

ERIN Water Efficiency Project (ERIN WEP)

Stock and Domestic Pipeline Project

Assessment against Socio-Economic Criteria as part of the Resilient Rivers Water Infrastructure Program

April 2025

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Section 1: Overview

1.1. Project Summary

The ERIN Water Efficiency Project (ERIN WEP) has been developed to significantly enhance the efficiency and security of stock and domestic (S&D) water supply to the property while returning water to the environment under the Resilient Rivers Water Infrastructure Program (RRWIP).

Current Infrastructure

The existing S&D infrastructure at the Erin Pastoral property relies on water from the Lachlan River, which is distributed across the property through a series of open channels and temporary emergency piping. This system currently delivers water to ground tanks, watering points, and domestic facilities. However, during dry periods, the Lachlan River can dry up completely, necessitating destocking and abandonment of the property during drought conditions.

Proposed System

Erin Pastoral proposes to construct a new S&D system valued at \$1,945,844 to replace currently failing infrastructure. The project is seeking \$1,835,944 of funding and returning 110 ML of water entitlement to the environment. The new system will include the installation of pump stations, filtration units, pipes, tanks, and troughs, enabling efficient delivery of S&D water across approximately 8,500 hectares of grazing area. Supplementary water will be provided by a pipeline from One Tree, connected to the existing Gunbar Water Scheme, thereby increasing the security and efficiency of S&D water delivery to the watering points.

System Components

The comprehensive system will consist of:

- 67 kilometres of stock and domestic pipeline
- 3 pump stations
- 2 large storage facilities
- Multiple tanks and troughs (watering points)
- Storage and reticulation from the Gunbar Water Supply

Water Savings

These improvements are expected to result in water savings of 130-150 megalitres (ML) per annum. Of this, 110ML of Domestic and Stock (D&S) Lachlan River water entitlement will be returned to the environment under the RRWIP.

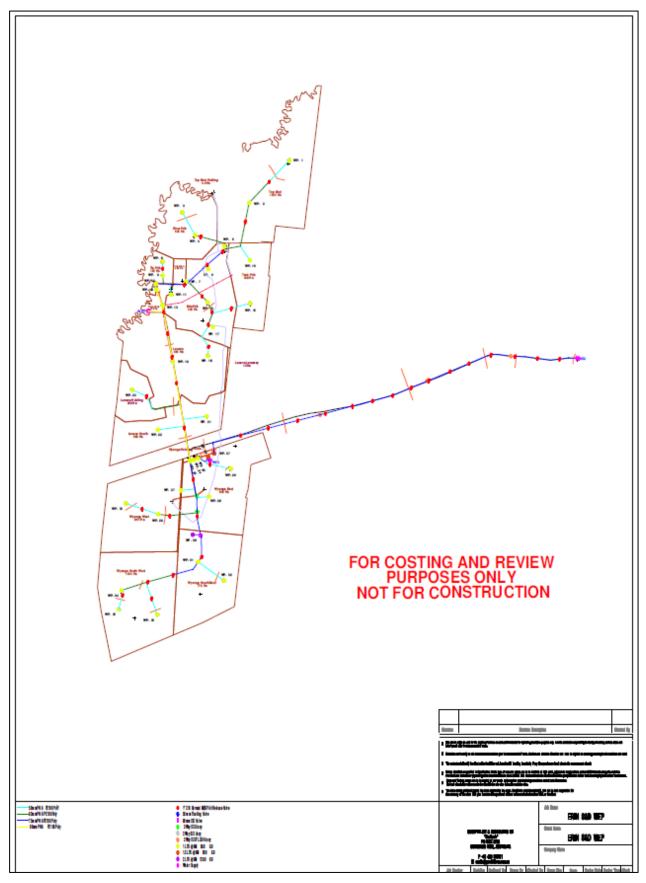


Figure 1: ERIN WEP Schematic layout/Design



Figure 2: Erin Pastoral existing Domestic and Stock Channel System (in light blue)

1.2. About Erin Pastoral

Erin Pastoral is situated approximately 40 kilometres northwest of Hay, within Nari Nari country. The property spans approximately 8,500 hectares and operates as a diversified agricultural enterprise, including sheep (wool and fat lambs), cattle (breeding and fattening), and cropping (cereal/legumes and pasture). ERIN Pastoral employs 2-3 full-time equivalents (FTEs) and engages numerous contractors for various activities throughout the year.

