



Swan Valley Irrigation District Overview Document



Key scheme facts

Volume

2,000 ML

Status

Feasibility

Irrigable Area

7,800 ha

This document has been prepared to provide a summary of important information relating to the irrigation district.

This document provides general information relating to:

- Tasmanian legislation, including the Water Management Act 1999 and the Irrigation Clauses Act 1973; and
- Irrigation Right, Delivery Right and Connection Agreement contracts relevant to the irrigation district.

Any Tasmanian legislation and contracts relevant to the irrigation district shall prevail over the general information provided in this document to the extent of any inconsistency.

For further information:

www.tasirrigation.com.au
www.waterconnectsus.com.au

or contact Tasmanian Irrigation:
03 6398 8433
enquiries@tasirrigation.com.au
Level 2, Launceston Airport
Western Junction, Tasmania
PO Box 84
Evandale TAS 7212

Contents

1.	Important information	1
2.	Scheme overview	3
3.	Legislative environment	4
4.	Tasmanian Irrigation.....	4
5.	Water entitlements	5
6.	Water trading	7
7.	Water charges	9
8.	Connections.....	11
9.	Farm Water Access Plans.....	11
10.	Pressures	12

1. Important information

Item	Summary	Further Information
How much water can the scheme supply?	The scheme is designed to supply 2,000 ML of water each year over a minimum 120-day delivery period, with the summer delivery period running between 1 September and 31 January each year. Water will be sourced primarily from Swan River winter flows, with some summer flood pumping to underpin reliability.	Section 2
How can I access supply from the scheme?	Supply from the scheme will be accessed through water entitlements. If you do not hold water entitlements, you may obtain them through water trading or purchasing them from Tasmanian Irrigation. Short term supply may also be accessed from Tasmanian Irrigation through 'spot purchases'.	Sections 2, 5 & 6
What are water entitlements?	Water entitlements are either irrigation rights or delivery rights. Irrigation rights confer entitlements to have an allocation of water made available for delivery during each irrigation season. Delivery rights confer entitlements to a share of the capacity of the scheme to deliver water within a zone during the irrigation season.	Section 5
What is the reliability of the irrigation rights?	Irrigation rights in the irrigation district have been assessed as having a reliability of at least 95 per cent based on the conditions applying at the time reliability was assessed and that the scheme continues to operate as it was originally designed. It should however be noted that the customer bears the risk of any reductions to reliability arising from climate changes or other natural causes.	Section 5
What is the term of water entitlements?	The term of water entitlements is set to match the term of the water licence issued under the <i>Water Management Act 1999</i> ("WMA") which will underpin the irrigation district's supply. The term of water licences are 40-years with provisions for the renewal of water licences set out in the WMA.	Section 5
Are there any eligibility requirements to holding water entitlements?	Tasmanian Irrigation may refuse to issue water entitlements, or approve a transfer of water entitlements, on the basis of credit worthiness. Aside from this, there are no specific limitations on who may hold water entitlements.	Section 6
Do water entitlements provide ownership over infrastructure?	The infrastructure of the irrigation district will be owned by Tasmanian Irrigation on behalf of the Tasmanian Government. Water entitlements provide rights to a supply of water from the irrigation district.	Section 5

