4th, April, 2007

Mr David Bade 581 Moy Pocket Rd Kenilworth, 4574, QLD PH (07) 54460974 FAX (07) 54460974

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

Dear Sir/Madam,

RE: Inquiry into Additional Water Supplies for South East Queensland-Traveston Crossing Dam Information.

The purpose of this letter is to provide information for the Senate inquiry into the Traveston Crossing Dam Proposal, Mary Valley, QLD.

As an affected landholder in the footprint of the Traveston Dam Proposal, my livelihood and future as a second generation farmer on the property is, I feel, being placed in unnecessary jeopardy.

The lack of answers to specific questions I have raised with QWI (*Queensland Water Infrastructure Pty Ltd*) has made decision making central to my business, very difficult. Therefore, I would like to place before this inquiry a series of *some* of the questions and concerns that I have been posing to QWI and DNRW and to which the responses have been misleading, inadequate and patronising.

- Will the catchment of Traveston Crossing Dam be declared? If so, what area will it affect (potential for thousands of properties)? On the cover, some information coming from QWI and DNRW seems to be denying that Catchment powers will be extended, but there are blaring holes in the statements which indicate, to me and others, that some details are being withheld from the public. People need to know *now*, if their business and/or landuses are to be curtailed at a future date. Primary Production and Rural landuse decisions involve long range planning. If there is no transparency *now* as to what is planned by the QLD State Government or QWI, or any other current or future stakeholder in the proposed Dam and it's catchment area, then this may prove very costly to people's businesses and livelihoods.
- What Landuse Controls are to be put in place to maintain *Water Quality* in the impoundment under the proponents of *State Interest*?
- If Declared Catchment Status is no longer the status name, what is it to be called now or at a future date?
- Will QWI be a concurrence agency with interest in the Water Act 2000 where referenced to the IPA 1997 (*Integrated Planning Act 1997*) or will a referral still be made to DNRW?
- Will compensation mechanisms be put in place in legislation for affected landholders and businesses both directly surrounding ponded area and those further out, but still within the catchment?

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- Give detailed explanation of function, and consequences, for affected landholders of designation of water easement? How will it effect a primary production business?
- Concern about the accuracy of flood modelling conclusions drawn for Imbil in QWI fact sheet '*Imbil Brooloo*'.
- Concerns about security and tenure of Water Licenses under Water Act 2000 Section 229: 'Effect of disposal of part of land to which water licenses to take water attaches'.
- Will price structure for water from dam brought about by Sunwater (or other) be affordable for users such as irrigators?
- From QWI <u>'Land Purchase Policy'</u> will affected landholders who have part of their properties resumed, be 'encouraged' to enter into *Type II* Landuse Controls over the remaining property they control?
- Major social and economic effects from landuse control measures designed to maintain water quality for dam to supply potable water, impacting on farming practices.
- Does QWI have the power to 'request' the Coordinator General to initiate procedures for compulsory acquisition of relevant land and a water storage easement under provision of State Development and Public Works Act 1971 currently or will this be sought under IPA 1997 Amendment?

Recent introduction of *Community Ambulance Cover and Other Acts Amendment Bill 2007* into Queensland Parliament by Deputy Premier and Minister for Infrastructure Anna Bligh, on March 14th, 2007.

"The Amendments to the Integrated Planning Act 1997 will provide QLD Water Infrastructure with exemptions for reconfigurations for part takes of land acquired by agreement with landholders"

I draw your attention here with further comment attached following this cover letter.

Part 8: INTEGRATED PLANNING ACT 1997, Page 62.	Amendment to Dictionary.
Community Ambulance Cover and Other Acts Amendment Bil	<u>12007</u>

	Clause	62	Amendr	nent of sch 10 (Dictionary)	18
			Sche	edule 10—	19
			insert—	rt—	20
			'wat worl Pty I unde	er infrastructure facility means a measure, outcome, cs or anything else that Queensland Water Infrastructure Ltd (ACN 119 634 427) is directed to carry out or achieve ar—	21 22 23 24
			(a)	the State Development and Public Works Organisation Act 1971; or	25 26
			(b)	the Water Act 2000.".	27

- Clarification needed as to what powers under Water Act 2000 are now available to QWI with the inclusion of Water Act 2000 in Section 10-Dictionary of IPA 1997.
- Are further amendments to be sought in relation to IPA 1997 by QWI pertaining to Traveston Crossing Dam?

Attached to this letter is supplemental information such as correspondence I have had with QWI and CFTF (*Community Futures Task Force*) concerning some of the matters referred to in this letter. I will also attach with this emailed file, a copy of the joint Submission which another landholder and I submitted on the Draft Terms Of Reference for the Environmental Impact Statement-Traveston Crossing Dam Proposal, Mary Valley.

I would be happy to discuss in person, any concerns if requested. Thankyou for your time.

Yours Sincerely. ADDEle_

Mr David Bade, Moy Pocket, Kenilworth.

SUPPLEMENTAL INFORMATION AND COMMENT

INTRODUCTION

Since the announcement of the dam proposal by Premier Beattie in April 2006, answers to many questions of concern by affected residents has been limited.

Fact Sheets released by DNR&W and then QWI have been very general in their content and a very limited source of information when addressing concerns.

To quote Graeme Newton, Chief Executive Director of QWI in the correspondence included in this Senate Submission, 'other matters you raised <u>may</u> be addressed in the EIS on Traveston Crossing Dam' has been a standard response by QWI when specific questions are asked. How can the public be expected to make on farm decisions or defend their rights in a fair and just manner when information is withheld until the EIS is released? We have waited for our questions and concerns to be addressed in a respectful and transparent manner, but they have not been very forthcoming. As a result, we have all suffered much distress over the last twelve months. By the time the EIS comes out with our 'concerns addressed', we will have suffered for two years if not longer in anticipation of our issues being resolved and our queries being aptly responded to. A large portion of people's concerns do not need an EIS study to answer them.

We tried to address as much as we could in our submissions to the Draft Terms of Reference, but QWI and the QLD State Government reserve the right to discard and ignore our demands and input. So our concerns may still go unanswered when the Environmental Impact Statement is released.

Correspondence and a copy of the joint submission on the Draft Terms of Reference for the EIS-Traveston Crossing Dam Proposal by myself and another local, Mrs Terri Asmus, have been emailed with this Senate Inquiry Submission for inclusion and contribution to the information pool. When making final decisions on suitability of this dam as part of the strategy for guaranteeing water supply needs for South East Queensland and it's future, it is hoped that all information in that pool will be justly considered and fairly responded to in detail, for public scrutiny.

*

LIMITED INFORMATION AVAILABLE CONCERNING DECLARED CATCHMENT AND LANDUSE CONTROLS

I have for some time been pursuing what landuse control measures, particularly whether Declared Catchment designation in some form, will be put in place for this dam.

QWI have not to date, directly answered the question of whether there is to be a Declared Catchment for Traveston Crossing Dam. I have asked this question directly and I approached Mr Steve Mill, Executive Director of the Community Futures Task force, who sent an email to QWI on my behalf with 10 questions which I have raised (*see attached correspondence: Letter No 2 & Letter No 3).

I eventually received a letter from Graeme Newton from QWI (*see attached Queensland Water Infrastructure correspondence: Letter No 1) in which I found to be a totally unsatisfactory answer to any of the questions I raised. No mention of declared catchment.

Three QWI Fact Sheets, which dealt in general and vague terms, were as close to what I presume are answers to some of the questions raised. I can only guess that 'some of your concerns may be answered in the EIS' constitutes an answer to the questions asked.

