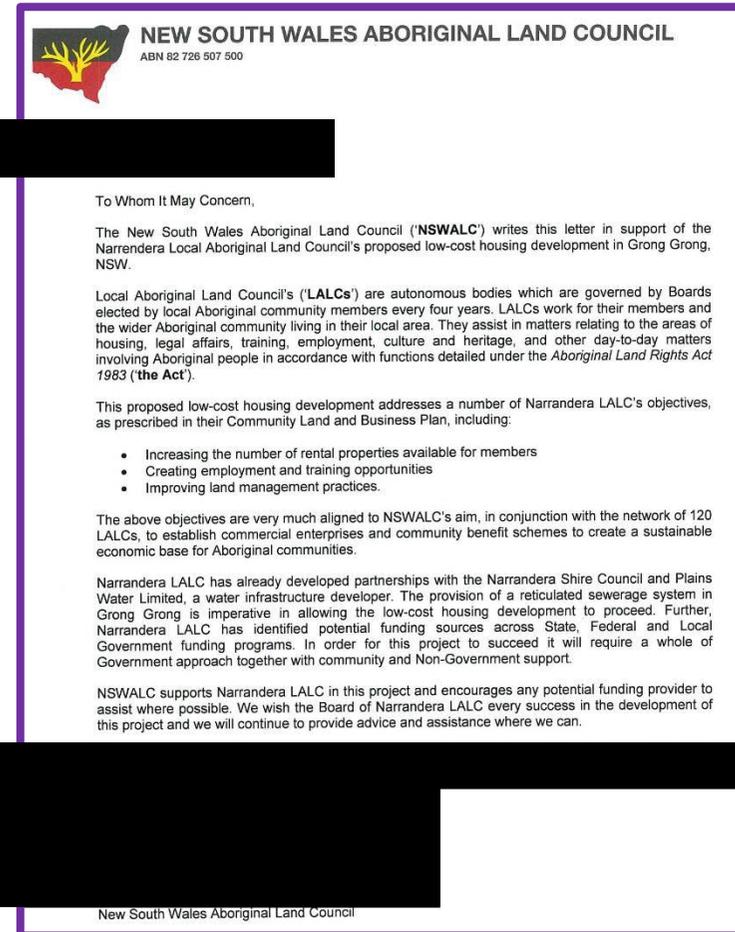


- An important driver for ILSC participation is the relative lack of other investment in Wiradjuri country, as shown in the graphic below, despite Wiradjuri being the largest Aboriginal nation in NSW.
- The Droughtmaster project has arranged prospective investment from a range of Aboriginal interests, and it is anticipated that the Commonwealth will play a significant role in Aboriginal investment, to be determined principally during the PPP process.



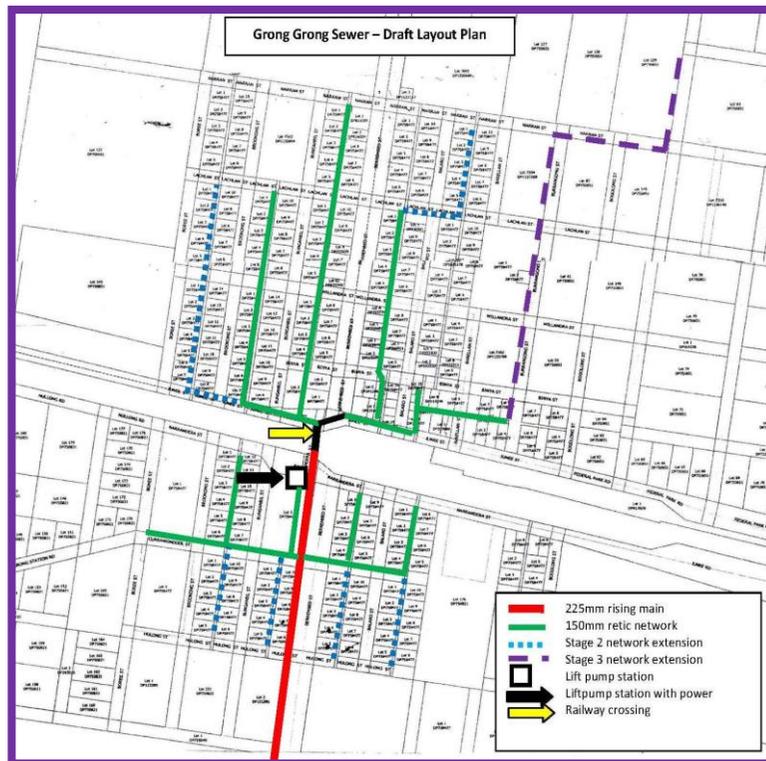
- In the village of Grong Grong, the Narrandera Local Aboriginal Land Council (LALC) is the largest landowner, measured by lot numbers.

- The project has been informed by the NSW Aboriginal Land Council that Grong Grong is the only place in Regional NSW where Aboriginal interests own urban land in a village with a zoning that allows development.



- The village has a well-developed cadastral makeup of predominantly 2,023sqm lots (½-acre), and is well suited to development, with 80% undeveloped.
- With sewer treatment and reticulation provided by the Droughtmaster project, all of the 2,023sqm lots can be subdivided in two, into a more manageable 1,000sqm (¼acre) size.

