

**Submission to the National Competition Council's 2003
NCP Assessment Framework for Water Reform**

**A submission from
*Burnett Water For All***

1 April 2003

Burnett Water For All (BWFA) is a broad base of community and industry groups that joined together when it became clear that the Queensland Government was going to forge ahead with approval for Paradise Dam (Burnett River Dam) without fully considering the social, economic and environmental outcomes.

BWFA opposes Paradise Dam because it is **not** environmentally, socially, or economically viable.

The group's mission statement is "...to seek more equitable and less damaging water solutions for the whole of the Burnett catchment".

The following groups/ organisations have joined together under the aims and objectives of BWFA to voice their common objection to the proposed construction of Paradise Dam on the Burnett River, Queensland.

- Gayndah, Kingaroy, Murgon, Wondai, Nanango Shire Councils
- Burnett Catchment Care Association
- Sunfish – Fraser Coast Branch
- Queensland Seafood Industry Association
- Freshwater Fishing & Stocking Association of Queensland
- Wakka Wakka Jinda Indigenous Group
- Wide Bay Burnett Conservation Council
- Coalstoun Lakes Farming Group
- Monto Landcare Group
- Biggenden chamber of tourism and development
- Group of affected landholders- grazing and citrus
- Concerned citizens

There are a number of other groups who share Burnett Water For All's views but fear the political ramifications of publicly opposing the Dam.

Using the issues from the 2003 NCP Assessment Framework for Water Reform this submission will demonstrate the inadequacies of the proposed development on the Burnett River system known as Paradise Dam.

The main issues discussed are:

- 1. Queensland Government's Commitment to and Investment in the Paradise Dam Proposal**
- 2. Economic Analysis**
- 3. Provisions for the Environment – Water Resource Plan (WRP), Resource Operations Plan (ROP)**
- 4. Water Allocation and Property Rights**
- 5. Integrated Catchment Management**
- 6. Land and Water Management Plans (LWMP)**
- 7. Consultation**
- 8. National Action Plan on Salinity and Water Quality– Salinity Hazard**

Background

The Paradise Dam Development

The development is a 300 000 ML structure proposed for the Burnett River at Paradise, 131.2 km upstream from the mouth, which will capture 144 000 ML of water annually.

Paradise Dam will flood 45 km of the Lower Burnett River which, combined with the existing Walla Weir, Bingera Weir, and Ben Anderson Barrage impoundments, will result in 70% of the freshwater Lower Burnett being contained as a lake system. However, unlike a natural lake, the Lower Burnett will be subject to frequent fluctuation in water levels as water is released for irrigation purposes.

The dam has been put up as part of an infrastructure package, which also includes Eidsvold Weir, Barlil Weir and the raising of Walla and Jones Weirs. The combination of these Weirs and Dams will extract an additional annual volume of water totaling 197 000 ML.

Issue 1.

Queensland Government's Commitment to and Investment in the Paradise Dam Proposal

The Queensland State Government has budgeted for the total \$210 million Paradise Dam proposal over 3 years. The 2002-03 State Budget Statement – Budget Paper No.2 states “\$209.2 million (\$35.3 million in 2002-03) is allocated to continue work on the Burnett Water Infrastructure Development, comprising the Burnett River Dam, together with the Eidsvold, Barlil and Jones Weir Developments”. In 2001-02, the Queensland Government provided \$3.9 million to undertake planning and impact assessment investigations in the Burnett region.

The Queensland State Government put the Paradise development up for private public partnership but no private companies took the project on. This option was abandoned to avoid any time delay.

The Queensland Department of Natural Resources and Mines (DNRM) released the Burnett Draft Resource Operations Plan (ROP) at the end of December 2002, for public comment. This document included 197 595 ML water per year reserved for new infrastructure.

The Queensland minister for state development announced in Parliament on 11th March 2003 that the commencement date for construction will be Nov 2003. This date has been publicized widely in media press releases.

This evidence indicates the Queensland Government is fully committed to the development of Paradise Dam and we request that NCC do a supplementary assessment of this project.

The Queensland Government is only waiting until after this round of NCC assessments before announcing a final decision to commit to construction of the dam.

Issue 2.

