

Inquiry Secretary, Ms Natasha Exel,

Legislative Council Select Committee, Tasmanian Irrigation.

[tir@parliament.tas.gov.au](mailto:tir@parliament.tas.gov.au)

**Submission to the Legislative Council Select Committee inquiring into the future management of Water Rights and associated assets that are currently administered by Tasmanian Irrigation Pty Ltd.**

Submission by Astrid Ketelaar & David Armstrong, AK Consultants Pty Ltd. 14<sup>th</sup> December 2017

Note; it would be appreciated if we could attend the hearings and speak to the submission.

**Background.** AK Consultants (AKC) is a private company offering consulting services to agricultural businesses, rural landowners, the State Government and Local Governments on matters pertaining to farming, land and water management and rural planning. AKC has operated since 1987 and has considerable experience in agriculture and water management. An important component is the preparation and submission of applications to build irrigation dams (Dam Assessment Reports and Water Allocation Assessment Reports), and assisting farmers with assessing the feasibility of irrigation developments.

In the early years of operation of Tasmanian Irrigation Pty Ltd (TI) AKC provided services to TI (in association with other consultants) in the areas of mapping potential irrigation districts, feasibility studies and Farm Water Access Plans.

In our opinion the concept of the Irrigation Schemes has been very effective and TI has achieved some very good outcomes and deserves recognition. It is, however, appropriate to review the operations now that the construction phase is nearly over.

There are some issues about which we would like to comment.

#### **1. Local management of irrigation schemes**

We note recent discussion in the media on the issue of local management of the TI schemes.

There are many examples of effective local management in Tasmania; Elizabeth Macquarie Irrigation Trust (EMIT), Blackman Dam, Macquarie Settlement Irrigation Partnership, Cressy Longford Irrigation Scheme, and the Winnaleah Irrigation Scheme, just to name a few.

AKC was closely involved with establishing operating procedures for the Cressy Longford Irrigation Scheme and the Winnaleah Irrigation Scheme Boards when they took over responsibility for managing those schemes around 2000/01. At that time, it was Government policy to encourage the local management of the three Government owned schemes in the State (Cressy, Winnaleah and Coal Valley).

We have not seen any evidence that local management of the Cressy and Winnaleah Schemes is anything other than effective and efficient, delivering water to irrigators at minimum cost, while also maintaining the capital assets. We see no reason why that model should not be applied to the TI Schemes. That would clearly save money and result in lower costs to the irrigators. However, the transition should only occur for those schemes / catchments where there is consensus amongst the irrigators that a local management board is preferred. We are aware of some schemes / catchments where there is a high degree of animosity and mistrust amongst the irrigators and local management is viewed as less preferred due to the underlying tensions. Under these circumstances significant input into developing working relationships would be required for local management to be effective.

In the above examples we are referring to the management of the Schemes and the infrastructure relating to the Schemes. Following on from this there is also scope for local management of stream flows to reduce the risks of restrictions and assist with flood mitigation.

In the summer of 2016/17 the irrigators along the Ringarooma River worked with the University of Tasmania and DPIPW to manage their irrigation takes while ensuring flows in the river were sufficient to protect the aquatic environment. Local management was considered to be very successful despite the relatively dry season (AK Consultants, January 2017, *Economic Impact of the Adaptive Management activities of the Ringarooma Water Users Group for the Irrigation Season 2015/16*, report for the University of Tasmania, Sense -T project). In our opinion, this example demonstrates that a local management group has the capacity to manage environmental risks more effectively and efficiently than a Government agency.

Management of TI and other irrigation allocations within a region could be combined and managed by a local committee – at present all TI water transfers sit outside the integrated management of stream flows and it is difficult to integrate irrigation releases and transfers with requirements for restrictions when stream flows are low. Management at the local level of all releases and abstractions would lead to better outcomes for the water users and the environment.

This came through as a very strong message from the recommendations of the AK Consultants report for the DPIPW, December 2012, *Compliance and Enforcement Systems in Water Resource Management Project – Stakeholders Analysis Final report*:

‘Most irrigators were aware that there is an impending changing market place with the introduction of the Tasmania Irrigation Schemes and there is a degree of concern in regard to the different operating environment and the potential for an increased focus on regulatory requirements with an increase in irrigation activity. While there was a degree of complacency due to the relatively wet seasons recently and little intervention on the ground in most catchments, compliance issues were thought likely to become a higher priority for stakeholders if the operating environment changed or the resource was under pressure.

