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Statement of Environmental Effects

792 Tammit Road, Euston (Hattah-Robinvale Road, Wemen)

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Introduction

Development approval is sought for works associated with upgrading of the existing irrigation pump station on the southern bank of the Murray River. The existing pump station supplies irrigation water to table grape production enterprise located at Liparoo, Victoria. The location of the pump station means that the pump station infrastructure straddles the New South Wales – Victoria border. This application for development approval relates to the portion of the works that will occur in New South Wales. Separate consent for the works located in Victoria is being sought from the relevant Victorian authorities.

The pump station is accessed via a track off Hattah-Robinvale Road, Wemen, which is approximately 30kms southwest of township of Robinvale. The pump station site is located opposite to Lot 5547 DP768457 Tammit Road, Euston. No terrestrial access to the pump from New South Wales is possible.

Existing infrastructure at the site consists of a pier and rail structure supporting the pump and suction column. In addition to the pump and rail, there are piers which support the electrical cables supplying power to pumps.

The site is a functioning irrigation pump station with a long history of use. The immediate area around the site has been highly modified in keeping with its current use. The proposed development will see the existing structure replicated, creating a second pump station on the riverbank.

The site is located proximal to other existing pump stations. For reasons outlined in the application the works will not result in long-term impacts and will not cause harm to the environmental, cultural, or recreational values of the site or the surrounding region.

The proposal is consistent with the Balranald LEP and should be supported through the issuing of a development approval.

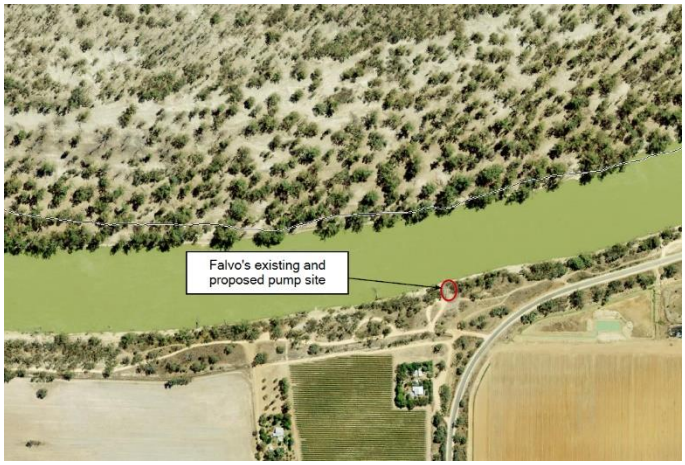


Figure 1 *Location of the existing and proposed pump station*

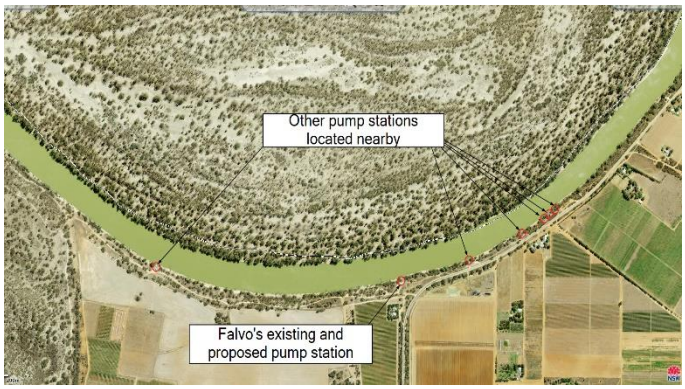


Figure 2 *Other pump stations located nearby*

Proposal

Project justification

The aim of the project is to supply irrigation water supply to Lot 3 PS802385 (in Victoria) recently approved for planting table grapes.

The existing pump station supplies irrigation water to the adjacent lot (Lot 2 PS802385), however does not have sufficient capacity to meet the demands of the new irrigation development. Therefore, it is vital the proponent has a second pump to service the new development.

