Appendix A
Submission issues response references

Appendix A

A1 Government Submissions

A summary of the issues raised by each of the government departments is provided in Table A1. The table identifies the government agency, provides a summary of the issues raised and a reference to the section of the Submissions Report that addresses each issue.

Table A1 Government Submissions

Respondent	Issue Summary	Section Ref.
NSW Rural Fire Service (Headquarters)	Consideration should be given to the management of vegetation and access within the catchment with respect to fire fighting and hazard reduction operations to minimise the impacts of bushfire on water quality.	4.1.2
	Infrastructure should consider the provision of asset protection zones, access arrangements, water supply and utilities, building construction and design and emergency management arrangements in accordance with 'Planning for Bush Fire Protection 2006'.	10
NSW Rural Fire Service (Bendolba/Salisbury)	The site of the new FRS Shed (south of the junction of the new Salisbury Rd and intersection of Chichester Rd) has been agreed to with the Water Board and local Brigade members.	8.4
NSW Land and Property Management Authority	All references to the Department of Lands should now refer to the NSW Land and Property Management Authority or LPMA.	Noted
	LPMA will assist in resolution of any outstanding Aboriginal Land Claims.	Noted
	Should Crown Roads be constructed, they will need to be transferred to either the Dungog Council or the RTA prior to construction.	Noted
	The need for catchment protection and environmental protection is noted however, consent conditions/management intent should allow for consideration of appropriate future development.	Noted
	Recreation access is supported. Crown lands should be considered to retain public ownership and maximise future use and development.	Noted
NSW Maritime	No comment. Retain an interest and welcome review of further material.	Noted
Department of Environment, Climate Change and Water	Key measures described in the EA should be included in the revised Statement of Commitments.	9 & 10
	Dust control should be implemented on haul roads and other exposed areas	5.9.1
	The air quality mitigation measures committed to by the proponent should be incorporated into an air quality management plan	5.9.1
	Should dust emissions occur, the proponent should be required to identify and implement dust mitigation measures, including cessation of relevant works	5.9.1
	The residual emissions are proposed to be offset via carbon sequestration. The figure recommended in the working paper is significantly lower than the proponents figure in the Statement of Commitments.	5.10.14
	The proponent should be required to use NCAT to confirm that the proposed carbon sequestration in the habitat corridor is adequate to meet carbon offset objectives.	5.10.15
	The proponent should be required to ensure that any proposed carbon offsets through reforestation or afforestation are consistent with, and do not detract from, the proponents capacity to follow DECCW's Principles for Biodiversity Offsets.	4.5.4
	DECCW recommend allowing the corridor to revegetate naturally (with weed and pest control) and divert funds from planting to acquiring suitable biodiversity offsets.	4.5.4
	The EA states that night works will be limited during construction, however they will be required during some phases of the construction works.	5.8.1
	Effective impact management and mitigation will be required for out of hours work.	5.8.1
	Extractive activities is a scheduled activity and quarrying associated with the project will require a DECCW Environmental Protection Licence.	Noted

Respondent	Issue Summary	Section Ref.
	The Noise and Vibration Assessment is not based on detailed work methods or practices and does not indicate that the community has been consulted on specifics of dam building activities.	5.8.1 & 5.8.3
	It is premature to agree to out-of-hours works or a variation to the standard construction hours. Post approval to seek and have determined, out of hours work should be supported by a noise impact assessment based on detailed design, the outcomes of community consultation and mitigation measures in line with the NSW INP and ICNG.	5.8.1
	The proponents noise and vibration commitments are inadequate and recommend that the ICNG is used as well using road project conditions modified for the current project.	5.8.2
	The erosion and sediment control measures in the EA (in accordance with 'The Blue Book') should be formalised as conditions of the Project Approval.	4.1.1 & 9 & 10
	Mitigation measures detailed in the EA to manage water quality should be formalised within the project approval.	4.1.2 & 9 & 10
	Current biodiversity offsetting measures are inadequate. The nature and extent of offsets should be revised and a compensatory habitat package be agreed upon prior to approval. Offsets should be consistent with DECCW offsetting principles including 'like for like or better conservation outcome'. The extent to which landholders would be prepared to engage the programs is unclear.	4.5.4
	The analysis of the proposed flow regime associated with the operation of Tillegra Dam and Seaham Weir is insufficient to assess the likely behaviour and characteristics of the impact of changes to the flow regime and the area over which these impacts occur.	4 & 6.2
	Recommend the implementation of a comprehensive monitoring program for the downstream section of the Williams River, Hunter River Estuary and Tide Pool.	9.2 & 10
	The DECCW is strongly of the view that biodiversity offset measures should be agreed upon prior to project approval.	10
	Surveys should be undertaken at least one week prior to any clearing and removal should be timed to avoid peak bird and bat breeding season.	9.2
	Trees that have Koalas, birds or other hollow-dwelling species should not be felled until the fauna has moved on its own accord.	9.2
	A two stage clearing process is recommended to retain marked habitat trees and vegetation corridors that are cleared 72 hrs after the initial clearing.	9.2
	A relationship should be established with local wildlife carer groups to care for, rehabilitate and release young, injured or orphaned fauna.	9.2
	A nest and bat box management plan should be developed by the proponent to replace lost hollows.	9.2
	The proponent should establish a Platypus habitat in catchment watercourses and along the dam shoreline.	9.2
	Barbed-wired fencing should not be used within the project area.	9.2
	The environmental flow and geomorphic objectives are commendable but are not achievable and create false expectation for the proponent.	4.2.12
	The hydrological and geomorphic aspects of the Williams River will need to be monitored to determine the magnitude of downstream impacts.	9.2
	It is not clear if all environmental flows will be able to pass over the Seaham Weir or transferred to the Grahamstown Dam. The statement of commitment does not include an adoption of an adaptive release strategy. A recommended release strategy should be part of an adaptive flow regime based on results from a comprehensive downstream water and ecological monitoring program.	6.2.3 & 9.2
	The river will be in a state of dynamic re-adjustment after the construction of the dam and the proponent should undertake a series of woody debris trials to monitor the effectiveness of this measure prior to extending the program.	9.2
	Few details are provided on the likely impact on the lower reaches of the Williams River, the inter-relatedness of flows in the lower stretches of the Hunter River. It is likely that reduced flow in these lower reaches will result	6.2

Respondent	Issue Summary	Section Ref.
	in changes in salinity and DO levels. Refer to studies in NSW on the impact of flow rules on estuary's salinity structure.	
	Monitoring is recommended to document any changes/increase in extent of mangroves south of the dam following its construction as a result of reduced freshwater flow.	9.2
	Concern that reduced flow will impact tidal pool replenishment, exacerbated by extraction for irrigation and low hunter flows. Resulting in pressure on Environmental Water Allocation in the Hunter (and associated flow-on effects) to mitigate impacts of salt water incursions. The initial filling stage and subsequent filling events should consider the impact of reducing high flows to the Tidal Pool.	6.2.2
	Undertake monitoring of the extent and health of ECC vegetation to gauge impact of Tillegra Dam and the altered flow regime.	9.2
	Ongoing monitoring of water levels, water quality and biota in the estuary to gauge impact should be completed because the flow modelling results were counter-intuitive.	6.2 & 9.2
	The impact of the dam on the Green and Golden Bell Frogs on Kooragang Island. The proponent should coordinate releases of freshwater from the dam and weir to assist in the management of the frogs.	7.2.1
	Cumulative impacts of water extraction in the lower hunter river system are not considered as the proponent has only considered the lower Williams river. More information should be provided on the annual flow reduction compared to natural case to inform adaptive management of environmental releases.	6.2.2
	The 10% rainfall reduction should be applied to determine impacts on flows/downstream ecosystems. Further assessment considering climate change scenario impacts should be used to adjust potential impacts on downstream environments through an adaptive flow regime.	6.2.5 & 9.2
	EA appears to have addressed most concerns with respect to Aboriginal Cultural Heritage although the assessment remains deficient in consideration of impacts from ancillary infrastructure.	5.7.2
	The need for additional Aboriginal cultural heritage assessments associated with parts of the infrastructure is identified in Section 1.4 of Working Paper M, but this is not set out as a commitment. This should be part of the condition of approval.	5.7.2 & 9.2
	The Aboriginal component of the CEMP should be expanded under a condition of approval to include reference to all the related Statement of Commitments.	9.2
	The Statement of Commitments have been reworded to be more definitive and they should be reflected in any conditions of approval for the proposal.	Noted
	The use of fly ash must have written approval from the EPA and the proponent must hold an Environment Protection Licence for the acceptance of ash waste.	9.2
	The Department of Planning should consider the inclusion of conditions requiring waste avoidance and resource recovery strategies. Maximise conservation of resources in design, construction and operation in accordance with the NSW Waste Avoidance and Resource Recovery Strategy 2007.	9.2
NSW Office of Water	The Department of Planning need to separate the matters relating to the development from the matters of ongoing development of water sharing plans and water legislation. NOW offer support.	Noted
	It is acknowledged that if approved, there will be unavoidable damage which will not meet the NSW water legislation and policy because some long term impacts cannot be mitigated.	5.1.2
	The dam will require a works approval and licence under the Water Management Act 2000 and will be subject to the 2009 Water Sharing Plan (HUAWSP).	Noted
	NOW recognise their commitment with HWC for a collaborative approach in developing and funding a comprehensive monitoring strategy to be used in developing environmental flows/water sharing.	Noted
	All HWC infrastructure fall under the Water Mgmt Act 2000 and this project will be incorporated into HWC's Major Water Utility Licence.	Noted
	NOW is not confident that the supporting information is adequate to frame	4 & 6.2