Further discussions were entered into with a Mr Gauld (CFTF), who spoke on behalf of Steve Mill, and I requested that he make further inquiries about two questions in particular:

- 1. Is there to be a declared catchment?
- 2. Will a second EIS be required for Stage II of Traveston Crossing Dam?

From the letter of reply from CFTF Executive Director, Mr Steve Mill, (*see attached CFTF correspondence: Letter No 4), I quote:

"The DNR&W have no intention of extending the declared catchment powers under the Water Act to Traveston Crossing Dam. Broader matters of landuse in catchments of major dams may be considered in Local Government Planning Schemes or under the Environmental Protection Legislation."

On the surface it appears '*no intention of extending declared catchment powers*' is a definitive statement, however, the second sentence quoted gives the statement, in my opinion, a different meaning.

I also draw your attention to the <u>Cooloola Council Meeting Minutes of 5th, September 2006</u>, a presentation by Mr M.J. Ball, Director of Planning and Development where I have copied in 3.0, 7.0 and 8.0 to comment on. (S13, In Committee Matters, Late Item 1, pg 43 & 44) "State Government Policy and Code for Preserving Water Quality in declared Catchment Areas-Guideline F10"

3.0 It is expected that if the Traveston Crossing Dam proceeds it will necessitate a change to the Cooloola Planning Scheme and, as such, the provisions in the Guidelines will be incorporated into the Scheme as 'State Interest'. 7.0 Obvious implications of the Guidelines are:

- 1. Amendment to the Cooloola Planning Scheme and increased development assessment applications.
- 2. Significantly reduced development oppurtunities.
- 3. Increased capital and operational costs of all development and infrastructure in the catchment.
- 4. No compensation payable to landholders as a result diminished oppurtunity and increased costs.

8.0 If the dam proceeds, these Guidelines will need to be implemented to preserve water quality.

There seems to be little doubt here that local government planning schemes in the context used in CFTF letter dated 20 February 2007, imply that Council Planning schemes are going to play a pivotal role to preserve sustainable water quality in the '*state interest*'. Further to that, it appears in *4.0* of that *Cooloola Report and Meeting Minutes*:

4.0 It is expected that Traveston Crossing Dam will become a declared catchment and as such development applications will trigger referral to the DNR&W and the Guideline will assist their staff to respond to those applications.

To me this indicates DNR&W will be a concurrence agency and final discussion in such matters will be made at State level.

With the introduction of the <u>Community Ambulance Cover and Other Acts Amendment Bill 2007</u> introduced by Deputy Premier, Treasurer and Minister for Infrastructure, Anna Bligh into State Parliament on the 14th, March 2007, which amends the Integrated Planning Act 1997, the question arises as to whether QWI is to take some future role in Landuse Controls under the Water Act 2000. This is especially implied when one considers the wording of *Clause 62 Amendment of Sch 10 Dictionary*. Part 8, pg 61 & 62:

Clause	62	Amenda	nent of sch 10 (Dictionary)	18
		Sche	xdule 10—	19
		inser	rt—	20
		' <i>wat</i> work Pty I unde	'water infrastructure facility means a measure, outcome works or anything else that Queensland Water Infrastructur Pty Ltd (ACN 119 634 427) is directed to carry out or achiev under—	
		(a)	the State Development and Public Works Organisation Act 1971; or	25 26
		(b)	the Water Act 2000	27

From the QWI Fact Sheet <u>'Land Purchasing Policy'</u> 5.1 pg 4:

(f) The appropriate controlled activities, either Type I or Type II will be contractual obligations contained in the Water Storage Easement or Sale Contract where an easement is not required and will also appear in Leases.

It is made quite clear the intention to introduce into immediate ponded area and surrounds, very specific landuse controls which are worded to purchase agreements. The question must be asked. What area of the catchment would need effective Type II Controls to *'preserve sustainable water quality in the State Interest'*?

From the QWI Fact Sheet <u>'Land purchasing Policy'</u> 5.1 pg 4:

(g) Given that the dam will be operated in stages it will be necessary to protect the buffer and flood margin areas for Stage 2 until that stage is completed. To ensure that improvements and/or significant infrastructure are not constructed, or incompatible land uses developed, up to the proposed flood margin area for Stage 2, the water storage easement will need to include appropriate covenants to manage these areas after Stage 1 is completed.

The wording here shows significant similarity with the principles of Declared Catchment as outlined in the DNRW's F10 Guidelines.

I have concerns with the functionality of many cases. Part of a property having these landuse covenants (Type I & II) imposed and on the other sides of an arbitrary line no controls apparently are in place. In the instance of heavy rain causing water shed (ie flow over surface) any '*incompatible landuse*' contaminants (fertilizer products for example) will pass directly into streams or ponded area. I see making a distinction of what enters the ponded area directly in heavy rain and from further upstream (ie outside ponded area and buffer zone) hard to justify.

The central point I wish to make is that water quality control measures in some form are an essential element of this proposal and will have consequences for landholders in and outside the acknowledged Dam proposal area. There are potentially thousands of properties affected to varying degrees.

The question of compensation for effects both direct and indirect on farms and businesses, must be addressed in the economic and social effects of the dam proposal on the community.

FLOODING

I Quote from QWI Fact Sheet 'Imbil Brooloo' :

"the townships of Imbil and Brooloo will not be affected by the full supply level or any additional flooding as a result of the construction of the Traveston Crossing Dam".

The 1999 flood did enter the lower part of the township around the bridge. Add the volume of water flowing in during a flood, from Yabba Creek and an increase in flood height is a very reasonable conclusion.

I Quote from QWI Fact Sheet about flooding 'Gympie':

" will provide a range of benefits to the town of Gympie, including significantly increased protection against a repeat of the devastating 1999 flood'.

At whatever level the *'operating level'* is for the dam, the fact is that the water being stopped from flowing in order to reduce the inundation level in Gympie, is going to raise the water level behind the dam thus increasing in height. It will then back up into Yabba Creek and directly contribute to the height of the resultant flood in the low lying Imbil township area.

If it is the intention of QWI to have functional flood gates at Stage II, 79.5metres AHD, then flooding consequences must be compounded by increase in final flood height.

The effects of an emergency discharge from Borumba Dam on Imbil township with Traveston Dam in place, needs to be studied in detail. Obvious reasons include immediate risk to persons and property in the path of the water surge.

WATER LICENSE SECURITY

From the Water Act 2000, Section 229

"Effect of disposal of part of land to which water license to take water attaches".

When part of property is sold, the license expires and must be reapplied for if still required for remaining portion. I have concerns as to actual security of tenure of license when removed from land title as is now the case under current legislation.

With the purchase by QWI of the effective floodplain of the valley to form the ponded area, all water users are going to have to negotiate easements to divert water. How secure are those agreements in the long term? Substantial costs are going to be incurred in potentially moving infrastructure, eg electric cables and water delivery pipes, with fluctuations in water height of dam.

GENERAL COMMENT ON TERMS OF REFERENCE FOR THE EIS-TRAVESTON CROSSING DAM PROPOSAL.

The EIS for such a major public works project needs to be as comprehensive and accurate as possible in detailing what benefits and negative impacts such a project will have if implemented.

Many points which have been put forward in public submissions need to be assessed for validity of points raised whether positive or negative in their consequence on the proposal.

Where people or organisations with expertise in relevant areas and fields put forward issues to be considered, due consideration should be given by the decision making authority.

*

ATTACHED CORRESPONDENCE

- Letter from Graeme Newton, Chief Executive Director, Queensland Water Infrastructuredated 31/1/07
- 2. Letter from Steve Mill, Executive Director, Community Futures Task Force-dated 19/2/07
- 3. Attached to above letter: Questions Steve M ills asked on behalf of myself, Mr David Bade
- 4. Letter from Steve Mill, Executive Director, Community Futures Task Force-dated 20/2/07

The following two letters are from me to Mr Greg Claydon, DNR&W and Graeme Newton, QWI, written and posted end of March. Response, if any, not expected before Senate Inquiry Submissions deadline.

