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Regional Development Australia Far West Submission

Regional Development Australia Far West welcomes the opportunity to contribute to this review and seeks to provide a regional perspective on the potential economic and social impacts of potential price increases to water supply and wastewater services.

Regional Development Australia Far West (RDA FW) is a leadership voice for the region. RDA FW support the building of local economies and dynamic communities and enhance liveability in the Far West by improving access to government funding and programs; facilitating partnerships and linkages with all tiers of government and the community; and managing a diverse range of projects that create economic, social, and natural capital. RDA Far West is a non-profit, community-based organisation.

The Far West NSW Region encompasses the semi-arid lands of western NSW and shares borders with South Australia and Queensland. The region comprises of 2 Local Government (LGA) areas, Broken Hill City and Central Darling Shire, and along with the Unincorporated Area of NSW covers an area of approx. 147,000 sq. km. The Far West has a strong economy based on mining, agriculture and tourism; however, unemployment is higher than the NSW average and many household incomes are relatively low.

The demographic of the region is unique, and as a snapshot includes:

- Low socio economic region
- Higher than average unemployment, especially young people
- An aging population
- A growing Indigenous population
- Limited access to education, training and career development pathways
- Vast distances between communities
- A relatively small regional population
- Higher than average costs for food, fuel and utilities
- Higher than average rates for disease and sickness



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The Far West region is a critical contributor to the State's economy with mining in the region contributing \$496.5 Million to the regions GRP (Oct 2021), and the regions GDP for the same period at \$1.6 billion. Residents in the region contribute above the state average for GDP per capita.

Ability of the region to pay

Unemployment in the region is currently recorded as 5.5% in comparison to Australia 4.6% and NSW at 4.5%. The region records an indigenous population of 5.5% well above the NSW rate of 2.9%. Average household income for the region is \$69,527, approx. \$7,745 lower than the NSW average and the average age is 42.3 years, compared to the NSW average of 38 years.

The social and economic disadvantage in the region has been highlighted through several reports. Both the Closing the Gap Report and the Dropping of the Edge Report (2015) have highlighted the social and economic disadvantage of the Far West region, particularly in relation to the disconnect of the community from services provided to and enjoyed by community members and services that are taken for granted by other communities.

Socio-Economic Indexes for Areas (SEIFA) is a product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage.

Broken Hill is ranked in the lowest 10% of communities in NSW for socio economic disadvantage.

Economic impacts

The population of the region has declined steadily over the past 30 years and is now a critical consideration in the workforce needs of the region with the 2019 Far West Workforce Development Study reporting 86% of business are planning for growth over the next 10 years, yet 46% of business report advertising a position in the past 12 months they were unable to fill. The region is further developing strategies and marketing to address the critical workforce needs of the region and support the planned mining development of rare minerals that are highly sought on a world market and crucial for utility scale renewable energy storage. A development that offers positive outcomes for the Far West region, Australia, and the world as we seek a significant reduction in emissions to meet world emission targets and slow global warming.

Addressing the workforce needs of the region, therefore population decline and ensuring the Far West NSW region meets the workforce needs of critical projects that continue to support the Australian economy as one of the world's largest exporters of iron ore can only be achieved with a holistic approach to ensure liveability, sustainability and affordable living in a harsh natural environment.

The capacity of the region to meet significant increases in basic costs of living is limited with the average household income approx. \$7,745 or 10% lower than the NSW average.



Health and wellbeing

The health and wellbeing of our people has become even more critical as the COVID-19 pandemic continues to impact the lives and livelihoods of people across the globe and much research has demonstrated the links between “greenspaces” and the higher levels of health and wellbeing of the people able to access them, even linking lower risks of various health conditions such as high blood pressure and cardiovascular disease, as well as physical health greenspaces are associated with positive mental health.

The Far West NSW region largely encompasses the semi-arid lands of western NSW and records an annual average rainfall of 224mm, compared to 1175mm in Sydney or a NSW State average of 554.5mm. Broken Hill and the surrounding regional centres fall into the lowest 20 average rainfall locations in Australia.

According to the World Health Organisation every city is recommended to provide a minimum of 9 square metres of urban green space for each person. Recent data demonstrates Broken Hill scores 5.3% in the prevalence of nature parks and reserves in comparison to the NSW average of 6.6%.