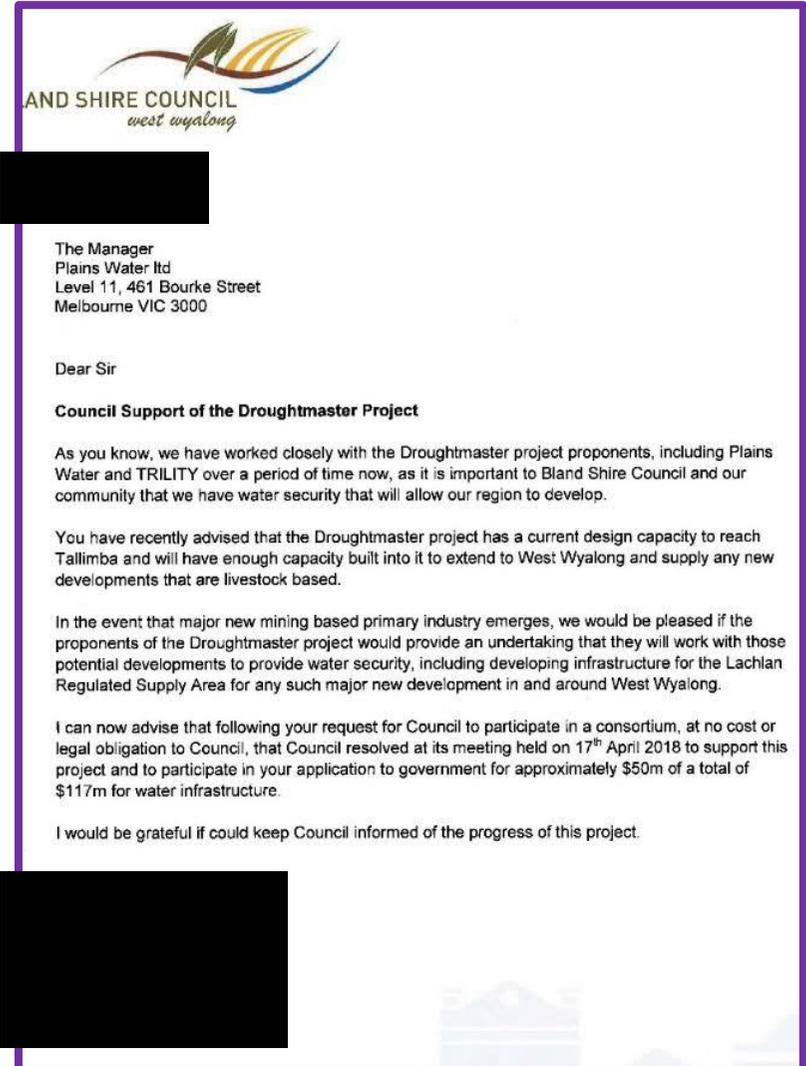
- Subdivision is a value generator for all landowners, with the majority expected to participate.
- The core development is expected to be driven by the development of the Aboriginal land assets to create a social and affordable housing estate where inter-regional migration to Grong Grong can be effected, based on the elevated level of job creation.
- A reticulated sewer network and treatment plant can be partially funded from the capture of some of the subdivision value. Sewer infrastructure development is regulated by the NSW Water industry Competition Act, which requires only external environment approvals, in addition to IPART approvals.
- This is a good example of the innovation, competition and capital provided by the private sector where integrated development of this nature achieves outcomes not capable of delivery by the public sector.
- It is noted that there is a substantial Aboriginal community in the Lachlan catchment where the Droughtmaster project experience may be able to be replicated.



Community Consultation & Cost/Benefit

- The Droughtmaster project has conducted extensive community consultation in various formats. The first reaction is community thinks government should provide water for free.
- More recently the consultation has focused on the sector of the community with an economic interest, which is a wide sector. The consultation now tends to prioritise woman, whose reaction is typically seeking quantification of the social and economic benefits of the project, whereas men seek to understand the engineering scale.
- Local Government has also been a focus of consultation and advocacy. The experience has been that the local government is highly variable. Some LGAs are exceedingly supportive, with Bland Shire Council an example of a high level of cooperation. Other local governments are less accommodating, which can be seen in the relative wording of the conditional imprimatur expressed in the correspondence adjacent and below.
- The project has received an important public imprimatur from former local government Councillors and Parliamentarians that was unsolicited and who were previously unknown to the project, in response to a certain barrier. It is indicative of the Droughtmaster project's overall extensive community support.

15



This submission contains confidential information belonging to Plains Water Ltd that is proprietary or privileged. It is provided specifically for the purpose intended of water security strategic planning development and is to remain confidential. Graphics contained in this presentation are illustrative only

Our ref: 385909
Your ref:



RE: Council Resolution 18/169-Droughtmaster Project

Thank you for your informative presentation to Council at its meeting on 21 August 2018.

Following your presentation and after considering your request for support for the Droughtmaster Project Council resolved as follows:

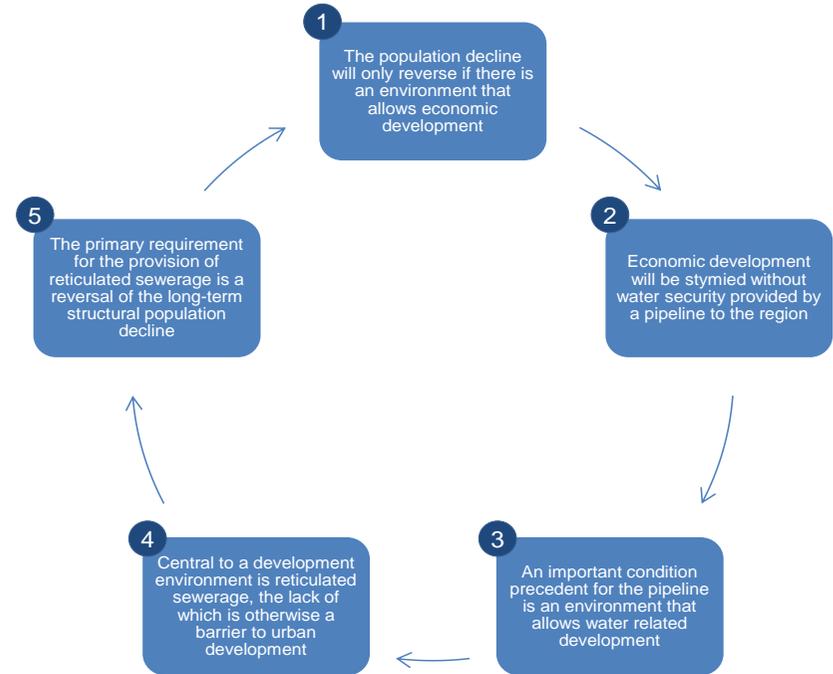
- 1) To receive and note the updated information on the Droughtmaster project as presented
- 2) To provide a letter of in-principle support for the Droughtmaster Project concept, on the basis that there is no financial commitment from Narrandera Shire Council.