Figure 3 *Existing pump setup*

Project scope

The project will replicate the existing pump station adjacent to it. The works will require a pump, delivery main and rail structure to be established on supporting beams. The new suction column of 250mm diameter will be installed on the rail structure and connected to the new delivery mains of 325mm leading to the proponents' property. The new vineyard development will occur in Victoria and the approvals are in place from the relevant Victorian authorities.

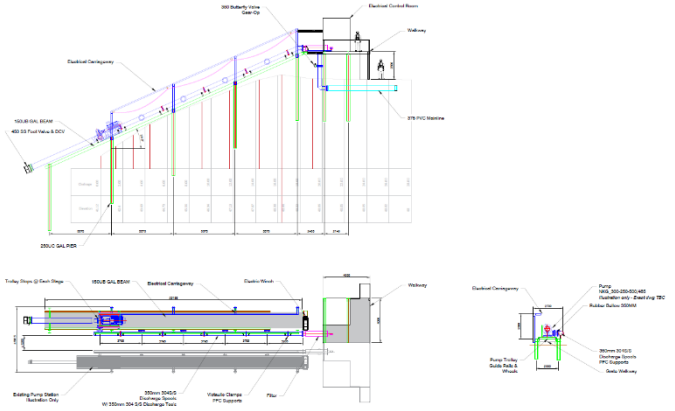


Figure 4 *Plan view and profile elevation of the proposed site layout*

Construction plan

Works at the site will broadly follow the process below:

- The site will be prepared for a new pump-and -rail setup.
- Three concrete pads will be established to support the rail structure.
- The infrastructure will be lifted and bolted together.
- The pump will be then connected to a new suction.
- A delivery main will be established on the rail structure.
- The works will be energised and commissioned.

Access

The site is connected to Hattah-Robinvale Road via an unnamed track which provides access to the site. No additional access tracks or parking areas will be required or be created.

Figure 5 *Access to site via unnamed track off Hattah-Robinvale Road*

Figure 6 *Site of the existing and proposed pump station*

Planning controls

Table 1 *Planning controls for the land*

Type	Planning Control
Local Environment Plan	Balranald LEP 2010
Land Zoning	W1 – Natural Waterways Zone
Minimum lot size	40 ha
Riparian Land and Watercourses	Riparian Land
Terrestrial Biodiversity	High conservation value
Wetlands	Wetlands

Definition

The works are defined as a Water Supply System for which the LEP provides the definition as:

any of the following:
(a) a water reticulation system,
(b) a water storage facility,
(c) a water treatment facility,
(d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

Zoning

In accordance with the Balranald LEP zoning maps the land is contained within W1 Zone – Waterways.

The objectives of zone W1 are:

- *To protect the ecological and scenic values of natural waterways.*
- *To prevent development that would have an adverse effect on the natural values of waterways in this zone.*
- *To provide for sustainable fishing industries and recreational fishing.*

Development consent is required under zone W1 for the Water Supply System.

Additional Local Provisions

Other relevant clauses from the LEP are as follows:

- 6.1 Biodiversity
- 6.2 Riparian land, waterways and groundwater vulnerability
- 6.4 Flood planning
- 6.5 Development on riverfront areas
- 6.6 Development on riverbeds and banks
- 6.7 Earthworks

An assessment of the relevant clauses is outlined below.

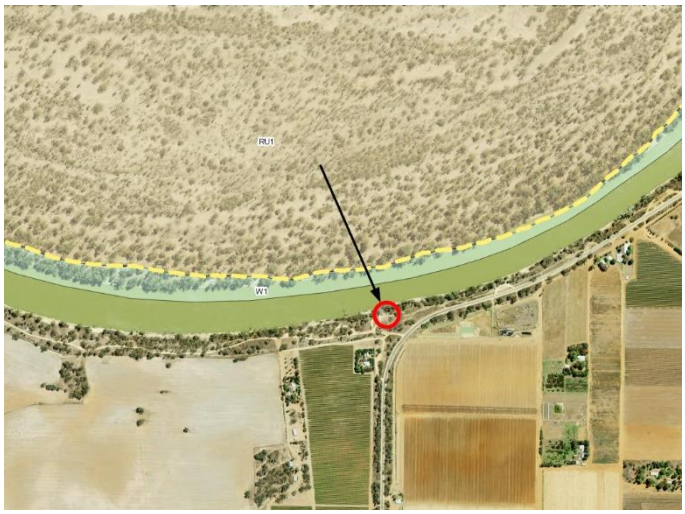


Figure 7 *Zone map*

Additional Planning Controls

The land is affected by the following mapping in addition to the zoning of the land:

