



A.B.N. 19 435 450 683

## GYMPIE & DISTRICT LANDCARE GROUP INC.

Postal: PO Box 695  
GYMPIE Q 4570  
Phone: (07) 54 83 8866  
Fax: (07) 54 82 1096

Office: 5 Groves Rd  
GYMPIE QLD  
Email: [admin@gympielandcare.org.au](mailto:admin@gympielandcare.org.au)  
Web: [www.gympielandcare.org.au](http://www.gympielandcare.org.au)

3<sup>rd</sup> April 2007

The Secretary  
Senate Rural and Regional Affairs & Transport  
By email: [rrat.sen@aph.gov.au](mailto:rrat.sen@aph.gov.au)

Honourable Senators,

### Re: Inquiry into the proposed Traveston Crossing Dam

The purpose of this submission is to provide information for the Senate Inquiry.

Gympie & District Landcare thanks the Senate for conducting an inquiry into the proposed dam on the Mary River at Traveston Crossing. We believe the proposed dam would have completely unacceptable environmental impacts on the river system and the estuarine environment of the Great Sandy Straits. Further, we believe the proposed dam would cause serious economic damage to our primary producers and the industries that depend on them, from one end of the Mary River to the other. We also believe the social impacts would be enormous, and are already significant. This submission refers in detail to some of these matters.

**We ask that the Senators inquire into the appropriateness of the process by which the Traveston Crossing dam proposal has been promulgated by the Queensland Government.**

We share the widely-held view that the state government has failed to carry out a rigorous evaluation of the proposed Traveston Crossing dam compared to the other water demand-supply options, and that the decision to proceed with the dam was not based on scientific rationale. This view is supported by a recently published technical report, the *“Review of Water Supply Demand Options for SEQ”* commissioned by the Mary Council of Mayors, which clearly demonstrates that the proposed Traveston Crossing dam is a **“high total cost, high unit cost, high risk and high environmental and social impact option”**, and further that the dam **“should not be considered for implementation...”** *Executive Summary, page i.*

**We request that the Senate Inquiry ask the Queensland Government to publicly release their Cost-Benefit Analysis for the Traveston Crossing Dam proposal.**

The dismissive response of Deputy Premier Bligh to the above-mentioned review further demonstrates, in our view, the State Government’s failure to properly evaluate the available options. We are at a loss to understand the State Government’s grim determination to pursue a proposal which, according to many experts, has little or no technical merit.

There are alternatives to this dam proposal, which are more economically viable, and with far less social and environmental impact. When one considers the high costs involved with the transfer of water along pipelines from dam to dam, catchment to catchment, it is clear that this water supply option would be very expensive for taxpayers. The proposed dam would have a large surface area but an average depth of just 5 metres, with high evaporation rates and a huge potential for water weed infestations and blue-green algae outbreaks. The total impact would be disastrous.

**We request that the Senate Inquiry ask the proponent for a breakdown of project costs and to detail their estimates of the compensation obligations expected to flow from the social, economic and environmental impacts.**

As the Objects of our constitution include: 2.1 "Value, protect and enhance our natural environment;" and 2.7.f "to make submissions on Landcare matters and to take all legal action to ensure environmentally appropriate decisions are made", we feel obliged to speak out against what we strongly believe to be a very bad policy decision.

As one of the oldest and most active Landcare groups in Australia, and one with a strong track record for the successful rehabilitation of the riverbanks along the Gympie town reach of the Mary River, we believe we have a significant 'stake' in protecting the ecological health of the river.

Over the last eleven years we have coordinated more than a dozen Community Tree Planting days on the riverbanks, involving thousands of volunteers who have contributed tens of thousands of volunteer hours. This enormous community effort helped us to win the 2001 Queensland Rivercare Award and has resulted in a tremendous sense of community ownership of these riverbanks and a strong appreciation of the need to look after the Mary River.

**We request that the Senate Inquiry consider the potential for this proposal to undermine the Landcare and Integrated Catchment Management ethic and dissipate the community's efforts to protect and restore the health of the Mary River system.**

We are concerned about the impact the proposed Traveston Crossing Dam will have on the natural flood patterns and how this will impact on riverbank stability, sediment transport, channel morphology, in-stream habitat values, macro-invertebrate diversity, fish spawning patterns, and general ecosystem function. We believe that the maintenance of appropriate environmental flow regimes is inconsistent with the government aims to extract very large volumes of water from the system. In short, we fear the proposed dam will threaten the ecosystem health of the Mary River and its estuaries, including the RAMSAR-listed Great Sandy Straits.