Accordingly I am pleased to advise you of Council's in-principle support for the Droughtmaster Project as recorded in the official Minutes of Council as Resolution 18/169.

16

- The project has developed a Rapid Cost/Benefit Analysis partially to establish the Social Licence to Operate, and as a preliminary assessment ahead of a Benefit/Cost Ratio Assessment (BCR) to be developed during the PPP process.

- The correlation between adequate infrastructure, in this case municipal wastewater infrastructure, and the development drivers, are mutually co-dependent, as shown in the graphic below.



- The Rapid Cost/Benefit Analysis measured the Droughtmaster project's Goal Definition against the Goals, Objectives and Strategies of all levels of Government. The section of the Rapid Cost/Benefit Analysis on Goal alignment is set out as attached at Annexure 4.

This submission contains confidential information belonging to Plains Water Ltd that is proprietary or privileged. It is provided specifically for the purpose intended of water security strategic planning development and is to remain confidential. Graphics contained in this presentation are illustrative only

Integration with the Lachlan Strategy

- The project is designed to extend into the Lachlan catchment. Currently the design has a terminal point that to extend beyond would require a redesign and potentially an implementation delay. For this reason any extension needs to be carefully considered, potentially during the PPP process.
 - Originally the Droughtmaster project was designed to extend to the Northparkes mine and so the project team has a well-developed understanding of the Lachlan catchment, as well as the catchments extending to Cobar, which is the subject of a separate confidential submission.
 - Notwithstanding the project team's reluctance to countenance delays, the project understands the possible Droughtmaster Combination with Options 5, 25, 26 and 27 in the Draft Strategy.
 - It is noted that Combinations are a consideration in the Draft Strategy, with reference to Lake Rowlands, which is too far up the catchment for the Droughtmaster project. Should a Combination emerge for Options 5, 25, 26 and 27, the project would effectively be completing the original design for Lake Rowlands from 80 years ago, which was to extend to Lake Cargelligo.
- The Droughtmaster project team would be prepared to consider and develop an Action Plan for the Combinations noted above, including extension to Cobar, at the PPP stage, subject to inclusion in the Draft Lachlan Strategy.

Droughtmaster Project Briefing Note

Project Employment & Training – Grong Grong



All employment opportunities set out below become certain when the Droughtmaster project completes final agreement with the major horticultural developers to trigger Stage-1. This is anticipated by early -2021. Training can begin once the agreement is in place with the horticultural developers.

Plains Water’s estimate is that **26 permanent jobs** are created on the implementation of Stage-1 of the project. This does not include casual and seasonal workers, which may be as many as 50 at certain times of the year. It does not include an assessment of the employment associated with the development of the LALC’s land assets in the village, which is also significant. This data is to be fully examined in the Cost Benefit Analysis.

Participation in Primary Industry development is conducted by the Plains Water Ltd infrastructure subsidiary, Riverina Infrastructure Pty Ltd (RIPL) operating with a CATSI, which together will facilitate training. In addition to training directly arranged at the Yanco Agricultural College nearby, or other business development courses, recruitment and training resources is being offered by the Department of Prime Minister & Cabinet

Employment Opportunities & Training				
Category	Jobs FTE	Training Requirement	Resources	Outcome
Permanent Horticultural establishment and Nursery jobs, including asset management	6 Horticulture 8-10 Nursery 2 Mgmt	An Ag school set up with the best in-depth agric background would be the most suitable facility. The majority of the hort jobs are tractor jobs, so they need tickets. Management jobs likely to require full tertiary training	The Ag school will know what is required. Built into the training is the need for business training which may be in addition to the Ag training regime	The outcome sought is that trainees are financially, technically and economically competent including operating their own contracting business. The preference is for certification in horticulture, irrigation and drainage & machinery accreditation. Management jobs are the leaders and will have received training in leadership
Major water infrastructure and primary industry related construction, operations, maintenance & security.	7, 3 of which are security related	Plains Water subsidiary RIPL, and contractors. Primary training is security industry for security trainees with OH&S included	Contractors are required to prioritise aboriginal employment by way of an Inclusion Rider. 2 will be trainees, The security personnel are required on a permanent basis at critical sites. 2 to be classified Rangers.	The outcome is for the trainees to integrate with the constructor’s workforce on a long-term basis. Security trainees to undertake security work across the project estate, including for the identification of water misappropriation, but multi-skilled as stand-in for other functions.
Casual agricultural field work and associated secondary processing. These are potentially part time or seasonal jobs and they are also piecework or sub-contract	Unspecified but significant. The Nursery alone will employ 15 casuals	Training is mainly on the job.	These jobs only emerge when the project is under development and productive after the establishment phase. They are essentially piecework jobs, so may be best suited to self-motivators or older hobby gardeners.	These jobs could be targeted at workers who may have been rehabilitated from drug and alcohol issues and will be preferenced to those who want to live at Grong Grong where accommodation is provided. They are also likely to be suitable to older people (over 50s) looking for a new life and hobby.
Secondary process jobs, including bee keepers, falconers, pest management (fruit fly), transport, community garden management etc.	5	The training required is for multi-skilling, where trainees can get a broad understanding of the entire operations. Ag school training important in most cases	Trainees should have transport licenses, including preferably heavy transport and to carry passengers in some cases	The outcome is for trainees to be multiskilled

Droughtmaster Project Procurement Plan

The infrastructure procurement plan is by way of an Engineering Procurement and Construction Management (EPCM) form of execution, subject to alignment with government processes.