- Riparian lands and watercourse
- Terrestrial biodiversity
- Wetlands

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The Murray REP has been replaced by State Environmental Planning Policy (Biodiversity & Conservation) 2021 which applies to the riverine land of the River Murray within the Balranald Shire Council local government area and is applicable in the assessment of this proposal. The objectives of this plan are:

(a) to ensure that appropriate consideration is given to development with the potential to adversely

affect the riverine environment of the River Murray, and

(b) *to establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray, and*

(c) *to conserve and promote the better management of the natural and cultural heritage values of the riverine environment of the River Murray.*

The plan outlines specific principles and planning controls that apply to this proposal and consultation which is required under the plan. Clause 5.12 does not specifically identify consultation for a water supply system. Clause 5.13 provides direction for the setback of development.

Aboriginal cultural heritage

All Aboriginal cultural heritage is protected by the NSW National Parks and Wildlife Act 1974. Responsibility rests with the proponent of a development to demonstrate that due care and diligence have been taken to identify and avoid impacts on archaeological sites through construction works.

An AHIMS search for the site suggests that there are no aboriginal sites located in the area in NSW. Consequently, the risk of harm to aboriginal cultural heritage is low.

Water Management Act

A controlled activity approval authorises its holder to carry out a specified controlled activity at a specified location in, on or under waterfront land. Under the Water Management Act 2000 (WM Act), a controlled activity means:

- *the erection of a building or the carrying out of a work (within the meaning of the Environmental Planning and Assessment Act 1979), or*
- *the removal of material (whether extractive material) or vegetation from land, whether by way of excavation or otherwise, or*
- *the deposition of material (whether extractive material) on land, whether by way of landfill operations or otherwise, or*
- *the carrying out of any other activity that affects the quantity or flow of water in a water source.*

Site and surrounding area

Subject site

The site is a pump station located on the Victorian bank of the Murray River at Wemen which is accessed by an unnamed track connecting to the Hattah-Robinvale Road. This site is opposite to Lot 5547 DP768457 which is located directly across the Murray River. No private property directly abuts the site of the proposed works.

The site has a long history of use as an irrigation pump site and has been highly modified as a result. The immediate area around the site has several access tracks and parking areas. The site is largely devoid of understory and groundcover species.

Several other pump stations are located close to the site and these supply irrigation water to other horticultural enterprises located nearby.

The opposite (southern) side of the Hattah-Robinvale Road has been extensively developed to support various horticultural activities, principally table grape production and almonds at this location.

Figure 8 *Aerial image of the site*

Figure 9 *View looking towards the bank/rail structure*

Figure 10 *View looking upstream towards river*

Locality

The pump station will service a table grape production enterprise located in Liparoo, Victoria. The nearest land holding in NSW is located on the opposite bank of the river. This landholding is zoned W1.