Economic Viability

Burnett Water Pty. Ltd. has stated that the estimated capital cost of the proposed Burnett River Dam of 300,000ML is \$168 million. This is in contrast to the Initial Engineering Appraisal figure of \$183.1 million previously provided by DNR Regional Infrastructure Development Group (Jan 1999). Given a yield of 144 000 ML/year the capital cost of the water should be around **\$1270/ML**. Bundaberg Cane Growers have already made it known that this cost will be too high and the most that they are prepared to pay is around **\$375/ML**. **Based on this it is very doubtful whether this dam will be subject to full cost recovery, and it is likely that water will be allocated on a non-competitive basis.**

In its response to the Environmental Impact Statement the Queensland treasury seriously questions the claimed economic benefits, stating that they are optimistic.

- They point out that the \$650 Million of additional vegetable production represents a 120% increase over the existing vegetable production of Queensland (\$540 million). Queensland Treasury then questions whether markets had been identified for this level of vegetable production.
- They also question the 484 full time jobs (during construction phase) used in the economic analysis when the EIS states that a construction force of 40 would be needed.

The economic analyses in the Paradise dam EIS haven't taken into account the economic costs to the region from:

- Losses from reduced water harvesting (see below).
- Losses from reduced water reliability.
- Costs of increased salinity.
- Loss of future opportunities for inland Burnett communities.
- Costs associated with algal blooms and aquatic weeds.
- Losses to Fishing and Tourism industries.
- Costs associated with loss of ecosystem services.
- Costs of complying with mitigation strategies.
- Future costs of compensation for the reduction of water allocations, when the WRP is redone.

"Treasury Comments on Economic Viability of Water Allocation Scenarios for the Burnett Basin" (Oct 2000). - The Queensland Government refused to release this document. It has since been leaked and expresses "serious concerns about the economic assessments" that cabinet used to support the Burnett WRP (finalized Dec 2000) which allowed additional allocations of 170 000ML/year and a new dam. Treasury concluded that "there can be no reasonable expectation of any economic benefit from expansion of water allocation beyond 73 000ML/year.

One alternative dam site was on Degilbo Creek. This proposal would yield 119 000 ML/ year at 95% reliability yet only cost \$30 million to build. This equates to \$248/ML. This dam being smaller and on a tributary would cause far less environmental impacts than paradise. A community and industry based study (MODSS for Burnett River Catchment Study) using economic, environmental, and social criteria rated Degilbo Creek, 15th out of the 30 infrastructure proposals assessed. Paradise Dam rated 29th out of 30.

The regions historical record for acting on repayment of similar financial commitments, as Paradise Dam entails, is poor. Funding arrangements for user contributions to the capital cost of Walla Weir, a smaller structure recently built on the Burnett system are detailed:

- Irrigators\$1.50 per ML of allocation each year for 20 years
 - Bundaberg City Council\$32,000 per annum for 20 years
 - Burnett Shire Council\$28,000 per annum for 20 years
 - Isis Shire Council\$15,000
 - Kolan Shire Council\$ 7,500
- The weir was completed in September 1998. **To date, no payments have been made.**

Loss of Flood Water Harvesting (Refer to Issue 4 - Property Rights for further detail)

A survey of local irrigators showed the changes announced in the ROP would equate to a 2149 ML shortfall which translates to 359 hectares of citrus worth \$20 million annually, plus at least 250 full time jobs. This is a huge loss for the small rural shires of Gayndah and Mundubbera. This has not been taken into account with the economic analysis for Paradise Dam, and we believe is not of great concern to the Queensland Government because these shires are not part of a politically marginal electorate.

Issue 3.

Provisions for the Environment

Integrity of the WAMP Process

- Several years work and a great deal of community consultation went into developing the Water Allocation Management Plan (WAMP).
- The WAMP is based on the best science and modeling currently available.
- The Cooperative Research Center for Freshwater Ecology has reviewed the ecological assessment methodologies used in the WAMP and found that they were a good model for undertaking the assessment of environmental flow conditions and requirements

WAMP environmental flow limit recommendations

- Mean Annual Flow at the river mouth was recommended to be above 81% of natural flow (It is currently at 84%).
- The 1.5 Annual Reoccurrence Interval (1.5ARI) at Figtree gauging station was recommended to remain above 74% of natural flows.
- The WAMP study predicts that major to very major ecological impacts are likely to occur with any reduction in flows below the environmental flow limits.