Respondent	Issue Summary	Section Ref.
	environmental flow provisions at this early stage. Further investigations into the relative contributions of the Hunter River and the Williams River to the estuary are required.	
	Need for NOW and HWC to continue discussions of water sharing plans. The outcome may reduce HWC expected yield	5.1.2 & 4.4.2
	HWC should apply a whole of catchment approach	4.4.2
	The assessment process does not allow adequate time, hence the flexibility of provisions within the HUAWSP to accommodate ongoing discussion	4.4.2
	Further discussion is needed to reach an agreement on transparency/translucency rules for Seaham Weir and end of system flows	6.2.3
	The EA is unintentionally misleading with inferences that assessment findings can be extrapolated into other parts of the estuary and understates the inflow contribution the Williams river provides to the Hunter Estuary	6.2.1 & 6.2.2
	The scope of investigation in the Ramsar wetlands assessment findings should be specifically worded to avoid the potential for misinterpretation during the development of water sharing provisions.	Noted & 7
	Any reductions of inflows to the Hunter Estuary from the Williams River may have end of system flow implications for the Hunter. This was not dealt with in the EA.	6.2
	Ecological process within the Williams River will be impacted by geomorphic change	4
	No evidence that channel adjustment downstream will replace sediment trapped by dam or that losses of sediment input will be offset by sediment contributions from tributaries. Alterations will increase bank instability.	4.2.13
	The report incorrectly refers to the Williams River and floodplain being disconnected.	4.2.14
	A high level of investment and commitment must be committed by Hunter Water to ensure mitigation of geomorphological impacts.	9.1
	Working paper E does not adequately consider Water mgmt principles of the WMA 2000 and should consider GDE Policy and NSW Wetland policy.	4.5.8
	Potential vegetation impact assessment is not consistent with the 7-part test in its consideration of factor C.	4
	The unknown long term impact of the project on the EEC could result in further reduction in the local occurrence of the ECC.	4
	The proposed release rules will have significant impact on flows in the >100ML/day range including reduction of flood, increased frequency of mid range flow and decreased total volume.	Noted & 4.4.3
	While the transparency/translucency releases are higher than other NSW storages, Tillegra is a Greenfield site, hence the volumes available for such releases are typically limited.	Noted
	HWC Seaham Weir already has significant impacts and transparent flows to Grahamstown Dam does not mitigate the impacts of the dam or existing HWC structures on the Williams River, within the Hunter Estuary.	6.2.3
	The suitability of the flow patterns may need to be improved over time as part of an adaptive management approach	4.4.3 & 9.1
	Transparent rules should ensure existing irrigators are not adversely impacted by the dam, especially during construction and filling. Releases from Chichester could be used to make up for shortfalls during this time.	4.4.6
	Fresh releases should be a standard operation in periods when spills or run of river transfers are not occurring, typically during dam refill.	4.4.3
	Environmental flows are not passed through the entire system.	6.2.3
	The environmental assessment includes estuary wide statements which are not supported by analysis presented in BMT WBM Technical report	7.2.1
	The ELCOM model assessment of salinity structure was based on constant flow methodology and completely ignores the dynamic nature of salinity characteristics in the estuary. ELCOM model is not suitable	6.2.1
	Not confident that info is adequate to frame environmental flow provisions at this early stage. Future investigations are required to ensure water is available for essential services and the Ramsar wetlands.	4 & 6.2
	NOW is using a FVM model. However results are not expected for several months and as such the model was not used by HWC for Tillegra Dam	Noted & 6.2.1
	Water Quality management strategies should be developed for cold water	4.1.2 &

Respondent	Issue Summary	Section Ref.
	pollution protocols, algal management and water quality monitoring and they should be managed via HCW Major Water Utility Licence	9.1
Department of Industry and Investment NSW	Tillegra Dam is inconsistent with the objectives of the Fisheries Management Act 1994 and several NSW Policies including the NSW Weirs Policy and Aquatic Habitat Management and Fish Conservation Guidelines 1999, mostly relating to fish stocks, fish habitats and impact on rec use.	5.1.3
	Localised extinction of fish species will occur. Cumulative loss of nearly 50% of river habitat in Williams Valley. Significant impacts in remaining valley and downstream	4.3.3
	I&I NSW was concerned that the reduction in wetted width of channels and the increase in low flows during the filling period would result in the potential increases in natural and artificial barriers to fish.	4.3.4
	No certainty that Williams River could support increase population of fish if fishway not constructed on dam. Fishway is necessary to mitigate impacts of dam	4.3.5
	Impact on Australian Bass populations will be significant. Flow on effects to socio-economic value of region not discussed in EA	4.3.7 & 5.2.7
	Dam will convert riverine habitat into preferred habitat for introduced fish species, increasing competition	4.3.6
	Fish will be damaged during discharge of water from tower, during operation of the HEP and in spilling events.	4.3.8
	EA is not clear on the modelling used to determine the need for the dam and may have underestimated the potential impacts	3
	The reduction of fresh flow will be further exacerbated by any future climate change and increased upstream water use and reduction in rainfall	6.2.5 & 9
	Numerous reports show that the reduction of freshwater inflow is a significant threat to estuarine systems. Ramsar report bases assessment on amount of flows rather than the changes in types of flows.	7.2.1
	Concern that prawns rely on the large flow that the dam is designed to trap.	6.2.4
	I&I NSW would request condition of consent to monitor and model prawn and commercial fishes catches in Hunter River and offshore to determine the level of impact on the commercial fishing sector	9.3
	I&I NSW would request condition of consent to include monitoring of geomorphic stability and have mitigation strategies in place to address any bed lowering, scouring or other impacts that arise as a result of the project	4.2.15 & 9.3
	Concerns on quality of water discharged during filling. Request condition consent on monitoring requirements during the filling phase.	4.1.2 & 9.3
	Lack of clarity about length of time for filling stage and the potential effect on the river due to this drought effect.	4.4.8
	Concern for cumulative impact in the region and request condition of consent that any expansion or increase in extraction be subject to further assessment	9.3
	Implementing the Tillegra Dam Aquatic Ecosystems Offset Package should be a condition of consent	9.3
	Remediation of 4 specific location fish passages should be a condition of consent	9.3
	the re-introduction of 10km of large woody debris habitat in the Williams River should be a condition of consent	9.3
	Sponsorship of monitoring and research program should be a condition of consent.	9.3
	Provision of 5 year community grants scheme of $100,000 per year for rehab of aquatic habitat should be a consent of condition	9.3
	I&I NSW support access for recreation groups. HW commitment to provide access to Native Dog Creek Bay has not been formalised in EA and should be a condition of consent	9.3 & 10
	Clarify if anglers will be able to access the proposed 50m buffer.	9.3
	Provision of fence stiles or gates for access should be installed in areas available for public use	9.3
	Should commercial aquaculture ventures be considered, further advice should be sought from I&I NSW	9.3
	HWC has indicated that offset funding may be available for stocking of Australian Bass. Such assistance should be clarified with I&I and will need	9.3

Respondent	Issue Summary	Section Ref.
	to be assessed and subject to formal approval under FMS	
	Approval is required under the Fisheries Management Act to release fish into waters	Noted
	I&I request that Hunter Water require the concurrence of the Department were limitations on access to the impoundment affects recreational fishing	9.3
	Fish cleaning facilities should be provided for both convenience and amenity issues	9.3
	The EA fails in the level of information provided on existing agricultural resources and land use. More comprehensive assessment is needed of future social economic effects on community as a result of loss of agricultural resources and production.	5.2.6
	No specific measures are proposed to mitigate the loss of agricultural resources or production, just Hunter Water's policy to provide assistance to help landowners	5.2.6
	EA does not consistently present information in regard to agricultural development and future options (example provided). However this is not likely to significantly effect broader assessment of impacts	Noted
	The assumption that Williams River users will be able to continue to access water releases etc. is critical to ensuring irrigation viability	4.4.6
	EA fails to consider cumulative impact of reduced flows on tidal pools and reduced water availability to irrigators and commercial impact on regional economy	6.2.2
	No issues were identified by Mineral Resources of Forests NSW within I&I NSW	Noted
Dungog Shire Council	Inadequate assessment of impact on community and council infrastructure	5.2
	Lack of information and inability to apply the precautionary principle	5.11.2
	Failure to provide specific commitments to mitigation	10
	Dungog Shire Council do not support project and EAR has failed to adequately assess and compensate for the social and economic impacts to our community and infrastructure	5.2
	HWC should provide a comprehensive analysis of social, environmental and economic costs both positive and negative using the Millennium Ecosystem Assessment and Cost Benefit Analysis	5.2.2
	DSC doubts that there will be no significant increases in demand for local accommodation during construction. Project management will remain the responsibility of the contractor, a workforce based in Dungog will increase pressure on housing significantly	5.2.9
	EAR fails to adequately address impact on local businesses, competition for services and local contractor resources.	5.2.4
	EAR fails to adequately address economic impact on removal of businesses and residents from inundated area resulting in the importance of employment and expenditure in the area being underestimated.	5.2.5
	Fail to adequately address loss of rates and like contributions to council when HWC will meet loss for 3 years only	5.2.8
	Fail to adequately address impact on social fabric and local services, local social equity, social displacement, workers interaction etc. These are often considered for small developments but not on major projects. HWC have made an initial commitment to the Dungog Information and Neighbourhood Service (DINS), this and other commitments need to be maintained and increased.	5.2.9
	Fail to address increased demand on medical resources. Provisions for medical services should be reflected in the SOC	5.2.9
	3 large projects will run co-currently with the dam, adding to social impact which need to be assessed thoroughly.	5.2.13
	HWC has not carried out a comprehensive traffic impact assessment for construction or assessment of the impact to roads through public use of the dam. The EA underestimates the road use	5.3.1 & 5.3.2
	Failure to differentiate between different classes of heavy vehicle use when considering level of increased use during construction	5.3.2
	Failure to accurately identify current level and proposed increase in heavy movements greater than class 3 south of Dungog and increase use on Chichester and Salisbury Rds	5.3.2

Respondent	Issue Summary	Section Ref.
	Traffic count data used do not compare to actual counts	5.3.2
	Structural details for many bridges on Main Road are incorrect	5.3.3
	Tabbil Creek Bridge is incorrectly listed on Main Rd 301 and LG Clements Bridge South of Paterson is not referred to at all	5.3.3
	Report underestimates amount of material and traffic movements for road and dam construction and proposes B Double transport where B Doubles are not permitted beyond Wordens Road on Main Road 301	5.3.2
	Council estimates overall traffic increase could be as high as 70% not 20%, with a 150% increase in Class 3 vehicles on Salisbury Road	5.3.2
	Failure to recognise hazard caused by increase in traffic passing schools and sporting facilities in Clarence Town and Dungog	5.3.7
	Failure to recognise lost costs with inundation of Quartpot bridge only built in 2004 on recommendation from HWC. Loan for borrowings are still being repaid	5.3.4
	Statement of commitments do not adequately compensate or mitigate against significant long term impacts, and more assessment and specific commitments should be made in traffic for the project to be approved	5.3.1
	Geology available fails to confirm the suitability of materials for various uses proposed in the dam and road construction. If not suitable, there would be greater road networks impacts due to increase in haulage routes	5.3.2
	Geological complexity has conflicting expert opinion and matters should be resolved prior to project progressing in assessment and approvals	5.4.9
	EA fails to address impact on river and ecology through formation of deltas. Deltas will form and progress upstream from the dam perimeter	4.2.4
	EA fail to address increase in erosion where streams enter the dam as the water level varies over time and vegetation is lost below the maximum	4.2.2
	EA fails to address foreshore erosion, increased erosion and creation of cutpoints and channel lowering, slope stability above the dam and dam rim, foreshore erosion from powerboats	4.2.1 & 4.2.2
	EA fails to address changes in flow patterns, cumulative effects, bed lowering, vegetation in weir pool, etc for full extent of river below the dam	4.2
	It is not appropriate to propose that impacts will be monitored and addressed after the dam is built. Use the precautionary principle	4.2
	Extent and significances of change to stream bed and impact on stream ecology are not recognised or adequately weighted in EA	4.2
	Downstream modification will impact on benthic species, change vegetation, bank stability and ecology of seasonal wetlands downstream	4.2
	Dam will be a barrier to species migration without a fish ladder	4.3.1
	Impact on Kooragang wetland not fully considered and contribution of the Williams river underestimated	6.2
	The condition of the Williams River has been understated and fail to recognise previous work	4.4.7
	EAR needs to provide reassessment of options using the BCA model, community consultation, independent review. Currently options have to be considered using the arguable data provided	3
	ILUP is too subjective and ambiguous to provide certainty and clarity. Actions and commitments need to be definitive and added into the SOC	9
	ILUP does not draw clear link between land use and water activities. Needs to be regularly reviewed by HWC with all stakeholders through life of the project	5.2.10
	Money on relocating Munni House would be better spent building a new facility and salvaging elements of Muni house or other Aboriginal and European heritage items from the area. The new facility would be better situated somewhere central, such as in place of the existing visitor centre in Dowling Street.	5.6.4
	Council commends HWC work for the possible relocation of Quartpot Cemetery and request ongoing commitment and cooperation should the dam proceed	5.6.5
	Management Plans should be developed for construction and operation. Should be available for comment from various stakeholders prior to adoption.	9.6 & 10
	SOC must include specific HWC commitments in all areas	9.6 & 10

