# TASMANIAN FARMERS AND GRAZIERS ASSOCIATION

## **SUBMISSION**

## TO

# HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

# INQUIRY INTO FUTURE WATER SUPPLIES FOR AUSTRALIA'S RURAL INDUSTRIES AND COMMUNITIES

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#### **INTRODUCTION**

The Tasmanian Farmers and Graziers Association (TFGA) is the peak representative body for the farm sector in Tasmania. Membership totals some 5 000 enterprises and members come from all regions within the State, including the Bass Strait Islands. Member enterprises operate within a range of major commodity sub sectors including meat, wool, vegetables, seeds and grains, poppies and commercial wood production

The Tasmanian farm sector has a clear interest in Commonwealth Government policy on the management of water resources in rural and regional areas. That interest reflects a concern that such policy should be such as will encourage and support development in the sector to its full potential. It also reflects a concern that Tasmanian farmers are not adversely affected by policy measures which, while appropriate in mainland Australia, are inappropriate in Tasmania.

The TFGA welcomes the House of Representatives Standing Committee on Agriculture, Fisheries and Forestry "*Inquiry into future water supplies for Australia's rural industries and communities*" as a worthwhile and timely initiative. The current drought in many parts of the mainland graphically highlights the fact that water is a very limiting resource in much of the country, and that Australia needs to look carefully at how it can manage and use that resource to best effect. Periodic inquiries of this sort have to be an excellent way for Government, and parliamentarians in general, to stay abreast of developments in regional Australia in terms of water usage and needs and in terms of prospects and opportunities.

Tasmanian farmers rely on water for three principal reasons: domestic needs, stock needs and irrigation needs. Domestic needs are in general met from a mixture of rainwater tanks and dam water. Usage is typically not great in relation to available supply. Stock watering is met from direct access to water courses and, directly or indirectly, from dams. While access to water when it is needed is of course critically important for stock management purposes, here again usage is typically not great in relation to available supply.

Irrigation, both actual and potential, is by far the greatest element of water usage on many in irrigation areas. This submission will focus on irrigation issues.

In this submission the TFGA has attempted to provide the Standing Committee with an overview of key issues with regard to water in the context of the Tasmanian farm sector. We look forward to elaborating on these in more detail in the hearing which the Standing Committee will be holding in Tasmania, on Tuesday 19<sup>th</sup> November, at Longford.

#### THE TASMANIAN FARM SECTOR

Perhaps the most striking feature of the Tasmanian farm sector, by comparison with regions of similar size elsewhere in Australia, is the variety of farming enterprises in the State. The range includes meat (both cattle and sheep), wool, grains and seeds, dairy, vegetables, poppies and pyrethrum. In addition, although not represented by the TFGA, it includes orchardists, vineyards, berry fruit growers, hop growers, flower producers, deer farmers, and a wide range of minor product producers. Finally, there is a very active farm forestry sub sector, which produces wood on a commercial basis from both managed native forests and plantations.

Nor is this variety skewed to one or two dominant types, with the others playing a minor role. Meat, wool, grains and seeds, dairy, vegetables and private forestry sub sectors are all substantial commodities in their own rights, as are vineyards and orchards.

The variety of enterprise types is a reflection of several factors, chief among which is the variety of climatic and soil types in the State. Climate, both temperature and rainfall, can change dramatically over very short distances as a result of altitude and topography. Soil type can change even more dramatically and over very short distances as a result of changes in underlying geology.

Total farm gate value of agricultural products in Tasmania is some \$750 000 000 per year, without including the value of wood produced by the farm forestry sub sector. Within this total, the meat sub sector contributes some \$160 000 000, vegetables some \$135 000 000, wool some \$85 000 000 and dairy some \$150 000 000. The value of production, after further processing has taken place in the State, would be perhaps four times this amount, or in the vicinity of \$2 - 3 billion per year.