Conventional project management and project control principles and activities will be established within the project organisation. The essential items for project management and control include:

- Safety and health including Design for Safety (DfS)
- Environmental protection including Construction Environmental Management Plan (CEMP)
- Detailed design utilising up to date design systems including BIM
- Scope definition and contract packaging
- Approvals and monitoring of conditions imposed on project
- Primavera P6 (or similar) Schedules at all levels; regular monitoring and reporting of progress
- Costs, cash flow, forecasting, reporting and financial management
- Risk documentation and risk sharing and mitigation
- Contracts and procurement
- Employment and industrial relations
- Community and land holder regular news reports, liaison with affected parties, and consultation
- Common Data Environment for efficient document control during implementation
- Quality assurance and inspection
- Commissioning and performance testing
- Reporting in formats required by various parties to the project

In some areas of expertise, the project team will undertake key roles, and in others, external contractors will be engaged under the management and supervision of the project team.

Where scopes and project element boundaries can be well defined, specific tasks such as: site investigation, survey, permitting, design and documentation work, materials procurement and construction contracting will be procured from experienced and reputable local and Australian contractors and suppliers experienced in this type of work. Where closer management of uncertain scope, conditions interfaces and outcomes are required, the project team may well establish in-house teams.

Control mechanisms and reporting obligations will be built into each contract so that integration into overall project reports will be efficient and reliable.

There will be a project focus on employing local people, particularly those of Aboriginal heritage, and utilise local contractors to the greatest extent possible. While this fulfils the Project objectives and obligations and Public/Private Partnership (PPP) arrangements, it also enhances local pride and ownership of work quality and schedule achievement, alongside community and land-holder cooperation. Aboriginal partners, in conjunction with Government, will assist in recruitment and training of local people. This cooperation is an important component of a successful project, and the implementation of company policy in this regard will come through the project management team and the contractors engaged to execute the work.

Procurement opportunities will be structured to make works and equipment supply suitable for local and Australian companies to provide, albeit without compromise on quality and value for money.

The overall implementation methodology will be determined by the proponent after consideration of options by the executive management team in conjunction with the PPP process.

The project team will decide the most suitable procurement and forms of contract for the various project elements. For example, when the scope, approvals, physical interfaces and operational functions of a component can be well determined, the best form of contract may be a Lump Sum Turn-Key contract. Where inputs are variable, and physical conditions latent or uncertain, or scope quantities are not well defined, other forms of contract such as Schedule of Rates, Prime Cost Sum for uncertain components, Target Cost with Incentive and other forms of risk sharing between owner and contractor may be appropriate.

A reporting regime will be set up within the project, both for in-house activities and external/contracted components.

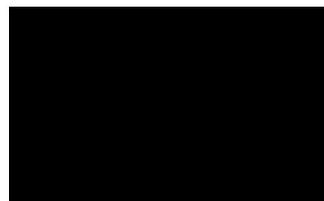
Contractors will be required to provide budget and schedule information in defined formats, and the project team will consolidate these continuously and report monthly. Expediting of lagging components will be undertaken. Look ahead for anticipated problems or delays will be undertaken and ameliorative actions implemented.

Contingencies for time and cost will be incorporated, some within contractor budgets to cover things for which they will be responsible, and some held by the proponent for items out of contractor control. Overall contingency management will be reported on within the monthly reports.

Interfacing with all relevant parties will be conducted by management, but in particular with WaterNSW, NSW DPIWater and IPART, in relation to regulated requirements, as well as customers to ensure operating protocols for the system and interactions with these parties are functional, acceptable and suitably documented.

It is important to note the specific reference to customers, as the pipeline is to be designed as common-user infrastructure. The pipeline delivers the water on a tolling basis with water generally modelled as a pass through. The water will mostly belong to the customers or contracted supplies.

Australian Tin Resources



By email



As you know, Australian Tin Resources ("ATR") expects to have our tin mine at Ardlethan operational in 2017. Sustainable long-term water security and upgraded power infrastructure are important matters for the success of the project which we expect to run for more than ten years.

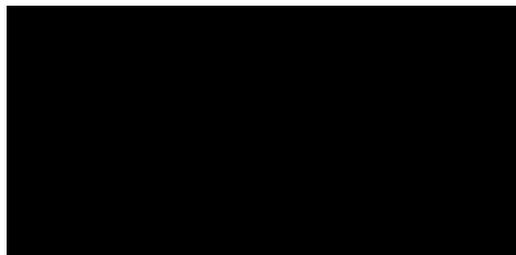
Ultimately the long term sustainability of the mining operation will depend on a secure supply of approximately 500ML/pa of makeup water in addition to whatever the water security requirements for the broader region are. We have approximately 3 GL of water available to us from our pit but would need makeup water from 2020/2021.

In relation to power infrastructure, the requirement is for 3.7MWh capacity, being the capacity that once was here but has since been removed.

We note that the ATR operations will directly employ up to 28 people, and while this is not a major new mining operation in terms of job numbers, it will have a significant impact in a small regional area, including reversing the decline in population.

We would be pleased to have these matters represented to government in the current Regional Economic Opportunities and Infrastructure Prioritisation process.

Yours sincerely,



The Droughtmaster project has developed a Rapid Cost/Benefit Analysis, which has been updated from time to time. The Droughtmaster project's Goal Definition was defined largely in terms of Regional Development and the provision of water security to farms to mitigate climate related risks, being particularly relevant today. At the outset of the development of the Cost/Benefit Analysis, the assessment was based on the demands, benefits and other factors known at the time.