Respondent	Issue Summary	Section Ref.
Hunter-Central Rivers Catchment Management Authority	Climate change information should be revisited to use the most up to date information to re-examine the business case.	5.10.8
	An additional study should be invested in relating to drought frequency and intensity in the HWC supply area	9.4
	An independent review of climate change information by accredited experts be undertaken to inform the use of the best available information	5.10.16 & 9.4
	All options should be reconsidered using a cost benefit analysis	9.4 & 5.2
	A re-evaluation of the revised clearing figures through the Environmental Outcomes Assessment Methodology to comply with the CAP and the 'Principles for the use of biodiversity offsets in NSW' should be undertaken	4.5.4 & 9.4
	An increase in the riparian offset proposal ratio to 1:3.2 is required, calculated as an expression of stream length with 20m buffer and consideration of riparian offsets in adjacent catchments with less ongoing risk.	9.4
	Assessment of land capability and soil landscape to inform the location of the potential regeneration/revegetation options is required	9.4
	A revision is required of the corridor offsets locations to areas with higher proportions of remnant vegetation to improve resilience of the Outcomes	4.5.4 & 9.4
	The condition of adequate protection covenant mechanisms to ensure the ongoing protection of offsets should be investigated	9.4
	A specific biodiversity offset plan be developed to guide offset delivery and include: site assessment, optimised site outcome for native vegetation regeneration/revegetation, site specific method of achieving outcome, site specific species lists, protection covenant to be applied.	9.4
	The upstream impacts and ongoing risks to geomorphic stability should be addressed and mitigation strategies be developed and adopted	4.2.15
	The fluvial geomorphology impacts are severely underestimated due to not using the most accurate information. The downstream geomorphic impact should be re-assessed and peer reviewed	4.2 & 9.4
	Once impacts are fully understood, a complementary package of costed strategies should be developed to manage the river and tributaries post dam	9.4
	The water quality and ecology impacts are understated and a long term monitoring program should be undertaken and the impacts re-assessed and peer reviewed	4.4.7 & 9.4
	Fish passage should be incorporated into the dam	4.3.1 & 9.4
	The process of assessment through the Water Sharing Plan has been inadequate. A complete water share planning process should be undertaken to develop the flow sharing and operational rules	4.42 & 9.4
	The demand predictions are not accurate. The demand management options should be re-assessed and peer reviewed.	3 & 9.4
	A full costing of the ongoing impact of the dam on the river and infrastructure that may be affected should be undertaken and a cost recovery mechanism be factored into the price of the water	5.2 & 9.4
	All offsetting proposals, including riparian vegetation and large woody debris, should account for the ongoing risks from the impacts of the dam and consideration should be given to offsetting some of the impact in adjacent catchments to balance the risk	9.4 & 10
	A fish stocking program for Australian Bass would require ongoing funding and the costing of this proposal should be re-assessed should the fish passage at the dam not eventuate	5.2.10 & 9.4
	The impact on the estuary has been underestimated and no offsetting or mitigation has been considered. Additional assessment of the estuary impacts should be undertaken and peer reviewed and an offsetting package to include the rehabilitation of Irrawang Swamp.	6 & 7 & 9.4
	The stipulation for community grants scheme to be on public land should be removed to allow sites on private land also.	9.4
Transgrid	Project site is clear of Transgrid interest so no objections are noted.	Noted

A2 Public Submissions

Public submissions were received in three distinct forms, comprising those receive from community groups/organisation, those received as unique submissions from individuals and those received as form letters.

A2.1 Public Submissions (Community Groups / Organisations)

A summary of the issues raised by each of the community groups/organisations is provided in Table A2. This table identifies the respondent, provides a summary of the issues raised and a reference to the section of the Submissions Report that addresses each issue.

Table A2 Public Submissions (Community Group/Organisation)

Respondent	Issue Summary	Section Ref.
Australian Water Network	No consideration of alternative supply options or demand modification has been presented.	3
	The dam is not needed and has not been justified by Hunter Water	3
	Alternative water supply sources and efficiency measures should be further considered	3
Community Environment Network Inc	There is uncertainty in timing, total costs, viability and identity of repayment of dam costs.	5.2.1
	See also 'Form Letter 1'	
Dungog District Chamber of Commence	Roads will not safely carry proposed additional traffic on roads that are already in poor condition due to insufficient funds to council. Proposal should not be approved unless funding is made available to upgrade one road into town and one north of the Dam as well as providing for ongoing management.	5.3.5
	Dam has already had negative impacts on business community and want funds to capitalise on any opportunities (eg tourism) from the dam and to plan for inevitable downturn. This impact has been minimised in the EAR. Funds and other support should be made available to businesses for them to capitalise on opportunities.	5.2.4
	Water body and surrounding HWC land to be permanently available for recreational use	5.2.10
	Need detailed studies on rental accommodation (availability and affordability) in the shire and on tourist accommodation and identify strategies to mitigate the immediate effect on low income families and any adverse effects on the tourism industry	5.2.9
	Financial cost to local community be addressed by perpetual annual payment of percentage of HWC revenue to Dungog Shire	5.2.1
	Impacts on workforce available to local businesses to be compensated by providing funds to retain and compete for staff during construction	5.2.5
	Dam has been highly divisive socially so funds required for social welfare projects to enhance social harmony	5.2.9
	Construction will increase workload on already overstretched medical services	5.2.4
Dungog Historical Society	Additional information provided on the history of the Dungog area	5.6.2
	Some of the references in WPI refer to the study area but references etc are clearly not in that area. There is some confusion in parts between the Study Area, the Location Plan and references to local area - sometimes being to Dungog and other times to other local areas.	5.6.1
	Additional information provided for Working Paper L Section 2.4.1.	Noted
	Correction provided for information about Samuel Kingston.	Noted
	Additional information provided on the earliest settlers in the Tillegra area	Noted
	It is not clear whether the reference to "services in 'the area'" is referring to the Tillegra area or the wider Dungog area.	5.6
	Additional information provided on the first schools in the region	Noted
	Additional information provided on local Churches	Noted
	Corrections and further detail provided for Table 2.1 of the Working Paper L	Noted
	The Society supports the approach taken to the items in that table based upon all the statutory heritage assessment procedures. There may, however be residents in the inundation area who may have particular views about	5.6.1

Respondent	Issue Summary	Section Ref.
	some items.	
	Correction required to the dates of Munni School year of closure and location of the school.	Noted
	Option 4(a) for the house and 4(b) for the 2 wooden outbuildings would seem to offer the best alternatives for them. A likely site for the relocation is near the Tillegra Cricket ground. It is suggested that part of the post and rail fence/yards on the other side of Salisbury Road, opposite the house and the nearby wood and metal slaughter house be also demolished and rebuilt.	5.6.4
	The Society would like a copy of this proposed record.	Noted
	The Society would like to have a copy of this proposed record.	Noted
	The Society would like a memorial board to be included and a possible site had already been located (near the corner of Chichester Road and Salisbury Road) to be documented in the EAR.	5.2.9
	The Dungog museum has limited room to accommodate larger items and artefacts. These items would be better displayed at the proposed 'Munni House' Interpretive Centre.	5.6
	The Society would be able to assist with the interpretive, centre walks etc and would be in a position to do a temporary larger display in our temporary display room and later could incorporate a smaller display with our current displays on the Chichester Dam.	5.6
	The proposed oral history interviews are welcomed by the society, however people who no longer live in the area (but grew up there) should have input. These histories should be filmed as well.	5.6
	If the dam is approved, the inundation area will destroy the history and heritage of the area.	5.6.1
Dungog Information & Neighbourhood Service	Social impacts on the people of Dungog.	5.2.9
	If the proposal is to proceed, Hunter Water should honour its commitment to unrestricted recreational use, substantial additional funding to upgrade arterial shire roads, and dedicated downstream water releases for irrigation to occur in an effort to offset lost agricultural production in the inundation area.	5.2.10
	If the proposal is postponed indefinitely, it is more than likely that Dungog will continue to suffer accelerated decline and decay because of lack of direction, certainty and prosperity than the area associated with the dam's footprint.	5.2.4
Hunter Environment Lobby Inc	An inadequate study of the Ramsar wetland has been undertaken.	7.2.1
	No direct consultation with Department of Environment & Climate Change (DECCW), the land manager of Kooragang Nature Reserve, the Office of Water, manager of the Hunter River system and water allocation, or Department of Industry and Investment - manager of fisheries.	7.2.6
	There has been no independent research or survey work conducted. The EAR relies heavily on desktop research and information supplied by the proponent.	7.2.1
	The EAR fails to establish the proposal as a sustainable development.	5.11.2
	A lack of information on the ecological character of Kooragang Nature Reserve. No additional independent on ground scientific survey work undertaken to satisfy the Supplementary Director-General requirements. The EAR fails to identify the impacts of the proposal on the Kooragang Nature Reserve under the three criteria of the Ramsar Convention.	7.2.1
	No adequate description of the habitat needs for migratory birds. Limited information provided on macroinvertebrate diversity (Section 3.11.5 Table 6 (p79)). While 3.10 Table 1 (p 60) describes the species and foraging areas used there is no information about the food sources, freshwater influences on the life cycles of these food sources and required inundation levels in the key foraging areas identified.	7.2.1
	The assessment gives no indication of the ground height that each vegetation community occurs on, the regularity of freshwater inflows needed or the height of the flows needed to maintain their integrity. There is no specific identification of the areas of freshwater dependent vegetation.	7.2.1
	The Conceptual Wetland Model (3.11.3 p.72) is generalised and used to represent broad links only, given the information sources. The detail and complexity of the inter-relationships within the wetland are not depicted.	7.2.1
	Hydrological modelling - ELCOM Model - the report acknowledges the	4.5.4