- 5. Letter from myself to Mr Greg Claydon, Executive Director, DNR&W-dated 29/3/07
- 6. Letter from myself to Graeme Newton, Chief Executive Director, Queensland Water Infrastructure-dated 29/3/07



QUEENSLAND WATER INFRASTRUCTURE PTY LTD

A66 13 119 654 427

Level S, 119 Charlotte Strept Krishane Q 4000 FO Gue 15940 City Lest U 4002 P 37 3462 7100 F 07 4405 7252

W www.oldwi.com.au

Date: Ref; 31 January 2007 3015

Mr David Bade 581 Moy Pocket Road KENILWORTH QLD 4574

Dear Mr Bade,

Thank you for your recent queries regarding the proposed Traveston Crossing Dam. I refer to your recent discussions with Laurie Pappin and Scott Smith of Queensland Water Infrastructure (QWI) and prior to this, representatives from the Department of Natural Resources and Water regarding your property at Moy Pocket Road, Kenilworth.

QWI's primary charter is to purchase properties that are required for the proposed Traveston Crossing Dam, as identified on the land purchasing plan released in October 2006. As such, QWI is currently 'standing in the market' and in discussion with willing sellers. All negotiations are on a voluntary basis and there is no requirement to negotiate should you not wish to have contact with our office.

Following your recent discussions with Scott Smith, QWI has noted your intent not to sell your property and I have marked your file accordingly. Should you in due course reconsider the sale of your property, we will be pleased to commence negotiations with you.

In the meantime, I can confirm that the purchase boundary for the proposed dam has been based on extensive flood modelling undertaken during the later half of 2006. Please find enclosed a series of fact sheets which further outlines a number of issues you raised such as flooding, land use controls and the approvals process. Other matters you have raised may be addressed by the Environmental Impact Statement (EIS).

The Terms of Reference for the EIS are presently being drafted. The EIS, when completed, will be submitted to the Federal Government for consideration as part of the approval process for the project. Should you wish to make written comments to be considered for inclusion in the draft terms of reference they will be accepted by The Coordinator General until 19 February 2007. For further information contact The Office of the Coordinator General on: 1800 996 829.

Please be assured that QWI is committed to behaving with integrity and working with all people in a respectful manner.__

Yours sincerel

Greene Newton Chief Executive Officer QUEENSLAND WATER INFRASTRUCTURE PTY LTD

Page 1 of 1

Community Futures Task Force

For reply please quote: LA18/CFTF

19 January 2007

Mr David Bade 581 Moy Pocket Road KENILWORTH QLD 4574

Dear Mr Bade

Thank you for taking the time to telephone the Task Force on 10 January 2007 and raising your concerns on the proposed Traveston Crossing Dam. Major General Peter Arnison, Chair of the Task Force, will be advised of your issues.

The Task Force has referred your concerns and questions to Queensland Water Infrastructure (QWI) and requested your issues be addressed directly with you. A QWI representative will be in contact with you shortly to arrange a meeting to discuss your issues and provide you with the appropriate advice.

I have attached a list of the issues that you raised with me in our telephone conversation on 10 January 2007. Please do not hesitate to contact the Task Force on 1800 133 258 should you wish to raise further issues.

Yours singerely

Steve Mill Executive Director

Encl.

PO Box 15637 City East Qid 4002 Telephone: 1800 133 258 Facsimile: 3224 5310 Email: info@communityfutures.qid.gov.au Web: www.communityfutures.qid.gov.au List of Issues in relation to the proposed Traverston Crossing Dam raised by Mr David Bade to the Community Futures Task Force by telephone on 10 January 2007

- Land use in and near the buffer zone. Will Mr Bade continue to be able to grow tree crops and will dairying be allowed near the buffer zone?
- Will the dam be a declared catchment?
- Is the dam being built to stage 2 capacity (height of dam wall and flood gates) at stage 1 construction?
- The flood effect will be 25 kilometres upstream. Water will be 15 feet deep in Kenilworth when the dam is full at stage 2 and fast flowing flood water will rise above this.
- Imbil will flood five to six feetwhen the dam is full at stage 2. The school, café, part of the showgrounds and some houses in Imbil will flood. The transfer station currently being built on Yabba Creek and the sewerage works will flood.
- The dam will cause flooding outside the buffer zone.
- What is the property buyback and disposal policy if the dam does not proceed.
- Mr Bade currently has a water licence for 21ML. Will he be able to keep the licence and to get access/easement to the river to pump. Will the access/easement be a commercial contract?
- What will be the diversion arrangements for the river at the time of construction and will this arrangement cope with a flood?
- That the stage 1 EIS will automatically allow stage 2 to proceed without a further EIS. Will stage 2 be referred to the Federal Government?

Community Futures Task Force

For reply please quote: AG20/CF7F

2 0 FEB 2007

Mr David Bade 581 Moy Pocket Road KENILWORTH QLD 4574

Dear Mr Bade

I have followed up on your requests for information regarding the proposed Traveston Crossing dam. Your first question related to whether the site will be a declared catchment on completion and if not, is there going to be a provision written into legislation for it to be in the future? The second question enquired that if Stage 2 of the project were to proceed would another EIS definitely be required?

The information I have received from the Department of Natural Resources and Water (DNRW) regarding the declared catchment is that:

"The DNRW have no intention in extending the declared catchment powers under the Water Act to Traveston Crossing Dam. Broader matters of land use in catchments of major dams may be considered in Local Government Planning Schemes or under the environmental protection legislation."

I have contacted the Coordinator-General's office on your behalf regarding the EIS question. Their response was, at the present time, an EIS would be required to enable Stage 2 to proceed. However, as Stage 2 is proposed to be complete by 2035, if required, a decision to proceed will be dependent on the applicable commonwealth and state legislative approval requirements at that time.

PO Box 15637 City East Qid 4002 Telephone: 1800 133 258 Facsimile: 3224 5310 Email: info@communityfutures.qid.gov.au Web: www.communityfutures.qid.gov.au I trust this has clarified the matters for you. For future reference I have attached the contact details of the relevant officers if you require further information.

Mr Greg Claydon Executive Director Department of Natural Resources and Water GPO Box 2454 BRISBANE QLD 4001 Mr Peter Silvester Acting Project Manager Department of Infrastructure PO Box 15009 CITY EAST QLD 4002

Telephone: (07) 3224 2418

Telephone: (07) 3237 7470

If you have any further enquiries please do not hesitate to contact the Task Force.

Yours sincerely

Steve Mill Executive Director Community Futures Task Force

Community Futures Task Force

29th, March, 2007

Mr David Bade, 581 Moy Pocket Road, Kenilworth, QLD, 4574 PH (07) 54460974 FAX (07) 54460974

Mr Greg Clayton Executive Director Department of Natural Resources & Water GPO Box 2454 BRISBANE QLD 4001

RE: DNRW AS CONCURRENCE AGENCY IN MATTERS OF LANDUSE CONTROL FOR TRAVESTON CROSSING DAM

Sir

I wish to seek clarification of whether agencies such as DNRW & EPA will have interest in landuse controls to be put in place in regards to Traveston Crossing Dam. Confirmation or otherwise is sort in relation to the following questions.

