A Tamar Lake Vision

This is a personal vision, but one that I am sure is shared by all the members and supporters of the Tamar Lake project. This vision for the development of the Tamar Valley incorporates measures to not only enhance the natural beauty of the valley and its waterways, but to greatly increase its amenity and economic production in the agriculture, aquaculture, industrial and tourism sectors.

The Tamar Lake project may only just be the construction of a barrier to separate the saltwater tidal estuary from the freshwater flows from the South and North Esk River catchments, but it provides for the storage of vast quantities of freshwater - the foundation of a civilized society, that benefits/impacts different industry and society segments in different ways.

To reflect this diversity, this Vision Statement has been segmented into the potential benefits envisioned for the different geographic segments of the Tamar Valley.

Our 10 year vision will see:

For the whole valley:

- All of the valley south of the barrage, and especially Launceston, “global warming proofed” against sea level rise.

- A large freshwater lake extending from the Cataract Gorge and the St Leonards weir in the south, to the barrage located at the Rowella/Long Reach area in the north, with a permanent water level near current high tide, and water clarity with a visual depth of up to 2 metres.

Current Members

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<tr>
<th>Ross Ambrose</th>
<th>Scott Anthony</th>
<th>Charles Booth</th>
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• Large private yachts and power boats visiting the Tamar from interstate and overseas during the tourist season and berthing at a new marina at Kings Wharf.

• Large 100 to 200 passenger tourist boats on day excursions from Launceston to Low Head with stops at waterfront access vineyards, and resorts, with no navigational time restrictions.

• In the longer term, the sale of up to 10% of the wasted freshwater flowing from the Tamar catchments out to Bass Strait. Tamar Lake studies have shown that a water volume equivalent to the production capacity of the Wonthaggi desalination plant could be delivered by new technology undersea pipeline to Wonthaggi at a delivery cost of $100 per ML.

For the area north of the barrage which includes George Town, Bell Bay, Beauty Point etc.:

• A Large Cruise Liner Mooring Facility

  The Tamar Estuary and George Town becoming a must do stop for cruise liners visiting Tasmania, with the larger vessels (2000 to 3000 passengers) moored in the sheltered waters between Kelso and Lagoon Bay, Low Head, (see Figures 1 & 2) and the smaller (300 to 500 passengers) luxury liners (Silversea etc.) berthing at Inspection Head wharf.

Figure 1 - Navigation Chart - Port Dalrymple area
The mooring facility and navigation depth is very similar to the current mooring facility at Port Arthur that is visited by many large cruise vessels each tourist season. This would be possible because the large reduction in tidal prism between the barrage and the estuary entrance would reduce the peak tidal currents past George Town from 1.7 m/s (6.12 km/hour) to a more manageable 0.3 m/sec (1.08 km/hour).

Figure 2 - Pacific Dawn - 2000 passengers - (250m long, draft 8.2m) – shown to scale - moored at Low Head – depth of mooring 27 metres

Figure 3 - Silver Shadow at Inspection Head Wharf - 382 passengers - (186m long, draft 6m) - shown to scale - depth of mooring 9 metres
Shore excursions could include:

- A history and sightseeing tour to Launceston and surrounding areas by bus or tour boat
- A round of golf at Barnbougle and/or Lost Farm golf courses
- Full day Tamar Valley wine tour
- ½ day history tour of George Town, and Low Head including Maritime Museum and Penguin Rookery
- ½ day tour of Beaconsfield Mine Museum, and Platypus and Sea Horse exhibits.

Greatly increased freight loadings through the Bell Bay Port. According to TasPort’s Bell Bay Port Information there are currently time limitations for cargo vessels wishing to berth at and depart from Bell Bay wharves. **Entry:** Vessels over 140m in length must enter on a flood tide only, with the earliest entry at low water at Low Head up to 30 minutes before high tide at Low Head. **Departure:** From 1 hour before to 1 hour after high water or low water, depending on draught and tide. This has yet to be confirmed by TasPorts, but because these limitations are all tidal flow rate dependent, it seems likely that in a Tamar Lake environment that these limitations would be removed because the reduction in the peak tidal flows from 1.7m/s to 0.3m/sec.

Greatly increased production in the Bell Bay industrial zone. Bell Bay once more a thriving industrial zone and port with a wide range of additional manufacturing and freshwater dependent industries.

Bell Bay with a large ship lift and ship repair and maintenance facility

George Town with full employment and a rapidly expanding population stimulated by new industry and tourism businesses
For the area between the barrage at Rowella and Freshwater Point/Dilston:

- Greatly expanded agricultural development on both sides of the Tamar Valley. The Tamar Valley becoming a major wine and fruit growing area with 99% irrigation certainty.

- The Tamar Lake becoming a major centre for freshwater aquaculture and recreational fishing.

- A cycling and walking track near the water’s edge around the periphery of the whole lake and across the barrage at Long Reach

- Improved aesthetic presentation and amenity access to the lake waters with the elimination of rice grass terraces along the banks between Rosevears/Dilston and the Batman Bridge on both sides of the lake. In a freshwater Tamar Lake environment, the rice grass is expected to die off and decay, allowing the re-colonisation of native species.

For the area between Freshwater Point/Dilston and the Cataract Gorge in Launceston

- A “clean, green” silt and pollution free Tamar that enhances the clean, green image of the State

- Water quality in zone 1 improved from current D to B+ quality.

Figure 7 - Rice Grass infestations in the Tamar
A very wide range of white water, swimming, and aquatic sports 365 days per year at multiple locations on the lake, including the Yacht Basin, Home Reach and the Launceston surrounds. These sports could include:

- State, National and International rowing events on the Home Reach 2000 metre course without having to worry about tides and water quality.
- A rejuvenated Tamar Yacht Club conducting sailing training in cadet dinghies in the Yacht Basin, and sailing races from the clubhouse down to the Barrage and back
- Other sports that are currently run on Lake Trevallyn could be run on the more convenient Tamar Lake at Home Reach

10 to 20 cumecs flowing continuously down the Cataract Gorge to enhance the tourist potential. With the possibility of reviewing the agreement between Hydro Tasmania and the Launceston Council of maintaining Lake Trevallyn water levels at a minimum 1.5 metres from the crest of the dam to ensure adequate levels for recreational purposes, water flows through the Trevallyn power station could be maintained at current levels to generate the same annual power generation as at present. This would have to be agreed by Hydro.

The TasWater Launceston Sewage Improvement Plan (LSIP) fully implemented with EPA standard tertiary treated discharges into a freshwater lake environment at Ti Tree Bend, and the number and effect of treatment plant overflows greatly reduced.

A continual Water Quality Improvement Plan (WQIP) program run by the NRM North TEER group to improve the water quality flowing into the Tamar from its catchments.

Robin Frith

20th May, 2017