Currently, Erin Pastoral services its domestic and grazing enterprise water requirements from the Lachlan River via an inefficient old earthen channel and temporary above-ground poly pipe systems. Approximately 130-150 megaliters (ML) per annum are used, contingent upon availability from the Lachlan River.

Since the early 2000s, the Lachlan River below Booligal has proven to be extremely unreliable in providing water of acceptable quality and sufficient levels for the existing D&S pump to function effectively. This issue was particularly evident in 2009 when there was no water along the entire 30-kilometer river boundary.

Historically, the previous owner of Erin Pastoral frequently ordered water for S&D purposes. However, the river's water level often failed to reach a height or flow that was able to be pumped out and distributed to the livestock, resulting in significant production losses over the years. The unreliability of this sole water source has had detrimental effects on livestock welfare.

Erin Pastoral has experienced substantial livestock losses due to sporadic changes in water height along the boundary, causing stock to become bogged down while attempting to access water. These sudden and unforeseen changes result in a significant animal welfare concern and are traumatic for the mental health of employees that are required to respond to the losses.

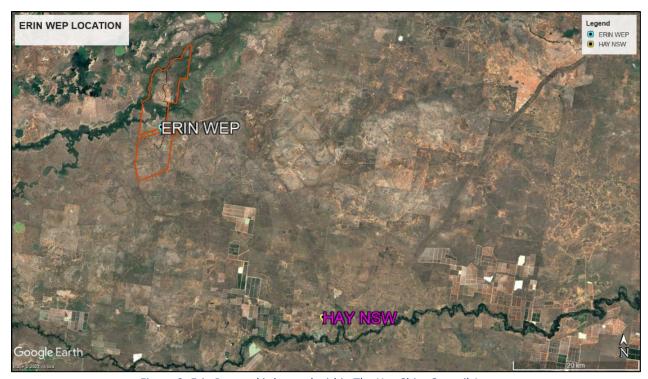


Figure 3: Erin Pastoral is located within The Hay Shire Council Area

1.3. Investing in current and future viability

This project will build assurance and resilience for continued farming in this area. The backbone of this project is securing water from the Gunbar Water Scheme. Bores have been considered as another alternative, however, discussions with neighbours and others in the district have revealed the prevalence of bore failures and significant financial losses, with tens of thousands of dollars spent on unsuccessful drilling efforts. Additionally, it has been observed that some who have found water just outside this district must use it cautiously due to its low quality, including high salt levels. Therefore, connecting to an existing water scheme is likely to provide greater certainty for future viability.

By securing water from the Gunbar Water Scheme, Erin Pastoral can plan and invest confidently in their operations, leading to sustained economic growth in the region.

This district north of Hay is close to 100% reliant on the support of the agricultural industry for its existence. The implementation of similar schemes, such as Nap Nap Station (funded under the Commonwealth Government's previous Off-farm Efficiency Program), are an important step in providing a sustainable water solution, needed for the ongoing support of agricultural production. This area, whilst traditionally known for its merino wool production, has evolved into supplying additional/supplementary agricultural markets. Markets include, but are not limited to, fat lamb, beef and cropping systems, have been introduced enabling Erin Pastoral and other local producers to connect with other agricultural commodity markets, due to the ever-changing market opportunities and climate demands. Cropping systems are, however, only implemented when seasonal conditions are favourable. The majority of the Erin Pastoral operation focuses on livestock production systems for wool and meat that require fresh, clean, and reliable water to maintain produce growth.

The implementation of efficient D&S watering systems ensures the sustainability of enterprises without the need to de-stock or, in extreme cases, abandon operations during dry periods. These systems are a vital investment for the current and future viability of both individual and district agricultural systems.

The development of an efficient D&S water system with a reliable backup water source will be the most significant project undertaken by Erin Pastoral to date. This project is essential to ensure investment in the future for current and future generations, making the enterprise sustainable for years to come, while also enabling water to be returned to the environment.

