Northern Midlands Irrigation Scheme

Preferred Option Overview
September 2020

Tasmanian Irrigation is delighted to share the Preferred Design Option for the Northern Midlands Irrigation Scheme. Tasmanian Irrigation (TI) sincerely thanks all landowners for their feedback and Expressions of Interest for irrigation water, and invites the community to review and provide feedback on this Preferred Design Option by Monday 12 October to TI Project Manager Jacob Gerke.

It is anticipated that construction of the Northern Midlands Irrigation Scheme will commence in 2022 and the first irrigation water will flow to landowners for the 2024/25 summer irrigation season. It is proposed this scheme, the second of TI’s Tranche Three projects, will deliver 11,425 ML of high surety (95 per cent average annual reliability) irrigation water via underground pipes to the Poatina, Macquarie, Barton, Isis, Conara, Campbell Town and Ross districts.

The proposed summer delivery period would typically run from 1 October through to April each year with minor variations depending on each season. The scheme will be built to supply a peak flow rate of 76.2 ML/day, however this may be revised to reflect actual water sales in the scheme.
Northern Midlands Irrigation Scheme
Preferred Option Overview

Legend

- Pump Station
- Pipeline

Poatina Tailrace Pump Station
Barton & Isis Pump Stations
For further information please contact:
- Tasmanian Irrigation’s office on 6398 8433 or the NMIS Project Manager, Jacob Gerke on 0429 978 313 or email jacob.gerke@tasirrigation.com.au
- NMIS Irrigator Representative Committee Chair, Richard Burbury on 0439 908 034

NMIS Irrigator Representative Committee members include:
Richard Burbury  Rae Young
George Gatenby  George Rigney
Tom Green  Sam Archer
The region is one of the key cropping, pasture seed and red meat production regions of Tasmania. The proposed Northern Midlands Irrigation Scheme will provide high reliability water which is underpinned by large Hydro Tasmania storages in the central highlands of Tasmania. A review of land capability in the district indicates that there is more than 56,000 ha of irrigable land in the region which equates to over 141,150 ML of demand. However even with the current water licences and existing irrigation schemes, there is a shortfall of greater than 80,000 ML/yr which is constraining growth in the agricultural sector in the region.

The studies undertaken during the pre-feasibility period identified that additional water is likely to be used for existing and new cropping enterprises. Enterprises will include poppy, potatoes, hemp, pasture seed, seed crop and red meat finishing. The key elements of the Preferred Option are shown on the map inside.

**Scheme Infrastructure**

Four (4) pump stations, two (2) balance tanks, pipelines and property outlets:

- The Poatina pump station to be constructed on the Poatina Tail Race, 1km downstream within the channel at drop structure No. 1, capable of pumping the entire 76 ML/day from the Tail Race into the distribution line;
- The main pipeline then extends 28.7km to the Barton pump station, capable of pumping 9.3 ML/day to into this pipeline; and
- A total of 90.5km of distribution pipeline.

The scheme design is based on the 2019 Expression of Interest (EOI) landowner survey for water demand. The survey resulted in TI receiving 32 EOI’s for 11,425 ML. Interest has continued with further EOIs being submitted throughout 2019 and 2020 confirming strong landowner support for the scheme.

A key component of the design for the scheme is to optimise the ability for irrigators to trade. Water trading can be temporary or permanent and can be for volume, for flow or normally for both. Further details on trading will be provided through the water sales period.

**One-off Uprfront Cost**

The estimated capital cost of the project is $65.81M, with a proposed funding contribution from the State and Commonwealth Governments of $49.4M and a contribution from the irrigators through the purchase of water entitlements of approximately $16.45M. The cost of water entitlements in the scheme is $1,440/ML. This is a one-off payment with a deposit being paid at water sales and the balance paid at scheme commissioning.

**Annual Operating Costs**

Operating costs for the scheme will vary based on water source. Hydro Tasmania will charge a cost for water based on the forgone loss of power generation. The Poatina pump station will pump water releases from the Poatina power station. Irrigators cover all costs of operating the scheme through the payment of annual water charges. Water charges are based on a fixed and variable pricing structure. Fixed costs and the Asset Renewal Levy (ARL) are based on the water entitlements purchased and are paid irrespective if the water is used. Variable costs are applied to water usage each irrigation season.

**Variable Costs**

<table>
<thead>
<tr>
<th>Supply zone</th>
<th>Volume pumped ML</th>
<th>kWh/ML</th>
<th>Hydro water cost</th>
<th>Estimate Variable Operating Cost**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poatina to Barton</td>
<td>11,425</td>
<td>165</td>
<td>$22.25/ML</td>
<td>$45ML</td>
</tr>
<tr>
<td>Barton Boost (main line)</td>
<td>5,855</td>
<td>303</td>
<td>$22.25/ML</td>
<td>$79/ML</td>
</tr>
<tr>
<td>Isis Boost</td>
<td>700</td>
<td>107</td>
<td>$22.25/ML</td>
<td>$63/ML</td>
</tr>
<tr>
<td>Campbell Town boost</td>
<td>1,400</td>
<td>184</td>
<td>$22.25/ML</td>
<td>$100/ML</td>
</tr>
</tbody>
</table>

**Total Annual Charges – Fixed and Variable**

<table>
<thead>
<tr>
<th>Supply Area</th>
<th>Fixed Operating</th>
<th>ARL</th>
<th>Variable Operating</th>
<th>Total Annual Charge/ML</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Line (Zone 1) &amp; Macquarie Settlement</td>
<td>$39*</td>
<td>$21*</td>
<td>$45</td>
<td>$105</td>
</tr>
<tr>
<td>ISIS Road</td>
<td>$39*</td>
<td>$21*</td>
<td>$63</td>
<td>$123</td>
</tr>
<tr>
<td>Main Line (Zone 2), Conara Main and Conara A</td>
<td>$39*</td>
<td>$21*</td>
<td>$79</td>
<td>$139</td>
</tr>
<tr>
<td>Campbell Town</td>
<td>$39*</td>
<td>$21*</td>
<td>$100</td>
<td>$160</td>
</tr>
</tbody>
</table>

**Variable Operating costs are shown in 2019/20 dollars and include the Hydro Tasmania charge.**