Respondent	Issue Summary	Section Ref.
	increasing unreliability of the model as distance increases upstream of the monitoring points. Table 13 shows only five scenarios without Tillegra Dam. The Sea Level Rise Sensitivity Scenarios do not include a scenario without Tillegra Dam.	
	The Hunter Water Corporation model for average daily flow does not provide a good representation of extreme flood events. This model does not match the existing Tuflow model used by BMT WBM.	7.2.1
	The conclusion that no areas of wetland will be destroyed or substantially modified has not been substantiated in the report. 3.11.5 Table 6 (p79) indicates that the figures for the extent of freshwater wetland in Kooragang Nature Reserve are not available.	7.2.1
	The limitations in the modelling used in the report do not provide adequate information to substantiate the conclusions that the hydrological regime of the wetland will not be adversely affected by the proposal.	7.2.1
	There is no analysis of timing, duration or frequency of freshwater surface water flows to the wetland. The report claims that sea level rise will cause a major impact.	7.2.1
	Further information in relation to the Eastern Curlew and the Green and Golden Bell Frog relying on freshwater wetlands as habitat should be provided in this report.	7.2.1
	There is no consideration of the cumulative impacts of the Tillegra Dam proposal on the loss of freshwater flows to the Hunter estuary. The cumulative loss of high flows to the estuary has not been identified in the EAR in relation to the proposal that will capture 30%ile flows in the Williams River.	7
	The volume, timing, duration and frequency of 30%ile flows from the Williams River to the Hunter Estuary has not been identified. The relationship of these flow levels to the function of Seaham Weir and drown out has not been identified.	4.4.5
	There is no indication in the EAR how the NSW Government water planning frameworks for the Williams River will impact on the ecological character of the Hunter Estuary Wetlands Ramsar site.	7.2.1
	The release strategy is still being developed, therefore this information is not provided in the EAR and this Supplementary DGR has not been met.	4.4.3
	The EAR does not give sufficient consideration to alternatives to Tillegra Dam. The EAR down plays the impacts and cannot be feasibly mitigated.	3
	The EAR does not provide the detail or scientific rigour to allow an informed decision on the approval of a controlled action under the EPBC Act.	7
	The EAR does not adequately address alternatives to the controlled action in relation to their comparative impacts on the matters protected by the controlling provisions for the action.	3
	The current water supply has been shown to already have a high level of drought security and the EAR does not make it clear why the Tillegra Dam is preferred to any other alternative.	3
	The community consultation around the Tillegra Dam proposal has been inadequate.	5.1.4
	The Dungog community will be affected by the loss of farm production.	5.2.6
	Community members involved in volunteer environmental activities in the Hunter Estuary Wetlands are particularly concerned about the impacts on the areas under their care. The EAR understates the impact of the proposal on the Ramsar listed wetlands and has not identified the strong community of interest working in these areas.	7.2.1
	A number of key matters under Schedule 4 of the EPBC Regulations 2000 have not been adequately covered in the EAR.	7
Hunter Koala Preservation Society	Koala colonies and habitat would be destroyed in the area	4.5.2
	The dam will threaten the Kooragang wetlands and destroy the Williams River	6 & 7
	The dam will inundate irreplaceable agricultural land	5.2.6
	The building of the dam is contrary to at least four for the Regional Strategy key objectives	5.1.5
	The need for the Dam has not been justified	3

Respondent	Issue Summary	Section Ref.
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
Hunter Regional Committee of the National Trust	Munni House should be preserved where it stands as it has great heritage value	5.6.4
	It is not possible to relocate the Munni House homestead due to brick construction.	5.6.4
	12 items were found to be inundated which have significance at a local level. It is considered that the cultural heritage assessment is conservative on these grounds.	5.7.2
	Quart Pot/Munni Cemetery has a local level of significance. Relocation is considered to be destructive.	5.6.5
	The mitigation measures proposed for Aboriginal Heritage are inappropriate. The sites will have no significance if they are under dam waters	5.7.3
	The EAR fails to adequately address the potential impacts and identify and secure water volumes from the Williams River needed to ensure the long term health of the Hunter Ramsar wetlands.	7.2.1
	The EAR proposes an inadequate number of replacement trees (1.5 million) to ensure the survival of many species and communities and does not adequately address mitigations for the loss of roosting and breeding habitat for threatened species.	4.5.4
	The proposed 2000 ha flooded area of land lies at the gateway to World Heritage listed and National Trust classified Barrington Tops National Park and it is considered that a dam is an inappropriate development for this very sensitive area.	4.5.1
	No attempt has been made to relate 50 identified heritage/archaeological heritage sites to the river landscape and to consider the importance of this relationship to heritage significance.	5.6.3
	No consideration of the cultural and natural heritage significance of the Williams River Valley and the impact of the dam on this significance.	5.6.1
	Mitigation measures for cultural heritage are inadequate. Retain fabric in situ is the most appropriate way to conserve and interpret heritage.	5.6.1
Institute for Sustainable Futures, University of Technology Sydney	The proposal is based on an unjustified down-rating of the region's existing water supply.	3
	Suitable alternatives have not been properly considered.	3
	The desalination option considered in the EAR is not at all realistic.	3
	No drought security alternatives are considered.	3
	The cost effectiveness of the project is highly questionable.	3
	The EAR fails to consider all direct and indirect socio-economic impacts.	5.2.2
	Greenhouse Gas (GHG) Emissions are underestimated. Methane emissions from the storage are not included. The GHG assessment has not included Scope 3 emissions. The emission abatement potential of the proposed mini HEP has been overestimated.	5.10.1
	The EAR has not adequately addressed the need for the dam. The EAR justification does not represent the available evidence.	3
	Demand calculations for water in the Hunter need to be revised (need more up-to-date data, comparisons of litres used per capita per date).	3
	There is a socio-economic impact of uncertainty around the cost of the Tillegra Dam to water customers. There is no assessment of the willingness to pay for increased drought security.	5.2.1
	Simplistic calculations of abatement from tree planting off-set. There has been no consideration of factors such as the loss of soil carbon in the establishment of plantations on agricultural land.	5.11.1
	Working Paper F claims to present information regarding targets and timing which it does not deliver.	5.11
	Important sustainability principles are not demonstrated in the EAR. Inadequate treatment of intergenerational equity.	5.11.3
Ironstone Community Action Group	The impact of the dam on the river downstream and the wetland areas	6 & 7
	The are better alternatives to construction of a dam	3
	The river should be allowed to flow freely to preserve existing ecology	4 & 6
Lakes Precinct Committee	Need for the Dam. Integrated water management should be used to secure water supply.	3
Mount Annan Botanic Gardens	Flora survey methodology may not have allowed for identification of all species present within the project site	4.5.1

Respondent	Issue Summary	Section Ref.
National Parks Association of NSW	The dam will have major and irreversible impacts on the riverine environment of the Williams river, the Hunter estuary and the Ramsar listed Hunter Estuary Wetlands, particularly Kooragang Nature reserve	4, 6 & 7
	The need for the Dam has not been justified	3
	ALP No Dams Policy announced in 1995	5.1.8
	Alternatives have not been adequately assessed	3
	The long-term environmental and social costs have not be adequately assessed	4 & 5.2.13
	No ecological character description has been developed for the Kooragang Nature reserve. Assumptions made in the wetland model are based on general information rather than specific detail	7
	No information has been supplied about requirements of the vegetation communities and EEC's on Kooragang Nature Reserve	7
	There has been no genuine attempt in the EA to consider the impact of the loss of the 30%ile flows in the Williams River in relation to over topping the Seaham Weir	6
	The EA has failed to provide the supplementary requirement for 'a description of the seasonal dynamics of the Williams River in the context of flows…'	4.4.3 & 4.4.7
	The modelled sensitivity scenarios for sea level rise do not include a scenario without Tillegra Dam, therefore no information is supplied to compare the impact of sea level rise with and without the dam.	7.2.4
	There are limitations in the Ramsar Assessment report in relation to source data accuracy and availability of scientific information.	7.2.1
	The long-term consequence of annual removal of an extra 50GL of freshwater from the estuary is not assessed	6
	A decision regarding the impact of the dam should be delayed until the NSW Office of Water has completed their study into the freshwater requirements of the Hunter River estuary.	7.2.1
	The proposal is ill-conceived and without valid justification.	3
	The proposal points to systemic failings and political interference in existing processes for the evaluation of major capital works by State agencies.	5.1.7
	The DGRs require a justification of the project. The need for additional 0.5 billion litre storage is not satisfactorily explained. Neither are robust evaluations of sustainable alternatives provided	3
	The alleged need for the additional water source is premised on potential climatic change but these reasons lack any credibility.	3
	The EAR does not refer to the most up-to-date data for the project site prepared by CSIRO (Goodwin & Blackmore 2009).	5.10.8
	the Mardi to Mangrove pipeline (Commonwealth grant) means the Central Coast no longer needs the water	3
	The adopted standard for drought security represents a flawed approach to risk management.	3
	Water demand forecasts by HWC appear overestimated.	3
	A critical deficiency of the EAR is its failure to compare the cost-benefit for the project with that for a wide variety of credible alternatives, including demand management, wastewater reuse, rainwater collection and stormwater harvesting.	3
	The EAR leaves unanswered the extent to which Hunter Water consumers will bear a significant long-term financial liability for which there is no commensurate benefit.	3
	Irreversible impacts on upstream and downstream riverine environments with substantial impacts on aquatic fauna and riparian vegetation.	4.3.3
	The altering of stream flow patterns and the reducing of intensity of downstream high flow flushing and scouring events.	4.2.9
	Much of the information in the EAR regarding wetland impacts is not site-specific.	7.2.1
	There has been a failure to promote sustainability principles.	5.11.3
	The EAR ignores the greenhouse impacts of methane emissions from rotting vegetation.	5.10.1

Respondent	Issue Summary	Section Ref.
Native Fish Inc	Changes to flow regimes on native fish and other aquatic creatures and water releases on those aggregating downstream of dam wall	4.3.3
	Effects of flows into Balickera Canal and pumping station on migrating fish (needs fish deterring device) - group wants to discuss with Hunter Water	4.3.8
	Supports recreational access but doubts HWC sincerity after indications regarding Grahamstown	5.2.10
Natural Conservation Council of NSW	Inadequate assessment of Ramsar wetland impact	7
	Inadequate ecological survey failed to identify endangered species	5.1.6
	Impact on platypus ignored	4.5.2
	Inadequate conclusion on aquatic ecology impact	4.3.9
	Inadequate assessment of riparian and terrestrial ecology impact	4.5.1
	EA report significantly underestimates the greenhouse gas emission impact	5.10.1
	Proposed mitigation actions are inadequate	4.5.4
	The need for the Dam has not been justified.	3
No Tillegra Dam Group	No water scarcity in the Hunter, there are no water restrictions in place, storage currently sits at 90.9%. The Hunter Valley is at its highest level in 30 years, demand in 2007/8 dropped to 67GL/year (the lowest in 40 years)	3
	The Federal Govt's decision to stop Traveston Dam under EPBC Act acknowledges the potential massive environmental damage caused by large dams. Decision also took into account social and economic losses	3
	There is plenty of time to put in well planned, integrated water supply and drought response plans, where community can be informed and consulted on level of service to pay for	3
	Papers subpoenaed by the NSW Legislative Council on 26 November, 2008, demonstrated that there was no planning behind the Tillegra Dam decision	3
	Tillegra Dam contravenes many state and regional policies, guidelines and statutory requirements	5.1.2 & 5.1.5
	Current state and regional climate change data disproves Hunter Water's assumption that Tillegra is needed.	3
	The Lower Hunter Regional Strategy clearly shows that the Tillegra Dam was never considered necessary to meet population growth	3
	Independent reports have demonstrated that Tillegra Dam is an absurd level of drought security and other options have not been adequately addressed	3
	Hunter Water has misused the reliability of supply criteria (yield) and demand to create a case for Tillegra	3
	Alternative supply options have not been carefully considered by Hunter Water and data adjusted to promote the dam	3
	The Hunter Water 'implications of doing nothing principle' has been used as part of its scare mongering media campaign and is irresponsible water management.	3
	Current climate change predictions show no change in natural climate variability before 2030	3
	Tillegra is of no benefit to the people of the Hunter and is not good water planning - there are simply better options	3
	An independent expert review undertaken by Dr Geoffrey Wells, environmental economist, University of South Australia, shows the CEA and CGE modelling used in the EAR to be inadequate to measure the full socioeconomic impacts	5.2.3
	The requirement of the DGRs for a full accounting of both direct and indirect impacts has not been achieved by CEA and CGE modelling	5.2.3
	The CEA and CGE modelling does not comply with Federal and State government guidelines	5.2.3
	A full Cost Benefit Analysis (CBA) must be commissioned in order for the requirements of the EAR to be fully met.	5.2.3
	Clause No. 9 of the supplementary DGRs 'sufficient information about the proposed action and its relevant impacts to allow an informed decision whether or not to approve the controlled action under the EPBC Act' cannot be met without a full CBA.	5.2.3
	CSIRO Sustainable Ecosystems Policy and Research Unit Glen Osmond, South Australia, supports the need for a detailed undertaking of a full CBA of	5.2.3