SEDNET modelling by CSIRO has shown that a large proportion of the nutrients flowing into the Great Sandy Straits originates from riverbank erosion. The historical clearing of the riverbanks has left many kilometres of riverbank at risk of slumping (eg slip circle failures) and it will take many decades, and a considerable investment, to reverse this situation. While that work has been ongoing for more than a decade, and involved much collaboration and community effort, we fear that the changed flood regimes could have serious impacts on the stability of the many kilometres of at-risk riverbank. If flood duration times are increased, we fear it will lead to more frequent episodes of 'super saturation' of the riverbanks, and more riverbank slumping.

**We request that the Senate Inquiry ask the government to release the modelling for flood duration and peak flood heights for downstream communities, both with and without the proposed dam for all historical floods.**

The community effort to repair the riverbanks over the last decade, combined with the efforts of primary industry associations and DPI extension officers, has led to both an awareness of, and a focus on, sustainable production issues which we believe bodes well for the future health of the river.

However, the Traveston Crossing dam proposal threatens to completely undermine more than a decade of progress towards sustainable production. We strongly believe that, should this dam proceed, it will shatter the will of the community to engage in volunteer efforts to rehabilitate the river and creek banks. Many of the people who have put their 'heart and soul' into promoting the Landcare ethic and Integrated Catchment Management ethic will simply walk away in despair.

As professional natural resource managers, with an intimate knowledge of the Mary River, backed up by a solid grounding in the science of land and water management, we have a clear insight into just how destructive the proposed dam would be to the ecological function of the river.

As participants in the Mary Basin Water Resource Planning process, we know that the Traveston Crossing dam proposal was never raised as an option. Although the documentation supplied to the reference panels did refer to a 'strategic reserve' and mentioned the option of building a small 'regulating weir' at Coles Crossing, at no time was there even the slightest intimation that the government was considering the Traveston Crossing dam. Thus we feel that either the WRP process was seriously flawed or we, and other members of the community reference panels, were deliberately deceived. This is a matter that concerns us greatly.

Gympie Landcare is currently engaged in habitat restoration works at the Gympie Creek Flying Fox roost site, which is used as a maternity colony by the threatened Grey-headed Flying Fox as well as the Little Red Flying Fox and the common Black Flying Fox. We are concerned that the drowning of large areas of riparian rainforest by the proposed dam would impact severely on the nationally-threatened Grey-headed Flying Fox, which is an important disperser species for fruit producing rainforest trees and shrubs. As a consequence it could also reduce the regenerative capacity of key species in the riparian rainforest complex, which is itself an endangered Regional Ecosystem (12.3.1). The Cooloola Environmental Audit identified the riparian rainforest complex as one of the most fragmented ecological communities within the Cooloola Shire and one which should be a priority target for restoration efforts. (*Cooloola Environmental Audit, LRAM, 1995*).

Other threatened and iconic species which are likely to be severely impacted on by the proposed Traveston Crossing dam include the Mary River Cod, the Mary River Turtle and the Queensland Lungfish. Our group and our community have gone to considerable lengths to improve the habitat values of the river as a means of ensuring the long-term survival of these species. We fear that all these efforts will be undone if the Traveston Crossing dam proceeds.

**We request that the Senate Inquiry ensure the State Government adopts "the precautionary principle" with respect to protecting essential habitat for these species.**

We attach a number of documents which are relevant to the matters outlined above. Attachment A provides an overview of our riverbank revegetation sites along the Gympie town reach of the Mary River, and provides detail of the enormous investment by the community, corporate sponsors and the federal, state and local governments in revegetating the riverbanks. Attachment B is an annotated map relating to these sites. Attachment C is a copy of our submission on the draft Terms of Reference for the Environmental Impact Statement for the proposed dam.

We welcome your inquiry into these matters and look forward to seeing your findings.