- Will DNRW be a concurrence agency in relation to landuse matters involving the Water Act 2000 for the Traveston Crossing Dam?
- Will Declared Catchment status under Water Act 2000 be enacted in relation to Traveston Crossing Dam upon completion or in the foreseeable future?
- Will QWI be granted some concurrence agency powers under the Water Act 2000 as it applies to proposed amendments to *IPA* 1997 Act introduced by Deputy Premier & Minister for Infrastructure Anna Bligh in State Parliament under the 'Community Ambulance Cover and Other Acts Amendment Bill 2007' on 14th March 2007?. If so give details.
- If some form of Landuse Control measures to preserve water quality in the ponded area are envisaged in the 'State Interest' will a compensation mechanism for affected landholders be put in place? Please explain.
- There has been some conjecture as to whether it will be called a Declared Catchment because many landuse Controls as indicated by QWI document 'Land Purchase Policy Traveston Crossing Dam 29th, 10th, 2006' are very similar to what you would expect to see under Declared Catchment status. It is quite apparent that some form of Landuse Control will be used to preserve water quality in the ponded area in the 'State Interest' given that this is primarily a potable water dam. What will these Landuse Control measures be called?
- Will water license security and tenure be a policy feature in the functioning of the dam given the implications of Water Act 2000 Section 229: 'Affect of Disposal of Part of Land to Which Water License to Take Water Attaches?'

Await your timely response, Yours shcerely, Maddee Mr David Bade. 18

29th, March 2007

Mr David Bade, 581 Moy Pocket Road Kenilworth QLD 4574 PH: (07) 54460974 FAX.(07) 54460974

Graeme Newton Chief Executive Officer QWI PTY LTD Level 8 119 Charlotte Street Brisbane, QLD 4000

RE: LANDUSE CONTROL MEASURES TO ENSURE WATER QUALITY IN TRAVESTON CROSSING DAM

Sir.

I have several questions to which I seek answers in relation to the future of my property and the Mary Valley in general. My property is Lot 59 on LX 384 to which QWI has expressed interest in 3 77 hectares.

I am a Primary Producer and have concerns on the consequences of Landuse Controls, as they will affect my business, future business direction and current business practices.

Points of concern I would like to see addressed by you are:

- Will Declared Catchment status be enacted in relation to Traveston Crossing Dam under Water Act 2000 by QWI or any future party with interest in water distribution from this dam?
- Will QWI be a Concurrence Agency in this case or will it refer back to DNRW?
- Will QWI be granted further powers under IPA 1997 in line with amendments recently introduced into State Parliament by Deputy Premier & Minister for Infrastructure Anna Bligh, under the 'Community Ambulance Cover and other Acts Amendment Bill 2007' on 14/3/077 If so give details.
- There has been some conjecture as to whether it will be called a Declared Catchment because many landuse Controls as indicated by QWI Pty Ltd Document 'Land Purchasing Policy Traveston Crossing Dam 29/10/2006' are very similar to what you would expect to see under Declared Catchment status. It is quite apparent that some form of Landuse Controls (which have not been highly and realistically detailed in current QWI Landuse Fact sheets) will be used to preserve water quality in the ponded area in the 'State Interest' given that this is primarily a potable water dam. What will these Landuse Control measures be called?
- What is QWI's policy in relation to Septic Systems and building of Permanent Structures in the immediate area of the Dam, but outside of the resumed area for Buffer Zone Stage 2?
- With completion of either Stage 1 or Stage 2, will the demand for higher standards of
 potable water quality mean that whoever takes over the running of the dam, be it
 Sunwater, SEQWater or other, will be granted powers under *IPA* 1997 by suitable
 amendment to extend powers to make a Declared Catchment in the vicinity of
 Traveston Crossing Dam, invoking stringent landuse controls that QWI and DNRW
 'currently' have no intention of extending.
- If control of water sales is given to Sunwater or other, will QWI still have an active role in the day to day functioning of the dam and retain concurrence powers in relation to the Water Act 2000, Integrated Planning Act 1997 and Slate Development and Public Works Organisation Act 1971? What form will it take?

- In reference to QWI 'Land Purchase Policy Traveston Crossing Dam Section 2' 'Outline of Purchase Process'. Will QWI be requesting the Coordinator General to initiate procedures for compulsory acquisition for relevant land and a water storage easement under the provision of the State Development and Public Works Organisation Act 1971?
- What justification is there for compulsory acquistion NOW of land required only for Stage 2? What justification will be used given this land is not required until 2035 if required?
- What is the function of water storage easement designation over land in the proposal area? How will it be implemented and what affects will it have on the parcel of land, if any, retained by the affected landholder?
- Will amendments to IPA 1997 leglisation be sought to affect resumptions of whole properties to manage water quality in the 'State Interest'?
- Is Primary Production to be considered to be an incompatible landuse under Water Act 2000? Or will it be allowed in limited form, under strict control? Please give details.

I await your timely response, Yours Sincerely, Mr. Dated Rodo

Mr David Bade Moy Pocket, Kenilworth 13th February, 2007

The Coordinator General Project Manager SEQ Infrastructure (Water) - Traveston Crossing Dam Stage 1 P.O Box 15009 City East, 4002

Dear Sir,

RE: DRAFT TERMS OF REFERENCE FOR THE ENVIRONMENTAL IMPACT STATEMENT - TRAVESTON CROSSING DAM PROJECT.

The purpose of this letter and submission, is to provide feedback and comment on the, *Draft Terms* Of Reference For An Environmental Impact Statement: Traveston Crossing Dam Project Stage 1 - Mary Valley, QLD, dated December 2006.

The following document is a submission compiled by two affected local landholders of the proposed *Traveston Crossing Dam* area. We felt compelled to put to you our thoughts and remarks concerning the Draft TOR as there are some areas within the draft document that, we feel, need consideration and further development. We would appreciate it if our submission, and the points made within it, were given serious attention by yourself and all those responsible for the completion of a *Final Terms of Reference*.

Thankyou for your time,

Yours Sincerely, Mr David Bade, Moy Pocket, QLD 4570

Mrs T. Asmus Frayne Rd, Amamoor, QLD 4570

SUBMISSION ON THE DRAFT TERMS OF REFERENCE

FOR THE

ENVIRONMENTAL IMPACT STATEMENT: THE TRAVESTON CROSSING DAM PROJECT STAGE 1 MARY VALLEY, QLD DECEMBER 2006

COMPILED BY Mr D. Bade 581 Moy Pocket Road, Moy Pocket, QLD, 4570 Mrs T. Asmus Frayne Rd, Amamoor, QLD 4570

PREAMBLE

Guaranteed supply of water from an ever increasing population is a major problem facing SEQ and indeed the whole of Australia. Much has been made of water storages as a significant part of the long term security and due consideration needs to be given to all options.

With the major impacts of large water storages on the immediate environment where sited, due consideration needs to be given to the catchments ability to deliver enough water at a high quality standard.

Changed weather patterns will play a major part in the ability of responsible government bodies to ensure water quality is maintained at the highest standard possible in the state interest. Implications for endangered species of flora and fauna both aquatic and terrestrial must be handled in view of Australian interest, if not the world community. Habitat protection and regeneration can and must be accommodated in any long term commitment to water strategy for the future.

Community issues and involvment in decision making processes, both locally and indeed at state level, form an integral part of the discussion making process.

As a further insight into the project aboriginal peoples traditional and contemporary uses of the land need due consideration in relation to the project.

With comprehensive and balanced consideration of all elements of this project, the EIS to be compiled from these Terms of Reference will produce an accurate picture of how this project will fit into the overall and ultimate objective of guaranteed water supply into the future.