Respondent	Issue Summary	Section Ref.
	the total economic value of ecosystem services provided by the catchment and infrastructure investment.	
	Social impacts have already been experienced in the community and there are additional social impacts if the proposal proceeds. An increasingly well recognised monitoring tool is the Environmental Distress Scale.	5.2.4
	There is a sense of imposition and injustice felt in the Dungog community.	5.2.9
	The Dungog people are distress and have been refused a voice in the proposal that threatens to irrevocably degrade their valued environment.	5.1.4
	Proven developer lobbying to inflate growth figures and water efficiency will curb demand	3
	There are health implications in relation to this strongly felt sense of imposition and injustice.	5.2.9
	Hunter Water failed to comply with the supplementary DGR item no.8 'to the extent practicable, a description of any feasible alternatives to the proposed action…'	3
	All alternatives have not been presented for discussion, neither before the proposal was announced in Nov 06, nor during the assessment period.	3
	Hunter Water failed to meet the requirements of State and Federal Government guidelines and National and International assessment frameworks for community consultation	5.1.4
	The level of service (of water supply) the community wants and wants to pay for has never been discussed with the community	3
	The Tillegra Dam proposal was presented as a given with no consultation on the need for such a massive supply.	3
	Hunter Water's investigation of, assessment of, and recommendation on issues of Indigenous heritage fail to fulfil the DGR	5.7.2
	Site investigations covered less than 10 percent of the inundation area	5.6.1
	An average of two hours was spent digging, investigation and assessing each of 20 trenches	5.7.2
	Members of the Aboriginal community have asked for more time to fully assess the area.	5.6.1
	Scientific surveys took place over extremely limited time frames (not trans-seasonal)	4.5.1
	Hunter Water has failed to properly consult or engage the Aboriginal Community about the area.	5.6.1
	The EAR claims it was required only to present the site details to a 'Concept Design' stage. This stage avoids any real discussion of the geological complexity of the site. That complexity adds to the cost of dam construction	5.4.7
	This additional cost to the community is not revealed in the EAR	5.2.1
	Detailed Design investigations commenced in September 2008. Signs of geological complexity are referred in the Peer Review Panel report in March 2009. None of this detail is provided in the EAR.	5.4.1
	There is no clear geological/structural model that details the structural complexity of the dam site area in any of the reporting or in the EAR.	5.4.1
	The simplistic model used in the Ear fails to acknowledge the clear geological discontinuities across the storage area, abrupt changes in dip and strike that ought to require more detailed analysis.	5.4.6
	The geological data presented in the EAR is considered misleading because it does not report the extent of shearing now recognised around the dam site and most likely along part of the Chichester Range away from the dam site. It is clear the full extent of shearing is still unknown.	5.4.2
	The EAR should be amended to reflect the more recent geological picture that is emerging from the document Design Stage Geotechnical Investigation Vol 1 (22.9.09)	5.4.3
	Hunter Water and its consultants have failed to assess the importance of the Terrestrial Ecology of the Williams River region particularly the threatened species and endangered ecological communities.	4.5.1
	Habitat assessments were undertaken at the wrong time of the year and for too short durations	4.5.1
	Socio-economic modelling has been challenged by independent expert reviews; International Federal and State Guidelines clearly identify Cost Benefit Analysis (CBA) as the required method for determining economic	5.2.3

Respondent	Issue Summary	Section Ref.
	impacts of major infrastructure projects. It	
	A threatened frog species has been found in the vicinity of the proposed dam. A trans-seasonal survey of threatened species needs to be undertaken.	4.5.2
	Offsets are unacceptable and will not replace or mitigate losses that will be experienced	4.5.4
	Impacts on threatened species of the Ramsar listed Hunter Estuary Wetlands have not been assessed.	7.2.1
	38 migratory birds that utilise the wetlands are subject to agreements with Japan and China	7.2.1
	A thorough assessment of impacts over a great spatial and temporal scale is necessary to understand the impacts that such an unnecessary project will have on terrestrial ecology of the Williams River region.	4.5.1
	Hunter Water and its consultants have failed to recognise the ecological values and important instream values of the aquatic ecology of the Williams River	4.3.9
	The Williams River has the most diverse and intact biota in the Hunter	4.3
	Many native fish species in the Hunter are under pressure from loss of habitat, mainly due to river impoundment	Noted
	A key threat to the freshwater catfish is competition from exotic species such as carp	4.3.6
	Professor Wayne Erskine expressed surprise at the numbers given for environmental flows. He considered them too low to allow for turning of the armouring layer and coarse gravel. The would render the river unproductive.	5.1.4
	EAR shows incompetence, lack of depth, failure to acknowledge social upheaval, exaggerates benefits	5.1.6
	Effect on rivers from impoundment are largely unknown, but mostly bad.	4
	Assessment of the foreshore erosion was limited to 96% - FSL with no discussion if the level drops below that	4.2.2
	There is no discussion of upstream effects with sediment load	4.2
	The effect of waves on the system is not satisfactory	4.2
	Sustainability issues have not been addressed.	5.11
	Findings for the World Commission on Dams should be applied.	3
	Kooragang Nature Reserve is perceived to be most at risk from the Tillegra Dam project, yet the Ecological Character Description is not available nor are the freshwater needs for the Hunter community and beyond	7.2.1
	The far-reaching effects of such a large project as Tillegra Dam cannot be known with these knowledge gaps	4 & 6
	The EAR and Appendix 6 of the EAR fail to meet the supplementary DGRs. In some instances the questions asked by the DGRs have been amended in the summary of Appendix 6.	7
	The report relies on poor modelling and unsubstantiated information provided by the proponent. Time and budgetary constraints are cited as a reason for the lack of site-specific information, and no field-work was undertaken	7.2.3
	Recent DECCW papers produced by Dr John Kaye, MLC, NSW Govt upper house show HWC misused data on climate change, population growth and yield to build case for the Dam	3
	Such as important issue as the impact of a river impoundment the size of the proposed Tillegra Dam must be properly assessed, with field-assessment and a thorough understanding of the freshwater needs of the wetlands.	7.2.1
	Hunter Water has consistently failed to analyse decentralised water supply options	3
	IWCM can alleviate the demand on mains water supplies.	3
	Improvements to stormwater management can also be realised	3
	The need for any large centralised infrastructure can be delayed until well beyond a reasonable planning horizon	3
	Demand management strategies are under-ambitious. Hunter Water's demand management strategies need to be more aggressive and applied to the non-residential sector.	3
	There is a potential to use wastewater recycling at a precinct level in conjunction with other decentralised water supply options.	3
	There is no evidence in the EAR that HWC used Inter basin approach set out in National Water Initiative (NWI) to which NSW Govt is signatory	3

Respondent	Issue Summary	Section Ref.
	Proponent refuses to look at Hunter river and other streams that feed it, the other dams in the region, and the Central Coast Dams as one interbasin. This is against NWI policy that there be no impediment to water trading, storage and sharing	3
North East Forest Alliance: Hunter Region	The inundation of the storage area will impact the immediate locality and also regionally upstream and downstream of the site.	4 & 6
	The offset scheme proposed for the Tillegra Dam project totally fails the criteria for offsets developed by DIPNR, DLWC and NPWS [DECCW]	4.3 & 4.5.4
	It has not been demonstrated that suitable habitat for the threatened fauna species which would be dislocated by this project can be created by rehabilitating or revegetating cleared or degraded land. The proposed off-set areas do not appear to be secure reserves	4.5.4
	The proposed riparian offsets will not create a like-for-like environment and one-to-one replacement is not a no net loss. Additional riparian offset measures are required	4.5.4
	Compensatory plantings should not be used as an offset measure for clearing land. These measures should be undertaken on top of the preservation of exiting vegetation.	4.5.4
	Loss of hollow-bearing trees is a Key Threatening Process. Planting of offset vegetation and the use of nest boxes can not compensate for the loss of hollows.	4.5.3
	The benefit of nest boxes is not well understood. Should the project proceed next boxes should be used, however at least an equivalent number of old hollow-bearing trees should be protected.	4.5.4
	The construction of the dam would impact on the already declining fauna populations in the area and reduce the available habitat.	4.5.2
	The dam will have a significant impact on the Hunter Ramsar Wetlands.	7
	The loss of habitat as a result of this proposal will have significant impact on the spotted-tailed quoll and cannot be offset	4.5.2
	The loss of existing Koala habitat and dispersal ability, the consequent loss of local populations, together with the loss of increased quantity and quality of habitat together constitute a significant impact which cannot be offset.	4.5.2
	The impact on the platypus population of the Williams River will be significant and cannot be adequately offset.	4.5.2
	The opportunity cost is an incalculable loss, given the dire status of many species and communities and the impacts of climate change. The losses constitute very significant irreversible harm, largely incapable of being offset.	4.5.2
NSW Council of Freshwater Anglers	The offsets relating to Native Dog creek were not included in the EA and should be included as an addendum.	8.5
	Any restrictions on recreational access to the dam from impacts on local infrastructure should be considered. Social and environmental offsets should be guaranteed.	5.2.10
Recreational Fishing Alliance of NSW	Provide good [environmentally sound and safe] access from all major roads to the dam areas	5.3.9
	Eco friendly camping area along arm of Native Dog Creek	5.2.10
	Any management changes eg restricted recreational access in future, be preceded by public consultation	5.2.10
	Other opportunities for fish stocking revenue - licence fees etc.	5.2.10
	Provide funding for visitor facilities to showcase and improve nearby natural areas (eg Barrington Tops NP and State Recreation Area) for tourists	5.2.10
	Formalise agreement to provide access to passive recreation area along arm of Native Dog Creek	5.2.10
	Design, construct and install artificial fish habitat where appropriate natural habitat [structure] absent	4.3.3
	Fund ongoing research and monitoring in dam area and Williams River bellow dam wall and below Seaham Weir	4 & 6
	Opportunities for HWC to work with I&I NSW through NSW Fishing Trust to align activities and funding with the Invest Plan for Fish Enhancement and Habitat programs	4 & 5.2.10
	Provide suitable boat ramp and floating pontoon to allow watercraft access at all water levels	5.2.10
	Allow managed accommodation as per Glenbawn Dam and Educational	5.2.10