WRP environmental flow objectives

- The original Burnett Water Resource Plan (WRP) was changed with the new legislation “Water Infrastructure Development (Burnett Basin) Amendment Act 2001”, without any community consultation.

- The Mean Annual Flow for the river mouth was signed off at 72%, which is 9% lower than was recommended by the WAMP study. Therefore major to very major ecological impacts are very likely to occur.
- The 1.5ARI was signed off at 74% for Figtree gauging station. The WAMP study predicts that this will be reduced to below 40% with the new infrastructure developments, and will therefore breach the WRP.
- The 1.5ARI environmental flow is very important as it relates to the small flows that occur on average every 18 months. These flows flush out salt, weeds, algae, and silt build-ups as well as triggering fish breeding and generally keeping the river healthy.

The Mean Annual flow at the river mouth and the 1.5ARI at Figtree are only two of the Environmental Flow Objectives. Other breaches in the WAMP recommendations exist but these are the most serious two.

Paradise Dam will flood a large section of the habitat of two species which have been nominated as Threatened Species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act):

- **Queensland Lungfish - *Neoceratodus forsteri***
- **Elseya Turtle - *Elseya sp.***

The reduction of environmental flows will also have major impacts on the remaining downstream habitat for these two species. Refer to our 2002 submission for more detail.

Millions of dollars are being spent on rehabilitation of the Murray River system, at a tremendous cost to our country. And yet the Queensland Government are doing the same thing to the Burnett River, just because there are a few votes in the Bundaberg district to be won. It will be future governments and generations that will have to “mop up the mess”.

Issue 4.

Water Allocation and Property Rights

Environmental Flows, Water Allocations and Property rights have all been eroded by the Paradise Dam proposal

There are 4 areas in which water is allocated in the Burnett WRP:

1. Environmental Flows
2. Supplemented Water Allocations
3. Un-supplemented Water Allocations (Flood Water Harvesting)
4. Water Reserved for Future Developments

Environmental Flows

The environmental flows have been reduced from 84% of Mean Annual Flow to 72% in the WRP.

Supplemented Water Allocations

Supplemented Water Allocations in the Upper Burnett were over 95% reliable and have been reduced in the WRP to only 90% reliable.

Flood Water Harvesting

Flood Water Harvesting allocations in the Upper Burnett outlined in the Draft ROP have been cut by more than 50% and in some cases by 75% from historic water use records. A survey of local irrigators showed the changes announced in the ROP would equate to a 2149 ML shortfall which translates to 359 hectares of citrus worth \$20 million annually, plus at least 250 full time jobs. This is a huge loss for the small rural shires of Gayndah and Mundubbera. **This reduction in flood water harvesting was actually legislated in the WRP without notification to those affected and without any consultation. The first local irrigators heard of the massive reductions was in the draft ROP.**

Water has been taken from each of the first three water uses and used to boost the water available for the new infrastructures.

At every stage in the water allocation planning process the Queensland Government has constantly assured us that no-one will be worse off. Yet, there has been no offer of compensation to the environment or existing irrigators for the loss of water that the water planning process has taken away.

When the IQQM model for the Burnett is updated to include the last 5 years of critical low flows and drought, it will reduce the total amount of water available in the Burnett. We believe that this modeling needs to be done before any water is allocated for the new infrastructures. Otherwise the environment and existing irrigators will suffer further losses because of Paradise Dam.

When the Queensland Government brought in new legislation (Water Infrastructure Development (Burnett Basin) Amendment Act 2001) to bypass the community consultation needed to change the Burnett WRP, it showed the community how easily it can change the laws which underpin our Water Rights.

We do not believe that property rights for water exist in Queensland, while the State Government can get away with such blatant disregard for the Water Act 2000.

Issue 5.

Integrated Catchment Management

Burnett Catchment Care Association (BCCA) is the Integrated Catchment Management group for the Burnett Catchment and was set up several years ago by DNRM, with Community and Industry representatives from throughout the Catchment.

BCCA investigated the Paradise dam issue during the EIS process in 2001. They concluded that the Dam was not environmentally sustainable and that BCCA would not support the project if it could not meet the original WRP's environmental flow objectives. They wrote letters to all the relevant State and Federal ministers stating this.

The Queensland Government ignored BCCA's stand and legislatively changed the Burnett WRP to fit in Paradise Dam. This makes a joke of what Integrated Catchment Management is supposed to represent and clearly shows the level of commitment that the State Government has to it.