Section 2: Project Description

2.1. Project outputs at a glance



67kms of pipeline



3 Solar Powered Pump Stations and filtration stations



2 large storages, 37 Tanks, 35 troughs and pads, and remote system automation and monitoring



Connection to a sustainable water source

2.2. Project Scope

The ERIN WEP aims to deliver an efficient supply and reticulation system for D&S water use across the property. This new system will replace the existing channel system and some poly pipe, providing water to various watering points.

The project includes the following key components:

- Construction of 67 kilometres of pipelines
- Installation of 3 new stock and domestic solar pump stations:
 - o 1 pump located at the Lachlan River
 - 1 pump as a booster at the containment area within Erin Pastoral
 - 1 pump located at One Tree, supplying Erin Pastoral via a pipeline with Murrumbidgee River water, supported by the existing Gunbar Water Scheme
- Installation of 37 new tanks, including:
 - o 2 x 110 kilolitre tanks
 - 35 x 22 kilolitre tanks

Six tanks will include Rural Fire Service (RFS) Storz fittings, enabling RFS fire trucks and other volunteers to access water quickly and efficiently in case of fire.

- Installation of 35 new troughs and Pads
- Implementation of telemetry systems to monitor the pumping and tank supply systems

The project is expected to achieve water savings of between 130-150 megaliters (ML) per annum and will return 110 ML of Lachlan Domestic and Stock water entitlement.

2.3 Project Delivery

Erin Pastoral has invested in the preliminary scope phase of this project by conducting an extensive channel assessment to identify new water points, pipeline routes, and pump station sites. The channel has been mapped to determine the distances of the existing open channel and to support the design of the new system. An independent soil analysis and inspection have also been completed.

The design, which includes a connection to the supplementary water source from Gunbar Water, has been completed. Extensive analysis has been undertaken to ensure the new water system will meet the ongoing demand required by the operation from both stock and domestic perspectives. The design incorporates modern telemetry across the property to assist with the monitoring and control of the system.

A single delivery partner/contractor will be engaged, overseen by Erin Pastoral and its water consultant. The use of a single delivery partner ensures the correct combined skillset is provided to complete the project efficiently and on time while offering local support throughout the construction phase.

No interruptions to supply are anticipated, as the project involves a limited number of products.

Section 3: Socio-Economic Criteria

3.1. Preparing for the future

This project will not only enhance Erin Pastoral's efficiency in water extraction and utilisation but will also benefit river operations and other users both upstream and downstream, particularly during periods of dry/drought. The project will allow for more water to be available in the pool for environmental and stock and domestic use by others.

The ancillary benefits of significantly improving water use efficiency are substantial. Projects of this nature have profound positive impacts on water availability within these stressed systems, especially during drought conditions. The implementation of such systems can prevent landholders from being forced to abandon their land during droughts, which can have severe psychological impacts on producers and the community.

Better water security also promotes investment in homes and gardens in rural areas. A small area of green space around a residence, often taken for granted, provides mental and physical relief to landholders during dry periods. Access to reliable water strategically located across the production area enhances productivity and makes grazing more efficient, thereby supporting all animal welfare during dry times. Many sheep have been trapped and rescued from drying channels and the Lachlan River during dry periods on Erin Pastoral. This system will significantly reduce the likelihood of such incidents in the future.

Water security is paramount in further developing Erin Pastoral into a sustainable production system that can be maintained and potentially expanded by future generations.

Contribution to Financial Viability and Network Improvements: The project will significantly contribute to the current and future financial viability of the district by ensuring a stable and reliable water supply, which is critical for maintaining and increasing agricultural productivity. By securing water from the Gunbar Water Scheme, the project will avoid the need for costly exploration/drilling and high likelihood of poor water quality associated with bores in this district.

Network improvements will include the modernisation of existing infrastructure to enhance water delivery efficiency and reduce losses. For example, transitioning from open canals to pressurised piping systems will significantly reduce water loss through evaporation and seepage. Additionally, integrating advanced monitoring and control systems will optimise water usage and ensure that resources are allocated

efficiently. These improvements will not only enhance the efficiency of water distribution but also support the long-term sustainability of the farm and district.