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	short stay accommodation	
	Provide maps of submerged topography for dam users	5.2.10
Red Herring Fishing Club	Recreational use - use of small fishing boats	5.2.10
	Stocking of fish within the Dam	5.2.10
Rivers SOS	The government should legislate a 'Protection Zone of 1 km' around all natural water sources from any form of impact (including Tillegra Dam)	N/A (policy issue)
	The need for the Dam.	3
	The construction of a dam on the Williams River will impact both upstream and downstream	4 & 6
Save Water Alliance	No consideration of alternative supply options or demand modification has been presented.	3
	The Executive Summary says that the EAR will present an assessment of Community and Stakeholder responses. It is considered that no mention of local concerns about environmental factors is presented.	5.1.4
	An independent study was undertaken by the University of Technology Sydney, which found that with lower water consumption and increased supplies, drought security was at a 30 year high, and that alternatives will cost hundreds of millions less than Tillegra Dam. Water saving strategies should be implemented.	3
	An independent consultancy has found that for a mere $115 million Hunter Water could still adequately drought proof the region.	3
	The view that the reserves of Tillegra Dam would only be required once in 1250 years.	3
	Rivers are one of our most precious assets, the Williams is one of the last healthy rivers in the region.	4
	Destroying rivers is a short-sighted investment strategy	4
	The Williams River is home to many threatened species and the dam will be detrimental to the health of these species.	4.5.2
Singleton Fly-Fishing Club	The suggested "subsequent increase in habitat in the dam" will be at the expense of biodiversity. An increase in lenthic habitat will coincide with a reduction in lotic and terrestrial habitat	4.3
	Support fishing and other recreational activities on dam	5.2.10
	Someone should be held accountable if environmental offsets not implemented	4.5.4
STEP Inc	ALP No Dams Policy announced in 1995	5.1.8
	Impact on the environment of the Williams River and migratory fish species.	4
	Need for the Dam as no water restrictions have been placed on Hunter Water users	3
The Junction Inn Fishing Club	Re-use treated effluent instead of dam	3
	Changes to flow regimes on native fish and other aquatic creatures and water releases on those aggregating downstream of dam wall	4.3.3
	Effects of flows into Balickera Canal and pumping station on migrating fish (needs fish deterring device) - group wants to discuss with Hunter Water	4.3.8
	Support recreational access to Native Dog Creek bay	5.2.10
	Support stocking with Australian Bass	5.2.10
	Retain as many trees around lake as possible	4.5.4
The Wilderness Society	The dam will change the ecology of the Williams River, destroy wild bass populations on the coast of NSW and disturb a platypus population	4 & 4.5.2
	Displacement of rural farming community	5.6.2
	Cost of the project	5.2.1
	Environmental flows and wetland impacts	4.4 & 7
	The dam will impact on environmental values of the Williams River including platypus, native fish species, Ramsar listed Hunter Estuary Wetlands and other terrestrial species	4 & 7
	Job creation	5.2.5
	The Wilderness Society commissioned the Institute for Sustainable Futures (University of Technology Sydney) to undertake 'An independent review of supply-demand planning in the Lower Hunter and the need for Tillegra Dam. The report covered supply estimates, demand forecasts, water supply-demand balance and alternative water supply-demand strategy. The ISF also provided recommendations to be adopted.	3

Respondent	Issue Summary	Section Ref.
	The Wilderness Society commissioned the Institute for Sustainable Futures (University of Technology Sydney) to undertake 'An assessment of Greenhouse Gas Emissions from the proposed Tillegra Dam'. The following recommendations were made:	5.10.4
	1. The Tillegra Dam EAR should be amended by removing the offset claimed for renewable energy generated by the mini hydroelectric plant	
	2. The Tillegra Dam EAR should be amended to include methane emissions from water storage	5.10.1
	3. The Tillegra Dam EAR should be amended to account for current understandings of the soil carbon dynamics associated with tree planting	5.10.10
	4. The Tillegra Dam EAR should be amended to include the GHG emissions from the manufacture of materials used in the construction of the Tillegra Dam, particularly steel and cement.	5.10.11
	5. All actions towards building the Tillegra Dam should be halted until a carbon neutral strategy that accounts for recommendations 1, 2,3 and 4 can be defined	5.1
	6. The full GHG impacts of dam proposals including surface emissions should be included in future planning for urban water supply across Australia	5.10.12
	7. The Australian Government should include surface reservoir emissions, particularly those from storages built after 2010, under the CPRS cap	5.10.12
	The dam will have negative impacts on the populations of insects and macroinvertebrates	4.3.3
	Native fish species will be impacted by the creation of a large water body and through a barrier to fish passage.	4.3.3
	Freshwater mussel populations will be impacted through changes in low, siltation and sediment transport.	4.3.3
	The loss of remnant vegetation will impact on pollinating species which may be of significance to threatened flora and fauna in the area.	4.5.2
	There are large potential effects on the Ramsar listed Hunter estuary Wetlands	7.2.1
	The impact on climate change of the dam have not been appropriately addressed	5.10.1
	Further investigation is required to assess the impact of the dam on aboriginal heritage	5.7.2
	There is insufficient demand to justify the building of the dam	3
	Hunter Water's change to yield estimates should be rigorously reviewed	3
	The dam is not needed to supply water to the Central Coast	3
	A number of the environmental values of the Williams River will be impacted by the proposal	4
	The Wilderness Society Submission also included two attachments:	N/A
	1. An independent Review of the need for Tillegra Dam	
	2. An Assessment of Greenhouse Gas Emissions from the proposed Tillegra Dam	
	Insufficient ecological survey has been undertaken	5.1.6
	The dam will result in loss of habitat for a number of species	4.3 & 4.5
	The short duration of the surveys have resulted in the Stuttering Frog not being identified in the area. The precautionary principal should be applied.	4.5.2
	Effect on habitat adjacent to the river	4.5.2
	The dam will not provide adequate habitat for platypus to live and breed.	4.5.2
	The dam will not provide adequate habitat for long-neck turtles	4.3.3
	The dam will impact on mammal species in the wetlands at Kooragang	7.2.1
Total Environment Centre	EAR fails to justify the need for the dam	3
	Inadequate offset measures because no guaranteed permission from landholders for riparian plantings	4.5.4
	EAR ignores generation of methane gas and other greenhouse gases from the body of stored water	5.10.1
	No guarantees that hydro electricity plant will be built to offset GHG	5.10.4
	Best practice demand management not adequately considered	3
	Impacts on fish movement to 15% of catchment for eight species of catadromous fish	4.3.3

Respondent	Issue Summary	Section Ref.
	No proper environmental flow strategy	4.4.3
	No attempt to model seasonal effects or extreme events on water flow vis Ramsar listed wetlands including prolonged low flow	7.2.1
	Terrestrial ecology assessment deficient in scope and methodology particularly wrt importance of intact native vegetation on local and regional biodiversity	4.5.1
	8 threatened fauna species is significant	4.5.2
	No snake species detected indicates insufficient sampling	4.5.1
	Inadequate sampling of frogs (especially stuttering frog)and other four threatened species likely to be present	4.5.2
Williams River Care Association	Extension of time to respond to EA	5.1.1
	The report fails to explain how the water levels in the weir pool will be managed and balanced with the pumping at the Balickera canal pump station	4.4.5
	There is a lack of information provided regarding fluctuations in water levels and the impacts on bank erosion and slumping	4.2.1

A2.2 Public Submissions (Unique)

A summary of the issues raised within unique public submissions is provided in Table A3. This table identifies the respondent, provides a summary of the issues raised and a reference to the section of the Submissions Report that addresses each issue.

Table A3 Public Submissions (Unique)

Respondent	Issue Summary	Section Ref.
Maryann Lees	Need for the Dam	3
	Cost of the project, including the cost to Hunter Water rate payers	5.2.1
	Impact on the environment is destructive, specifically the impact on the last decent river in the region (Williams River) and aquatic fauna.	4
	Inaccuracy of the methodologies used in the EIS, based on the independent study undertaken by UTS	3
Jennifer Livesay	Recreational use	5.2.10
	Supportive of dam to provide security of water supply	3
Colin Livesay	Recreational use	5.2.10
Dr Rod Bennison	Need for the Dam	3
	Cost of the project, including the cost to Hunter Water rate payers	5.2.1
	The dam will be environmentally damaging	4 & 5
Kari Peebles	Alternative sources of water supply should be explored such as rainwater tanks, waste reduction and conservation and recycling	3
	Land could be used for better purposes - food production or plantation trees.	5.2.8
Anonymous	Destruction of land inundated by the storage	4.5 & 5.2.6
	Need for the Dam. Sufficient water is available to supply the Hunter region. The dam is being constructed to supply Central Coast and Sydney	3
	Cost of the project. Cost to Hunter Water customers.	5.2.1
Paul Maguire	Need for the project. An Independent Review should be undertaken into whether the dam is needed.	3
Christine Sykes	The impact on ecosystems and the rivers normally fed by this region will be catastrophic	4 & 6
	Accuracy of drought/rainfall figures used	3
	Land use. Agricultural value of the land.	5.2.6
	Stability of land at the dam wall	5.4
	Cost of the project and the ability of the region to support this cost.	5.2.1
	Stop feeding precious drinking water to Central Coast power Stations	3
Keith Sykes	Cost of the project	5.2.1
	Alternate sources of water supply - aquifer copes well with replenishment during drought	3

Respondent	Issue Summary	Section Ref.
	Land use. Agricultural value of the land.	5.2.6
	Cost of the project is likely to be exceeded due to the instability of the land where the dam wall is proposed.	5.4
Lesley Darr	Impact on environment, particularly the Williams Rivers	4
	Further examination of geology required	5.4
	Further examination of environment required	5.1.6
	Impact on agriculture land and on farmers in the area	5.2.6
Kevin Armstrong	Need for the Dam. Not justified based on population growth predictions.	3
	Environmental studies undertaken for the project are inadequate	5.1.6
	Cost of the project is not justifiable	3
Richard Stanford	Impact on environment (Williams River and wetlands). Because of all the other construction, there is a cumulative impact	4 & 7
	Impact on valuable farmland/ agriculture	5.2.6
	Alternative sources of water supply should be explored, including recycling water and harvesting urban runoff	3
Carol Pasenow	Extension of time to respond to EA	5.1.1
Geoff Berry	Extension of time to respond to EA	5.1.1
Wolf Skafte-Zauss	Recreational use	5.2.10
	Upgrade of roads to support recreational access	5.3.9
Nora Jones	Alternative sources of water supply such a recycling water should be considered	3
Rebecca Mason	Recreational use	5.2.10
Tavis Chivers	Recreational use	5.2.10
Gary Jones	Recreational use. Ban on 2 stroke engines to prevent pollution	5.2.10
David Cains	Recreational use - promotion of tourism for increased income in the area.	5.2.10
Daniel Traylen	Recreational use	5.2.10
Valentina Oosterman	Recreational use	5.2.10
	Upgrade of roads to support recreational access	5.3.9
Carloyn Chapman	Recreational use	5.2.10
Charlotte Ashford	Extension of time to respond to EA	5.1.1
James Whelan	Social and environmental impacts on the community of Dungog	5.2.9
	Cost of the project. Project funds could be spent on more cost-effective strategies.	5.2.1
	Loss of valuable agricultural land	5.2.6
Rebecca Parish	Recreational use	5.2.10
Greg Venticinque	Recreational use - valuable income through tourism	5.2.10
Glen Irwin	Recreational use	5.2.10
Gary Wells	Water filtration systems should be used to allow recreational use	5.2.10
	Recreational use	5.2.10
	Supportive of dam to provide security of water supply for Newcastle and Central Coast	3
Rick Chapman	Recreational use	5.2.10
Bruce and Rita Nicholls	Need for the Dam. Existing infrastructure is adequate to supply water to the Hunter region	3
	Climate Change is likely to result in higher rainfall and we therefore do not need the dam	3
	The dam will destroy the ecology of the upper Williams River	4
	Impact on agriculture	5.2.6
	Social Impacts from displacement by land acquisition	5.2
	Cost of the project to Hunter Water customers	5.2.1
Kate Murphy	Recreational use	5.2.10
	Upgrade of roads to ensure safety of residents and dam workers	5.3.5
	Levy to Dungog community for use of water	5.2.9
Steve Denshire	Need for the Dam. Sufficient water already available.	3
	The dam will impact on the river environment and agriculture	4 & 5.2.6
John Evers	Recreational use	5.2.10
Michael Smith	Need for the Dam. UTS Independent report identified that demand citied is	3