With the knowledge that public greenspaces in the region are limited residents traditionally embraced the concept of developing greenspaces at home with turf and garden areas that created opportunity, relaxation, enhanced liveability and supported health and wellbeing outcomes. Unfortunately, the recent prolonged drought and the constant authority narrative of the need to reduce water consumption mandated many residents dedicated less water to their greenspaces, reducing liveability, visual appeal, health and wellbeing and increasing the prevalence of dust storms and raised dust in the city.

The NSW Health Fact Sheet states the health effects for exposure to raised dust are irritation to the eyes and upper airways, further stating exposure to dust may;

- trigger allergic reactions and asthma attacks
- cause serious breathing-related problems
- contribute to cardiovascular or heart disease
- contribute to reduced life span.

The Far West region lacks capacity to significantly increase greenspaces in and around our communities through rainfall alone, unlike many of our cousins in other parts of the State. Our population is aging, potentially with reduced physical capacity and any significant increase in the cost of water will negatively impact the capacity and willingness to restore greenspaces, impacting the health and wellbeing of our people, liveability, physical health, the cost to Australia’s Health Care system and population growth.

Reduced liveability, physical and visual appeal and increased health risks will significantly impact the regions capacity to attract the workforce required to continue mining the minerals that enable



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Australians to live the lifestyle we are accustomed to.

Broken Hill is one the oldest continuous mining centres in the world and offers opportunity for further large-scale mining ventures with a number of planned new ventures set to develop. The agricultural industry continues to feed the nation (and contributed \$61.2 Million to the Gross Regional Product in 2019-2020) with sheep/wool, beef, and goat production. However, affordable, reliable, high quality water is essential to enable the rest of Australia to continue to benefit from the toils of the Far West region.

Mean maximum temperature is listed on the BOM website as 32.8 degrees Celsius, whilst the average temperature of Sydney is stated as 26.0 degrees Celsius. World coverage of the current climate issues with Australia's mean temperature recorded as 1.15 degrees Celsius above the 1961-1990 average demonstrates the significant liveability and health and wellbeing differences between Broken Hill and Sydney with a mean temperature difference of 6.8 degrees Celsius.

Liveability in Broken Hill remains a critical factor for population retention and growth. In a region that receives significantly less rainfall, has fewer greenspaces and far greater mean temperatures the ability for the community to increase greenspaces, cool off in a swimming pool (the beach isn't an option for us) over summer months, often exceeding 42 degrees Celsius remain critical outcomes.

The issue of Lead

The World Health Organisation (WHO) states lead is a naturally occurring toxic metal found in the Earth's crust. Its widespread use has resulted in extensive environmental contamination, human exposure, and significant public health problems in many parts of the world.

Lead exposure can have serious consequences for the health of children. At high levels of exposure lead attacks the brain and central nervous system causing coma, convulsions and even death. Children who survive severe lead poisoning may be left with intellectual disability and behavioural disorders. At lower levels of exposure that cause no obvious symptoms, lead is now known to produce a spectrum of injury across multiple body systems. In particular, lead can affect children's brain development, resulting in reduced intelligence quotient (IQ), behavioural changes such as reduced attention span and increased antisocial behaviour, and reduced educational attainment. Lead exposure also causes anaemia, hypertension, renal impairment, immunotoxicity and toxicity to the reproductive organs. The neurological and behavioural effects of lead are believed to be irreversible. Furthermore, the WHO states;

- Lead is a cumulative toxicant that affects multiple body systems and is particularly harmful to young children.
- Lead in the body is distributed to the brain, liver, kidney and bones. It is stored in the teeth and bones, where it accumulates over time. Human exposure is usually assessed through



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the measurement of lead in blood.

- Lead in bone is released into blood during pregnancy and becomes a source of exposure to the developing fetus.
- There is no level of exposure to lead that is known to be without harmful effects.
- Lead exposure is preventable.

A recent study (Blood lead levels among Broken Hill children born between 2009-2015: a longitudinal study to inform prevention strategies, 2021 Lyle, Borland, Quartermain) states lead, silver and zinc mining have been continuous in the town of Broken Hill, in far western New South Wales (NSW), since 1884. As understanding of the detrimental health effects of lead exposure in children and the blood lead level (BLL) at which they occur has grown, the BLL guideline for action has been progressively revised down since the 1960s. Recent evidence has accumulated that BLLs <10 µg/dL have measurable health impacts and that there may be no safe level of lead exposure in young children.