Item	Summary	Further Information
Are there costs associated with holding water entitlements?	Water entitlement holders are required to pay annual water charges made up of fixed charges levied on water entitlement holdings and variable charges levied on water supplied.	Section 7
Do I have to pay charges if I don't use water?	Fixed charges are payable on water entitlement holdings regardless of whether water is supplied. However, variable charges are only payable on water that is actually supplied.	Section 7
Is GST payable on water charges?	The supply of water is not currently subject to GST. Should the GST treatment of water change, GST may be collected in the future.	Section 7
Are water entitlements tradable?	Water entitlements can be held by anyone and are tradable within the irrigation district on a temporary or permanent basis. The extent of the tradability of water within the irrigation district is based on the zone nomination of delivery rights.	Section 6
Why does the scheme have zones?	Zones arise because of variations in pipeline diameters and other factors that limit the capacity of the scheme to deliver water to different parts of the irrigation district.	Sections 5 & 6
Is anything else required to use water?	In addition to holding water entitlements, to take water from the scheme you will require a property outlet, a connection agreement and farm water access plan.	Sections 8 & 9
What is a connection agreement?	A connection agreement provides the link between water entitlements and land by specifying the location at and terms under which water can be taken from the scheme.	Section 8
What is a Farm Water Access Plan?	A Farm Water Access Plan is a management tool that identifies and manages environmental risks associated with the application of water. Its purpose is to demonstrate that the use of water is sustainable and complies with Australian and Tasmanian Government requirements.	Section 9

2. Scheme overview

The Swan Valley Irrigation Scheme is currently expected to be constructed during 2015-16 and ready for operations during the 2016-17 irrigation season although the project schedule is subject to change.

The proposed Swan Valley Irrigation District will service vineyards, orchards, pasture and cropping land around in the Swansea, Cranbrook and Coombend districts. Production in the area includes wine grapes, nuts, pasture for livestock finishing and cropping.

The scheme is designed to supply 2,000 ML of water each year over a minimum 120-day delivery period, with the summer delivery period running between 1 September and 31 January each year.

Water supplied in the district will be pumped from the Swan River and taken into storage in a dam to be constructed on an unnamed tributary of the Swan River near Cranbrook. During the irrigation season water will be pump boosted from the dam and delivered under gravity throughout most of the district via distribution pipelines. Additional pumping may be required to service the areas of the district below Swansea.

For reference, a map illustrating the infrastructure of the irrigation district and the zones can be found at the end of this document.

3. Legislative environment

In Australia, water is managed by each state and territory in accordance with the Inter-governmental Agreement on a National Water Initiative. In Tasmania, water is governed by the *Water Management Act 1999* (“WMA”).

Under the WMA all water resources in Tasmania are vested in the Crown. The Minister for Primary Industries and Water may grant rights to take water under a system of water licences. Water licences are currently administered by the Department of Primary Industries, Parks, Water and Environment (“DPIPWE”).

Where an irrigation district is established, the rights arising under a water licence (or an agreement deriving from a water licence) may be broken into individual shares and issued as irrigation rights. Irrigation rights are administered by entities (such as Tasmanian Irrigation) who are responsible for operating irrigation districts.

Water licences and irrigation rights are statutory water entitlements. They are transferable and separable from land. The irrigation schemes owned, operated and developed by Tasmanian Irrigation use irrigation rights as the statutory basis for water entitlements.

4. Tasmanian Irrigation

Tasmanian Irrigation is a state-owned company responsible for developing and operating irrigation schemes in Tasmania. As at February 2014, Tasmanian Irrigation has built and operates nine irrigation schemes, owns the infrastructure of two locally managed schemes, has three schemes under construction, and is at various stages of developing a further five schemes.

The capital cost of the irrigation schemes currently being developed by Tasmanian Irrigation is a shared partnership between the public and private sectors. A total of \$229 million has been made available by the Australian and Tasmanian Governments for Tasmanian Irrigation's first tranche of schemes which are nearing completion. An additional funding commitment of \$90 million has been made by the Australian and Tasmanian Governments to progress a second tranche of projects, which includes the Swan Valley Irrigation Scheme. Private investment is raised through the sale of water entitlements.

The irrigation schemes currently being developed by Tasmanian Irrigation are designed to last 100 years, deliver water at an average annual reliability of at least 95% and are built to satisfy demand in each region, with a threshold level of private commitment required before construction begins.

5. Water entitlements

Water entitlements are either irrigation rights or delivery rights.