Yours sincerely,

Kent Hutton  
President

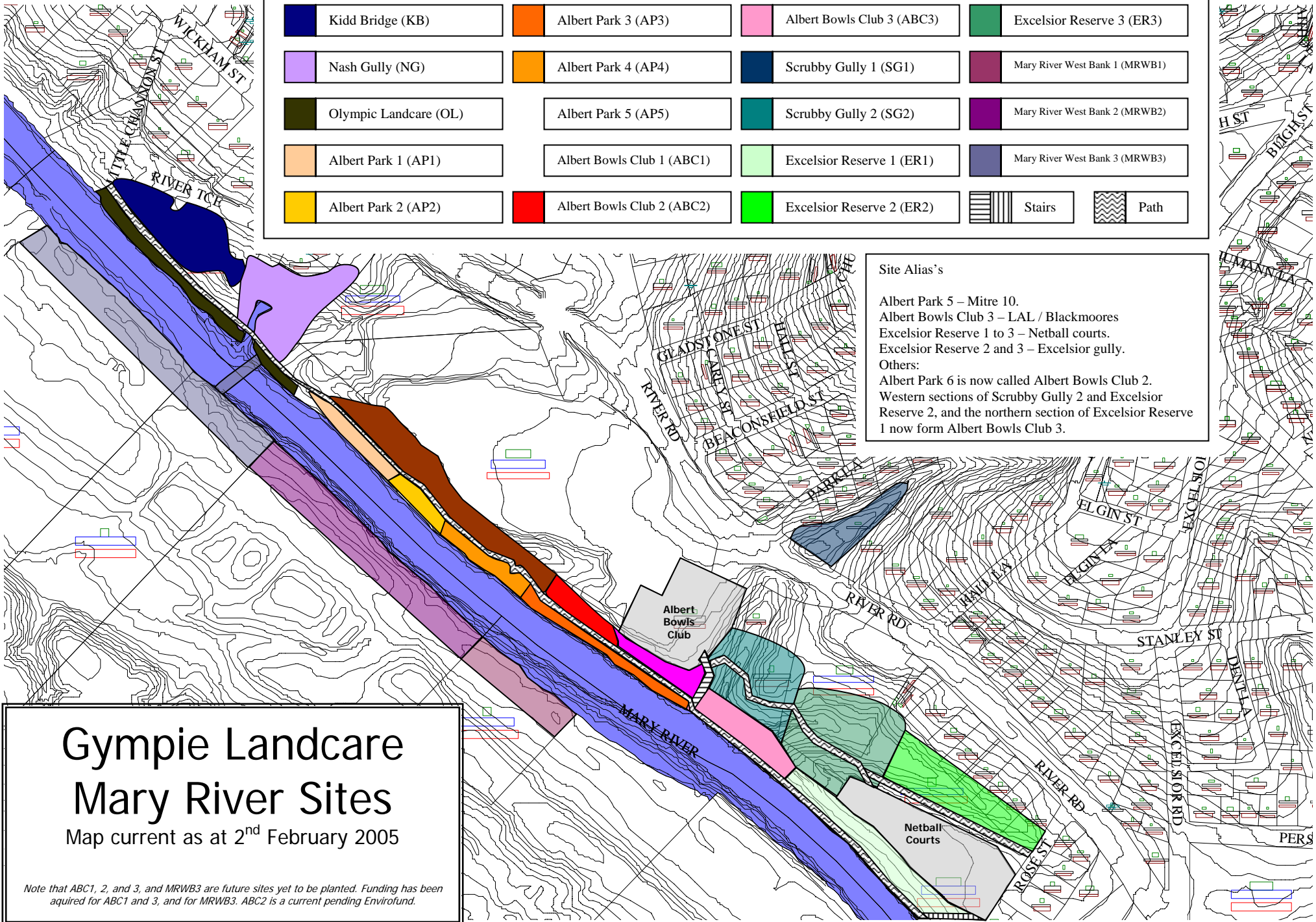























Paul Marshall  
Operations Manager

**Attachment A:** "Overview of Riparian Revegetation Sites along the Gympie town reach of the Mary River".

**Attachment B:** Mary River Sites Overlay Map

**Attachment C:** Copy of Gympie & District Landcare's submission to the Queensland State Government, Coordinator-General Draft Terms of Reference (ToR) Environmental Impact Statement (EIS) regarding the proposed Traveston Crossing Dam.



 Kidd Bridge (KB)	 Albert Park 3 (AP3)	 Albert Bows Club 3 (ABC3)	 Excelsior Reserve 3 (ER3)
 Nash Gully (NG)	 Albert Park 4 (AP4)	 Scrubby Gully 1 (SG1)	 Mary River West Bank 1 (MRWB1)
 Olympic Landcare (OL)	 Albert Park 5 (AP5)	 Scrubby Gully 2 (SG2)	 Mary River West Bank 2 (MRWB2)
 Albert Park 1 (AP1)	 Albert Bows Club 1 (ABC1)	 Excelsior Reserve 1 (ER1)	 Mary River West Bank 3 (MRWB3)
 Albert Park 2 (AP2)	 Albert Bows Club 2 (ABC2)	 Excelsior Reserve 2 (ER2)	 Stairs
			 Path

**Site Alias's**

Albert Park 5 – Mitre 10.  
 Albert Bows Club 3 – LAL / Blackmoores  
 Excelsior Reserve 1 to 3 – Netball courts.  
 Excelsior Reserve 2 and 3 – Excelsior gully.  
 Others:  
 Albert Park 6 is now called Albert Bows Club 2.  
 Western sections of Scrubby Gully 2 and Excelsior Reserve 2, and the northern section of Excelsior Reserve 1 now form Albert Bows Club 3.