BLLs ≥5 µg/dL are endemic among young children in Broken Hill, because of the high risk of lead exposure in the community resulting from lead mining. Sources of lead include the legacy of past smelting and mining, and the resultant accumulation of lead dust in houses and soil; lead paint; and the ongoing impact of current mining operations.

A total of 1865 Broken Hill children born between 2009 and 2015 were registered on the Lead Management Program database.

The proportion of children who had a blood lead test at 12 months rose from 36% of those born in 2009 to 73% of those born in 2014 and 2015. Approximately half the children tested at 12 months already had a BLL ≥5 µg/dL.

At this 12-month test, around half the children recorded a BLL <5 µg/dL, one in three had a BLL 5–9 µg/dL, and one in five had a BLL ≥10 µg/dL.

SA Health inform us the best way to protect your children's health is to prevent lead getting into their mouth where it can be swallowed. This can be done by:

- **washing** and drying children's hands after playing outside or with pets and especially before eating or sleeping
- encouraging children to eat in highchairs or at a table
- providing a large mat for babies to play on - **wash** frequently
- **washing** children's playthings regularly with soap and **water**, especially those used outside

Reducing lead around your home by regularly cleaning indoors to remove household dust is important to minimise lead exposure in lead-contaminated environments. However, when cleaning is done using 'dry' methods such as sweeping, dust can be lifted into the air which will re-settle on surfaces later.



Furthermore, SA Health state the best way to reduce exposure around the house is to “hose off hard surfaces around the house especially” and “reduce dust from the garden by covering bare soil with grass”.

Broken Hill has historical lead health problems and extreme exposure due to more than 137 years of continuous mining, lead is in our yards, our homes, our soil and the best protection we can offer our children and ourselves is based on the use of water.

The IPART issues paper

The issues paper discusses the repair and replacement of water pipes in Broken Hill.

Over the next 5 years Essential Water plans to spend around \$180 per customer on upgrades and improvements. Although the Broken Hill Pipeline has improved water supply, the pipes and treatment plants that Essential Water owns and manages are relatively old and need to be repaired or replaced. Money that Essential Water spends on these repairs and replacements will be recovered over time through water and wastewater prices paid by customers.

The people of Broken Hill have been paying for water since 1883 when Charles Rasp discovered what turned out to be the world’s largest deposit of silver, lead and zinc. Our community is built on resilience, tenacity, hard work and strong planning. The people of Broken Hill and Far West NSW expect far greater business management and corporate responsibility. A business model that doesn’t budget and save for asset replacement and infrastructure upgrades is destined to fail, to retain consumer confidence and competitiveness and as a basic business model one expects businesses to budget and plan to meet infrastructure upgrades, yet it appears a lack of planning could now potentially become the burden of Broken Hill residents.

Essential Water discuss the proposed increases are in part due to a decrease in water use, potentially due to population decrease, however if Broken Hill is to meet future workforce needs our population must increase, thus increasing water use.

Furthermore, Essential Water state *“In our 2019 review we considered that people in Broken Hill would use more water once the Pipeline came into use and water restrictions were lifted. However, over the last 3 years people have used less water than we predicted”.*

Broken Hill people have invested significant resources into the conservation of water through more efficient appliances and changed habits, they have been discouraged from watering gardens and lawns, filling swimming pools and cleaning hard surfaces. Essential Water introduced Level 1 water restrictions on Saturday 1 December 2018, which included prohibiting the use of domestic and public sprinklers, automatic watering systems and fixed or hand-held hoses for irrigation of gardens and lawns between 10am and 7pm.



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The Australian Government Bureau of Meteorology website states “Essential Water gives notice that, from Thursday 27 June 2019, Level 1 water restrictions, as set out below, will take effect in Broken Hill, Silverton and Sunset Strip.

The restriction type is listed as “permanent”.