Irrigation rights

Irrigation rights in the irrigation district will be issued under the *Irrigation Clauses Act 1973* (“ICA”) and are subject to the terms of the agreements titled “Irrigation Right: Swan Valley Irrigation District”.

Irrigation rights confer entitlements to have an allocation of water made available for delivery during each irrigation season. The entitlement arising under irrigation rights is defined as a volume and denominated in megalitre (ML) units.

The allocations made to irrigation rights for an irrigation season are calculated by multiplying:

- the entitlement held under irrigation rights on the opening day of the season; and
- the allocation percentage notified by Tasmanian Irrigation before the start of the season and any revision made to the allocation percentage during the season.

If revisions are made to the allocation percentage during a season, the resulting allocations will be made on the basis of the entitlement held under irrigation rights on the day the revision is notified.

Irrigation rights do not provide secure rights to have water delivered but do so when held in conjunction with delivery rights.

Reliability

Irrigation rights in the irrigation district have been assessed as having a reliability of at least 95 per cent based on the conditions applying at the time reliability was assessed and that the scheme continues to operate as it was originally designed.

It should however be noted that the customer bears the risk of any reductions to reliability arising from climate changes or other natural causes.

95% reliability means that over 100 years the annual allocation for each irrigation right will total at least 95% of the annual volume for that irrigation right.

Irrigation season

The irrigation season for the irrigation district opens on 1 May each year and closes on 30 April the following year. The allocations made to irrigation rights during an irrigation season are valid for use or trade during the whole of the season.

Delivery rights

Delivery rights in the irrigation district are subject to the terms of agreements titled “Zoned Flow Delivery Right: Swan Valley Irrigation District”.

Delivery rights confer entitlements to a share of the capacity of the scheme to deliver water within a zone during the summer delivery period of each irrigation season. The summer delivery period runs from 1 September to 31 January and may be extended by Tasmanian Irrigation. The entitlement arising under delivery rights is defined as a flow rate and denominated in megalitre per day (ML/day) units. The flow rate is based on a minimum delivery period of 120 days, which will provide irrigators with flexibility in taking water during the 153 day period between 1 September and 31 January each year.

As the delivery capacity of the scheme is not subject to seasonal variation, the allocation made to delivery rights for each irrigation season will equal 100 per cent of the entitlement held under delivery rights on the opening day of the season.

Delivery rights provide assurance that capacity is available to deliver water at a set rate, when and to where it is required. Flow rate entitlements give certainty over the timing of supply and introduce a tradable product through which irrigators can plan water deliveries, manage seasonal risks and maximise the benefit of their entitlements.

Zones

Delivery rights carry a zone nomination which relates to the zones of the scheme as shown on the map of the irrigation district at the end of this document.

Zones arise because of variations in pipeline diameters and other factors that limit the capacity of the scheme to deliver water to different parts of the irrigation district.

Each zone originates from the supply point for the irrigation district (i.e. the proposed Melrose Dam) and extends to the furthest downstream point of the zone as shown on the map.

There are two types of zones: trunk zones and spur zones.

Trunk zones comprise the zone as shown on the map of the irrigation district and all other parts of the water delivery system of the irrigation district through any part of which water flowing from the proposed Melrose Dam must necessarily pass to reach the zone.

For example, Mainline Zone 3 (M3) does not just include those parts of the scheme identified on the map as Mainline Zone 3 (M3) but also includes Main Line Zone 1 (M1) and Mail Line Zone 2 (M2) as water must pass through these zones to reach Mainline Zone 3 (M3).

Spur zones comprise the zone as shown on the map of the irrigation district and the trunk zone to which that zone joins.

There is one spur line in the scheme, Main Line Zone A (MA) which joins to Mainline Zone 3 (M3). Main Line Zone A (MA) includes those parts of the scheme identified on the map as Mainline Zone A (MA) and all other parts of the scheme that comprise Mainline Zone 3 (M3).

