Introduction

Water and its management is of fundamental importance to the Lockyer Valley for both urban uses and the broader regional needs. Like all urban parts of the State there is a need for effective water and sewage systems to service residential communities and commercial/industrial use. Further to those uses, and given the Region’s significant contribution to the agricultural industry, a secure, sustainable, efficient and cost effective water supply is essential for the ongoing success of the agricultural sector.

The Discussion Paper: *Shaping Our Water Future* raises a host of issues surrounding water security, sustainability, efficient pricing/demand management, governance and related issues such as flood mitigation and artesian water use. These issues are discussed below.

Significance to Lockyer Valley Region

The Lockyer Valley, long recognised as the South East Queensland “salad bowl”, has the potential to significantly increase agricultural production. This increased production would further service our national market share and also establish meaningful international markets. To become a reality that sectoral growth will require a secure and sustainable supply of water as an input to production.

The agricultural sector currently provides the regions largest contribution to Gross Regional Product ($166M and 14% of the total GRP). The sector also has more than 900 businesses operating in the region and employs 16% of the regional workforce. Key regional agricultural products are vegetables and fruit products which are more intensive and higher priced products than for example broad acre farming. The Lockyer Valley provides the State with 35% of its irrigated vegetables. Clearly, water security and access is critical to the regional agricultural sector and to the states food production.

Security of Supply

Water is fundamental to agricultural production. This is evidenced by the significantly reduced production during the millennium drought. ABS statistics indicate that in 2005/06 agricultural production was approximately 15% less than production in 2010/11 and 18% less than 2000/01. (Estimates from Industry leaders estimate significantly greater lost production). The region is blessed by its climate, soil types and location. However, consistency and security of water supply remains an issue as there remains the risk of climate fluctuation, especially through drought years that impact on production.

Approximately 80% of water used in the Lockyer’s regional agricultural production is sourced from ground water. Nevertheless, sustained drought impacts both surface and ground water in terms of quantity and quality. Drought conditions coupled with groundwater pumping have caused issues
in terms of limited aquifer recharge, groundwater storage depletion, rising salinity levels in some areas and failure or diminished capacity of bores. Council is seeking to protect the aquifers from incompatible uses such as mining and coal seam gas operations.

Council and other stakeholders are also looking to develop recycled water options from sewage treatment plants to assist with water security and continuity of supply in times of drought. This would build on the recycling initiatives implemented in the first stages of the Western Corridor Recycled Water Scheme. State Government support and the recognition of such approaches in the Water Strategy would be welcomed.

Agricultural production needs a secure water supply just as the market place for the products needs security of the supply of the agricultural product. Before the investment of capital in agricultural ventures, producers need to be able to ensure a revenue stream to service their investment. That revenue stream is dependent on certainty over the inputs to production - especially water. Otherwise the risk is too significant and capital will go elsewhere.

One issue evident in water related strategies in the past has been the view that agricultural uses of water can be utilised as a buffer against drought affecting urban/domestic supply. However, it needs to be recognised that if the agricultural industry is to prosper there will need to be increased certainty over water supply for that industry as well.

**Sustainability /Recycling/Climate Change**

The Lockyer is keen to maintain and enhance its reputation as a clean, green and sustainable community. While this is relevant for all industry in the region it is of special significance to agriculture. While issues such as bio-security are significant, maintaining a clean and sustainable water supply is clearly fundamental.

LVRC is supportive of the beneficial use of sewage as a strategy to mitigate the adverse environmental effects of releasing treated sewage to waterways and as a strategy to achieve sustainable water use. As indicated above Council is considering recycling of sewage water for industrial and agricultural uses. This clearly has a community, environmental and water security benefits. The water strategy needs to support and foster such projects.

There is ongoing debate about the extent of climate change and its causes. However, it is well understood that regardless of climate change there will be ongoing seasonal variability with respect to rainfall. The cyclical pattern of drought and flood is not going to change.