Issue 6.

Land and Water Management Plans

The Bundaberg Sugar Industry has taken a proactive approach to Land and Water Management Plans (LWMP) that will be required to use any new water available from Paradise Dam. They have pooled their Rural Water Use Efficiency Funding to develop maps and a workbook which will make it very easy for all cane farmers to complete these plans. This however has been an obvious attempt to “jump in early” and set “the bar” at the lowest possible denominator.

The draft workbook is so simple that we do not believe that the plans will pass the State Guidelines for Land and Water Management Plans. This is also the view of a subgroup of the Queensland Fruit and Vegetable Growers – Mundubbera and Gayndah citrus groups, formed to review and adapt LWMP for the local citrus industry. **These LWMP’s developed by the cane industry will only describe the current irrigation practices rather than force new water to be used most efficiently. There is no requirement for water scheduling, the plans don’t have to comply with industry best practice and flood irrigation on sandy soils is even permitted.**

The new water will come at great expense to the environment and existing water users. It will be a travesty if cane growers are allowed to use it as inefficiently as they have used water in the past.

This is also a huge waste of Rural Water Use Efficiency Funding as no water will be used more efficiently by plans developed in this manner. This funding could have been used to implement the trickle irrigation systems that could save 30% of the water used in the Bundaberg Sugar Industry.

Issue 7.

Consultation

Since the Queensland Government made its election promise to build Paradise Dam at the end of 2001, the community consultation with this project has been reduced to the bare minimum.

Dept of Natural Resources and Mines officers were prohibited to discuss Paradise Dam issues with the public.

As outlined in our 2002 submission to NCC, the community consultation for the Environmental Impact Assessment was made as difficult as possible with no prior warning, hard to get documentation, short submission period, and an uncooperative attitude by Burnett Water Pty Ltd. Please refer to our 2002 NCC Submission for more information.

A similar approach was taken for the draft ROP which was released a couple of days before Christmas with submissions needing to be done over the holiday period. Documents were again difficult to obtain and the submission period was the bare minimum required.

Chapter 8 of the draft ROP describes all of the amendments that can be made to the ROP without any further Community Consultation. **It clearly states that any amendment can be made in order to fit in Paradise Dam.** This plan sets out the operating rules for water in our area and therefore can greatly affect the livelihoods of all businesses that rely on the river for water, and

the Communities that they support. The Community needs to be consulted on any changes to the ROP.

The massive reductions in flood water harvesting proposed for the Inland Burnett shires of Gayndah and Mundubbera were legislated in the WRP without notification to those affected and without any consultation. The first local irrigators heard of the huge cut to flood water harvesting was in the draft ROP.

Issue 8.

National Action Plan – Salinity Hazard

In February 2003, the Queensland Department of Natural Resources and Mines released Salinity Hazard Map for the Burnett Catchment. This map shows that the Salinity hazard for the Bundaberg Irrigation area is in the Moderate High to High potential area.

If this area is managed with practices which intensify salinity such as tree clearing, cultivation, or inefficient irrigation techniques with salty water then this area has a high risk of developing salt problems.

Salinity has not been properly considered with the Paradise Dam proposal. The EIS for Paradise Dam only briefly mentioned salinity passing it off as insignificant in the Burnett.

In periods of low flow, conductivity readings often exceed 1000 $\mu\text{S}/\text{cm}$ in the middle reaches of the Burnett, the threshold level above which undesirable levels can accumulate in some soil types. The salinity level in the Burnett river regularly reaches 2000 $\mu\text{S}/\text{cm}$.

A rivers natural salinity reduction is through regular small to medium flows which flush the salt to the sea. Paradise Dam will severely reduce the 1.5ARI flows which will reduce the flushing of salt out of the system. This will further increase the salinity risk, when this water is used for irrigation.

The water from Paradise Dam is to be used in the Bundaberg irrigation area. This will result in more tree clearing and cultivation along with increased irrigation. All of the factors which increase salinity risk.

As discussed in Issue 6, the Land and Water Management Plans (LWMP) which will be required to use any new water allocations are not thorough enough. **However, the Land and Water Management Plans proposed by the Cane Industry – which are acting as a benchmark for all industries, do not even make a mention of salinity nor force best practice irrigation techniques.** All surface water in the cane industry's LWMP is viewed as fresh water, when there are vast variations in water quality.

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