The project proposal aligns with relevant NSW Water and regional strategies, by ensuring that it supports the goals for sustainable water management practices for current and future generations. This alignment will facilitate the successful implementation of the project and ensure that it complements ongoing efforts to improve water management in the district. The *Riverina Murray Regional Plan 2036* has identified that the Riverina Murray region is getting warmer and details projected climate change impacts including the "increased occurrence of heatwaves, hot days and fire risk" ¹. In implementing this project, Erin Pastoral is responding to these projections through providing a stable and reliable source of water to meet human and livestock needs during increased and prolonged periods of extreme heat.

3.2. Benefits to industry

The ERIN WEP provides significant economic benefits to the local and regional economy through local purchasing and employment opportunities, with positive ripple effects throughout the regional community.

Construction Industry: Erin Pastoral will leverage established relationships with suppliers and contractors in the Hay region for the procurement of services and products for civil works, including earth moving, gravel supply, concrete, formwork, and wet hire of heavy machinery. This approach will stimulate employment opportunities and financially benefit these businesses and their communities. Utilising local contractors and suppliers also brings the added advantages of local knowledge and reduced costs associated with mobilisation and demobilisation. The project is expected to create jobs during the construction phase, contributing to the economic vitality of the region. Additionally, the use of local materials and services will ensure that the economic benefits remain within the community, fostering a sense of ownership and pride among local stakeholders.

Water Industry: The implementation of efficient on-farm systems will enhance control and monitoring capabilities of water reticulation across the farm assisting them with better decision-making. This will also lead to off-farm benefits in relation to river management and water releases, particularly during dry periods. This will contribute to the overall sustainability and efficiency of water resource management. Advanced technologies such as remote sensing, automated flow monitoring, and remote data analytics will be employed to optimise water distribution and minimise losses. These improvements will not only enhance the operational efficiency of the water management systems but also ensure that water resources are used judiciously, preserving them for future generations.

Agricultural Industry: It is widely known that stock and domestic projects such as ERIN WEP have contributed towards enhancing the resilience of livestock and farming industries. In livestock production systems, animal health is paramount. Healthier animals lead to more efficient and productive systems. Water quality and security are critical components of these production systems, directly influencing weight gain, yield, fibre production, fertility, and lambing/calving percentages. High-quality water also improves the digestibility of fodder, which is especially important during droughts and feed gaps when alternative feeds are introduced, leading to increased water demands. The variation and increase in water demand are directly related to the digestion of different feeds and additives introduced to livestock during these times. It is well known in the industry that changing a water source and or delivery system from ground tanks and channel to delivery via pumps, pipes, tanks and troughs that animals can present an increase in weight gain of around 6%.

In line with this, Erin Pastoral intends to incorporate best practices in water management to maximise the efficiency of water use and enhance the overall productivity of the farming systems². By making livestock and farming systems such as Erin Pastoral more resilient and consistent in achieving production targets year after year, local farming businesses that support these systems will also become more resilient. The

¹ Riverina Murray Regional Plan 2036 (p. 34)

² Riverina Murray Regional Plan 2036 (p. 4)

Riverina Murray Regional Plan 2036 states that "Agriculture is integral to the success of the economy and a major force in the State. The Riverina Murray makes the largest regional contribution to agricultural production in NSW (\$1.4 billion)." The ERIN WEP project will secure further socio-economic benefits for the region and also promote the adoption of strategic grazing management through the efficient placement of watering points in areas not previously serviced by water, to further enhance the sustainability and profitability of farming operations.

3.2.1. Secure Supply for Industry

The proposed infrastructure of ERIN WEP project to construct a new S&D system will enhance efficiency of the delivery, storage and use of water. This will have a direct spinoff in helping secure water supply for not only the environment but also those other industries that rely on this commodity. More water in the consumptive pool, due to less Erin Pastoral extraction, results in improved water availability for other landholders in the immediate region. Particularly in drier times when in the past Erin Pastoral and others have been unable to access water from the Lachlan due to low flows. Water from the Gunbar Water Scheme will be a secondary source of water during drier times, which is a more preferable option rather than relying on bores which may or may not result in water.