There appeared to be a general disconnect between what is being imposed at a policy level and what is practical on the ground. Irrigation water resources were highly variable in the State and the attempt through the water licencing system for generic implementation appeared to be undermining the policy objectives. This has not gone un-noticed by the stakeholders and was possibly the main driver behind the strong message being put forward for self-regulation at the local level as it was thought that the local stakeholders understood better the local complexities and could provide tailored solutions to the complex issues. Voluntary compliance was seen to be the desired outcome at all levels and was thought to be much easier to achieve by the irrigators themselves through greater local control.’

Hence in our opinion there is scope for local management of TI Schemes through a board whose members have an interest in the operation of the Scheme and local management of stream flows through the irrigation community at the catchment level. It is important to maintain clear distinction between these two groups of local stakeholders; we are not proposing that the burden of the Scheme infrastructure and management costs should be shared amongst the entire irrigation community.

## **2. Water Access plans**

AKC was one of only a few consulting companies initially accredited by TI (previously TIDB) to provide Water Access Plans (WAPs). Despite extensive input by AK Consultants we failed to influence the development of the WAPs to achieve an end product that we consider could be delivered efficiently, at a reasonable price while effectively addressing environmental risks at the farm level. We were, (and still are) very concerned about the nature of these plans, which we assessed to be unnecessarily complex. A further issue was that we considered TI sought to shift responsibility for any environmental problems resulting from on-farm irrigation developments, from themselves to the consultants, particularly in relation to the risks of salinity in the Midlands. As a result, we only delivered a small number of plans for TI, and that was only when TI desperately needed plans completed urgently. We subsequently advised TI that AKC did not wish to be listed as an accredited provider of Water Access Plans.

We understand it was a requirement of the Commonwealth funding that TI assess the on-farm environmental risks associated with irrigation. In our opinion, however, there are deficiencies in the system which detract from their efficacy and add to costs:

**Structure and content.** In the early years the plans were long (30+ pages), containing mostly text and maps. We believe the WAPs could be simplified using a model like that used for Dam Assessments. In principle Dam Assessment Reports (DARs) are designed to address the engineering and environmental risks associated with an irrigation dam. Detailed assessment and reporting, commensurate with the level of risk, is only required if the preliminary assessment indicates that there is a risk. We believe a similar process could be applied to the Water Access Plans.

**Land to which the WAP applies.** Water Access Plans are only required for land which will be irrigated with water supplied by TI; similar plans are not required where the irrigation water is from other sources. We are aware of situations where some water for a particular area is sourced from TI, and some from other sources. If a problem were to arise, we assume TI could then stop the use of TI water on that area, but have no authority over the use of other water on the same area? The approach is inconsistent with whole Farm Planning and does not promote sustainable management practices.

It could be argued that in those circumstances that TI should have authority over all the water used on such an area. In our opinion that could only be justified if it can be shown that such a high level of State control is necessary to manage the risks. We do not believe that to be the case in Tasmania.

In early November this year AKC was contacted by a client on the South Esk River seeking to purchase water from TI for irrigation; he needed the water urgently. TI advised him that although water was available, he would need a Water Access Plan assessing the risks to the land he wished to irrigate, and that would take a month to prepare and consider. This was obviously not appropriate

for his circumstance, and he quickly arranged to buy water from another source upstream – his requirement for water was met very quickly and he avoided the bureaucratic delay.

Most irrigators do have water sources in addition to TI supplies. If the TI WAP indicates an environmental concern, there is nothing to stop the landholder using other water on the area. Not only that, on many farms it will be difficult, and often impossible, to verify which water source was used to irrigate a particular area (after the irrigation events).

**Red Tape.** The WAPs are generally accepted by purchasers of TI water as a component of “Red Tape” associated with purchasing a TI water right. There seems to be little, if any, engagement with landholders to encourage them to consider the environmental risks, and little value to the farmers in general.

**Are WAPs necessary?** In our opinion the risks from irrigation are mostly low. Irrigation has been extensively conducted in Tasmania for many years, with very limited environmental impacts. The most significant risk is salinity, and there are examples where natural salinity (or salinity developing under dryland agriculture) has been exacerbated by irrigation (Cressy, Ouse, Coal River Valley). But even in these areas, salinity is being managed without the need for WAPs.

Other regulatory mechanisms such as the Forest Practices system manage the biodiversity risks, where there is clearing for new irrigation developments.

It is appropriate for there to be a review of the WAP process, considering questions such as:

- What have WAPs cost?
- What have been the benefits? What risks have been identified? Has irrigation of areas of land been precluded or avoided due to the risk assessments?
- What monitoring is undertaken to manage the identified risks identified by the WAPs
- Has adherence to the plans been audited? What have the audits revealed?