Term of water entitlements

The term of the water entitlements issued in the irrigation district is set to match the term of the water licence issued under the WMA which will underpin the irrigation district’s supply. The term of water licences are 40-years with provisions for the renewal of water licences set out in the WMA. If the term of the water licence that underpins the irrigation district’s supply is extended, the term of water entitlements issued in the district will be extended by the extended term of the water licence.

6. Water trading

Irrigation rights and delivery rights are tradable within the irrigation district in accordance with the ICA and the Trading Rules for the irrigation district.

Trades are made by transferring volume between irrigation rights and flow rate between delivery rights. To take effect, a transfer must be approved by Tasmanian Irrigation and recorded in the water entitlements register for the irrigation district.

Trade types

There are two categories of trades – entitlement trades and allocation trades – and three types of transfers – permanent transfers, limited term transfers and short term transfers. Entitlement trades include permanent and limited term transfers, while allocation trades refer to short term transfers.

Entitlement trades are transfers of the volume and flow rate entitlements held under irrigation rights and delivery rights. A permanent transfer (sale) will result in an absolute change in the ownership of entitlements, while a limited term transfer (lease) will result in a change in ownership for a defined period of time.

Allocation trades refer to transfers of the volume and flow rate allocations that have been made to irrigation rights and delivery rights for a particular irrigation season. Because allocations are made on the first day of a season, short term transfers will necessarily take effect entirely within one season.

Tradability

The tradability of water within the irrigation district is regulated through the zone nomination of delivery rights. A transfer of flow rate will only be approved if:

- in the case of permanent transfers, the zone nomination of the transferor's delivery right is the same as the zone nomination of the transferee's delivery right;
- in the case of limited term or short term transfers, the zone nomination of the transferor's delivery right is the same as or compatible with the zone nomination of the transferee's delivery right; or
- Tasmanian Irrigation approves the transfer on the basis that it does not exceed the capacity limitations of the scheme taking account of all other delivery rights issued.

Conditions

Important additional conditions to Tasmanian Irrigation's approval of transfers include:

- that all money owing to Tasmanian Irrigation by the transferee and transferor is paid;
- that the sale price of the transfer is disclosed;
- in the case of transfers exceeding 12 months, that the transfer is consented to by the holders of any registered security interests;
- in the case of a permanent transfer, Tasmanian Irrigation is satisfied as to the credit worthiness of the transferee; and
- in the case of limited and short term transfers, the transferor remains liable for all money not paid by the transferee in relation to the transferred entitlement or allocation.



To assist buyers and sellers of water entitlements establish connections, Tasmanian Irrigation has launched the Tasmanian Water Trading Notice Board. The Notice Board allows parties to advertise their interest in buying, selling or leasing water entitlements.

If you would like to place an advertisement on the Notice Board or view advertisements that have been posted to the Notice Board by other parties, you can access the Notice Board via Tasmanian Irrigation’s website at www.tasirrigation.com.au.

The Notice Board is a free service provided by Tasmanian Irrigation in support of the development of a water market in Tasmania.

7. Water charges

The on-going costs associated with the irrigation district and its related infrastructure are funded through annual water charges, which comprise of fixed charges that are levied on water entitlement holdings and variable charges that are levied on actual water supplied.

Tasmanian Irrigation has prepared estimates of water charges to assist interested parties to forecast the likely future costs associated with holding water entitlements and being supplied with water from the irrigation district. The estimates are based on cost information for 2014-15.

Please be aware that the charges are estimates only and subject to change, and will be determined each year on the basis of costs applying at that time.

The supply of water is not currently subject to GST and accordingly Tasmanian Irrigation does not collect GST in respect of the water charges. Should the GST treatment of water change, GST may be collected in the future.