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PART A

SECTION SPECIFIC COMMENTS ON DRAFT TOR: PART B -SPECIFIC REQUIREMENTS - CONTENTS ON THE EIS

*

<u>Please note:</u> <u>All text that is underlined in this section are comments by the authors of this</u> <u>submission.</u>

PART B: SPECIFIC REQUIREMENTS - CONTENTS OF THE EIS

1. INTRODUCTION

SECTION 1.4 *Alternatives to the Project*

Page 17

This section should describe feasible alternatives within the proposed Project, including the option of taking no action i.e. of not building the dam. Alternatives should be discussed in sufficient detail to enable an understanding of reasons for preferring certain options and courses of action and rejecting others. Reasons for selecting preferred options should be delineated in terms of technical, commercial, social and natural environment aspects.

*NB: This section should state also that to evaluate the option of 'not building the dam'; it must be considered that a *combination* of ALL or SOME of the alternatives developed and operating in conjunction with each other can supply the equivalent water/or more, than the proposed Traveston Crossing Dam can.

<u>Descriptions should include the option of a number of alternatives being assessed</u> together/implemented together as opposed to only assessing each alternative on their individual merits, and on an individual case against the Traveston Crossing Dam option.

SECTION 1.4 Alternatives to the Project

Page 17

The alternatives considered should include:

- Demand reduction techniques;
- Other water supply methods, including:
 - Recycling

New pipelines forming a water grid between storages;

Desalination *NB: All forms not only RO, and all alternate Plant energy supply

options, with value adding of byproduct considered in the cost and efficiency calculations/comparisons; and

Groundwater.

<u>*NB: I ask that the below methods/techniques be included in this list as all are valid and well</u> researched alternatives and should be considered as not only stand alone alternatives, but

considered in combination with each other when evaluating the option of 'not building a dam'.

- <u>Cogenerative Power/Desalination Plants (and the potential of retrofitting to existing power</u> stations)
- Dry Cooling Technology to replace existing Evaporative Cooling on Power Plants (and the potential of retrofitting to existing wet cooling power stations)
- Stormwater Harvesting
- All methods of:
 - 1. Water Reclamation
 - 2. Water Conservation
 - 3. Water Reuse
- <u>WSUD-Water Sensitive Urban Design</u>
- IWCM-Integrated Water Cycle Management

<u>*NB: WSUD, IWCM must be considered and the idea of it's inception on a large scale posed as an alternative, in conjunction with other alternatives, to the proposed Traveston Crossing Dam.</u>

2. DESCRIPTION OF THE PROJECT

SECTION 2.2 Description of the Water Storage Construction and Operation

Page 21

2.2.3 Pre-construction Activities

A description of the pre-construction activities should be set out in this section, including; **NB: The following should be included in the list;**

• Relocation where possible of EPBC and EPA protected species of flora and fauna, and their colonies, (including not only the ponded area but anywhere that vegetation is to be removed).

Page 23

2.2.5 Proposed Water Storage Operation Full details on the proposed on-going management of the dam, inundation area and buffer zone should be provided including:

<u>*NB: I believe the following should be included in the list. So people know what land around them will be 'out of bounds'.</u>

• Areas of Public Access and No Public Access, Areas of Restricted Access. (When dam is operational)

3. ENVIRONMENTAL VALUES AND MANAGEMENT OF IMPACTS

SECTION 3.1 Natural Disasters and Extreme Weather Conditions

Page 28

This section should describe historic weather patterns in the Project area and seasonal conditions (e.g., cyclones, thunderstorms, floods and storms) that may influence timing and/or construction methods and how this would be managed. The vulnerability of the area to natural or induced hazards, such as floods, bush fires and earthquakes should also be addressed. Details should be provided of earthquake fault lines or past earthquake activity in the vicinity of the Project area and the implications for the Project. This section should include a discussion on how weather would be monitored to minimise the risk of adverse impacts to the Project area during the construction period.

*NB: Section should describe historic weather patterns in the Project Area AND;

- <u>Consider extreme, intensified weather patterns/predictions based on and associated</u> with Globally acknowledged Climate Change scenarios (super storms, intense Cyclones that are as yet unrated etc..). These Climate Change weather scenario's need to be evaluated and described in a seperate study to historic weather pattern influences.
- Outline effects of large mudslides/landslips into and around the Water Storage as a result of the above Natural Disasters, or as a result of the dam being built (water saturation, dam creating water back ups and forging new gullies and watercourses etc...can cause slips, small and vast) All of these may cause properties to be in harms way when they previously were not.
- <u>Natural disasters and extreme weather affecting Borumba Dam, should be incorporated</u> into this Section of the TOR as Traveston Crossing Dams FSL could effect Imbil and the Dam surrounds in the case of a Borumba emergency release or wall break.

SECTION 3.2.1 Land Use and Infrastructure

Page 29

Potential Impacts and Mitigation Measures

A description of the following should be included;

*NB: The below three that I believe must be considered for listing here;

- Ways of replacing lost water supply to properties that have lost their source by having dams, creeks, pump holes, bore holes, wells etc... lost to the dam storage area. (As some properties will be left high and dry when their main, or sole water source (most especially household and livestock watering supplies) goes under the dam. It is also hard for these people to be offered water from the Dam as the dam will most likely, on average, only be 60% full which will cause the waterline to recede a long way from their property front)
- Possibility (in association with helping people to relocate within the Mary Valley and, for example, into new developments) remove, in their entirety, any homes such as Timber Queenslanders and have them gathered on a site where they can be purchased for relocation to new house blocks. This would provide an alternative for some people to save them having to wait long time frames for a new home to be built, or they may prefer an older timber house. This would surely be a preferred option to destroying the many beautiful Queenslanders in the path of this proposed dam. Better (psychologically and emotionally) for the community to see their timber homes reused instead of demolished or all sold off to a house removal company.

 Some landholders being resumed/acquired, may be offered reduced rates and/or assistance of some kind (or free, but that's not likely) to move their dwelling if they wanted to relocate their current dwelling to a new property or up onto any land that was cut off during resumption.

Page 54

3.9.1 Transport Methods and Routes

"The EIS should describe the current existing road network and intersections of the surrounding region specifying current traffic volumes, notably on Bruce Highway, Gympie-Brooloo Road, Kenilworth-Skyring Road, Tuchekoi Road and associated access points"

Please refer to comments on Moy Pocket Road in **PART B of our Submission**:-SECTION 2. ASSOCIATED INFRASTRUCTURE 2.5 Traffic Implications

PART B

OVERALL COMMENTS ON THE DRAFT TERMS OF REFERENCE FOR THE EIS: TRAVESTON CROSSING DAM PROJECT STAGE 1

*

1. DECLARED CATCHMENT

1.1 Expected Declared Catchment

I refer to:-

Cooloola Shire Council Minutes of the General Meeting; Tuesday 5th September 2006 at 9.00am. Page 43 to 45. Report By Director of Planning and Development, MJ Ball, Received. RE: State Government Policy for Preserving Water Quality in Declared catchment Areas.

- '4.0 It is expected that the Traveston Crossing Dam will become a declared catchment and as such development applications will trigger referral to the Department of Natural Resources, Mines and Water and the Guideline (F10) will assist their staff to respond to those applications.'
- '7.0 *Obvious implications of the Guidelines are:*
 - 1. Amendment to the Cooloola Planning Scheme and increased development assessment requirements.
 - 2. Significantly reduced development requirements.
 - 3. Increased Capital and Operational Costs of all development and infrastructure in the catchment.
 - 4. No compensation payable to landowners as a result of diminished opportunity and increased costs.'

This report clearly defines the fact that the State Government is '*expected*" to make the Traveston Crossing Dam a '*declared catchment*'.

This would give certain Government agencies, and their contractors, the power to control what happens in and around the ponded area of the dam, and also externally to the whole catchment area.