**Gympie Landcare  
 Mary River Sites**  
 Map current as at 2<sup>nd</sup> February 2005

*Note that ABC1, 2, and 3, and MRWB3 are future sites yet to be planted. Funding has been acquired for ABC1 and 3, and for MRWB3. ABC2 is a current pending Envirofund.*

## Overview of Riparian Revegetation Sites along the Gympie town reach of the Mary River

Revegetation Site	Site Code	Description	Comments
<b>Mary River – Gympie town reach</b>			
Mary River frontage from Kidd Bridge to the Gympie Weir	MR_KBr, MR_NG, MR_OLc	Approx 1.5 ha of revegetated riparian rainforest including the area adjoining River Tce (planted 1997-9), Nash Gully below the Gem Club and River Tce (planted 1998-02) and the lower bank from Kidd Bridge to the weir (planted 2000-03). Infrastructure includes footbridge and walking tracks.	Funded by Cooloolo Shire Council and the Natural Heritage Trust, the Olympic Landcare program with sponsorship from BHP Project partners include CSC, Gympie Gem Club, Rotary
Mary River frontage from Gympie Weir to Albert Bowls Club	MR_AP1-5 MR_ABC 1-3	Approx 3 ha of revegetated riparian rainforest including: <ul style="list-style-type: none"> <li>the area immediately below the northern section of Albert Park sports grounds (the AP5 / Mitre10 site planted in 2001-02);</li> <li>the area below the RiverWalk track (AP1-AP4 planted 1997-01);</li> <li>the area below Albert Bowls Club (planted 2005);</li> <li>the area below the Albert Park grandstand up to the Albert Bowls Club (planted in 2006)</li> <li>Infrastructure includes stairs down to the river behind Albert Bowls Club built in 2001 and upgraded in 2005 with handrails.</li> </ul>	Funding from Cooloolo Shire Council, Natural Heritage Trust, AG Envirofund, LAL / Mitre 10 . Project partners include: CSC, Devil Rugby League, Gympie Cricket Club, Albert Recreation Assoc, Albert Bowls Club Problems with viny weeds, particularly Cats Claw Creeper, Blue Morning Glory and Balloon Vine.
Albert Bowls Club to Excelsior Netball Courts	MR_SG2 MR_ER1-3	Approx 2.5 ha of revegetated riparian rainforest including the lower section of Scrubby Gully and Excelsior Gully from Rose St to its junction with the Mary River: ER1 planted 1999-02, ER2 planted 2000-03, ER3 planted 2001-03, including highly-successful Centenary of Federation planting day; Infrastructure includes stairs to the river, walking track, footbridge, and erosion control structures.	Erosion control works on mouths of Scrubby Gully and Excelsior Gully and river frontage funded by Blackmores, as was the addition of a handrail to stairs in Oct. 2005. Major problem with Blue Morning Glory infestation.
Scrubby Gully above the Bruce Highway	SG1	Approx 0.5 ha of revegetated riparian rainforest above the Bruce Highway above the Albert Bowls Club and Gympie Motel (planted in 2001-03). Infrastructure includes footbridge.	Works funded by Cooloolo Shire Council. (Adjacent to Council-owned site proposed for Gympie Bush Foods and Aboriginal Cultural Trail)
Mary River west bank frontage of USL (unalloc. State land)	MR_WB1	Approx 0.5 ha of previously denuded erosion-prone river frontage which has been revegetated to riparian rainforest. Infrastructure includes fencing.	Works funded by Cooloolo Shire Council and the Envirofund with large community in-kind contribution.
Mary River west bank Brennen's frontage	MR_Br1	Approx 1 ha of previously treeless riverbank, from the USL to the weir, which was prone to regular slip-circle failure during flood events was fenced off and revegetated during 2003-04 to riparian rainforest species. Infrastructure includes fences and gates.	Works funded by Envirofund and the Mary River Catchment Coordinating Committee with large community in-kind contribution.
Mary River west bank Brennen's frontage	MR_Br2	The approx 1 ha of riverbank from the weir to Kidd Bridge, has been fenced off and revegetated during 2005-06 to riparian rainforest species. Infrastructure includes fences, gates and cattle race designed to take	Funded by Envirofund with large community in-kind contribution.