3.3. Benefits to community, region or state

The project aims to deliver substantial economic benefits to the local regional economy through local purchasing and employment opportunities, with positive ripple effects throughout the regional community.

Economic Impact

Erin Pastoral will leverage established relationships with suppliers and contractors in the Hay region for the procurement of services and products necessary for civil works. This includes earth moving, gravel supply, concrete, formwork, and wet hire of heavy machinery. By engaging local businesses, will help stimulate employment opportunities and provide financial benefits to these businesses and their communities. Utilising local contractors and suppliers also brings the added advantages of local knowledge and reduced costs associated with mobilisation and demobilisation.

Employment Opportunities

The project anticipates the creation of an additional 9 full-time equivalent (FTE) positions during the construction phase, along with 3 to 5 part-time roles, including positions within the Cultural Heritage and design teams. Upon completion of the system, there may be an additional FTE engaged, contingent on further development of the operation resulting from the project's completion.

Community and Mental Health Benefits

This project provides long term benefits in mental health for the farm owners, especially in dry times where it will remove the need to make daily tough water related decisions that involve the livelihood of the operation. With their property concerns alleviated, they can be more present and engaged in community events and interactions and have the mental capacity to support other landholders in the community.

Enhanced Bushfire Fighting Capability

The project will enhance the bushfire firefighting capability of the NSW Rural Fire Service (RFS) through the installation of specific tank fittings that enable the RFS to access water from the selected tanks. The local RFS has indicated that this area traditionally has limited or sparsely located water sources. The addition of six new fill points will significantly improve the Brigade's bushfire fighting capability, better enabling them to protect the local community during bushfire events.

3.4. Environmental benefits

The ERIN WEP will return 110ML to the environment. The environmental benefits of the RRWIP program include the creation of more sustainable water sources for native wildlife, including animals, birds, and frogs in various areas. Erin Pastoral recognises the critical importance of ensuring that environmental water is made available to sustain wetlands in the area. With the support of the Gunbar Water scheme, the ERIN WEP will eliminate the need for bore water extraction and will more efficiently deliver water to areas that have previously experienced intermittent supply. Allocating 110ML of water to this highly stressed river system, which supports the delicate ecosystem downstream known as the Great Cumbung Swamp, is of paramount importance.

"The Great Cumbung Swamp has historically been one of the most important waterbird breeding areas in eastern Australia and supports one of the largest remaining stands of river red gums in NSW. In addition, in 2016, the Booligal wetlands supported the largest and most successful breeding colony of straw-necked ibis in the Murray Darling Basin since 1984. Like many rivers of the Murray-Darling Basin, flow regulation in the Lachlan river catchment has had a significant effect on the average annual flow as well as inter-annual and seasonal variability (Driver et al. 2004, Higgisson et al. 2019). The interaction of a number of factors such as these are considered key drivers in the deterioration of the freshwater ecosystems within the catchment. The lower Lachlan river system has previously been assessed as being in poor ecosystem health as part of the Murray-Darling Basin Authority's Sustainable Rivers Audit (SRA) because of an extremely poor native fish community, highly modified flow regime (hydrology), and a physical form and vegetation community that is in poor to moderate condition (Davies et al. 2008, MDBA 2012). The millennium drought (2001-09) resulted in large areas of river red gums becoming stressed and a decline in the condition of wetland vegetation (Thurtell et al. 2011). Some recovery of the wetlands and rivers has been observed since 2010, attributed to a series of natural flow events (2012 and 2016), translucent flow events and targeted environmental watering actions (documented in previous CEWO monitoring reports)." 3



Figure 4: Forty or so Emus drink from a trough watering point in western NSW

As previously noted, the water saved by the implementation of the project will also assist in the health of the Lachlan River especially in dry times where flows have historically stopped.

3.5. Licencing and Approvals

Further cultural heritage work is scheduled to be conducted following the final stage of the design. This has been discussed with the Nari Nari Tribal Council (NNTC), who will assist in identifying sensitive areas across the project site that may be located near any works areas. This additional study will be undertaken after the confirmation of the project should it get approved. Recent correspondence from the NNTC supporting this project has been received.