Respondent	Issue Summary	Section Ref.
	inaccurate.	
Robyn Mitchell	Costs to Hunter Valley Residents	5.2.1
	There will be an impact on the Williams River, wildlife, fish, birds and other rare and endangered species	4 & 4.5.2
Bruce Mitchell	Costs to Hunter Valley Residents	5.2.1
	There will be an impact on the Williams River, wildlife, fish, birds and other rare and endangered species	4 & 4.5.2
Elizabeth Watson	Need for the Dam as no water restrictions have been placed on Hunter Water users	3
	There is no guarantee that sufficient rainfall will occur in dam catchment.	3
	Evaporation from the storage will increase under global warming. Dams are last century technology.	3
	Alternate uses of project funds such as education, recycling waster water, harvesting stormwater and desalination	3
	Land use. Greater benefit to use land for food production	5.2.8
Joanna McLachlan	The construction will result in the destruction of a major healthy river	4
	ALP No Dams Policy announced in 1995	5.1.8
	Need for the Dam. Hunter Water users do not need extra water.	3
J & K Woodward	ALP No Dams Policy announced in 1995	5.1.8
	Need for the Dam as no water restrictions have been placed on Hunter Water users	3
	The dam will destroy another major healthy river system forever	4
Alex Provost	Job creation / Job Loss	5.2.5
	Need for the Dam	3
	Impact on the Williams River environment and Kooragang wetlands	4 & 7
Don Owers	Need for the Dam	3
	Cost of the project	5.2.1
	Climate Change impacts from generation of greenhouse gases	5.10.5
	Use of water by industry	3
	Population growth estimates are not accurate	3
	Alternative sources of water supply should be investigated - small scale dams on farms and water tanks on properties	3
	Geological impacts	5.4
Michael Dean	Alternative sources of water supply should be investigated	3
	Recreational use	5.2.10
Paddy Dillon	Recreational use. The dam should be made fully recreational and have 6 boat ramps and jetties.	5.2.10
	Dungog community should be paid for the water removed from the catchment. A free water plan should be created for Dungog residents and businesses.	5.2.9
	Compensation for Dungog businesses that have lost income from the acquisition of land by Hunter Water has not been addressed	5.2.9
Jocelyn Hulme	Need for the Dam. Rainfall and runoff is likely to increase and awareness of value of water is reducing demand	3
	Productive agricultural land would be destroyed	5.2.6
	Blue-green algae blooms will require cold deoxygenated water to be released	4.1
	The changed flows from the Dam will cause significant impact on the ecology of the Williams River	4.4.1
Ross Edmonds	The need for the Dam has not been justified	3
	The damage to the Williams River will be catastrophic	4
	Permanent loss of farming land	5.2.6
Penelope Drake-Brockman	The need for the Dam.	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	The proposed offset measures will not be effective in preventing loss of biodiversity	4.3 & 4.5.4
Colin Stephenson	The need for the Dam has not been justified	3
	The SKM (2008) review of yield estimates demonstrates that the proposal is irresponsible and provides for an absurd level of drought security	3
	Climate Change will result in an increase in rainfall and as such climate	3

Respondent	Issue Summary	Section Ref.
	change should not be cited as a need for the Dam	
	The IFS report shows the Dam is not needed based on water consumption estimates.	3
	Population growth estimates demonstrate the Dam is not needed	3
	The Dam will destroy the biodiversity and aquatic ecology of the region	4
Matthew James Slattery	The need for the Dam has not been justified and the proposal provides for an unnecessary level of drought security	3
	Given the project is 'critical infrastructure' for the state, why are Hunter Water customers alone paying for the Dam	5.2.1
	The Dam will have impact on the biological and hydrological health of the Williams River. The findings of the investigations undertaken have been ignored by Hunter Water. The aquatic ecology investigation are incomplete	4 & 5.1.6
	The need for the Dam has not been justified and the proposal provides for an unnecessary level of drought security	3
Paul Humphreys	Recreational use	5.2.10
Andrew B Spannenberg	The EA does not address irrigation savings by diverting sewerage in-land	3
	The EA report should cross reference to RTA new road works to service the anticipated population growth	5.3.1
Dr Niko Leka	The inundation of arable land is irresponsible as the dam is not needed	5.2.6
	The impact of the dam will extend upstream and downstream of the area inundated	4 & 6
	The dam will result in an increase in CO2 emissions	5.10.5
Peter Jones	No projections are given relating to the social or ecological consequences stemming from an increase in the human population that will be directly sustained by this project	5.2
	The project undermines arguments for alternative answers to water supply and exposes local authorities to greater pressure that counter their efforts to build long-term sustainable communities.	3
	The project camouflages uncontrolled human populations growth and is not supportive of intergenerational equity or sustainability	5.2.4 & 5.11.4
Shaun Pollington	The dam is not needed. The Chichester Dam has never run out of water.	3
	Better management of water wasting is required (private and business)	3
	Alternatives such as rainwater tanks, grey water usage and composting toilets should be used	3
Barbara Mork	The need for the Dam has not been justified and alternatives have not been properly assessed	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	The EAR fails to properly address and assess the impacts of the dam on the environment and this failure is considered to be in breach of the Director General's Requirements	5.1.6
	Proposed offsets do not mitigate the terrestrial environmental impacts of the dam	4.3 & 4.5.4
	The greenhouse gas impacts of the methane emissions from rotting vegetation have not be investigated.	5.10.1
	The relocation or inundation of the cemetery is not appropriate.	5.6.5
	The disruption to seasonal flooding and depositing of silt on downstream river flat will be curtailed threatening the viability of these lands and further degrading the river system	4.2.8
	Potential loss of threatened species of fauna	4.5.2
	Destruction of productive farmland at a time where we are facing increasing food production costs	5.2.6
Stephen Albury	The need for the Dam has not been justified	3
	The Dam will have significant impact on the natural habitat and ecosystems of the river and consequently impact the ecology of the area. Need fishways.	4 & 4.3.1
	The timeframe for review of the EA is not acceptable	5.1.1
	The information collected for the EA is inadequate. Hunter Water has paid for the EA to be prepared which highlights the flawed system for EIS.	5.1.6
	Data collection for the EA should have occurred during each season over a period of years and as such is not complete.	4.5.1
	Other options should be fully investigated and adopted prior to construction	3

Respondent	Issue Summary	Section Ref.
	of a dam	
Amanda Albury	The relocation or inundation of the cemetery is not appropriate.	5.6.5
	Hunter Water has paid for the EA to be prepared which highlights the flawed system for environmental impact assessment	5.1.7
	The timeframe for review of the EA is not acceptable	5.1.1
	There are many alternatives such as tanks and home water saving devices that must be used in every house, property and industry before building a dam.	3
	Independence of the EA system	5.1.7
	No amount of mitigation measures will offset the impact of the dam construction	4.3 & 4.5.4
	Changes to the natural flow regime will impact on the ecology of the river and wetlands	4 & 7
	Drought proofing the Hunter region should not be used as justification for the Dam as sufficient capacity already exists	3
	Data collection for the EA should have occurred during each season and weather condition and as such is not complete.	4.5.1
	The DGR requirement to justify the need for the dam has not been met.	3
	Cost of the project to Hunter Water customers	5.2.1
	Impact of rotting vegetation on wildlife and methane gas	5.10.1
Ruth Boydell	The cost of the dam for local residents	5.2.1
	Impact of the dam on agricultural land	5.2.6
Marion Stuart	The funding proposed for upgrading roads to cope with additional construction and recreational traffic is inadequate.	5.3.9
	The social impacts including loss of rates on land, loss of farm land and relocation of families will have flow on effects through the shire	5.2.4 & 5.2.9
	Dungog Shire should be paid royalties for the water used by Hunter Water	5.2.9
	Recreational use	5.2.10
Helen Rubeli	The dam will impact on the platypus and mussel populations in the Williams River	4.5.2 & 4.3.3
	The need for the dam has not been justified and will impact on the community	3 & 5.2
Craig Duckmanton	The dam is not needed and will impact on the environment and the community	3 & 5.2
Bill Holley	The blocking of any naturally flowing system will cause damage	4
	The EA is inadequate. No proper study has be undertaken of the platypus population in the Williams River	5.1.6 & 4.5.2
	The need for the Dam has not been justified	3
	The precedent of Seaham Weir should be taken into account when discussing further interference with the Williams River	6
Jane Hunter	The dam is unnecessary as the Hunter currently has sufficient water	3
	The government should focus on water conservation and reduce money spent of water infrastructure	3
	The dam will impact on the environment of the Williams River and wetlands	4 & 7
	The dam will have adverse impacts on tourism in towns such as Dungog and surrounding areas.	5.2.7
	Building the dam on fertile farmland which should be protected	5.2.6
JE & CD Imrie	The need for the Dam has not been justified and alternatives have not been properly assessed	3
	The dam will result in unacceptable impacts on the ecology and environment of the Williams River	4
	The EA does not account for greenhouse gas emissions from the breakdown of inundated biomass	5.10.1
	The EA report on impacts to downstream wetlands is not site specific, which creates uncertainty about the conclusions	7
	Current scientific opinion from around the world does not support the damming of free-flowing rivers	3 & 4
Rick Banyard	The need for the Dam has not been justified	3
	There has been no demand management strategy produced and publically displayed by Hunter Water	3
	Hunter Water has not provided assurance that the water supply demand will	3