This emphasises the need for a more reliable and sustainable use of water as agricultural production increases and utilises more water in the face of increased evaporation. Site selection, crop management, cultivar selection along with the management of the water resource will all be required and needing state government leadership through the water strategy. While more efficient use and management of demand will assist it will be important for the state to identify and plan for alternate water supplies.

Attitudinal change to the use of recycling water will be required. Similarly water quality needs be fit for purpose. Industrial uses clearly demand less treatment. Depending on its specific use, there is also a range of water qualities required for agriculture. The key is fitness for purpose. The State’s Water Strategy can play a role in fostering attitudinal change and community acceptance of recycled water.
User Pays/ Best Use /Demand/Pricing

According to the Queensland Water Commission’s SEQ water strategy, rural producers in SEQ used about 150,000 megalitres of water in 2005. That document notes the need to both improve the reliability of water supply and to also price water appropriately. This is considered necessary to seek improvements in water efficiency. It is also considered that water should be provided to the most effective use of that resource.

Pricing is one tool to allocate finite resources and to reflect true costs. As noted in the discussion paper water efficiency is the target and pricing should be considered as a starting point for both water supply and the management of sewage disposal to reflect consumption and use. The State is also able to influence the allocation of water and the State needs to develop, in consultation with local government and other stakeholders, the appropriate criteria to allocate water effectively.

Both ground water and surface water needs to be allocated to the optimal user in terms of the value of the ultimate product and the industry itself. This allocation needs to reference the long term sustainability of both the water resource and the respective industry. For example an industry requiring high levels of water as an input but with a modest commercial benefit per unit of product (an example may be the rice industry) would need to demonstrate significant additional economic/community benefits to justify the inefficient use of that scarce resource.

As discussed below, under current governance arrangements, LVRC has little ability to influence the price of water. LVRC owns less than 1% of QUU and has no direct board representation. The QCA has previously noted that the bulk water price is the largest determinant of price for water. This in turn is reflected and influenced by the water distributor/retailers.

Pricing of water is complicated especially when effectively geographic monopoles are established. As a starting point, prices should ideally reflect the efficient cost of supply rather than what the market will bear. Governance arrangements and legislative frameworks need to be developed to best suit that target. Pricing of water should be able to change with the market (to allocate water more efficiently) but more certainty over pricing paths is also desirable. Industrial and agricultural users of water need more certainty over pricing in order to plan their investment decisions without factoring in significant price risks. It is considered that longer term indicative pricing paths are required to foster investment.

Water use and pricing is a complex area and full consultation with Councils should be undertaken prior to setting policy or proposing complex legislative changes. This would hopefully avoid the need to repeal legislation before it even commences.

Ownership /Governance/ QUU/Regulator

As indicated above Governance arrangements in the water sector are complex and not well understood. While historically local governments were directly involved in the establishment of water infrastructure and distribution of water they are now somewhat removed from this function. There are bulk water entities who provider, store and treat water. There are other entities who manage and operate pipelines to others involved in the distribution and retailing of water and sewage services. There are grid managers and price regulators etc. The role and interrelationships of these entities is not understood by the consumer who is simply seeking water and sewage services.
The intention to simplify business structures, create economies of scale, clarify respective roles and reduce the number of entities involved in the water sector has not yet been realised. Governments at all levels need to better communicate these roles to consumers and establish a stable environment for economic growth and commercial endeavour. LVRC recognises that governance arrangements need to be embedded in arrangements that facilitate efficient service delivery and resource use.

**Flood Mitigation**

The discussion paper does not discuss flood mitigation but focuses rather on the market aspects of water. However, it needs to be recognised that a truly integrated planning response in the water sector will look at water and sewage in a total catchment approach and the implications for flood mitigation need to be considered.

Flood events in the Lockyer since the release of the discussion paper have once again highlighted the need for this integrated approach.