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The Secretary Senate Rural and Regional Affairs and Transport Parliament House Canberra ACT 2600

Submission to the Senate's Inquiry into Additional Water Supplies for South East Queensland Traveston Crossing Dam

WWF-Australia welcomes the opportunity to contribute to the Senate's inquiry into this complex and challenging issue. We believe the Senate has an opportunity to play an important role in the development of secure and sustainable water supplies in South East Queensland.

The Committee may be aware of our concerns that the Queensland Government's initial plans for new water infrastructure in South East Queensland may impact significantly on the Fraser Island World Heritage Area, the Great Sandy Straits Ramsar Wetland, Mary River cod, Mary River turtle, and Queensland lungfish. We have approached Commonwealth agencies asking that they engage closely with proposals for new large scale water infrastructure through the Commonwealth's responsibilities on referrals under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC)*, and provide strong oversight on the Queensland Government's assessment process for the planned dam on the Mary River.

In considering the best possible investment opportunities for water infrastructure, we urge the Committee to consider that large scale dams can do nothing to guarantee rainfall. As well as the obvious risks to biodiversity associated with new dams in environmentally-sensitive areas, WWF are also concerned that new dams may not be the most effective way to provide ever-increasing levels of water to south east Queensland's expanding population. A number of eastern Australia's most reliable dams remain at historically low levels. South east Queensland already has 19 large dams, however they have done little to avert the region's water crisis.



Commonwealth and state government responsibilities under the National Water Initiative

We urge the Committee to ensure the large scale infrastructure proposed by the Queensland Government, and the associated assessment processes, adhere to policy commitments set out under COAG's National Water Initiative¹, including:

Section 25

The Parties agree that, once initiated, their water access entitlements and planning frameworks will:

(iii) be characterised by planning processes in which there is adequate opportunity for productive, environmental and other public benefit considerations be identified and considered in an open and transparent way

Section 37

Broadly, water planning by States and Territories will provide for:

(i) secure ecological outcomes by describing the environmental and other public benefit outcomes for water systems and defining the appropriate water management arrangements to achieve those outcomes:

Section 69

The Parties agree to ensure that proposals for investment in new or refurbished water infrastructure continue to be assessed as economically viable and ecologically sustainable prior to investment occurring

Areas requiring assessment prior to decision-making on infrastructure projects in the Burnett Mary catchment

WWF believes work already done by the Commonwealth identifies issues that the Committee might find useful when identifying areas for further assessment. We see a real need to ensure the Queensland Government investigates the impact new infrastructure will have on the natural

¹ http://www.coag.gov.au/meetings/250604/index.htm#water_initiative



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resource issues identified by the Commonwealth in the Burnett Mary Queensland Report Card published in 2004². The report card states:

The Burnett Mary region is being challenged to maintain and improve the ecological and environmental health of its natural resources. The key problem areas identified by partner agencies and the Australian Government programs are:

- Maintaining the region's unique biodiversity
- Weeds and pests
- Water quality and impacts on the Great Barrier Reef World Heritage Area
- Water quantity and supply
- Dryland salinity
- Population pressure
- Coastal development
- Land and soil management
- Natural and cultural heritage

The NRM Report Card goes on to note:

- Pollution and contamination from herbicides, pesticides, fertilisers and sewage/ stormwater effluent in the Mary River currently pose a moderate threat to the Ramsar wetland.
- Erosion in the Mary River catchment contributes to turbidity and siltation in the Great Sandy Strait.
- Groundwater supplies in areas of the region are also significantly over allocated. For example, groundwater supplies in the Burnett River catchment are already being degraded. Significant seawater intrusion into the aquifer has already commenced along the coastal interface of the aquifer. There are also concerns over the increasing level of nutrient and wastewater contamination in the shallow groundwater aquifers of the coastal Burnett catchment.

² http://www.nrm.gov.au/state/qld/burnett-mary/publications/report-card/index.html#problems



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• The present high levels of water use and the interruption of river flows within the region are having a significant effect on the Ramsar Wetland as well as other significant conservation sites and species such as the Mary River cod and lungfish.

Considering the Commonwealth's existing concerns over biodiversity, water quality and quantity issues, and the identified significant impacts of those dams and weirs already in place on biodiversity, WWF urges the Committee to closely investigate the broad scope of all the issues raised in the Report Card.

WWF, in conjunction with the Queensland Conservation Council and Humane Society International, wrote to the Department of Environment and Water Resources in November 2006 to request they investigate the issues raised in the Burnett Mary Queensland Report Card through the EPBC referral process, however have yet to receive any confirmation of the scope of the EPBC assessment process.

Limitations of Self-Assessment

Given that the Traveston dam project will be treated as a controlled action under the EPBC, and that as a result the bilateral agreement with Queensland ensures the projects' proponents will also be the projects' primary assessor, we believe Commonwealth action to ensure transparency and public engagement is essential and that the Committee has an opportunity to determine what form that Commonwealth action should ultimately take.

We were disappointed to note that the dam proposals have been designated as "significant projects" under the *Queensland State Development and Public Works Organisation Act 1971*. We urge the Committee to guarantee the Traveston dam assessment process engages stakeholders such as landholders, affected farming communities, independent water specialists and environmental scientists in a robust, independent and transparent process.