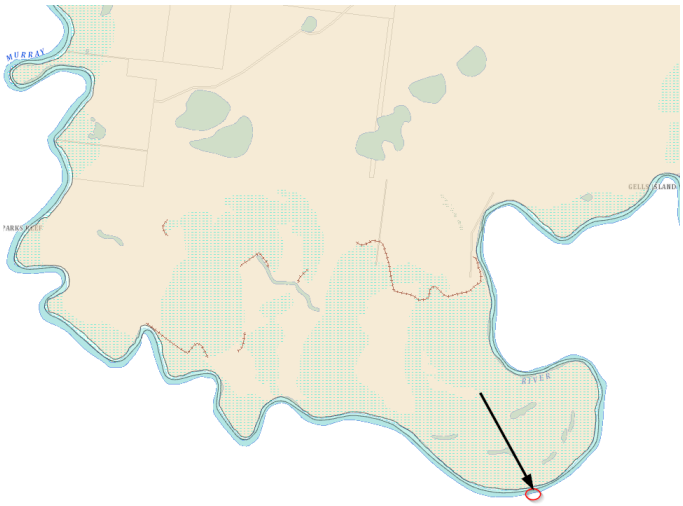


Figure 11 *NSW Planning map with the site location*

Figure 12 *View across the pump site to NSW land*

Planning assessment

Policy context

The proposed works will enhance the existing pump station, enabling it to service an increased area under table grape production.

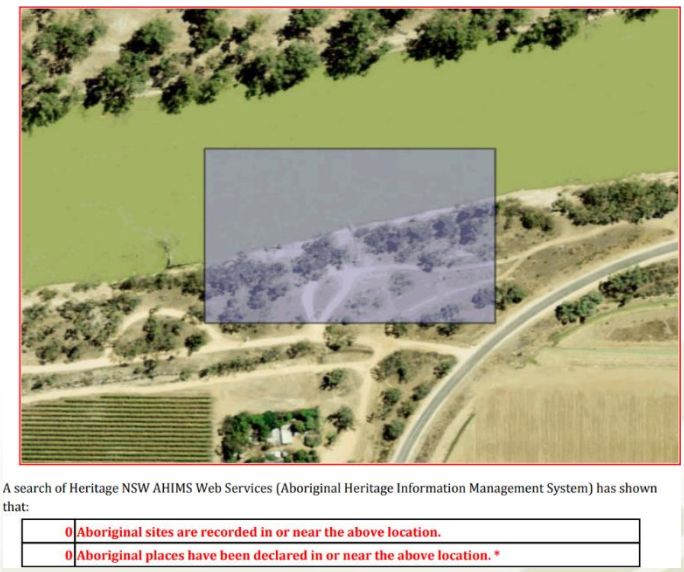
The current pump station infrastructure is neither designed to service the additional land nor able to hold the additional infrastructure. The planned upgrades to the site will correct these shortcomings.

Aboriginal Cultural Heritage

The rails for the new pump station will sit on three small concrete slabs recessed into the riverbank. The formwork for these slabs will be dug by hand tools to minimise the risk of harming cultural heritage.

If any item of cultural heritage is uncovered, the works will immediately cease and the necessary organisations will be notified to determine what actions are required.

A search of the AHIMS database was undertaken. The search revealed that no aboriginal cultural heritage sites have been recorded in the vicinity of the works location.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

Figure 13 *AHIMS search for the site*

Fauna

The design of the pump station is a rail structure supported by concrete pads. The pump and rising main will be supported by this structure and there will be no additional contact with the riverbank.

The pump intake will be fitted with mesh exclusion screens to prevent the ingress of macroinvertebrates and other aquatic species into the pump.

No snags were present near the pump site and the riverbank is devoid of vegetation and therefore the proposed works will not significantly impact the habitat of terrestrial or aquatic fauna.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 sets out specific principles that need to be considered when undertaking any development on land the plan applies to. A response to the principles is offered below.

Access

- The proposed works will not adversely impact the public's ability to access the river or foreshore areas. Access to the site and surrounding area will be unchanged as a result of the planned works.
- The suction intake will extend into the Murray River. However, as the river is 120m wide at this location navigation of the river will not be adversely impacted. Markers and navigation aids will be installed on the structure as required by Roads and Maritime NSW.

Figure 14 *View south from pump site*

Bank disturbance

- Disturbance of the riverbank will be confined to the construction phase of the project and will be minor in nature. It will be limited to the disturbance caused boxing up the formwork for the supporting pads and by the foot traffic of workers at the site.
- Once construction activity is complete, no further disturbance of the riverbank will occur.
- The understorey *Acacia stenophylla* next to the existing pump station will be required to be removed to establish the pump station. The understorey cover will be pruned or cut off and the stalks/trunks be poisoned to prevent disturbance to the riverbank. A BOSET report will accompany this application.

