

# **WEATHER---RAIN---STORMWATER---DAMS---WATERSUPPLY---FLOODING**

## **WEATHER**

With today's knowledge we can monitor it, estimate/ calculate it, perhaps predict it when and where it would affect our daily life and report it the next day.

## **RAIN**

A little bit more predictable, when we monitor the weather.

We can see and track the clouds and estimate when and how much rain will fall in a particular area. Again, we can report the measured amount of rainfall, the effect on the ground and (if it falls in catchment areas) the amount of water, that flowed into a dam.

## **STORMWATER**

**60 % of the rain** that does not soak into the ground, that doesn't end up in a dam but flows directly into waterways or is channeled into stormwater pipes throughout cities designed and created by councils/governments. This water is lost, by flowing out into the oceans.

## **DAMS**

The current reason to build dams is twofold: – water storage  
– flood mitigation

In normal circumstances both of these objectives can be achieved and juggled.

Except in abnormal drought cycles, rain periods caused by natural patterns or by

**CLIMATE CHANGE.**

As governments (local, state, federal) legislate, design, build, operate or appoint these tasks to various organizations, they have full responsibility for the proper management of Dams.

The problem with the dams in Queensland seems to be, that the need for water supply is exponentially increasing and the “**BUCKET**” is never big enough and most times is half empty.

**BUT** when in rains for long periods of time, than it quickly fills up with water, that we want to keep and store, but can cause flooding, if we hang onto it too long.

Seems to be, that we cannot manage/control two things with one mechanism/ tool: **DAMS.**

Flooding is caused by excessive rain and we need excessive rain to guarantee adequate water

supply to the population. If anybody professes, that they can do it, they misrepresent the (often historical) facts to the contrary.

**WATERSUPPLY**

The dams in Australia (over 500) seldom have been able to harness and store the water requirement for us in the past 20 years. It is obvious, that it will be harder and harder to do so. The current flurry of constructing desalinating plants is only a stop-gap effort as demand will quickly outstrip supply. Not because we don't have enough water in the ocean, but because energy is expensive and applied techniques are polluting. Operating and maintenance of these plants are high (and is expensive, when shut down for long periods of time). Water tanks I every backyard is only tinkering. Grey-water recycling is unsafe, expensive and have to have plenty to water to be used to get grey-water, which government introduced water restrictions during drought periods actually reduce across the cities.

**FLOODING**

In the foreseeable future, we won't stop the storms inundating us with flooding waters. We cannot control the weather; the dams don't control the amount of water, our rivers are running wild. Catchment areas are encroached by housing. Dams are too small.

**RECOMMENDATION**

[REDACTED]

An AquaDam project, new methods to harness water. This technology was developed to be able to collect and more importantly store unlimited amounts of stormwater. Additionally the system provides the opportunity to generate green-renewable energy for the processing (cleaning) and pumping of the water. Recommendations were made to the authorities to create a secondary

system of stormwater collection/storage, in addition to the existing one for water storage and same one for flood control in order to gain priority for flood mitigations by the existing dams. It was outlined, that during drought catchments in river systems do not collect enough water. On the other hand during flooding, the dams are not big enough for the amount of water and actually (if it's not managed as flood mitigation tool) it will cause flooding of low lying areas, like Brisbane. As we notice now, the authorities are forced to release fresh water (into the ocean). Currently, they do not have a mechanism to collect and store this water. With the AquaDam system, this water actually could be put into an AquaDam bladder and floated down into the ocean for storage/purification and supply of fresh water to the population of Brisbane. We understand, that it is hard to implement new technology. The problem is, that the people in charge failed us, we had a devastating flood in Brisbane because of poor planning, poor management and catastrophic decisions. And as yet, that there is no long term solution that is presented by the current administration to address the issues for the future. No change was implemented after the recommendations of the 1974 floods and we'll all fail, if we don't insist in taking constructive action now for a workable solution on a long term. Climate Change, will hit us again and again. There is a long period between planning and workable solutions, which has to be multifaceted to be effective.