There were six goals as set out below:

- 1. Reversal of population decline in the communities of the NSW Riverina**
- 2. Creation of Jobs within the NSW Riverina**
- 3. Improve water security for farming communities**
- 4. Increase food security**
- 5. Attracting investment to the NSW Riverina**
- 6. Increased sustainability and resilience of local communities.**

These goals were assessed as aligning with the strategies and objectives of all levels of Government in the Droughtmaster project's Rapid Cost/Benefit Analysis.

Since the Cost/Benefit Analysis was first developed, new demands for project delivered water security and new infrastructure, including new sewerage infrastructure to enable housing development, has emerged..

New demands for enabling water security have included new mining projects as Engines of Growth, particularly tin mining around the Ardlethan area and prospective major new gold mining in Bland Shire (West Wyalong), that weren't as apparent, or as well advanced at the time the analysis was first developed.

These new, more immediate demands to enable Regional Development has resulted in three new project goals, including goals associated with the Narrandera Local Aboriginal Land Council (LALC), which is an important project partner, and which is also the largest landowners in the Grong Grong village at the centre of proposed project housing development enabled by new water infrastructure. Agreement with the LALC will see Aboriginal workers prioritised for project related employment and aboriginal owned residential land in the village developed for housing to support jobs and inter-regional migration.

- 7. Develop new water and sewer enabled village development for worker and Social & Affordable housing**
- 8. Facilitate Aboriginal economic empowerment through project and related jobs and aboriginal asset development**
- 9. Improve water security for new regional mining development, as an Engine of Growth sector**

The tables below sets out how the project Goals, including the new Goals, aligns with the Goals Strategies and Initiatives of Local, State and Federal Governments.

Table: Relevant Goals Alignment from State, National and Local Strategies and Initiatives

Body	Strategy/ initiative	Goals	Links to goal
State Government			
Infrastructure NSW	State Infrastructure Strategy 2018-2038	Strategic objective: Support the growth, productivity and liveability of metropolitan and regional communities by ensuring that water security, quality and wastewater services protect public health and the environment	1,2,3,4, 5,6,7,8, 9
Infrastructure NSW	State Infrastructure Strategy 2018-2038	Infrastructure NSW recommends that the NSW Government continues the implementation of the reforms to Crown land and that, as part of the Land Negotiation Program, a review is undertaken by mid-2018 of the potential for Crown land to assist in meeting open space or employment objectives outlined in Regional Plans.	5,7,8
Infrastructure NSW	State Infrastructure Strategy 2018-2038	Link integrated strategic land use and infrastructure planning	5,7,8
Infrastructure NSW	State Infrastructure Strategy 2018-2038	Investment should therefore be targeted at infrastructure that aligns with existing industries and enables new or emerging business sectors to grow.	3,4,9
Infrastructure NSW	State Infrastructure Strategy 2018-2038	Regional NSW – Ensure water supply and wastewater treatment to enable growth.	1,2,3,7, 9
Infrastructure NSW	State Infrastructure Strategy 2018-2038	Eight FERs (22 per cent) have experienced declining populations. While population increases generally indicate future economic growth, a stable or declining population is not always an indicator of future decline: some FERs will grow if appropriate investments and interventions are made to reinforce their strategic endowments.	1,2,3,5, 7,9
Infrastructure NSW	State Infrastructure Strategy 2018-2038	The NSW Water Statement could: <ul style="list-style-type: none"> • support the critical needs of NSW industries and communities by ensuring water security and quality of supply • support regional development and enhance opportunities for promoting a diverse economy • facilitate a water supply system that is responsive to changing demands • facilitate financial efficiency in the delivery of water • protect and maintain the certainty of water rights • provide the market with opportunities to determine and manage its own risks • protect the integrity and sustainability of environmental and cultural assets. 	2,3,5,7, 8,9
WaterNSW	20-Year Infrastructure Options Study Rural Valleys	System Deficiencies Improvement The two key deficiencies identified in the in the Murrumbidgee include high system losses or poor delivery efficiency,	3,9

DROUGHTMASTER PROJECT RAPID COST/BENEFIT ANALYSIS SUMMARY EXTRACT



NSW Department of Industry – Centre for Economic Development	Regional Growth Enablers	For the purpose of regional development, government has a long established and strong role in the provision of public infrastructure. Infrastructure projects being constructed on efficiency grounds should be subject to cost benefit analysis, with those that provide the greatest net benefits to society prioritised..... Particularly for regional NSW, government may also choose to intervene for equity reasons to provide a basic level of infrastructure that would not otherwise be provided.	1,2,3,5,6,7,8,9
NSW Department of Industry – Centre for Economic Development	Regional Growth Enablers	A Region seeking to encourage economic development should concentrate on the factors that enable the growth of endowment-based industries, as well as building local leadership capacity, to capitalise on the opportunities that the Region’s endowments present. Endowments can lead to opportunities from which commercial and industrial interests may leverage and develop specialisations.	3,8,9
DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	Inland region <ul style="list-style-type: none"> • Economic decline of 1.2% annually (GVA, CAGR, 2011–2016). In 2016, the total GVA of the area was \$21.5bn • Agribusiness is the largest industry in Inland regions, with 27,700 employees • There was an unemployment rate of change of 1.8% in the last five years (CAGR, 2011–2016). Overall, the unemployment rate was 6.0% in 2016 	1,2
DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	What will it take <ul style="list-style-type: none"> • Aboriginal economic participation – Aboriginal economic activity is a vital and growing area that will build a stronger foundation for social, economic and cultural prosperity in NSW. Supporting greater participation and opportunities for Aboriginal people will create jobs and employment, lift education and skills, and activate regional economic potential. 	7,8
DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	What will it take <ul style="list-style-type: none"> • Governments and industry working together – Rising to the challenge will overwhelmingly benefit the private sector. We can create a business-friendly environment by ensuring regulatory settings protect the community while not hindering enterprise, and leveraging private-sector investment where benefits are largely private. • Governments and communities working together – Engaging communities in government decision-making helps local economic development initiatives better address the needs of different community members, and forges a joint commitment to better outcomes. 	5,6,8