While a certain amount of production is consumed within Tasmania, much of it is sold into interstate markets and a very significant proportion, in some commodities up to 100%, is sold internationally. Outstanding examples of exports are fine wools, which have received world record prices from international buyers at auction in Launceston; dairy product which is sold into East Asian markets; and poppies, which are sold internationally for the manufacture of medical drugs.

The nature of both products and markets means that Tasmanian farmers are in general price takers, and that their competitiveness is heavily dependent on their ability to control unit costs. This is the case for product which is sold into Australian markets as much as for that sold internationally, given the absence of tariff protection in Australia. The health of the sector in the circumstances is testimony to the ability of Tasmanian farmers to compete on their own merits and without Government assistance. The adaptation of the dairy sub sector to recent national industry deregulation is a striking illustration of this fact.

#### **IRRIGATION AND THE FARM SECTOR**

The single most important limitation to the capacity of Tasmanian farmers to increase the productivity of their land is a lack of access to water. In the final analysis low temperatures set the limits for plant and animal growth, but there is essentially nothing that can be done, in a practical sense, to change that. Other factors, such as nutrient supply, weed control, etc are in general well within the capacity of farmers to control as necessary. Capital needs are demonstrably available, as is evidenced by the ongoing level of investment in all sub sectors of the industry. Necessary management skills are also available. In fact Tasmanian farm management skills are highly regarded worldwide in a number of commodity areas.

All sub sectors currently irrigate to some extent or other with the exception of the fine wool producers, although even there forage crops and pasture are often produced for stock under some degree of irrigation. In most sub sectors irrigation is essential and is the rule.

It is useful to note here the two fundamentally important benefits that irrigation gives the farmer. The first is the self evident fact that irrigation delivers more water to land than would be received by rainfall alone. In drier parts of Tasmania, such as the midlands, the benefits are immediately visible in the lusher growth under pivot irrigators than in surrounding, unirrigated land. Less evident, but equally important, is the better pasture growth under irrigation in the naturally wetter dairy districts of north eastern and north western Tasmania.

The second benefit is the removal of the risks associated with dry weather, which accompany reliance on rainfall alone. This benefit translates into a greater certainty of cash flow for farmers, given more predictable crop success. It also allows, in many cases, farmers to capitalise to a greater extent on the warm but dry growing weather of summer, by planting and harvesting two crops from the hectare, rather than one.

These benefits of irrigation can be summarised as follows:

- it offers farmers in drier parts of the State a wider suite of crop options to select from;
- it gives farmers the opportunity to diversify the "portfolio" of crops that they can grow at any one time;
- it allows fuller use of the warm but dry growing months of late spring, summer and early autumn;
- it can allow more than one crop to be grown on the same hectare in any one year.

There is no doubt that the farm management skills and capital, which would be needed for farmers to capitalise on an increase in irrigation water supplies, are available.

Without doubt, if all available water could be harvested and used for irrigation in Tasmania, the State would see a substantial increase in the farm gate value of farm production.

#### **TFGA POSITION ON WATER FOR IRRIGATION**

Irrigation offers one of the best opportunities for increasing sustainable land productivity in Tasmanian farming.

Accordingly, the TFGA believes that, as a general rule, water in farming districts should be made available for irrigation purposes to the maximum sustainable extent, after provision is made for domestic and stock watering purposes and for the protection of fresh water ecosystem values as reasonable.

Where water in such districts is also used for industrial purposes, including the generation of hydro-electric power, and comparable and less limited natural resources, such as wind and natural gas, are available to replace water for those purposes, such industries should aim to reduce their reliance on water and increase use of those alternatives.

Having said this, the TFGA also believes that it is incumbent on farmers to continually be seeking to improve the efficiency of their use of water, and to apply the water they use to add as much value as possible to their land. In general the free market environment in which Australian farmers operate, will motivate individual farmers towards both of these goals.

In establishing what constitutes a reasonable level of protection for fresh water ecosystem values, Government needs to distinguish between necessary and luxury levels of flow in watercourses

#### **IMPORTANT ISSUES AND POSITIONS**

#### Water is a limited resource

It goes without saying that while water is a renewable resource it is also a limited resource. Where demand is well short of supply this is not a problem for users, but where this not the case users and regulators need to be equally concerned as to the best way to manage water use to best overall effect.