³ CEWO Monitoring, Evaluation and Research Program: Lachlan River System 202-2021 Summary Report Final.

Approval will also be sought from Crown Lands to allow construction access across a small, landlocked parcel of Crown land situated in the middle of the project area. This is not expected to impact the project, as similar submissions to Crown Lands for identical works have been successfully completed in the past.

3.6. Cultural impacts and benefits

Erin Pastoral acknowledges the deep connection to the land held by Aboriginal People. Through their project manager, Erin Pastoral has engaged the Nari Nari Tribal Council (NNTC) to conduct a cultural heritage survey of the proposed pipeline routes, pump stations, and watering point locations. This initiative has been discussed with and is supported by the NNTC. The survey will involve several NNTC members working alongside the designer to identify any areas of cultural significance that need to be diverted around or marked. This collaborative approach is a standard practice for the designer when working with Indigenous communities.

During the construction phase, the Nari Nari Tribal Council may be further engaged to explore additional opportunities for involvement and to ensure that the project adheres to cultural considerations. Erin Pastoral, in collaboration with their Project Consultant, is committed to maintaining and strengthening the positive relationship with the local Aboriginal community throughout this project and beyond.

3.7. Supporting the Murray Darling Basin Plan

The project aligns with the objectives of the Murray Darling Basin Plan by promoting water conservation, equitable water allocation, environmental protection, climate change adaptation, and regional development. It exemplifies the basin plan's integrated and balanced approach to managing water resources for the benefit of all stakeholders and the long-term sustainability of the basin's ecosystems and communities through:

- Water Conservation: The project focuses on optimising water use in these rural communities and
 agricultural operations. By reducing water losses and improving water management practices, the
 project contributes to overall water conservation. The project will return 110ML of D&S allocation
 water to the environment. This aligns with the basin plan's objective of ensuring a sustainable
 water supply for all stakeholders, including the environment.
- Improved Environmental Outcomes: The Murray Darling Basin Plan places significant emphasis on restoring and maintaining the health of the basin's ecosystems and water-dependent environments. By optimising water use through efficiency measures, more water can be dedicated to environmental flows, helping to protect and rejuvenate wetlands, rivers, and habitats critical for native flora and fauna.
- Climate Change Adaptation: As climate change impacts water availability and exacerbates drought
 conditions in the basin, investing in water efficiency infrastructure becomes crucial for adapting to
 these challenges. The project's implementation enhances resilience to climate variability, which is a
 fundamental aspect of the basin plan's long-term vision for sustainable water management.
- Regional Economic Development: The ERIN WEP will lead to increased agricultural productivity and
 economic growth in this rural community. By supporting primary producers and other water users
 in maximising water use efficiency, the project fosters stronger and a more sustainable regional
 economy.
- Stakeholder Collaboration: The success of the Murray Darling Basin Plan relies on collaboration among various stakeholders, including farmers, communities, environmental groups, project partners, local businesses, the RFS, Aboriginal people, the Hay Shire, state and federal and government agencies. The implementation of the project involves engaging and collaborating with these stakeholders, promoting a cooperative approach to water management, and advancing the

broader goals of the basin plan. This has already been demonstrated by local field days held promoting these programs in the Hay district.

The ERIN WEP supports the healthy working basin objectives of the Murray-Darling Basin Plan and aligns with the Murrumbidgee and Lachlan Water Resource Plans. The investment in water dependent regional communities also mitigates some of the impacts of reduced water availability resulting from the Basin Plan.

3.8. Community support and engagement

Erin Pastoral's project representatives have received support from various stakeholders, including:

- Hay Shire Council
- Local residents and farmers
- Local suppliers

Additional support has been received from:

- Nari Nari Tribal Council (NNTC)
- Rural Fire Service (RFS)
- Gunbar Water

NSW Local Land Services (LLS) have also been approached however do not see a requirement to connect given the existing infrastructure in place at One Tree.

3.9. Positive Economic Outcomes

The ERIN WEP will support local industry during and after the installation and commissioning of the system, as previously described.

