AUSTRALIAN FLOODPLAIN ASSOCIATION

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Submission to the: *Inquiry into the Impact on Rural Water Usage of Recent Policy Initiatives and the Possible role for Commonwealth Agencies*

THE DEVELOPMENT OF WATER PROPERTY TITLES:

The development of water property titles has greatly reduced the ability of Governments and government agencies to return much need water to over allocated rivers. It is well understood that river regulation and the granting of extraction licenses was undertaken with little or no regard of the impact on the environment or down stream communities. Licenses were also granted with an expectation that only a portion of them would ever be in use at any one time. This resulted in many river systems being over subscribed, or over allocated. Many of the sleeper licences have now been activated. There has also been considerable exploitation of policy loop holes for the management of water on floodplain. Users have been able to intercept these flows by capitalising on the poor definitions of river systems in Australia that mean much of the floodplain and its creeks and rivers are not defined as a river in terms of management and policy. This has seen an explosion in the number of floodplain structures, particularly off river storages and levee banks that all channel water so that it can be pumped from the river. There is relatively metering or costing of such water which is essential for downstream communities. And then the arrival of cotton in many Australian river valleys saw huge development of both land and water resources to grow this then very valuable crop.

The granting of water property rights has effectively shifted the wealth base of rivers. In the past, prior to large scale irrigation development, the wealth of a river system was spread along its length with all landholders benefiting as river flows and flood events passed down the system reviving floodplains and wetlands as it travelled. Now with large portions of flows and flood events being extracted for use at the top end of rivers the wealth that was previously spread evenly has been taken from down stream landholders (without compensation of any kind) and given to landholders at the top end of the system.

Many sections of the community have speaking out for some time about the over allocation of water sources and the detrimental impacts, both environmental and economic, this has been causing. They were also asking that there be a reduction in the allocation of water in systems.

However now with the granting of water property rights the only way in which extraction can be reduced is for governments to purchase licenses through trading market mechanisms, which will prove exorbitantly expensive.

Water gains through infrastructure efficiency works are not available or appropriate on every river system. Also any gains made by such projects are not always cost effective.

The current levels of extraction are both environmentally and economically unsustainable. Water property rights have severely limited options to restore vital flows to grossly over subscribed river systems.

METHODS OF PROTECTION FOR RIVERS AND AQUIFERS:

Methods available to Governments and the community to protect rivers and aquifers have been greatly reduced by the issuing of water property rights. Extractive users can now sue for compensation if their 'right' to water is in any way reduced or impeded. Unfortunately no such offers of generosity were made to landholders impacted by the issuing of extractive licenses. The water that many communities had and relied on for their livelihoods has been removed with abstractions upstream with no compensation.

The first element in providing protection is to determine the sustainable health needs of our water sources.

The methods then available to maintain those needs and ensure river and aquifer protection are:

- Embargo further development and water harvesting on those systems deemed over allocated or over used.
- Provide full protection to the few rivers that remain 'free flowing' rivers by totally excluding extractive development on those systems.
- Develop a water fund to purchase extractive licenses. Governments (both State and Federal) can and should be in the market place as active buyers of water licenses, as many individuals and businesses are now doing. These purchased entitlements can then be dedicated to river and aquifer health, particularly in those areas where riverine vegetation is stressed and dying.
- State Governments can also be encouraged to abolish supplementary licenses (as they are called in NSW, and known by other terms in other states, water harvesting in Queensland). These extractive licenses are given as bonuses and impact heavily on downstream landholders and eco-systems. In Queensland, until relatively recently such water had no charge, encouraging users to develop new ways of accessing the water without any assessment of downstream impacts. In many river systems these licenses allow for the extraction of quite large volumes of water and reduce flooding significantly. The abolition of these would provide both economic and environmental benefits.
- Government funding can also be used to implement water use efficiency on those systems where it is cost effective to do so.
- When assessing extraction limits Governments must consider the huge flow variability in Australian rivers. Using averages can be very dangerous and give unrealistic results and/or expectations. For example for rivers that have very large flood events ever so often and then revert back to reasonably low flows, the average could in fact be the entire flow for considerable lengths of the time. Therefore the environment and downstream landholders receive little or no flows causing much hardship.

FARMING INOVATIONS:

Negative

In some States a water harvesting method or innovation has been developed known as 'bunding'. This is an innovation that has horrific impacts again on both downstream landholders and the environment. Large banks are erected across floodplains with the sole purpose of capturing and diverting water to on farm storages for use in irrigation. There is virtually no credible assessment of the likely impacts of such developments on floodplains and downstream communities or the amount of water that they extract.

In some instances individuals can gather more water with bunding works than their actual licenses entitlement allows them to extract. This type of water harvesting is devastating for riverine environments and grossly unfair for downstream communities. This is one practice that needs to be outlawed very quickly.

Positive

As indicated above governments could fund infrastructure efficiency works to ensure water losses are kept to a minimum and water gained through such programs could be dedicated to environmental outcomes.

MONITORING DROUGHT AND PREDICTING FARM WATER DEMAND:

When considering the impacts of drought on water needs and impacts to farmers it must be remembered that regulating rivers with large storage dams in their headwaters actually prolongs and exacerbates drought conditions, particularly in the downstream areas. Many rivers could survive through drought periods but these have become much more intense. This becomes very evident if you look at dam inflows for a 'drought' period and compare these to end of system flow figures.

When developing water sharing arrangements these type of impacts must also be considered with rules that better protect both the environment and downstream communities in times of drought.

THE IMPLICATIONS FOR AGRICUTLURE OF PREDICTED CHANGES IN PATTERNS OF PRESIPITATION AND TEMPERATURE:

These could be very serious for both agriculture and the environment. The predicted consequences of 'climate change' must be considered when assessing the sharing of water resources. Contrary to past practices the needs of the environment and then the WHOLE community must be fully realised and provided for before extractive limits are set. At present it seems that the amount of licensed water is set aside and then the rest is divided up between everyone else.

CONCLUSION:

The Australian Floodplain Association is very grateful for the opportunity to make comment on the impacts of rural water usage as this is having grave impacts on many of its members. There are fundamental flaws in water management in many states of Australia and these need to be addressed urgently.

In brief these are:

- Many of our river and groundwater systems are grossly over allocated and over used.
- On most river systems the large irrigation developments are set up on the top end of the river with disastrous results for the bottom end.
- The granting of water property rights reduces options to regain water for riverine health. The only real method available is to buy back licenses and dedicate them to river and aquifer health. This will cost vast amounts of money.
- There are water extraction methods that are grossly unfair and unsustainable, namely 'bunding' and such practices should be prohibited.
- Sustainable yields need to be identified for all rivers and aquifers with processes put in place to ensure those that are over committed are brought back to sustainable immediately.
- The rights and needs of downstream communities and ecosystems must be more seriously considered when determining sustainable extractive limits for rivers systems.

Should you have any questions on the information in this submission or require any further information, please contact Sue Jones (02 68242097)

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