### **3. Competition with private developments**

There has been an assumption that development of water storages by TI is preferable to development by individual farmers, and this has manifested in TI claiming a priority over stream flows, downstream markets and frustrating private developments. By way of example, we are aware of a proposal by a private landowner to develop a large storage on a tributary of the South Esk, at the same time as TI was investigating the feasibility of the Milford Dam at Conara. The landowner tried to negotiate with TI, but found the competitive approach (funded by Government money) too fraught with risks to continue, and he abandoned the project, despite the private scheme potentially being more cost effective than the Milford Scheme.

We are aware of, and understand TI's need to get TI Schemes over the line, through pre-sale of water. There is a perceived pressure that the TI supply is an opportunity to access water that will probably never again be available. We have seen where this has resulted in irrigators signing up for TI water which could have been sourced more cost effectively through alternative means, for example developing on-farm storage.

Once the scheme is commissioned the farmers are then precluded from developing these alternative sources. A more effective process would have been to fund investigations into the best water resource options for each farmer first (e.g. facilitated through the Farm Water Development Plans which were funded in 2007/08) and then undertake a comparative analysis of the benefits of a scheme. Assessing the options in situations like these requires detailed analysis at the farm scale; we believe such analyses should be supported by government (and TI) when the initial planning for schemes is being undertaken.

Looking to the future, we consider Schemes should only be constructed in areas where there is no capacity for private interests to develop cost effective means of developing water resources. In areas where there is private interest (either individually or collaboratively) the preference should be to support and assist the private sector to evaluate the potential for development, rather than hindering or excluding their interest.

#### **4. Restricting Water Access**

TI offer summer water (and in some cases winter water) at 95% reliability. To be able to offer this level of reliability in many cases TI secure larger allocations at lower reliabilities and store the water. Once TI have secured their allocations, there is little (if any) remaining Surety 5 (S5) and Surety 6 (S6) water to be allocated from stream flows for on-farm storage by other farmers.

##### **Meander catchment**

An example is the Meander catchment (which is a Hydro catchment) where the only water now available is Surety 8 (S8) flood take water (available during declared flood take periods). All S5 & S6 water that was not allocated prior to TI involvement, is now allocated to the TI schemes (confirmed by email from the Department (19/09/2011 and 17/07/2014). Even though the yield tool may show water is available at S5 and S6 at the proposed offtake, only S8 water be made available.

In Hydro catchments, Hydro Tasmania needs to approve the transfer of any new allocation. If the applicant is within a Scheme area, Hydro's current position is to not approve the transfer and to direct the applicant to TI to seek water from them.

If there is TI water available our understanding is that the applicant will not be granted an allocation.

If the TI water is not suitable (eg summer water when the applicant is seeking winter water) or not available (eg Scheme is fully subscribed), then only S8 will be made available.

If the applicant is outside a Scheme area, only S8 will be made available.

##### **Swan Valley Scheme**

Another example is the Swan River catchment, where TI offers 2000ML summer water at 95% reliability, however, their allocations from the Swan River are comprised of 3000ML at Surety 5 and an additional 1000ML at Surety 7. These allocations, the daily take limits and the conditions under which they can be taken are designed around protecting the environment and the rights of other users, however, they also restrict further private water development in the catchment, due to the imposition of take thresholds to protect the flows for TI abstraction.

We question whether TI has gone too far to protect the 95% reliability it has committed to their customers. There are circumstances, such as the Swan Scheme area and Meander Catchment where the allocations to TI should be reviewed to ensure prospects for further private development have not been unreasonably compromised.

#### **5. Water pricing**

In our opinion the capital and annual costs of water from TI are high, when compared with farmers' own dams and direct takes, even after allowing for differences in reliability. Of course, this is not always the case, but we have conducted quite a few financial comparisons and higher costs for TI water are not uncommon. This is not to say the TI costs are unjustified, rather that it is appropriate to review the annual costs that TI charge to irrigators, and determine whether there is opportunity for the TI's annual costs to be reduced; perhaps via local management.

#### **6. Access to Water Right details.**

Information about licenced Water is publicly available, and we use that information when giving advice to farmers on issues such as property purchase proposals, real estate agents when describing water resources on a property that is for sale, and for property development proposals. Similarly, details of farm dams is publicly available.

Information about water allocations provided by TI and other Schemes is not publicly available.

We see no reason why the volumes and flows of water provided to irrigators should not be publicly available in the same way as licenced water.

#### **7. Public access to reports.**

We are aware of reports that have been commissioned as part of Scheme feasibility assessments. Whilst in most cases these reports have been made available after persistent requests, in one case the reports have been withheld due to a perceived conflict between an irrigator (our client) and the Department. We believe feasibility studies commissioned using public funds should be easily accessible via TI's website.