

## Response to the Apportionment of Dam Safety Upgrade Costs

## **Dam Safety Upgrades**

Theodore Water supports all reasonable actions and investments to secure public safety. This decade has seen many damaging flood events that have created devastating impacts on life, property and community wellbeing. Many of the events we have experienced are the result of regional record-breaking rainfall. Unfortunately, no amount of capital investment in dam safety upgrade will ensure larger and more concentrated flood events will not occur in the future. Unless specific structural inadequacies against original design perimeters have been identified, further consideration should be given to the value of all works proposed under Dam Safety Upgrades.

## **Apportioning Costs**

All Queenslanders enjoy the direct and indirect benefits of water storage. This includes our;

- irrigation farmers who produce our food and fibre,
- communities that have grown and prospered because of irrigation and water security,
- State's economy through irrigated commodity export provisions,
- communities who benefit from the protection afforded by dams and through the reduction of frequency and impact of flooding,
- Councils who have been able to increase available residential and commercial land due to the safety
  afforded by dams,
- · recreational users who enjoy water sports, fishing and camping, and
- insurance companies and those who pay insurance premiums benefit from well maintained and operated dams.

Water storages, at their very least, provide a mechanism to slow a flooding event. In summary the mitigating effects of large water storages are well known. Until they are breached, they allow time that would otherwise not be available to prepare and/or evacuate. This is achieved as dams by their very nature, typically increase storage surface area as they fill and continue to do so as they overtop. If a Dam was not present, the flow of water would be concentrated through a narrower area, increasing the velocity and quantity of peak flow. When a dam reaches its assessed safe capacity and release must be made in order not to exceed that safe capacity, the release is proportional to the catchment inflow. Effectively now releasing the same amount of water that would be flowing had the dam not been present. The slowing of a flood event by the operational process of a dam provides significant safety benefit to communities.

It is our view, should any upgrade in the name of public safety be deemed necessary, the burden of efficient and effective expenditure should be shared across Federal and State governments, not only irrigators and water users.