Fixed charges

Swan Valley Irrigation District: fixed charge estimates*	
Operations & maintenance charge	\$67.00/ML
Asset renewal levy	\$45.00/ML
Transfer charge**	\$35.00/ML
Total	147.00/ML
Unused water rebate***	\$31.00/ML

* Water charges estimated in 2014-15 dollars

** The transfer charge is estimated to be an additional \$10/ML higher in the inaugural season of the irrigation district as the dam will need to be filled to full supply level which includes reliability contingency water of 750 ML

*** The unused water rebate is credited on the difference between water supplied to you during the Irrigation Season and the Current Allocation held under your Irrigation Right on the closing day of the season

Fixed charges include an operations and maintenance charge, asset renewal levy and a transfer charge. These charges are levied on water entitlement holdings and are payable regardless of whether any water is supplied.

The operations and maintenance charge recovers the fixed costs associated with the irrigation district, including costs associated with employee entitlements, vehicles, plant and equipment, routine maintenance, telemetry, compliance, administration, finance and insurance.

The asset renewal levy provides for refurbishment and replacement of significant scheme assets and funds that may be made available in the unlikely event of a major scheme failure. Funds collected through the levy are set aside in an asset renewal reserve for the benefit of the irrigation district.

The transfer charge recovers the cost of pumping water from the Swan River to the Melrose Dam. Like the other components that make up the fixed charges, the transfer charge is payable regardless of whether water is used. However, water that is not used during an irrigation season will be eligible for an unused water rebate. The value of the rebate is based on the savings estimated to be made in the following irrigation season resulting from pumping costs, taking account of dam losses and interest costs. Please note that the transfer charge is estimated to be an additional \$10/ML higher in the inaugural season of the irrigation district than indicated in the table as the dam will need to be filled to full supply level which includes reliability contingency water of 750 ML.

Variable charges

Swan Valley Irrigation District: variable charge estimates*	
ex Melrose Dam Pump Station	\$5.50/ML
ex Swansea Boost Pump Station	\$52.00/ML
* Water charges estimated in 2014-15 dollars	

Variable charges are payable on water supplied and vary across the scheme to reflect differences in the cost of supplying water to different parts of the irrigation district. Variable charges recover the costs associated with pumping water through the pipeline distribution network.

The figures presented in the table above show the final charge estimates for each part of the scheme (i.e. they do not need to be added together). A breakdown of the estimates for each area and descriptions of the parts of the scheme each charge is applicable to are provided below.

ex Melrose Dam Pump Station

The ex Melrose Dam Pump Station pricing area includes water extracted on all parts of the scheme, except for water that passes through the Swansea Boost Pump Station. The estimated variable charge accounts for pumping costs incurred at the Melrose Dam Pump Station.

ex Melrose Dam Pump Station	Pumping at Melrose Dam
------------------------------------	------------------------

ex Swansea Boost Pump Station

The ex Swansea Boost Pump Station pricing area includes water extracted downstream of the Swansea Boost Pump Station. The estimated variable charge is based on the ex Melrose Dam Pump Station charge and accounts for additional pumping costs incurred at the Swansea Boost Pump Station.

ex Swansea Boost Pump Station	Pumping at Melrose Dam	Pumping at Swansea Boost Pump Station
--------------------------------------	------------------------	---------------------------------------

8. Connections

The water entitlements issued in the irrigation district are separate from land.

To access water from the irrigation district, a connection to a pipeline of the scheme needs to be in place and associated with water entitlements through a connection agreement.

Connection agreements specify the location at which water may be accessed from the scheme, and contain the terms and conditions of taking supply through a property outlet.

An important condition of connection agreements is that water taken from the irrigation district may only be used on land that is covered by a Farm Water Access Plan (see section 9 below).

To discuss connection requirements, please contact Tasmanian Irrigation.

9. Farm Water Access Plans

A Farm Water Access Plan must be in place for every property that receives water from the irrigation district.

Farm Water Access Plans are management tools demonstrating that the use of water is sustainable and complies with Australian and Tasmanian Government requirements. The plans are completed in accordance with soil, water and biodiversity modules and specify management actions where environmental risks associated with irrigation are identified.