DROUGHTMASTER PROJECT RAPID COST/BENEFIT ANALYSIS SUMMARY EXTRACT



DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	The Role of Government The NSW Government should identify and remove market failures that serve as obstacles to competition and regional growth. In doing so, it is important to avoid unsustainable industry assistance. However, where a market failure can be addressed through better coordination, regulatory improvements or efficient public investment, the government can and should act to promote sustainable growth.	1,2,
DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	Principals for future investment 4. Reliable accessible water and energy Energy and water are vital to people and business. Securing climate-resilient water supply is particularly important for key industries, and digital advances will largely require reliable energy.	3,6,7,9
DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	How we are looking to the future <ul style="list-style-type: none"> prioritising skills and support programs to target youth unemployment in key sectors 	2,8
DPC – Regional Development	A 20-Year Economic Vision for Regional NSW	4. Manage vital energy and water resources sustainably to ensure supply will meet long-term regional needs. <ul style="list-style-type: none"> research and development investment in energy and water security and resilience, particularly for engine industries. 	3,9
NSW Dept of Industry	Making it happen in NSW – Regional Development Framework	Aboriginal Economic Development The framework for Aboriginal economic prosperity is a key initiative of OCHRE, the NSW Government’s plan for Aboriginal affairs.....The framework aims to support Aboriginal people to realise their economic aspirations by developing sustainable employment and by building Aboriginal communities’ economic and entrepreneurial capacity.	7,8
Local Government			
South West Slopes FER	Regional Economic Development Strategy (REDS)	Infrastructure Priorities Water security: improve access to water and security for the agriculture, food production and mining sectors	3,4,9
South West Slopes FER	Regional Economic Development Strategy (REDS)	Infrastructure Priorities Action Complete the Plains Water Droughtmaster project to ensure water security for the agriculture, food production and mining sectors (Project described Page 44-45 REDS) Investigate options to address water security issues impacting growth of industries and townships in the Region	1,2,3,4,5,6,7,8,9
South West Slopes FER	Regional Economic Development Strategy (REDS)	Infrastructure Priorities Action Enhancing the towns and villages of the Bland Shire to facilitate in attracting and retaining residents to improve the population growth in the Region.	1,6,7

DROUGHTMASTER PROJECT RAPID COST/BENEFIT ANALYSIS SUMMARY EXTRACT



Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Strategy</p> <p>The specialisations inform the strategic elements</p> <ol style="list-style-type: none"> 1. Develop and grow its Agricultural and Manufacturing ‘Engines of Growth’, emphasising better connections to external markets and enabling greater supply chain integration within the Region 2. invest in skills and the supply of key utilities critical to ‘Engines of Growth’ production processes, 3. Grow the Western Riverina population and labour pool to support greater output, specialisation and productivity: through increasing housing supply and enhancing services and liveability. 	2,3,4,5,7
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Strategic Themes for the Primary Specialisations</p> <ul style="list-style-type: none"> • Increase reliability and reduce costs of key inputs like energy, water and skilled labour • Provide the infrastructure and services that facilitate housing supply and population and labour force growth • Take a fresh look at new approaches to partnership with other institutions 	2,5,7
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Infrastructure Priorities</p> <p>Increase certainty in water supply to support longer term investment decisions</p> <p>Action</p> <p>Work with irrigation network providers to identify and advocate for further improvements in water network infrastructure</p>	3,4,5,
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Infrastructure Priorities</p> <p>Realise a diverse supply of housing types to meet the needs of the community</p> <p>Action</p> <p>.... proactively seek funding opportunities for enabling infrastructure to accelerate housing supply</p>	5,7,8
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Infrastructure Priorities</p> <p>Celebrate and embrace indigenous and multicultural heritage</p> <p>Action</p> <p>Increase the branding and awareness of the Region’s indigenous and multicultural heritage</p>	8
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Infrastructure Priorities</p> <p>Provide affordable and reliable water and treatment services for Western Riverina’s Communities</p> <p>Action</p> <p>Sewage Waste and Water Treatment Program</p>	7
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Enablers Alignment</p> <p>Pursue new and transformative partnerships across the local, state and federal government where the project seeks engagement and coordination across all tiers of government.</p>	5
Western Riverina FER	Regional Economic Development Strategy (REDS)	<p>Enablers Alignment</p> <p>Partnering with energy suppliers to determine infrastructure requirements and costs to supply reliable and affordable energy</p>	5