We believe that, while the Senate Committee has a real opportunity to contribute to the prioritisation of water supply options in South East Queensland, there are also issues relating to the circular self-assessment process that has handicapped state government engagement with the community on the issue of Traveston dam that may be worth investigating more closely.

Similarly, we also believe that the Committee has an opportunity to look more closely at the potential for a Commission of Inquiry under the EPBC to deliver outcomes where state government self-assessment processes are failing, and will fail in the future, to deliver transparent and acceptable assessment processes to the community at large.



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Effectiveness of Existing Mitigation Technologies for Single Species

We are particularly keen to see the Committee investigate the re-visit issues raised under Section 5 of the Traveston Dam referral document, which deal with measures aimed at avoiding or reducing significant impacts on matters protected under the EPBC.

1. Lungfish

The matter of upstream and downstream passage of fish must be fully investigated as a result of the presence of threatened aquatic fauna. We urge you to consider the findings of the Queensland Department of Primary Industries in their paper which assesses the effectiveness of existing mitigation for threatened lungfish. The paper, *Downstream Passage of Fish at Ned Churchward Weir*³, states:

"Whilst low numbers of fish were identified using the fishlock, the results indicate that the current fishway does not appear to be providing optimal passage for downstream migrating fish. A major deficiency of the design appears to be the lack of attraction flow and the retention of fish once they have entered the fishlock."

Similarly, the Queensland Department of Primary Industries paper Upstream Passage of Queensland Lungfish at Ned Churchward Weir Fishlock⁴ found:

"It has been demonstrated that the current fishlock is unlikely to be providing optimal passage for lungfish."

Despite the presence of a fishlock on Paradise Dam, WWF understands that since the dam is yet to properly fill, opportunities to test it, and to ascertain its effectiveness have been limited. We are aware of no public information that provides us with an appropriate level of confidence that the Paradise Dam lungfish mitigation is allowing upstream and downstream passage of sufficient numbers of lungfish to ensure its population is not fragmented and to guarantee there is no disruption to its breeding cycle.

What scant information on the effectiveness of mitigation for threatened fish species that does exist seems to indicate a highly precautionary approach must be taken in assessing plans for more in-stream blockages in the species' habitats.

³ A.P Berghuis et al, *Downstream Passage of Fish at Ned Churchward Weir* QLD Department of Primary Industries March 2004 pg 16

⁴ A.P Berghuis et al, *Upstream Passage of Queensland Lungfish at Ned Churchward Weir Fishlock* QLD Department of Primary Industries March 2004 pg 19



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The international biological importance of the Australian lungfish cannot be overstated. Fossils of the species found in New South Wales have been estimated to be 100 million years old. Interrupting the species' spawning behaviour may well have permanent, irreversible consequences for its ongoing viability.

2. Mary River Turtle

The Mary Basin draft water resource plan *Environmental Flow Assessment Framework and Scenario Implications*⁵ indicates significant effects from large water storage on threatened species including the Mary River Turtle. The draft plan states:

"The other vertebrate fauna of this part of the river would also be affected by flow regime changes associated with scenario case R. A key issue is the impact of reduced sediment transport and increased vegetation encroachment on the sand banks that provide critical habitat for turtle nesting, including the endangered Mary River turtle. Loss of exposed sand is critical as loose sandy substrate (rather than finer material such as silt) is specifically required by the turtles."

WWF regard effective protection of critical habitat as vital for ensuring the future viability of protected species. We urge you to consider the potential impacts of the destruction of critical habitat inherent in the Traveston Dam proposal, and the risks associated with manipulated breeding regimes for the species.

3. Mary River Cod

The Commonwealth's *Recovery Plan for Mary River Cod*⁶ proposes as its objectives:

- Self-sustaining populations established outside the present range by 2010.
- Conservation status of cod downlisted from 'endangered' to 'vulnerable' by 2010.
- Distribution of cod in the Mary River system increased to encompass at least 60% of their former known range by 2010

The plan also notes:

The Mary River cod (Maccullochella peelii mariensis) is one of Australia's most endangered fish.... It is estimated that Mary River cod now occur in less than 30% of their former known

⁵ Queensland Department of Natural Resources and Mines Draft Mary Basin Water Resource Plan Environmental Flow Assessment Framework and Scenario Implications 2004

⁶ http://www.deh.gov.au/biodiversity/threatened/publications/recovery/mary-river-cod/summary.html



range in the Mary River system. Remnant populations may have become isolated from each other due to habitat fragmentation and the impoundment of streams.

WWF is concerned plans by the Queensland Government to dam the Mary River will make achieving the recovery objectives of the Commonwealth's recovery program for this species impossible. Given the significant progress that the Commonwealth has made in this area, we urge you to ensure state planning does not undermine the good conservation outcome already achieved on Mary River cod.

In Summary

WWF believes the Committee has an important role to play in ensuring the long-term benefits described by the Queensland Government are realistic deliverables.

We urge the Senate to further investigate opportunities for the Commonwealth to engage assessment alternatives available through the EPBC process in order to remove the need for the Queensland Government to provide independent, transparent and comprehensive assessment of a project to which it has already publicly committed itself.

We also urge the Committee to actively engage with Queenslanders and interested experts as broadly as possible, in order to studiously assess the environmental, social and economic costs associated with the Traveston and Wyralong projects, and their true potential to deliver improved water security for water users in South East Queensland.

Yours sincerely,

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