- As a consequence, comprehensive detail and explanation of these measures needs to be provided.
- Comprehensive maps and worded documents outlining details of the declared catchment boundary and it's implications on property size (e.g 16hec), existing roads, proposed roads,

property access, service roads, landholders and businesses, including;

- 1. Maps of the declared catchment boundary and the areas and practices of the properties and businesses within that boundary that will be targeted for restrictions, or be included for ongoing monitoring and assessment.
- 2. Cadastral maps must be included and landholders and b usiness owners should be officially notified of ALL restrictions as part of the *Traveston Crossing Dam EIS*.
- 3. Maps of all roads, infrastructure, access roads, service roads etc.. that will be affected.
- Will the declared catchment area status be enacted when the Dam is commissioned or enacted at some time in the future?
- Outline what access government agencies, or their contractors, will have to properties in order to do assessments or conduct ongoing monitoring under *declared catchment area* guidelines and their restrictions? This would also include outlining a landholders rights regarding government employees accessing their property.
- The Governments intention to make Traveston Crossing dam a *declared catchment area* also needs to be positively confirmed within the EIS.
- Outline what will all government departments with '*jurisdiction as a concurrence agency*' (Guideline F10 DNR handbook of Resource Planning Guidelines) intend to pursue to guarantee water quality is maintained and possibly improved in the '*State Interest*'.

Several relevant parts in relation to the dam proposal need to be strongly considered in relation to the *Traveston Crossing Dam* Environmental Impact Study. I refer to the below quote from the DNR's F10 Guidelines:-

(Policy & Code For Preserving Water Quality in Declared Catchment Areas; Guideline F10) Quote from Section 2.1 Explanation

"Preserving the quality of water in a catchment area is more about managing the effects of land use on the environment than the sustainable management of water resources. Planning for preserving the quality of water in a catchment area must seek to achieve sustainable land use outcomes which are characterised as having no unsustainable impacts on land and water resources."

- Outline whether or not it is implied that in the context of non urban development that development is not to occur to within;
 - 1. 100 metres of the high bank of a designated watercourse; or

- 2. 400 metres of the FSL (or planned FSL-is this Stage 2?) or flood margin reserve, whichever will provide the greatest distance from the water edge of the lake;
- 3. 25metres of each bank of other watercourses.
- Outline whether or not it is implied that in the context of urban development that development is not to occur within;
 - 1. 100metres of the high bank of a designated watercourse, or FSL (or planned FSL-is this Stage 2?) or flood margin reserve, whichever will provide the greatest distance from the water edge of the lake;
 - 2. 25metres of each bank of other watercourses.
- Comprehensive detail and explanation should be undertaken to outline the effects of a *Traveston Crossing Dam Declared Catchment Area* on;
 - 1. Land tenure in the catchments
 - 2. Existing infrastructure and enterprise:- including Primary Production, Extractive Industries and Property Subdivision in the *declared catchment*.
 - 3. Future landuse options, including full detail of restriction to be applied to this zone and it's relationship to the entire *declared catchment* area.
 - 4. 100 metre exclusion zone on each bank of all watercourses in the *declared catchment* area and 25 metres around each bank of other watercourses.
 - 5. Other courses that don't run all year, such as seasonal creeks, running gullies and dry gullies. (Anywhere where it is recognised that significant run off will discharge into the *declared catchments* ponded area).
 - 6. Landholders and businesses within the declared catchment. What are ALL the declared catchment restrictions they will face and who will bare the monetary costs as a result of implementing those restrictions? e.g fencing or revegetation of riparian zones.

1.2 Septic Systems

- Identify, including detailed map, all those affected by restrictions on Septic Systems in the declared catchment. e.g;
 - 1. Private in Household

2. Public Areas e.g

-Parks, Reserves etc..

- Community sewerage treatment plants with discharge into the river e.g
 -Kandanga
 -Imbil
 -Kenilworth
- Describe ongoing costs and infrastructure to further purify water before discharging to the river and local catchment.
- Clearly describe who will bare the cost of replacing systems with Eco friendly ones. At the very least, within the 400m no development zone (as outlined in the *DNR's Policy & Code For Preserving Water Quality in Declared Catchment Areas; Guideline F10*) surrounding the ponded area.

1.3 Economic Analysis

- Compensation to existing landholders for constraints on their ability to grow crops (broadacre and intensive horticulture) resulting from restrictions or use of fertilisers, crop protection and herbicide chemicals.
 - 1. Detail of what agricultural chemicals and fertilisers are going to be allowed in the *declared catchment* areas.
 - 2. Details of the types of horticulture and zones (with maps) where these enterprises will be allowed.

1.4 Dairy Farming

Pasture areas and indeed significant areas of Dairy farms are on the floodplain of the Mary River and Creek systems in the catchment area. *Declared catchment* status will, I believe, negatively impact on dairy farms as far as Maleny, as they may practise incompatible land uses as set out in the *Water Act 2000*.

- Comprehensively detail what Dairy farming practices are going to be allowed outside of the buffer zone but within the *declared catchment*.
 - e.g Fertilising pastures with nitrogenous and phosphate fertilisers leaching directly and indirectly through subsoil will impact on water quality in the ponded area.

• Comprehensively detail all additional costs to the proposed Traveston Crossing Dam Project for compensation or even buy out of these enterprises which are going to be significantly impacted by the proposal.

2. ASSOCIATED INFRASTRUCTURE

2.1 Sewerage Works at Imbil

Placement of the treatment facilities are very close to the height of the buffer zone. Overflow from the facilities impoundments ponds could in a high rainfall period directly enter untreated into Yabba Creek.

• Costs involved to rebuild to higher elevation (buffer zone) for a new facility not even completed at the time of writing this submission. They should be included and outlined in the EIS.

2.2 Roads

Question suitability of some road realignments and bridges;

Walkers Road -

- A serious problem becomes obvious when considering the design for connection of properties on the eastern side of Walkers Road considering this is the only access. If designed for Stage 1 at what height will the bridge be built?
- Bridge will be under water in Stage 1 approx 4 metres.
- Upgrade to road leading to bridge will have to be lifted by my estimate of 6 metres to handle Stage 2.
- From Stage 2 a solid fill road access with a new bridge would form a dam across the river by restriction of water flow to bridge proper.
- An elevated concrete structure would be too exposed.

Pickerings Bridge -

• Not indicated as being affected. This bridge is approx 5 metres above river bed.

Road access to many areas will be made much more indirect than present. Assess the people that will be affected by;

- Inconvenience
- Risk of isolation in times of flood which becomes a safety issue.

- Additional cost in fuel and time that is to be borne by those affected.
- Diversion of power transmission lines, low and high voltage, will in areas involve clearing and cause further disruption to landholders.

Generally the cost of construction/rerouting and elevating to handle Stage 1 and potentially Stage 2 needs to be comprehensively addressed from the whole catchment area on the basis of cost benefit analysis.

2.3 Effect of Ponded Area on Mary Valley Railway

- Include the substantial costs to rebuild and possibly realign sections of the railway network.
- Need to undertake geotechnical studies into stability of railway footings along the entire length of the railway line in the ponded area and buffer in order to take in influences on it by increased water table and flood surges.

2.4 Land Clearing and the Vegetation Management Act

- Avoiding threatened flora and fauna habitat.
- Incorporation of cost benefit analysis basis for the necessary realignments of;
 - 1. Powerlines
 - 2. Roads and road infrastructure e.g; bridges need to be raised, culverts, road margins, drainage etc...
 - 3. Private access connections
 - 4. Sewerage works from affected towns of Imbil, Kandanga and Kenilworth

It will be necessary to remove large areas of remnant vegetation (DNR mapping) to maintain water quality in the ponded area. This disruption to the ground will cause major disruption in the short term.