Federal Government			
Australian Government Department of Agriculture	Water Infrastructure Options Paper	<p>To determine whether a water infrastructure project warrants Commonwealth involvement, principles addressing the above considerations should be applied.</p> <ul style="list-style-type: none"> • Projects need to be nationally significant and in the national interest. • There must be strong state or territory government support with capital contribution and involvement of the private sector and where appropriate local government. • The investment will provide the highest net benefit of all options available to increase access to water, taking into account economic, social and environmental impacts. • Projects should address a market failure which cannot be addressed by proponents, state and territory governments or other stakeholders and limits a project of national significance from being delivered. • Projects should align with the Governments broader infrastructure agenda to promote economic growth and productivity or provides a demonstrable public benefit and addresses a community need. • Projects should align with the National Water Initiative principles including appropriate cost recovery and where full cost recovery is not deemed feasible, any subsidies are fully transparent to the community. • If providing capital, a consistent, robust analysis of costs and benefits and assessment is undertaken. 	1,2,3,4,5,6,7,8,9
Australian Government Department of Agriculture	Regional Investment Corporation	<p>The Department is committed to enhanced sustainability, efficiency and productivity in the management and use of water resources. Australia faces major challenges in ensuring sustainable water supply in the face of increased climate variability and rising demand for water. In response, the Australian Government provides national leadership in water reform.</p>	3,4,5,9
Australian Government Indigenous Land Corporation	National Indigenous Land Strategy 2018-2022	<p>DEDICATED INDUSTRY STRATEGIES</p> <p>To help achieve better outcomes for Indigenous people and to grow the Indigenous Estate, the ILC has identified key sectors of the economy that present opportunities for Indigenous Australians or where Indigenous land-holders may have a competitive advantage. They include both existing and emerging markets.</p> <p>Over the period of this NILS, the ILC wants to make the most of opportunities in these sectors to drive Indigenous wealth creation and employment, asset development and the protection and management of environmental and cultural values:</p> <ul style="list-style-type: none"> • <i>Agribusiness</i> – through partnerships with Indigenous corporations and the ILC Group’s existing agribusiness operations, as well as emerging opportunities across the agribusiness sector • <i>Tourism</i> – through partnerships with Indigenous corporations and the ILC Group’s existing operations at Ayers Rock Resort, Mossman Gorge and Home Valley Station, as well as through 	2,5,7,8

		<p>development of land-based tourism enterprises across the Indigenous Estate</p> <ul style="list-style-type: none"> • <i>Niche Indigenous products</i> – (for example) making traditional knowledge in bush foods a foundation for business and employment opportunities • <i>Renewables</i> – utilising the competitive advantage of Indigenous land holdings to create business, employment and income opportunities, as well as supporting the cultural and environmental sustainability of Indigenous-held land and its activities. • <i>Urban investment</i> – recognising that most Indigenous people now live in urban areas and that holding assets and having a strong Indigenous presence in capital and regional cities is very important • <i>Water-based activities</i> – making the most of the ILC’s ability to invest in water-based activities connected to land, as well as advocating legislative change to allow the ILC to support all water-based activities (salt and fresh) undertaken by Indigenous corporations. 	
Australian Government Indigenous Land Corporation	National Indigenous Land Strategy 2018-2022	<p>RELATIONSHIPS</p> <p>The ILC is committed to building productive relationships with Indigenous leaders, organisations, communities and individuals, as well as with other parties across the government, business, philanthropic and community sectors.</p> <p>The ILC will work with Indigenous land holders to build capacity, networks and strategic alliances to pursue opportunities in new and emerging markets at different points along the supply chain.</p> <p>Alliances are being pursued at three levels:</p> <ul style="list-style-type: none"> • <i>Networks</i> – connecting the ILC to interests in the wider Indigenous Estate • <i>Partnerships</i> – cooperation and collaboration between the ILC and Indigenous land holders on key projects and activities • <i>Strategic alliances</i> – formal arrangements involving the ILC, key Indigenous land holding bodies, industry partners, philanthropic and/or government partners. 	5
Australian Government Indigenous Land Corporation	National Indigenous Land Strategy 2018 - 2022	<p>MECHANISMS</p> <p>The ILC delivers land acquisition and land management assistance through its principal program, <i>Our Land Our Future</i>. The program has been adjusted to reflect the Board’s strategy and the ILC Group’s strengthened business processes. A range of flexible investment products have been developed to underpin the strategic relationships supported by the program; they include grants, loan products, joint ventures and equity partnerships.</p> <p>The ILC’s focus is to provide investment packages tailored to the needs and opportunities of individual Indigenous corporations.</p> <p>The revised program is guided by the following <i>Investment Principles</i>:</p> <ul style="list-style-type: none"> • Increase the productivity, value and profitability of the Indigenous Estate. • Support new and emerging markets where evidence supports opportunity and sustainability. 	2,5,7,8

		<ul style="list-style-type: none"> • Invest in value-for-money projects focusing on cultural, social, environmental and/or economic returns. • Invest in socially responsible, sound, ethical and sustainable projects. • Support Indigenous-held land to remain within the Indigenous Estate. • Maximise Indigenous procurement and employment opportunities through creating Indigenous benefits through the supply chain. • Build the capability of Indigenous investment partners. • Have measurable outcomes and a defined methodology for measurement. • Have a clear path to divestment of land or ILC exit from a partnership agreement. <p>The following <i>Priority Areas</i> shape the ILC's investment activities:</p> <ul style="list-style-type: none"> • Providing protection and long-term management of land with cultural and environmental values and assets. • Developing and investing in land-based enterprises that create training, employment and other significant benefits for Indigenous people. • Maximising the productivity and use of Indigenous-held land that will deliver the greatest benefit for Indigenous people. • Investing in land assets and enterprises that are economically sustainable, can leverage investment and take advantage of emerging markets and supply-chain opportunities. 	
--	--	--	--

INNSW SIS Extract – Information Only

PPP: Public Private Partnership

An option the NSW Government uses to procure infrastructure. PPPs must comply with the National Public Private Partnerships Policy and Guidelines and NSW-specific requirements in the 2017 NSW Public Private Partnerships Guidelines (TPP17-07). While every PPP has its unique characteristics, the principle features of a PPP include:

- Provision of service-enabling infrastructure that includes private sector skills to deliver a combination of design, construction, financing, maintenance, operations and delivery of services risk sharing between public and private sectors
- Contribution by government through land, capital works, risk sharing or other supporting mechanisms
- Payments from government or users to the private sector on the basis of service delivery.