Farm Water Access Plans are completed by pre-qualified consultants authorised by the Minister for Primary Industries and Water. To keep costs to a minimum, Tasmanian Irrigation is able to assist with the preparation of maps and baseline information required to complete farm water access plans and can arrange for tendering work to the pre-qualified consultants.

As an indication of the cost of preparing a Farm Water Access Plan, the net cost to landholders to date has generally been \$2,200 (inc. GST) or less. This figure is provided as a reference only. The actual cost to prepare a Farm Water Access Plan may be higher and will be determined at the time a quote is sought from a pre-qualified consultant.

Amongst other things, the factors affecting the price of Farm Water Access Plans include:

- the size of the area to be assessed;
- existing land capability data for the area to be assessed; and
- the likelihood of threatened species, ecological communities or other matters of environmental significance occurring in or near the area to be assessed.

Tasmanian Irrigation is required to conduct random annual audits of Farm Water Access Plans each year to ensure compliance.

10. Pressures

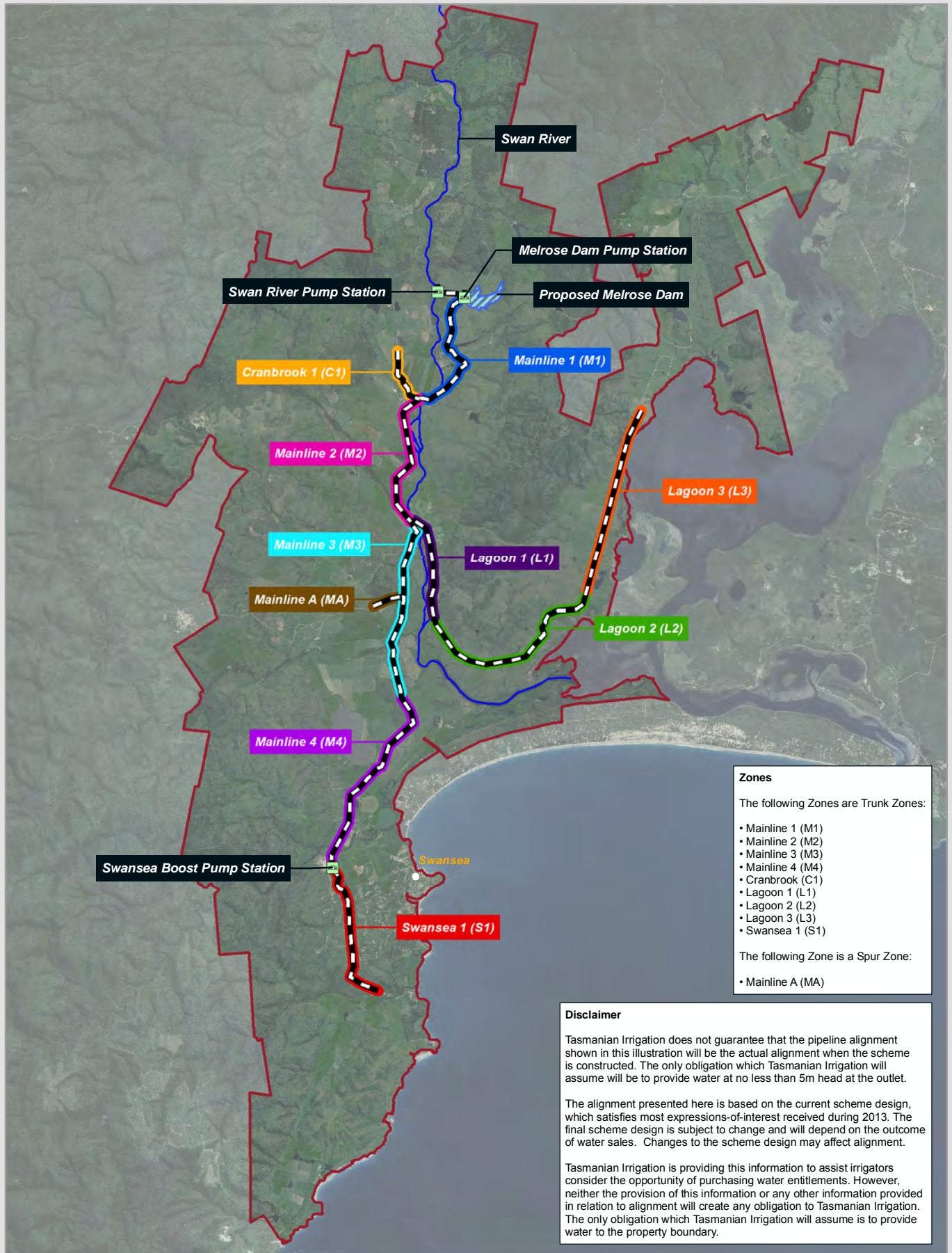
Tasmanian Irrigation guarantees a minimum pressure of 5m head (equivalent to 49kPa or 7psi) at each property outlet connected to a pipeline of the scheme.