The situation with regard to water availability for irrigation varies, in catchments where irrigation occurs or could occur. In some such catchments there is ample water for foreseeable irrigation needs. In others most if not all water has been committed to the maintenance of environmental values and to other uses (including current irrigation programs) and there is real doubt over ability to supply additional irrigation needs. There is a difference in the urgency with which a management response is needed in these situations but not in the need for response as such.

The TFGA believes that there is a need for systematic management of the water resource in all catchments from which irrigators do, or in future may, draw water, and that irrigators must be closely involved in the development of the management systems which are put in place to this end.

#### Comprehensive management of the water resource is essential

Management of the water resource in irrigation catchments must include consideration of all elements of water harvest, storage and use. These range from the mix of vegetation types which are maintained in catchments, to decisions on flows and flow patterns necessary to protect identified ecosystem values, to issues relating to storage, to patterns of use (for irrigation and other uses).

The TFGA believes that catchment water management plans should include consideration of all elements of water collection, storage and use.

### Development of new techniques must continue for water harvesting, storage and use

Over time the techniques used to harvest, store and use water, in all fields of use, have changed to allow for more efficient and effective outcomes. Drilling, pumping and storage techniques have changed dramatically. Irrigation systems, from cultivation patterns, to water reticulation systems, to drop size management and to plant management, have taken irrigation to the status of a science in itself.

There is no reason to doubt that further efficiency gains are achievable, and that those gains are possible at acceptable cost. It comes down to undertaking the research and development necessary in a systematic and focused way. There is a clear case for the use of community as well as industry funds to this end, given that the community benefits from the results.

The TFGA believes that there needs to be an increase in the research and development effort being put into technology relating to the harvesting, storage and use of water for irrigation, that this needs to be done in very close association with irrigators, and that Government has an important role to play in the funding of this program.

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### Irrigation and related agronomic and husbandry skills must be taught

The best technology in the world is of limited value if it is applied by operators who have not been trained properly in its use. Proper training in up to date techniques, and provision for those skills to be further upgraded as new developments come along, is essential if farmers are to capitalise effectively on research and development outcomes.

Appropriate training systems will vary with the nature of the subject matter to be imparted and the nature of the recipients. Vocationally oriented training systems in Tasmania are appropriately addressed through Rural Industries Training and Education (previously the Rural Industries Training Advisory Board), a body which has the respect and trust of the farming community in general. At a graduate training level the University of Tasmania would be an appropriate manager. Seminars and field days would be an invaluable addition to both approaches.

The TFGA believes that an active and focussed training program is essential if farmers are to maximise their opportunities to make efficiency gains and that appropriate training management entities are available in Rural Industries Training and Education and the University of Tasmania.

#### Environmental flows are one use among many

Regardless of the demands which are made on the water resources of a catchment by industry, provision must be made in any water management plan for the maintenance of adequate "environmental flows" in watercourses. The situation at the mouth of the Murray River cannot be allowed to develop in Tasmanian rivers.

The useful concept of "environmental flow" has been developed by planners to address this need, although there remains a very considerable fuzziness to this concept which is reflected in the difficulty we have in defining what it is exactly, in the circumstances of specific watercourses.

On the other hand, it is very important that the concept of "environmental flow" is kept in perspective. As with environmental values on dry land, such as those relating to native vegetation, we cannot allow the maintenance of all water values to be given the status of absolute priorities in all circumstances. Thinking on the issue needs to accommodate an element of compromise in the same way that industrial uses of water need to do so. It is appropriate to regard the environmental needs of fresh water bodies, as simply one use (albeit an important one), to be considered in the balance with other potential uses.

The TFGA believes that the concept of "environmental flow" is a useful concept in the context of water management planning but that it should be regarded as one use among others, and as a use which does not necessarily attract any absolute priority status over others.