- Discuss the implications of the broad scale clearing including;
 - 1. Erosion and control measures
 - 2. Stickraking and other methods of clearing vegetation
 - 3. Methods of timber harvesting

- 4. Site clearing and disposal (including whether burning or chipping)and where sound, traffic, and emissions (such as smoke from burning) will impede local roads and local landholders.
- 5. Removal of byproduct, waste and rubbish
- 6. Potential sale of timber byproducts (wood chip, logs, posts, mulch, slabs etc..)
- Outline what steps will be taken to control nutrient leaching as a result of ash from burning, and site clearing.
- Polution created from burning rubbish and timber should be monitored and addressed in the total Greenhouse emission projections for the Dam.
- What steps will be taken to minimise the affects of approximately 90% of the grass being removed and 100mm of the soil surface being disturbed during clearing.
 - no effective ground cover; causing erosions in heavy rain and storms until recovered by grass. Need for reseeding.
 - there will be excessive weed germination on all bare ground causing further maintenance issues.
- Discuss the consequences and solutions to the significant problem of regrowth below the waterline when water levels are lower than FSL. What action is going to taken within the first 2 years with germinated seed and suckering, particularly of pioneer species such as wattle with growth one to two metres. If left within ten years will become 70% of full canopy height which will make it remnant vegetation under DNR Vegetation Management Act guidelines.
- What are the *water quality* implications in regrowth areas in relation to the ongoing maintenance necessary for control of this regrowth?

e.g Chemical control Manual control

• Discuss weed and noxious weed control options in ponded area and adjacent areas. If weeds are left to go to seed in Government owned land then private property adjacent will have increased out of pocket maintenance costs dealing with the weed contamination;

e.g common weeds; thistles, cobblers pegs, billy goat weed etc... declared weeds; groundsel, rats tail grasses, parramatta grasses, parthenium, nagora burr etc..

2.5 Traffic Implications

Increased traffic movement both to and from the construction site will dramatically increase with major implications for local community as well as all those using the same network.

- Give details of feasibility study for existing network to handle the increased volume movement.
- Summarise upgrade to network envisaged to handle the heavy vehicle movement which will be focused on the construction site.
- Will State Government also pay for the upgrade more importantly maintenance contribution generated by the project.
- Moy Pocket Road not mentioned in the TOR but it is the site of a major quarry which will no doubt be supplying construction aggregates for this project. The road is grossly inadequate at present for handling a major increase in truck movement both to and from the quarry in relation to this project. Investigate these factors.

2.6 Development in the Catchment

• Outline changes and/or modifications to existing Cooloola Shire Subdivision Regulations. In relation to future subdivision and subdivision involved in Traveston Crossing Dam Project acquisitions of part properties.

*

3. THE DAM ENVIRONMENT

3.1 Fluctuating Water Levels Affecting Aquatic Fauna

Considering inconsistent rainfall and pan evaporation figures, the resultant fluctuating water levels in the shallow edges of the ponded area will periodically cause dieback of aquatic vegetation e.g; waterlilies, aquatic grasses such as valisenaria, introduced aquatic weeds etc... resulting in a significant drop in dissolved oxygen and an increase in excessive nutrient load caused by microbial activity in decomposing matter. This has severe consequences for much of the aquatic fauna present. A direct result of this is large fish kills, particularly in the summer months in conjunction with an inversion layer, as seen and documented in the Paradise Dam.

• What measures are going to be put in place to manage these effects?

3.2 Shallowness of the Dam

Massive breeding of Cane Toads, Biting Midges, Mosquitoes etc..

- What steps are to be undertaken to control the serious increase in these populations?
 - 1. Cost benefit analysis of options for control/eradication
 - 2. Use of Organochlorine or equally potent chemicals
 - 3. Pesticides directly to ponded area for mosquito control. Source of major concern for declared catchment status in relation to water quality and '*state interest*'.

3.3 Cane Toads

Populations will, at certain times of the year, be very difficult if not impossible to control. These population explosions could create a potential catastrophic effect on Native wildlife and endangered, vulnerable or protected species.

- Determine impact on Native fauna and their food chain.
 - e.g; Endangered Native fish and frog species have to compete directly with cane toads and their tadpoles for food. These Native species can also become a food source themselves. The Cane Toad will also compete with terrestrial fauna for food.

• Population explosions of Cane Toads, will occur outside of Stage 1 and will encroach upon fauna, flora, waterways and ecosystems that are endangered or 'of concern'. These areas are not being included in the Stage 1 EIS, but they should be. Large Cane Toad population increases brought about by Stage 1 of the Traveston Crossing Dam, will affect areas in Stage 2 and beyond. Therefore a directive should be included in the Stage 1 Terms of Reference to outline and study the impact of Cane Toads on these species, protected within the EPBC Act, that have habitats beyond Stage 1 and it's buffer.

3.4 Fish Ladder

• How will problems associated with the *Paradise Dam Fish Ladder* be overcome?

4. FLOODING

4.1 Flooding

Flooding of the valley is an essential element in the natural cycle and performs a vital function in nutrient replacement of flood plain and flushing out of general health of stream proper. The dam wall will place an effective barrier to the flow of water and the resulting body of water will have a significant consequence on the nature of flooding in the catchment areas as well as upstream and downstream of the wall.

4.2 Flooding at Imbil and other Townships.

Imbil township and it's rural residential environs is predominantly built on the Yabba Creek floodplain and will be very susceptible to inundation by rising waters backing up into Yabba Creek. Borumba Dam may have some regulatory effect and may actually prolong the duration, if not the magnitude, of localised flooding.

Flood waters already coming slowly down the Mary River and resting in the main ponded area of the dam proper will form a barrier to the flow of Yabba Creek. There will also be, as a result, a rise in the 'ponded area' caused by the magnitude of this flow. Flood water coming from Yabba Creek will rise very rapidly because it has nowhere to go, compounding flood effects and rendering them much greater than would be the case without the presence of the dam.

The buffer zone along Yabba Creek at Imbil is totally inadequate to handle a large flood event. More studies need to be done on how Imbil can be protected.

- Studies must be done and made publicly available in the EIS (expressly following a direction to do so from the Final Terms of Reference) on the possibility that water may breach the Stage 1 boundary at Imbil township.
 - NB: A significant part of Imbil including houses, schools, businesses are within the inundation level for a flood event of the magnitude of 1999 with the Dam in place.
- Earthen barriers have been proposed to keep flood waters out of the township. Consideration also needs to be given to the fact that flooding in a major rainfall event will occur in the town behind the barrier because of the topography of the area. Studies should also be done on protecting Imbil from this.
- If there is any discrepancy in the *QWI* and the *Queensland State Governments* current FSL Flood Height figures relating to either *Stage 1 or 2: Traveston Crossing Dam* at Imbil township, then this could eventuate in damage of property and have potential for loss of life. There is no room for error when calculating flood heights around Imbil nor should there be around Kandanga, Kenilworth or any other towns.

- Show data and methods (including hydrodynamic modelling) used to arrive at flood height figures, around Imbil, Kandanga, Kenilworth and other communities, include flood modeling for an extreme climate/rainfall/natural disaster event. (such as an emergency breach or release at Borumba Dam into a part filled or already flooding Traveston Crossing Dam ponded area and it's tributaries).
- Water may breach the Stage 1 and Stage 2 boundary in the case of an emergency discharge or breach at Borumba Dam up stream. This scenario should also be considered within the realms of the *TOR SECTION 3.1 Natural Disasters and Extreme Weather Conditions*.