Revegetation Site	Site Code	Description	Comments
		pressure off the area adjacent to the weir until off-stream watering system put in place.	
Mary River west bank Brennen's	MR_NLP_Brennans	Collaborative project to install a solar-powered off-stream watering system completed in 2006, and cattle race down to the river has been closed off (but will serve as a fall-back in case of extended failure of the off-stream watering system.	Jointly funded by the landholder and NLP. Superseded cattle race to be mass planted to Lomandra in 2007.
Mary River – Excelsior Reserve – landslip stabilisation project	MR_ER1_A0110	Collaborative project scheduled to commence June 2007; with BMRG contributing \$10,000, CSC \$11,000, the 'Skilling Queenslanders for Work' program \$61,000 and \$15,000 in-kind (community / Green Corps)	This project will address priority erosion control and landslip stabilisation works, and will follow on from works by the CJP team diverting stormwater runoff.
Mary River Program of Works	MR_M05	This project enabled in-fill planting and additional maintenance to be carried out on all of the above-mentioned sites, along with the Six Mile Ck site (mentioned below). Adequate maintenance is essential in the first three years after plant establishment if high levels of survival and high growth rates are to be achieved.	Funded by BMRG and project managed by MRCCC, this was a consortium project involving several Landcare groups and over 50 properties.
Mary River – Excelsior Reserve riverbank site	MR_ER1_EF (planned)	Collaborative project between CSC, Gympie Landcare and Gympie Netball Association to undertake second stage weed control and revegetation to enhance revegetation works undertaken in 1999.	Proposed Envirofund project – CSC have committed \$15,000 to the project for 2007-08.
Bruce Highway frontage project	MR_DMR (in-planning)	The Bruce Highway upgrade works now underway between Rose St and Albert Bowls Club have impacted in several places on the adjacent revegetation sites. We are liaising with Main Roads about ways to remedy this.	No decision on revegetation activities adjacent to the highway road works can be made until after completion.
Albert Park to Excelsior Reserve Rising Sewer Main duplication	(under review)	Cooloolool Shire Council is in communication with us re minimising disturbance to revegetation areas between Albert Park and Excelsior Reserve when they duplicate the rising sewer main later this year. It is anticipated that we will be involved in site restoration following these upgrade works.	In process.

#### Listing of other Gympie Landcare riparian revegetation sites in Cooloolool Shire

- Amamoor Creek – National Country Music Muster site – areas 1-3
- Commissioner Gully – Myall St site, Jane St site, Henry St site, Active Riders site, Brewery Rd site;
- Deep Creek – southern bank site adjacent to Bridge St, northern bank adjacent to Bruce Highway; Lime St site (EF\_Burns); and planned EF project site (O'Connell)
- Gympie Creek – Widgee Crossing Rd (Flying Fox Roost) site;
- Six Mile Creek – Seven Sisters Equestrian Centre site; DMR Rest Area site;
- Tozer Gully – Columbia Oval site (EF\_One Mile Sports Assoc / Football Gympie);
- Yabba Creek – anabranch sites (EF\_Hooper, EF\_Parker-Price)



# GYMPIE & DISTRICT LANDCARE GROUP INC.

Postal: PO Box 695  
GYMPIE Q 4570  
Phone: (07) 54 83 8866  
Fax: (07) 54 82 1096

Office: 5 Groves Rd  
GYMPIE QLD  
Email: [admin@gympielandcare.org.au](mailto:admin@gympielandcare.org.au)  
Web: [www.gympielandcare.org.au](http://www.gympielandcare.org.au)

A.B.N. 19 435 450 683

---

16<sup>th</sup> February 2007

Project Manager – Traveston Crossing Dam Project  
SEQ Infrastructure (Water)  
The Coordinator-General  
PO Box 15009  
City East QLD 4002

Dear Sir,

**Re: Submission on the draft Terms of Reference for the EIS – Traveston Crossing Dam proposal.**

The purpose of this submission is to provide feedback on the Draft Terms of Reference (ToR) for an Environmental Impact Statement (EIS) dated December 2006 regarding the proposed Traveston Crossing Dam.

The Gympie and District Landcare Group (G&DLCG) is a community based group who have been involved with land care activities including river restoration for over 18 years.

We request that our group be considered a stakeholder in the ongoing consultation process concerning the project and in the Resource Operations Plan that would licence its operations under the Water Act 2000, should the project be approved. It also requests that this submission on the draft ToR be considered as a submission to the EIS itself.