#### Improved storage is fundamentally important

Given the fact that water is a limited resource, and in the interests of using available supplies to best effect, it is essential that in irrigation catchments an absolute minimum of water is allowed to "run to waste".

The only effective way to do this by an adequate system of water storage and release. The logical form of storage is by a system of dams. The most appropriate system of dams in any particular catchment will be dictated by watercourse patterns and topography, and by the location of irrigation areas within the catchment. Farm dams and farmer owned dams should be a central element in any storage system.

Techniques for the construction and management of dams in Tasmania are based on long experience in the State, experience elsewhere in Australia and experience elsewhere in the world. On the other hand there is no doubt that we can learn more in relation to the management of dams, for example in the area of evaporation control.

An important issue with regard to developing good systems of water storage is the availability of the necessary capital.

The TFGA believes that integrated water storage systems in irrigation catchments are fundamentally important if Tasmanian agriculture is to reach its potential in terms of productivity. Such systems will call for cooperative effort between farmers and Government, particularly in relation to issues of off-site dams and capital availability.

#### The need for storage applies to all water users

The need for effective water storage systems in irrigation catchments does not simply apply to irrigation water. It applies equally to all water uses including town water supplies, other domestic water needs, industrial water needs and stock water needs. It also applies to developing sectors, such as aquaculture and shellfish farming, both fresh water and estuary based. Nor are environmental water needs excluded.

All water uses depend for their success on appropriate volumes of water being available when needed. Managed storage and release is as necessary and appropriate for oyster farming, for example, and for the maintenance of environmental values as it is for irrigation, where supply is limited.

All water users need to accept that un-managed water supplies are a luxury where demand exceeds supply.

The TFGA believes that it is incumbent on all water users in irrigation catchments to contribute to the costs and effort of creating, maintaining and using water storage in those catchments.

#### Water property rights

Farmers will not, and cannot, reasonably be expected to commit the necessary resources to maximising the benefits of irrigation, if they cannot be assured of their rights to the water on which that investment is predicated

The most effective way to provide this assurance is by the allocation of a property right to irrigators for the water which they are allocated. Such a property right will give them confidence that their allocation will be given full recognition if and as priorities have to be decided in times of drought. It also means that they can count on getting the entitlement over a period which will allow them to re-coupe financial investment. Finally, it means that if priorities are reviewed and regulators seek to reduce entitlements they will be entitled to fair compensation.

Property rights of this kind are not way unusual in the primary industry context. Examples include property rights to land itself, and to things like access and utility easements. In all of these cases infringement of the right attracts, at the very least, fair compensation.

The TFGA believes that a rigorous system of property rights must be developed in relation to water allocations, and that these rights should be given the same status in law as property rights to such things as land.

#### THE ROLE OF THE COMMONWEALTH

Clearly Government must play a central role in the regulation of water in irrigation catchments. Under Australia's Federal system of Government, State Governments play the most direct role in this regard. However the Commonwealth also has an important part to play.

Key contributions from the Commonwealth relate to:

- Research and Development, through funding contributions and other forms of encouragement;
- Training and skills development, through funding and other forms of support for training entities;
- Infrastructure development, through funding assistance;
- Environmental regulation, by ensuring that Commonwealth legislation, including the Environmental Protection and Biodiversity Conservation (EPBC) Act, work to support rather than hinder the refinement of concepts such as "environmental flow".
- Encouragement of the development of the comprehensive planning methodologies, including necessary data collection, which will be necessary if we are to see full benefit flow from water management.

#### **CONCLUSION**

The Tasmanian Farmers and Graziers Association believes that it is possible to secure far more benefit from irrigated agriculture in Tasmania than is being secured currently, without comprising fundamental environmental values and without breaching the principles of sustainability.

We have sought to present our views on the nature of the potential benefits of further irrigation and on important issues and actions which can be taken to bring those benefits to fruition.

The Commonwealth has an important role to play in relation to what needs to be done.

We trust the Standing Committee will give our views full consideration as it forms its own views on issues which relate to water in rural and regional Australia.