Ongoing connection and use of Gunbar Water delivered from the Murrumbidgee River will supplement income to that scheme without having any impact on the delivery of water to others. Gunbar Water would use fees and volume charges derived from Erin Pastoral connection to cover ongoing extraction and supply costs, including maintenance and energy expenses. Additionally, Gunbar Water have carried out testing to ensure water can be delivered to Erin Pastoral.

3.9.1. Management of future lifecycle costs

Maintenance costs for all on farm and Coorong Road works will be covered by Erin Pastoral. All supply charges from Gunbar Water will be met by Erin Pastoral for the future.

The ongoing repair and maintenance costs have been taken into consideration and will form part of the future farm budget. The fee structure for ongoing water supply costs have been agreed to with Gunbar Water.

3.9.2. No impacts to the water market

There will only be positive results to the water market given that this project will return 110ML to the environment by reducing evaporation and seepage across the property through the delivery of water through pipe systems and the storage of water at watering points in tanks and troughs. There will be no reduction of water for use in the Lachlan River.

As D&S water is unable to be traded, from a water market perspective there will be nil impact on the market, if anything there will be more water in "the collective pool" so markets may benefit.

3.9.3. Supporting Regional Communities Economically

This project will ensure Erin Pastoral are more efficient in their water take and use, this will also benefit river operations and other users downstream, particularly in times of drought.

This project will have a direct impact on the production opportunities and outputs for Erin Pastoral and increase job security for employees directly on-farm. Whilst this is very difficult to quantify, Erin Pastoral could expect anything up to a 20% increase in grazing efficiency along with the reduction in labour units required to deliver water to the livestock system. As previously noted, overall grazing and operation efficiencies will increase.

The project provides economic benefits to the local regional economy through local purchasing and employment opportunities and will have flow on benefits throughout the regional community through increased production, sharing of new ideas in particular ability to increase livestock grazing efficiencies through watering point placement and remote monitoring. These will be demonstrated in the ERIN WEP. The simple point of being able to continue production through dry times supports the livestock carrier, wool carriers, shearers, fencers and station staff that would not be required in dry times when livestock have been greatly reduced in numbers or removed from the station all together. It is estimated that during periods of drought, Erin Pastoral will be able to retain approximately 2 to 3 FTE positions. This helps keep essential operations going during tough times and keeps people locally employed.

Erin Pastoral will leverage established relationships with suppliers and contractors in the Hay region for procurement of services and products for civil works, including earth moving, gravel supply, concrete, formwork and wet hire of heavy machinery. This will stimulate employment opportunities and financially benefit those business and their communities. Local knowledge and the avoided costs associated with mobilisation and demobilisation are added benefits of using local contractors and suppliers. As previously noted, the ERIN WEP will stimulate employment opportunities and financially benefit those business and their communities. The project expects there will be an additional 9 FTE's during the construction phase along with 3-5 part time personnel including Cultural Heritage and design team employment units. On completion of the system there may be an additional FTE engaged pending further development of the operation and increased production opportunities.

3.9.4. No negative third-party impacts

As previously noted there will be no negative impacts on third parties associated with the water market or regional communities. Connection to Gunbar Water has been given the green light as previously noted.

Saving water in the stressed lower Lachlan System is only going to be of benefit to those in this area particularly in times of drought and low availability.

3.10. Water savings shared between the environment and water users

ERIN WEP will return 110ML of savings of Lachlan Domestic and Stock water to the environment. The water savings are shared in alignment with the principle that the region is in a "net" better position regarding socio-economic outcomes as a result of completing the project. The ERIN WEP will return the majority of the water savings that will be achieved because of this project. A non-tradeable Lachlan River Domestic and Sock Water Access License (WAL) will be surrendered having nil effect on markets whilst securing the efficient use of water across the property demonstrating significant savings.

3.11. Water saving assumptions

An independent water saving analysis has been developed.

From the study completed it notes a predicted saving of between 130ML and 150ML per annum. This study was carried out across the station and includes the assessment of core samples taken from channels, along with the identification of failures both current and historical in the existing channel and ground tank system. Saving quantities are also supported by other technical reports.