4.3 Sedimentation and Debris Modelling

Significant changes to the river environment will take place along the entire length of the river both upstream and downstream as well as the ponded area itself.

Consideration of the following points need to be considered;

- 1. Large volumes of sand, gravel and general logs and debris, travel downstream in flood waters.
- 2. When water flow slows or changes direction, sand and gravel is deposited because there is not enough energy to keep it moving.
- 3. With reference to flood modelling, slower flowing areas at the edges behind the main flow will build with sediment deposited in large quantities. Sand, gravel debris obstructions and blockages will form.
- 4. The river channel will fill with sediment as the river flow slows. I believe deposits will, when dam is initially filled and before a major flood event, cause very undesirable siltation of the main river channel as far back as Kenilworth.
- 5. Major siltation deposits will occur in all streams e.g Moy Pocket area.
- 6. Riparian Zones will be badly damaged by scouring and sediment deposits.
- 7. Deep sections of the river in the ponded area will be filled in. This may cause total or some important loss of habitat for endangered species even when the dam levels fluctuate after this event.
- 8. Trees, logs and other large debris will be deposited all along the river.
- 9. Aquatic flora, e.g lilies, reeds, hyacinth etc.. populations will be scoured from edges (eddies) and potentially be carried towards the wall, particularly in the immediate area of the dam all.

- 10. All sedimentation and debris settling into the ponded area will affect the total water yield figures of the *Traveston Crossing Dam* in time.
- A study of the above points and related issues needs to be undertaken in the EIS.

Downstream implications of sedimentation;

- 1. Significant flows will only occur in times of flooding to move material down stream.
- 2. Nature of soils in the immediate environment e.g floodplain, are very unstable when saturated and will move by landslide and suspension in floodwater moving into the main channel.
- 3. Flood event magnitude will govern how far this material will move downstream. A consequence of this is that large desposits of sand, gravel and debris with larger material included such as trees and logs, will effectively fill the river immediately downstream and possibly for some kilometres.
- 4. The immediate downstream environment from the dam will be so severely modified and I believe no longer functional as a habitat for fauna and flora species.

Possible drainage and interference with the working spillway and floodgates by debris being carried to the dam wall by floodwaters;

- 1. Large trees, logs and general debris will be forced to spillway.
- 2. Aquatic flora such as lilies, hyacinth, reeds etc.. will be forced to the spillway.
- Will this interfere with the ability of the spillway to adequately discharge water and will it increase the effects of flooding?

Consequences for Great Sandy Strait and Ramsar;

Fine suspended particles (muddy water) will reach the ocean and these particles will be deposited causing an increase in nutrient availability upsetting the balance of flora and fauna.

1. Particles suspended in water will reduce light in the upper water layer and will effectively choke and inhibit food chain flora that is important to he Ramsar and Strait, such as;

-plankton, seaweeds, grass beds etc..

• The affects on the Great Sandy Strait and Ramsar Wetland as a result of this excessively muddied water, must be analysed and included in the TOR and EIS.

4.4 Flooding of Roads

Compounded by the slow flowing water (effected by dam wall), the floodwater level will be higher behind the dam wall until it abates (i.e settle to FSL). Sand and gravel, logs and debris will be dumped with greater frequency on road crossings all around the dam area increasing maintenance costs.

Damage to roads will be magnified by changes to flow patterns during flood water. There will be much undermining of asphalt and road surface as well.

• Detail calculations and allowances for increased maintenance costs during construction and thereafter.

5. STAGES 1 & 2

5.1 Dam wall

The construction of the dam wall to the height of 90.9 AHD Stage 1 and 92.8m AHD for Stage 2 (*QWI Geotechnical Report & Diagram of Dam Wall 'Preliminary Geological Model'*) and the spillway had effectively the same height for stage 1 & 2, is a source of major concern. The striking similarities between the wall thats being constructed now and it's operation for Stage 2 need to be distinguished because I interpret it to only a difference of the flood gates between Stages 1 & 2. i.e adding the flood gates to the current construction will give stage 2 capability.

- A thorough and comprehensive explanation of the distinction, if any needs to made, between the proposed stage 1 to be assessed in the EIS to be compiled here and stage 2 which if needed will take place by 2035.
- A definitive answer needs to be given in the EIS compiled here on whether there is a stage 1 with a stage 2 to follow.
- Details of spillway and floodgate operation need to be incorporated in the TOR.
- Attention should be given to operation conditions and safety issues.

5.2 Split Referral

Only Stage 1 of the proposed Traveston Crossing Dam has been referred to the Federal Minister under the Environment Protection and Biodiversity Conservation Act (EPBC) yet the State Government is proposing to build the dam to full in Stage 1 and acquire all the properties for Stages 1 and 2 in Stage 1. This constitutes a Split referral under Section 78 of the EPBC Act. The State Government should assess the full impact of Traveston Stages 1 and 2 (including pipeline, distribution and water treatment) in the EIS, advise the Federal Minister that the referral was made in error and refer the full proposal for assessment under the EPBC Act.

6. OTHER

6.1 Effects of Short Term Work Force

Social and economic contributions from short term workforce employed during construction phase will have significant effects on local communities particularly Cooloola Shire. While there are some positive outcomes such as increased spending at local businesses, these may well be offfset by the negative implications;

- 1. Shortages of skilled labour may occur for local businesses because of labour demands for skilled, semi skilled and trainee/apprenticeship workers on construction site.
- 2. Increased traffic congestion on local roads network.
- 3. Increased rent for even basic housing in the area of dam.
- Outline what is to be done to minimise these negative impacts.

6.2 False Economy

A short boom economy is not sustainable in the long term. Beyond the completion of the dam.

• Planning must be put in place in the initial planning of the *Traveston Crossing Dam* and it's *EIS* so that new businesses or businesses who have expanded as a result of increased turnover during Dam construction, do not suddenly become unviable.

Increased supply and demand could also lead to higher costs for some goods at local businesses; Gympie & Mary Valley towns.

6.3 Water Distribution and Treatment Systems.

I have a major concern with section Section 2.3.5 of the Draft Terms of Reference . "It is noted however, that consideration, assessment and approval for these systems will be sought under appropriate seperate processes, and they do not form part of this EIS process"

The distribution and treatment systems to be used to distribute water from the proposed project is effectively the reason for having the dam in the first place.

The economic viability of the project is directly related to how and where the water harvested from the dam is used.

There is a direct correlation between end user and supply and that will have a direct consequence on the infrastructure.

- It is our view that this outlook that "consideration, assessment and approval for these systems will be sought under appropriate separate processes, and they do not form part of this EIS process" should be reconsidered and readdressed.
- Justify why consideration, assessment and approval of the effective end users will be sought under '*appropriate seperate processes*' and why they should not form part of the *Traveston Crossing Dam* cost benefit analysis.

6.4 Water Entitlements

- Details of irrigation and industrial water entitlements need to be outlined in relation to both up and down stream users;
 - 1. Security of entitlements.
 - 2. Scope for further allocating being made available with dam completed.
 - 3. Will the quantity of water for downstream entitlements be encompassed in the Environmental Flows or will they be seperate; will they allow for Environmental flows as well as requirements for flows needed to fulfill Water Entitlements downstream.
 - 4. Easements through buffer zone to access water.
 - 5. Requirements and limitations to be summarised and infrastructure to 'divert the flow of water'.

*

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WATER ACT 2000

COOLOOLA SHIRE COUNCIL MINUTES OF GENERAL MEETING-Tuesday 5th September, 2006 at 9.00am. *REPORT BY DIRECTOR OF PLANNING AND DEVELOPMENT, MJ BALL. PAGE 43-45*

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