We believe building this dam will have detrimental social, economic and environmental impacts. Millions of dollars have been spent on restoration projects along the Mary River and associated tributaries, which are put at risk because of this proposal.

## **Background**

Historically, early settlers didn't understand the key role of riparian vegetation in protecting the riverbank, and didn't foresee the massive erosion caused by extensive clearing of the timber from the riverbanks. The result was the once deep waterholes filled up with sediment, water quality declined, and the loss of fish habitat lead to a decline in fish numbers.

The G&DLCG was formed in 1988 and has a long association with farming organisations, large and small businesses, respective tiers of government department's involved in water and land management, local government and community organisations including schools.

It is these links that have continued to develop and enhance the G&DLCG contributing towards a better understanding of the dynamics of natural systems throughout the G&DLCG area and in conjunction with other Landcare groups throughout the catchment.

This has been achieved despite living with drought conditions for the last 20 or more years.

The Gympie and District Land Care Group has been involved in a range of activities to improve degraded areas along riparian corridors, some of which are listed below;

- The Gympie town reach of the Mary River over ten years
- Various parcels of reserve land within Gympie including a cabinet timber Farm Forestry plot
- Revegetation of the Mary Riverbank Traveston Crossing
- Various sections of the Imbil town reach of Yabba Creek
- Various sites on Amamoor Creek in association with QP&WS and DNRM, and the Gympie Country Music Muster committee
- Cats Claw Creeper Management Project
- Involvement with the Mary River Catchment Coordinating Committee (MRCCC) Mary River Cod Recovery Program. Restoring Cod Habitat in conjunction with Threatened Species Network Grant, World Wildlife Fund for Nature, Griffith University Aquatic Ecologists and Departmental researchers and extension officers
- Waterwatch Program since 1995

### **Points of Concern**

The following are points of concern that we would like considered in the ToR for the EIS. We recommend for the ToR to include internationally acceptable social impact assessment and management principles. For the social, economic and environmental impacts on all landholders and communities directly affected, as well as those not directly affected by the dam eg. in the upper sections of the catchment and below the dam wall down to Hervey Bay including impacts on fisheries, wetlands and tourism. All alternative projects need to be assessed in terms of comparative socio-economic impact.

Other priority areas of concern include the Mary Basin Water Resources Plan, riverbanks, environmental flows, salinity issues, weeds and ecological conservation values that relate to the endangered Mary River Cod, Mary River Tortoise, the Australian Lungfish and the Grey-headed Flying Fox and others. Eighteen species are listed as either endangered or vulnerable.

### **Alternatives**

Recently the Mary River Council of Mayors commissioned Cardno and University of Technology Sydney to investigate alternative water supply sources for South-east Queensland. “This Study outlines a robust strategy for meeting the supply-demand balance within the planning horizon of 2050, without needing to construct a dam at Traveston Crossing on the Mary River. This is a strategy that has significantly lower costs, reduced greenhouse gas emissions and reduced environmental and social impact. It also offers an adaptive approach to changing circumstances in terms of yield and demand. This Study also makes a series of recommendations to improve the transparency and level of community engagement in water planning in SEQ.” (Carno and University of Technology Sydney 2007.)

### **Recommendation:**

It is recommended the final ToR includes the outcomes of this study in the alternatives section (Section 1.4) and the cost / benefit analysis (1.3.2) section. The Gympie and District Landcare Group requests the Coordinator General carefully considers the findings of the Mary River Council of Mayors report.

### **Mary Basin Water Resources Plan**

The dam is being constructed for people of Brisbane, taking water out of the Mary River catchment to the detriment of those living and working within the Mary River catchment. The Mary Basin Water Resources Plan is a flawed document. A Community Reference Panel made up of Sector Representative and Indigenous groups was set up in 2003.

In November 2005 a draft plan was released for public consultation. In April 2006 the Premier announced the proposed Traveston Crossing Dam.

The final draft was altered to now include the proposed Traveston Crossing Dam and endorsed by parliament 28<sup>th</sup> July 2006 without further community consultation.

The community members who had contributed their time and effort to develop this draft document, were left feeling grossly deceived as there was never any mention of the Traveston Crossing Dam in any of the discussions.



Simply achieving the outcomes listed in the Water Resource Plan will not provide for environmentally sustainable flows at crucial locations in the river. The EIS must be based on the flows which are required to ensure the continued viability of threatened species and habitats.

The Mary Basin Resource Plan does not take into account groundwater resources in the Mary River Catchment in the area where the dam is proposed. It would appear that installing a grout curtain to intercept seepage will potentially affect the groundwater in the area.