Under level one restrictions;

- Watering of private gardens is permitted only with: An automatic watering system between 7pm and 10am; or A manual watering system between 4pm and 10am.
- Watering of private lawns is permitted only with: An automatic watering system between 7pm and 10am; or A manual watering system between 4pm and 10am.
- Private vehicles may be cleaned: By a commercial car wash; or By means of a bucket or watering can filled directly from a tap (and not by means of a hose); or By means of a trigger hose, used only for the purpose of wetting, and rinsing a vehicle after it has been washed; or To clean inside a tank of a tanker vehicle by means of a trigger hose, where such cleaning is necessary either to avoid contamination of the tanker’s contents or to ensure public safety.
- Paved areas: may be cleaned by means of a trigger hose, only if necessary, as a result of an accident, fire, to ensure the health and welfare of animals using the area, or other emergency, unless prior written approval is granted by Essential Water.
- Windows and building facades may be cleaned: by a bucket or watering can be filled directly from a tap (and not by means of a hose) unless it is necessary to do so as a result of an accident, fire, or other emergency.
- Construction activities: water must not be used, except by means of a trigger hose.
- Swimming pool or spa which: Has previously been filled – must not be emptied and refilled, it may only be topped up or maintained with water from a hand-held hose, bucket or watering can; or Has not previously been filled – must not be filled without Essential Water’s prior written authority.
- Private and public gardens: filling or topping up ponds and lakes: An empty pond or lake must not be filled without Essential Water’s prior written approval; or The level of water in a pond or lake that has previously been filled with water may only be topped up or maintained with water from a hand-held hose, bucket or watering can.



Given the date is October 2021 and water restrictions were again introduced 27 June 2019 and remains listed as permanent on the BOM website the pretence that Essential Water predicted Broken Hill people would use more water remains a mystery, how could they use more water over the past 3 years when Level one restrictions were implemented 27 June 2019, formally removed on 01 March 2021, yet appear to remain in place. In consulting 5 people today about when water restrictions ceased, all five stated they thought they were still in place.

Conclusion

The potential price increases outlined in the IPART issues paper ranging from 11% (above CPI), realistically approx. 45% higher in Broken Hill and significantly higher for outlying remote communities over the next 5 years will have a detrimental impact on the region. Water is vital for all forms of life and a potential increase of up to 45% in Broken Hill and more in outlying remote communities for a basic human need is unreasonable and unrealistic.

As outlined, the community's ability to pay is limited with average household incomes 10% lower than the NSW average, thus any increase in water prices will discourage greenspaces, reduce the physical and visual appeal of the city and impact real estate prices, further disadvantaging the community, already ranked in the lowest 10% for socio economic disadvantage.

Mining has long been the cornerstone of the Australian economy and a number of large scale mining ventures set to develop over coming years in the region are significant to the continued economic output of Australia. Increased mining activity and the workforce requirements to meet that activity will increase water usage across the region, however significant increases in water costs will impact the viability of mining ventures and the economic output of Australia.

The health and wellbeing of the people of Far West NSW will suffer with price increases, impacting the national Health Care System.

Years of drought have significantly impacted every aspect of life in the region with many of the large street trees in Broken Hill, regeneration reserves and residential gardens now dead. Increases in the price of water will impact the community's and councils' ability to replant trees and gardens and provide water for establishment and growth, further exacerbating the issues of raised dust, mental health, physical health, lead poisoning and workforce needs.

The Far West NSW economy is dominated by mining, yet the visitor economy plays an important part in the region's economy and the fabric of Australia. Broken Hill is Australia's first Heritage listed city. The City of Broken Hill is of outstanding heritage value to the nation for its significant role in the development of Australia as a modern and prosperous country.



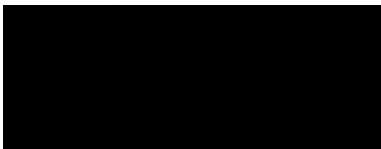
The listing recognises the significance of over 130 years of continuous mining operations, its contribution to technical developments in the field of mining, its pioneering role in the development of occupational health and safety standards, and its early practice of regenerating the environment in and around mining operations.

Significant price increases in water will impact the regions' ability to grow the visitor economy and the impression of visitors to the city, impacting the region's economy, workforce and culture.

On behalf of the people of Far West NSW, Regional Development Australia Far West implore IPART to consider the circumstances of the region, the annual low rainfall, extreme summer temperatures, economic capacity and health and wellbeing of our communities in determining any price increases.

RDA Far West look forward to a positive outcome for Far West NSW.

Yours sincerely



Michael Williams
Director Regional Development



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