Informal Confidential Submission to the Lachlan & Macquarie Water Strategy

Background

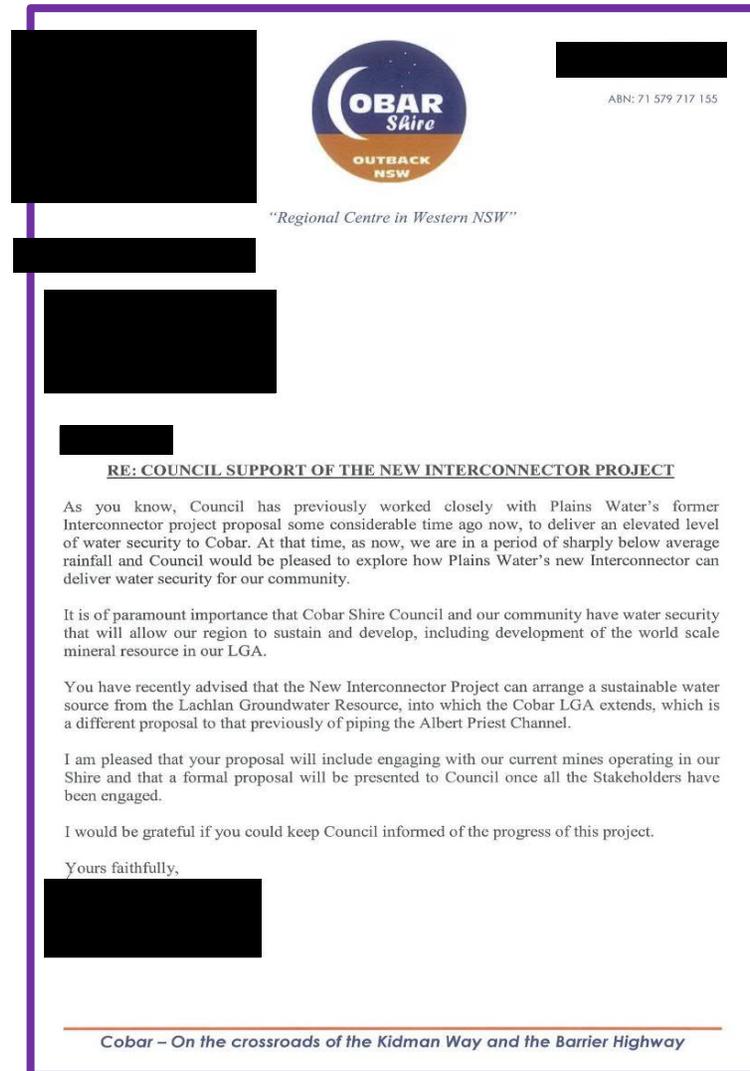
In 2008-2010, Plains Water Ltd, at the height of the Millennium drought, spent 2 years assessing and developing a proposal, known as the Interconnector Project, to deliver water security to Cobar, principally via the piping of the Albert Priest Channel.

More recently, earlier in 2020, Plains Water again undertook an assessment, known as The New Interconnector Project, at the height of the most recent drought. The New Interconnector Project was to some extent supported by Cobar Shire Council, as noted in the correspondence opposite.

Plains Water has a well-developed understanding of the requirement to deliver long-term water security to Cobar to support ongoing mining, which is likely to be generating an elevated overall value per Megalitre of water used.

There is a significant level of sunk investment and intellectual property in these proposed developments and the Company and its team is prepared to participate with government in the implementation of such a proposal for water security to Cobar.

This informal confidential Submission sets out key considerations that would define an Action Plan implemented between government and the private sector to achieve the outcome.



The Interconnector Proposal

By the time Plains Water was invited into the proposal in 2008, the Commonwealth had offered \$12.5m for what was understood to be half of a \$25m infrastructure build. The Commonwealth contribution was on the basis that the Commonwealth Environmental Water Holder would gain a proportionate share of the savings, assumed to be applied in the Macquarie Marshes.

Plains Water quickly determined that the capital cost was \$60m, rather than \$25m, and offered to fund the \$47.5m shortfall on the basis of the proportionate share of the savings flowing to Plains Water's nominated beneficiaries.

The beneficiaries include both LGAs, Bogan and Cobar, as well as the local mining interests, in addition to Northparkes and Cadia mines, both of which were in, or close to, the Macquarie catchment and were both planning major expansions for which water security was a prerequisite.

The outcome was the project failed principally because Bogan Shire Council, who owned the channel easement, said if they did not own the pipeline, it would not agree to the proposal, notwithstanding Bogan Shire Council had no means to fund any development.

Plains Water has not seen anything subsequently that indicates that Bogan Shire Council had changed its position. Because of this the most recent design of the New Interconnector Project to reach Cobar has water security sourced from the Lachlan catchment with the route selection designed to largely bypass Bogan Shire.

Another barrier was that the Cobar Water Board, which owns the existing dual 130km pipeline from Nyngan to Cobar, did not have a governance structure that allowed it to participate. Plains Water has not seen anything subsequently to indicate that this situation is any different.

By way of comparison WaterNSW was able to develop the Wentworth to Broken Hill pipeline because there is a creditworthy counterpart in Essential Water operating in a regulated environment. That does not exist at Cobar regardless of the fact that the Cobar Water Board is a State Authority.

There is a pathway to implementation that is unlikely to be economically viable without private sector innovation, competition, skills and capital and the New Interconnector would be well positioned to participate should Government seek an effective outcome, for which Plains Water is prepared to enter confidential discussions.

There are some matters that should be looked at more closely. Cobar appears to use more water per equivalent population (EP) than comparative communities. A search of the Cobar Water Board Annual Reports shows that even allowing for Council passing on some of its entitlement to the mines, it still appears to use 3 times the amount of water per EP, than Orange, for example.

Plains Water is mindful that while its Droughtmaster project is in stable Government electorates, both at the State and Federal level, that is not the case for Cobar and the political risk for Government may well be an important consideration.