Flooding

- The site is subject to inundation by floodwaters. However, the works will not be adversely impacted by floods of any magnitude. The pump station is designed to remain operational during floods of all foreseeable magnitudes, including 1:100-year flood events.
- The proposed development of the site will not deprive the surrounding ecosystems of the benefits of periodic flooding. The scale and design of the structure is such that it is will not have any impact on the flow regimes of the river.
- There will be no increased hazards or risks from flooding because of this proposed development. The proposed development will not have any material impact on risk from flooding due to its design, scale or location.
- There will be no redistributive effects on flooding because of the proposed works. The proposed development will have no impact of any type on the flow of floodwaters.
- The proposed works will not impact any other land in the vicinity. All adjoining land consists of the riverbank and, by definition, faces the risk of inundation.
- There will be no impact on the ability of emergency services to have flood-free access due to the siting or design of the proposed works.
- There will be no increased risk of pollution during flooding as a result of this proposal. The site will not be used for the storage of chemicals or any other potential contaminants.

Land degradation

- The land subject to the proposed development consists entirely of the riverbank from the waterline to the high point at the top of the bank. The development will have limited impact on the riverbank.
- Understorey species will be allowed to recolonise the riverbank around the rail structure.
- There will be limited excavation at the site as part of the proposed works. There will be no increased risk of inducing acid-sulphate soils.

Landscape

- The pump station site is largely devoid of understorey and groundcover species. The only vegetation required to be removed as a result of the proposed works are immature River Kooba trees immediately upstream of the existing pump station. Once construction is complete, the understory species will be left undisturbed and will be encouraged to re-establish.

Figure 15 *Understorey cover required to remove*

River related uses

- The development has an essential relationship with the Murray River. The river is the sole source of irrigation water in the region and the development cannot occur elsewhere or be set back from the river.

Settlement

- The proposal is intrinsically linked to the Murray River. It cannot be located anywhere else. It cannot be located on flood-free land. The site is located among other similar irrigation facilities and this proposal will not have any impact on the availability of cropping, pastoral or food and fibre producing land.

Water quality

- There will be no effect on water quality as a result of the proposed works.
- The proponent will take all possible and responsible measures to prevent any negative impact on water quality during construction. This will include measures such as:
  - Construction activity will be confined to periods of suitable weather.
  - If required, a suitable silt barrier will be erected to prevent any silt and soil entering the river.
  - No snags will be removed from the river.

Wetlands

- The works are not located on or near any mapped wetlands.

Balranald LEP

The site is in Zone W1 Natural Waterways. The proposed works are consistent with the relevant objectives of this zone, including:

- *To protect the ecological and scenic values of natural waterways*

The site is an existing pump station which is close to other existing pump stations. The proposed development will have no additional impact on the ecological values of the immediate region. The works site is adjacent to an existing operational pump station and has no significant ecological value as habitat. The aquatic habitat will not be interfered with as there is no contact with the bed of the river. No snags will be removed from the river.

- *To prevent development that would have an adverse effect on the natural values of waterways in this zone*

The development is proposed in the area with many operational irrigation pumps and the addition of another is not expected to adversely impact the natural values of waterways in this zone.

- *To provide for sustainable fishing industries and recreational fishing*

There will be no adverse impacts to fishing activities as a result of the proposed development.

Site Constraints

The principal constraint is that the site is located on the sloping southern bank of the Murray River. This means that it is located on the State border between New South Wales and Victoria. All terrestrial access to the site is from the Victorian road network.

The slope of the riverbank presents additional complexities that have been accounted for both in the project design and the proposed works plan.

Potential Impacts

Potential impacts associated with the works are listed below as are the mitigation measures to limit impacts.

Tree removal or damage

The site is largely devoid of vegetation so impacts to vegetation will be minimal. The only vegetation that will be removed are immature River Kooba trees which will be conducted in a manner to minimise disturbance to the riverbank.