#### **Recommendation:**

The EIS must be based on the flows which are required to ensure the continued viability of threatened species and habitats. The current Mary Basin Water Resource Plan needs to be reworked to provide adequate scientifically based environmental flows to critical downstream locations at Dagon Pocket (an important breeding ground for the Australian Lungfish and Mary River Tortoise) and at the Mary River Barrage to protect the Great Sandy Straits that are Ramsar listed.

#### **Riverbanks / environmental flows**

CSIRO research (De Rose et. al, 2002) has already shown that riverbank erosion can contribute upwards of 87% of end-of-valley sediments in the Mary River Catchment.

This sediment load carries with it large amounts of phosphates, which stimulate the growth of algae and decrease levels of dissolved oxygen, further impacting on water quality.

The effect of the spillway in decreasing the peak intensity of downstream flood flows but increasing the duration of high flow and high water level events is likely to have large impacts on river bank stability for a great distance downstream. These riverbanks also consist of deep unconsolidated alluvium held together by fragile riparian vegetation and become super-saturated and unstable.

This has already been observed in the catchment as a result of the construction of Baroon Pocket dam which resulted in the destruction of riverbanks and sediment infill of the stream bed along the entire downstream catchment of Obi Obi creek (more than 30km) (Braby 2007). This excessive sediment most likely contributed to death of seagrass and impacted on fisheries, dugong and marine turtles in the Great Sandy Straits after the 1992 floods (McLeod 1996). The implications of this effect for infrastructure and downstream of Traveston Crossing requires thorough investigation for impacts on landholders, communities and ecosystems as far as the Great Sandy Straits Ramsar Wetlands.

There is also major concern of unstable stream banks from water ponding above the dam wall supersaturating the banks similar to what has been experienced by landholders on the Mary River Barrage, putting at risk not only restoration projects but all riverbanks throughout the proposed inundation area.

Other major organisations impacted by this dam being built will be farmers, commercial fishing and local government. The commercial fishers believes that the 1992 twin flood directly effected the fishing industry particularly the nursery areas at the mouth of the Mary River and had a significant effect on brackish water ecosystems and the riverine areas.

The river currently flows unimpinged by any large barrier other than the Barrage at Maryborough.

The ToR has excluded the range of impacts on local government and farmers with the cumulative impact leading to increasing pumping costs, affecting farmer's income and local townspeople's rates.

#### **Recommendation:**

The full economic and social costs of potential collapse of streambanks both in the proposed inundation area and downstream all the way to the Great Sandy Straits Ramsar Wetlands needs to be included in the assessment of the project's potential impacts.

#### **Rare and Threatened Species**

The EIS should be based on the flows, which are required to ensure the continued viability of threatened species and habitats. The ToR doesn't specifically refer to the risk and loss of rare and threatened species. The impact on threatened species must consider loss of habitat, connectivity and fragmentation. Population viability analysis (PVA) and Population and Habitat Viability Analysis or Assessment (PHVA) are very useful tools in evaluating risks, particularly to small populations and threatened species.

**Recommendation:**

That Population Viability Analysis (PVA) and Population and Habitat Viability Analysis or Assessment (PHVA) are included in the analytical tools used in evaluating the risks of extinction from this project on all threatened and endangered species that occur in the Mary River Catchment, Ramsar Wetlands and World Heritage areas downstream.

The Environmentally Sustainable Development (ESD) Charter should be referred to in the ToR, in particular, the need to adopt the 'precautionary principle' where the environmental impact of actions is not fully known.

**Declared Water Catchments**

Landholders in the upper, mid and lower reaches of the catchment are concerned about their future land use if the area becomes a declared water catchment.

Landholders need to know what restrictions would be placed on their properties. It is feared that land use restrictions will be imposed with no agricultural pursuits to take place within 400 meters either side of the Mary River or its tributaries with no compensation to those affected. This action, if implemented will have huge economic loss and another social impacts to those landholders living in these areas of Mary River catchment.

A significant concern missing in the ToR is the social impacts on landholders affected by this dam proposal. The State government has only referred to Stage One even though it has had it's officers attempting to advise affected victims in Stage Two that it would be in their interest to sell now.

**Recommendation:**

The ToR to include reference to informing stakeholders in the catchment of any restrictions on land use and how would they be compensated.

**Weeds**

The total cost of the national farm weed bill is \$ 4 billion per year, made up of yield losses and control costs. (CSIRO- MLA study Feb 05)

The G&DLCCG has led the way in addressing the aggressive Cats Claw Creeper vine.