However, the actual pressure experienced at a property outlet may be higher depending on the proximity of the outlet to a pump station or pressure reducing valve and the relative height of the outlet. It can also vary depending on where and how much water is being taken elsewhere in the scheme.

To assist irrigators to understand the range of pressures that may be experienced at an outlet, Tasmanian Irrigation has prepared estimates of the range of pressures that are likely to be found at different points along the pipeline alignment.

The provision of information on pressures is given on the basis of the current scheme design and will not in any way limit the ability of Tasmanian Irrigation to amend the scheme design nor does it create an obligation on Tasmanian Irrigation to warrant those pressures.

The only obligation that Tasmanian Irrigation will assume in relation to pressure is an obligation to supply a minimum pressure of not less than 5m head (equivalent to 49kPa or 7psi) at each property outlet connected to a pipeline of the scheme.



- Zones**
- The following Zones are Trunk Zones:
- Mainline 1 (M1)
 - Mainline 2 (M2)
 - Mainline 3 (M3)
 - Mainline 4 (M4)
 - Cranbrook (C1)
 - Lagoon 1 (L1)
 - Lagoon 2 (L2)
 - Lagoon 3 (L3)
 - Swansea 1 (S1)
- The following Zone is a Spur Zone:
- Mainline A (MA)

Disclaimer

Tasmanian Irrigation does not guarantee that the pipeline alignment shown in this illustration will be the actual alignment when the scheme is constructed. The only obligation which Tasmanian Irrigation will assume will be to provide water at no less than 5m head at the outlet.

The alignment presented here is based on the current scheme design, which satisfies most expressions-of-interest received during 2013. The final scheme design is subject to change and will depend on the outcome of water sales. Changes to the scheme design may affect alignment.

Tasmanian Irrigation is providing this information to assist irrigators consider the opportunity of purchasing water entitlements. However, neither the provision of this information or any other information provided in relation to alignment will create any obligation to Tasmanian Irrigation. The only obligation which Tasmanian Irrigation will assume is to provide water to the property boundary.

- Proposed Pump Station
- Proposed Pipeline
- Proposed Melrose Dam
- Proposed Irrigation District



0 4
Kilometres
Map Scale 1:145,000
When printed at A4

SWAN Zones

Map No: SWAN-M1423-000
Version: 000
Date: 25/02/2015
Map Created by: MP
Tasmanian Irrigation



Basemap supplied by TASMAT © State of Tasmania. Base data from the LIST © State of Tasmania.



03 6398 8433
enquiries@tasirrigation.com.au
Level 2, Launceston Airport
Western Junction, Tasmania
PO Box 84
Evandale TAS 7212