Visual and aesthetic impact

The site is an existing pump station. There will be only minimal changes to the site's visual impact. Other pump stations of similar design and appearance are located nearby.

An appropriate colour palette (including muted tones) will be used for all site infrastructure to ensure that it blends into the setting as much as possible.

Traffic impacts

There will be no additional traffic generated or any additional traffic impacts for any roads in New South Wales. There will be a minor increase in traffic volume during the short period of construction, but this will be confined to the Victorian road network.

Impact on flow paths

There will be no impacts on any flows as a result of this proposal.

Waste management

The production of waste will be limited to the construction phase of the project. During construction, the management of waste will be a priority. Workers at the site will be required to remove all waste materials from the site at the conclusion of each working day.

The operational pump station will produce no onsite waste.

Siting impacts

The pump station will not interrupt views of, or disrupt access to, the river and its environs. The infrastructure owner is in the process of obtaining a Crown Lands Licence for the site.

Visual appearance

The visual appearance of the infrastructure at the site will reflect its function. The appearance will be attenuated as far as possible through the careful choice of materials and colours where scope to do so exists.

Design impacts

There will be minimal changes to the site's appearance. The site is an existing pump station and the infrastructure at the site reflects this use. The new pump station will have a similar appearance to the current pump station.

Noise, vibration, and dust

The pump station is in a relatively remote area of Victoria. There are no residencies within NSW that are close enough to detect noise from the operating pump station. There will be no detectable vibration or dust or any other type of emissions from the operating pump station.

Other considerations

The project will result in the upgrade of a pump station by installing a replica of the existing pump station. The proposed changes will result in a pump station of sufficient capacity to service the increased planted area.

Impact Identification

Potential impacts arising from this proposal have been identified through a process involving consultation with expert consultants, visits to the site, and negotiation with various consent authorities and service providers on both sides of the State border.

Impact Minimisation

The proposal to install the pump station adjacent to the existing site present synergies that will reduce the impact of the development. These include:

- There will be no additional maintenance or service callouts as the new pump site will be serviced at the same time as the existing pump site.
- The pumps can be repositioned according to the changes in river levels.
- The new pump station will offer greater reliability and efficiency ensuring that the vineyard has sufficient irrigation water during peak demand times and all river flow regimes.

Construction Impact

The proponent will implement control measures to minimise the impacts of construction activity. These include the following:

Silt fencing

If required, silt fencing will be erected at the site. The first fence will be placed along the riverbank, close to the water's edge. This will prevent any loose soil or any other debris from entering the river. Any material trapped by the fence will be picked up by and removed from the site.

Vegetation impact

The project will have minimal impact on vegetation with immature River Kooba trees to be removed.

Fauna impact

Impacts on fauna species because of the project will be minimal. There will be no impact with the bed of the river. No snags or logs will be removed from the water. The pumps' suction intakes will be fitted with exclusion screens to prevent aquatic organisms being drawn into the pumps.

Rubbish and waste

Contractors will be required to remove all wastes from the site each day. No waste will be permitted to be stored at the site.

Noise

Noise will be limited to the construction phase of the development. Construction hours will be confined to the EPA recommended times.

Dust, vibration, and other emissions

It is not expected that construction activity will result in emissions of dust, vibration, or any other type of emissions. The operational pump station will not produce dust or vibration.

Conclusion

In conclusion, it is considered the development responds well to the opportunities and constraints of the site and is consistent with the relevant provisions.

The proposal is appropriate for the site for the following reasons:

- The proposal is consistent with Balranald LEP.
- The proposal is consistent with the State Environmental Planning Policy (Biodiversity and Conservation) 2021.
- The proposal supports primary production industry in the region with the attendant benefits this brings to the wider region.
- There will be no major loss of vegetation and no other substantial impact on ecological or biodiversity values of the locality.
- The proposal responds well to the site's characteristics and opportunities and has considered the potential impacts upon the locality and particularly of this section of the Murray River.

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