It smothers trees and kills by depriving the tree of light. It is commonly found along waterways smothering vegetation and leading to increased erosion of riverbanks as trees die. It spreads its seed by wind. A combination of collapsed riverbanks and the seed from this plant will quickly establish itself in these locations.

Other weeds such as Noogora Burr, Castor Oil plant and Inkweed are to be found in the receding waterline at Paradise Dam.

Another serious threat is the waterweed Cabomba. This is a weed was originally found in Lake McDonald, one of Noosa Shires' water sources. This weed does not have any predator and has a massive root system. The Noosa Shire Council is spending \$150,000 per year just to monitor and attempt to control it. It is 36km away from the proposed Traveston Crossing dam. If it finds its way into the dam, its expansive and quick growing roots will quickly infest this area and could be spread by floods throughout the river.

**Recommendation:**

The ToR to include baseline studies of all weeds in the catchment and provide strategies for control, costings and responsibility.

**Salinity and Climate Change**

The Mary River Catchment has been identified as a catchment requiring investment under the "National Action Plan for Salinity and Water Quality" due mainly to the high levels of phosphorus and salt levels experienced across the catchment. Its status as a priority catchment under this national plan specifically links its management to particular strategies outlined in the National Biodiversity and Climate Change Action Plan (NBCCAP) 2004-2007, and the National Agriculture and Climate Change Action Plan 2006-2009.

Salinity hazard mapping prepared by the Queensland Government (2003) shows significant parcels of the catchment are at high risk of developing salinity problems in the future including the location of the proposed Traveston Crossing Dam. Already in times of low flow, water salinity increases are being recorded.

In addition to incorporating the effects of climatic trends on streamflow, this also specifically includes evaluating changes to greenhouse gas emissions (carbon and nitrogen compounds) resulting from land use changes. The emission of greenhouse gases (GHG) from reservoirs due to rotting vegetation and carbon inflows from the catchment is a recently identified ecosystem impact (on climate) of storage dams. Estimates suggest that the gross emissions from reservoirs may account for between 1% and 28% of the global warming potential of GHG emissions. (World Commission on Dams 2000).

#### **Recommendation:**

The following National Action Plans and Agreements relating to catchment management and climate change must be referenced in the Terms of Reference:

- Intergovernmental Agreement on the Environment (IGAE),
- National Biodiversity and Climate Change Action Plan (NBCCAP) 2004-2007,
- National Agriculture and Climate Change Action Plan 2006-2009 and
- National Action Plan for Salinity and Water.

#### **Conclusion**

There are alternatives to this dam proposal, which are more economic, and with less social, and environmental impacts. A large surface area of water to a average depth of 5 metres, the potential for water weed and terrestrial weeds to infest such a site, the evaporation rates, sediment build up and issues of blue-green algae all combined would lead to a disastrous situation. If one considers the transfer of water along pipelines from dam to dam, catchment to catchment, the situation becomes even more expensive for taxpayers. Already the social impact of this decision made by the Beattie government to build a dam at Traveston Crossing has enormously deflated the community spirit and put many years of community work and good will at risk.

Compensation to this community if the dam proposal is not approved should include increasing funding, encourage, and assist community groups such as G&DLCG to further improve the catchment and help solve the existing problems we already have.

We have a natural system that with the help of the community and others described earlier can improve our quality of life and our environment. Building this dam only exacerbates issues society already has to confront and is not a sustainable solution to the water crisis.

**Yours sincerely**

**Kent Hutton**  
**President**  
**Gympie & District Landcare Group**

#### **References:**

Braby J. (2007). Submission to the Draft Terms of Reference for the Environmental Impact Study for the Traveston Crossing Dam.

Cardno and University of Tehnology Sydney (2007). Review of Water Supply-Demand Options for South East Queensland. [www.savethemaryriver.com](http://www.savethemaryriver.com)

De Rose, R. Prosser, I. Wilkinson, L. Hughes, A. Young, W. (2002). Regional Patterns of Erosion and Sediment Transport in the Mary River Catchment, Queensland. Technical Report 37/02. CSIRO Land & Water, Canberra.

McLeod J. (1996). Commercial Fishing Industry's Perspective in Assessing and Adopting Scientific/Technical Information in H.M. Hunter, A.G. Eyles, G.E. Rayment (eds.), 'Downstream Effects of Land Use', 427-428, 1996. © Department of Natural Resources, Queensland, Australia.

World Commission on Dams (2000) Dams and development: a new framework for decision making. The report of the world commission on dams. London and Sterling VA. Earthscan Publications Ltd.

<http://www.dams.org/docs/report/wcdreport.pdf>