Respondent	Issue Summary	Section Ref.
	not be overcome by new inventions, techniques, processes. The viability and economics of alternatives should be assessed and be a condition of approval of the dam.	
	Hunter Water have no realistic figures of the future likely cost of desalination given the rapid changes in processing technology	3
	The population projection used by Hunter Water to justify the need for the dam is at best tentative.	3
	Hunter Water does not adequately examine the impact of industry and businesses on the future demand for water	3
	The expansion of recycled water and or water harvesting as an alternative has been largely ignored	3
	The construction and operation of the dam will impact he environment through reduced flows and evaporation from the storage.	4
	Water quality in Tillegra will be impacted by surrounding activities and this water quality will also impact downstream during releases	4.1
	The reticulation system used by Hunter Water is wasteful, with evaporation losses when transferred to Seaham Weir and from Grahamstown Dam.	3
Gillian and Roy Harris	The cost of the dam for local residents who will not benefit from the dam as water will be used elsewhere	5.2.1
Michael Rumbel	Loss of income	5.2.9
Michael Collins	Central Coast water users should also be paying for the construction of the Dam	3
John & Janelle Spearpoint	The environmental impacts within the Seaham Weil Pool have not been adequately assessed	4.4.5
	Impacts of flow regimes have not been outlined on Seaham Weir Pool	4.4.5
	The EA fails to consider the rate of water level changes in Seaham weir and the impact on adjoining farm drainage and terrestrial ecology	4.4.5
	Failure to mitigate long-term environmental damage within weir pool	4.4.5
	No protection to landholders adjoining the Tillegra Dam scheme	4.4.6
	No off-river storage options for capturing headwater flows are reported in the EAR as having been investigated	3
	The dam will have severe negative impacts on the river ecology	4 & 6
	Fish passage. Failure to provide fish passage can not be compensated for by catchment offsets.	4.3.1 & 4.3.4
Digby Rayward	The EA fails to address any compensation for the Dungog Shire residents	5.2.9
Joan Dawson	There is not water shortage in the Hunter and there is not likely to be.	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	Alternative methods of water conservation should be employed	3
	Construction of the dam will result in the loss of high quality food production areas	5.2.6
	The habitat of important fauna and flora will be lost	4.5.2
Tom Hammond	An independent expert panel should be engaged to examine all aspects relating to this project.	5.1
	Hunter Water should publish all available information on the projections for water demand under all scenarios for public comment	3
	The NSW Minister for Water Resources should publish current NSW policy for management of urban and industrial water supply for the next 50 years and allow public comment	N/A (policy issue)
	The NSW Minister for Water Resources should publish current water storage amounts per head of population for all major centres and also publish NSW government policy/guidelines for water storage per head of population	N/A (policy issue)
	The NSW government should publish a statement on policy for the development of a 'water grid' supply network for major NSW urban areas and allow public comment.	N/A (policy issue)
	The water balance in the EA shows that the current system is capable of supply the projected future requirements	3
	The EA fails to show why, if the current system can supply capacity on an annual basis it can't on a daily basis.	3
	No information is presented on any operational changes which could be	3

Respondent	Issue Summary	Section Ref.
	made to the supply from Seaham to Grahamstown during highflow/flood events to meet demand	
	The EA does not indicate the feasibility and effect of increasing the height of Seaham Weir	4.4.5
	Tillegra will have much higher evaporation that Chichester, however this has not been taken into account in assessing the second/enlarged Chichester option	3
	The EA does not assess the effect on future demand of the fitting of rainwater tanks to all new buildings and retrofitting existing buildings	3
	The EA does not indicate why Hunter Water does not require industry to provide 100% of their industrial water requirements.	3
	The EA claims the dam will diversify supply, however failure at Balikera could cut supply to 32% of proposed levels	3
	No information is given on a range of water usage restriction scenarios	3
	The effect of drought conditions on inflow has not been assessed	3
	The central coast water supply should not be used as justification for the project	3
	No offer of compensation has been made to Dungog Council	5.2.9
	No additional funding will be provided to upgrade roads other than the those inundated by the storage.	5.3.6
	Recreational use is used as justification for the project, however no commitment has been made.	5.2.10
Karinda Stone	The climate change predictions used in the strategic planning and project justification as misleading and do not reflect the latest information	3
	Conflicting arguments are presented regarding future runoff and yield forecasts	3
	Drought scenarios have not been put in context with regional Hunter-wide impacts	3
	Hunter Waters justification for the project is based on unrestricted water access to Hunter Water customers. Higher demand should be addressed by other means	3
	Hunter Water has failed to recognise market instruments and water saving initiatives.	3
	The consideration for alternative presented contains false claims and errors. Tillegra dam was considered to have the least impact of the options considered - this statement cannot be made with a degree of confidence	3
	The 'do nothing' scenario relies on flawed analysis of climate change impacts and conflicting run-off and yield figures into the future	3
	The EA fails to adequately consider the Hunter Unregulated and Alluvial Water Sharing Plan	4.4.2
	The EA fails to adequately consider key objectives of the National Water Initiative and a thorough review of water supply arrangements in the Hunter region be investigated (5 dams in the area operated by two separate NSW Ministerial corporations)	3
	The proposal is contrary to Ecologically Sustainable Development principles	5.11
	The EA proposes a water extraction regime that accesses flows not available to extractors elsewhere in the Hunter Valley, in accordance with the rules of the Water Sharing Plan from the Hunter River developed in 2004	4.4.2
	The EA fails to acknowledge weed invasion potential due to altered hydrology	4.3.10
	The EA fails to acknowledge macro water sharing processes (flow rules)	4.4.2
	Foreshore erosion at low storage levels has not been assessed.	4.2.1
	Mass slope failure risk (foreshore erosion) has not been assessed	4.2.2
	The risk of bed level erosion on tributaries has not been assessed.	4.2.3
	The potential for delta formation at the upstream limit of inundation in tributary streams, including the Williams River has not been assessed.	4.2.4
	The upstream assessment of fluvial geomorphology fails to assess impacts of the storage on other users or the environment	4.2
	The River Styles assessment has not been referenced and geomorphic character of the river has not been properly described	4.2.5
	The EA fails to recognise the importance of flood flows to freshwater floodplain wetlands and groundwater dependent ecosystems	7

Respondent	Issue Summary	Section Ref.
	The EA misrepresents geomorphic processes and conventional riverine terminology and concepts.	4.2
	The EA presented a flawed assessment of bed stability impacts	4.2.6
	The EA claims of low risk bank instability are not justified.	4.2.7
	The EA fails to acknowledge the good condition of the Williams River and current management practices.	4.4.7
	The EA fails to acknowledge cumulative socio-economic impacts with other part 3A projects.	5.2.13
	The EA fails o provide adequate commentary regarding the fact that Chichester Dam already exists.	3
	The EA fails to acknowledge the cumulative impact of loss of 60GL of freshwater on Hunter River tidal pool water users	6.2.2
	The claims in the EA that the Hunter River dominates water inputs to the estuary are unfounded.	7.2.1
	The assessment of wetland impact relies on numerical model with obvious limitations and a limited data set to conclude no impacts on Ramsar wetlands	7.2.3
	The EA downplays the importance of freshwater flows to the estuary in comparison to sea level rise and tidal effect.	7.2.1
Nikki Coleman	The need for the Dam has not been justified	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	Impact of the Dam on the Williams River and its environment	4
	Proposed offsets do not mitigate the terrestrial environmental impacts of the dam	4.3 & 4.5.4
	The greenhouse gas impacts of the methane emissions from rotting vegetation have not be investigated.	5.10.1
	The social cost of the project are unable to be mitigated and the social loss is too significant for the dam to proceed	5.2.9
Linda Bowden	The dam will inundate 3000 hectares of irreplaceable agricultural land	5.2.6
	Alternative approaches should be considered before destroying the Williams River	3
	The Dam will destroy the biodiversity and aquatic ecology of the region	4 & 6
	The Hunter Estuary Wetlands will be impacted from reduced flows	7.2.1
	The impact of a large artificial body of water on the microclimate of the Barrington Tops National Park has not been identified.	5.10.9
	The storage of 450.000 million litres will have a cumulative impact on loss of freshwater to the Hunter Estuary	7.2.1
	A number of species listed as endangered under the EPBC Act have know habitat in the proposed inundation area	4.5.2 & 7
	38 Migratory birds under Japanese and Chinese Migratory bird treaties which have food sources relying on inter tidal processes	7.2.1
	The potential presence of the Giant Barred Frog requires further investigation	4.5.2
	Hunter Waters rationale for justification of the dam is flawed.	3
	Recent geology information does not match that included in the EA and may be a breach of the EP&A Act as it has not been made available to the general public	5.4
	The economic modelling for the dam is flawed and does not match International, National and State guidelines	5.2.3
	The building of the dam is contrary to at least four for the Regional Strategy key objectives	5.1.5
	Cost of the dam	5.2.1
	The projected water use of the predicted population growth in the lower Hunter region does not consider sufficiently any level of water use efficiency or demand management strategies	3
	The need for the Dam has not been justified	3
	Tillegra provides an absurd level of drought security	3
	The review of yield systems by SKM (2008) demonstrates the proposal is irresponsible.	3
	The Hunter region long-term water supplies are adequate.	3
	Independent reports show the dam is not needed for climate change	3

Respondent	Issue Summary	Section Ref.
	Hunter Water's costing of alternatives need to be questioned and independently reviewed.	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	Job creation and job losses	5.2.5
	The NSW government directives to IPART failed to consult with the Hunter public. The Hunter community were not consulted before announcement of the dam and have not been consulted adequately since	3
	The are better alternatives to construction of a dam - there is no immediate need for the dam therefore a full integrated sustainable water planning process should be undertaken	3
	Data collection for the EA is limited and taken over an extremely short duration	4.5.1
	Only minor recognition is given to river connectivity and hence the potential for impacts to be expressed and propagated upstream and downstream of the dam	4 & 6
	Cumulative impact assessment have been largely ignored.	5.2.13
	There is poor evidence of survey work downstream of the dam	4.5.1
	Surveys for frog species is inadequate given the potential presence of three threatened species including the Giant Barred Frog	4.5.2
	ISF demonstrates catastrophic effects from GHG. The proposed offset measures of planting 1.5 million trees is inadequate	5.10.14
	Noise levels are above standards and the effects of construction on a small community cannot be justified	5.8.1
	Hunter Water does not include any social impacts on the Dungog community in the EA.	5.2.6
	Habitat losses and other impact of the construction of the new Salisbury Road have not been adequately considered.	4.5.2
	The Hunter Estuary Wetlands will be impacted from reduced flows. The advice from Hunter Waters Max Filayson should be questioned in terms of its localised research - the precautionary principle should be applied in this case and the proposal designated too damaging to the wetlands	7.2.1
	The loss of habitat has the potential to impact several threatened species. Further investigation is required to adequately address a number of terrestrial ecology aspects of the area.	4.5.2
	Further investigation into seasonal requirements for migratory birds using the Hunter estuary is required.	7.2.1
	The moving or inundation of the cemetery is not appropriate.	5.6.5
	Munni House should be preserved where it stands as it has great heritage value	5.6.4
	There is no indication that Hunter Water has investigation other heritage values	5.6.1
James Hooke	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	Water sharing policy for downstream users	4.4.6
	The dam is not needed for the local community and they should be compensated for their losses	3
	Release of water from the dam for irrigation and the timing and volume of this water	4.4.6
	If irrigation releases are not assured then combined pressures with drought may remove more farms from the Williams Valley.	4.4.6
Bruce Black	Consideration should be given to the potential to create a larger recreation area joining areas such as the Great Lakes and Nowendoc region to Tillegra. This could create an area similar to the Victorian 'high country' with Dungog as the gateway town	5.2.10
Ruth and Kevin Murdoch	The need for the Dam has not been justified	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	The EA does not properly address the impacts of the proposed dam on the environment	5.1.6
	The offsets to mitigate ecological damage are inadequate	4.3 & 4.5.4
	Methane gas emissions have not be considered	5.10.1

Respondent	Issue Summary	Section Ref.
	2000 ha of highly productive viable farmland will be destroyed	5.2.6
	Inundation of historical Quart cemetery and other burial and "culture" places	5.6.5
	The disruption to seasonal flooding and depositing of silt on downstream river flat will be curtailed threatening the viability of these lands and further degrading the river system	4.2.8
	EAR refers to potential loss of threatened species - deliberate destruction of native fauna is a desecration of our heritage	4.5.2
Julia Wokes	The requirements of Tillegra Dam may impact the availability of water to irrigate from the tidal pool of the Paterson River	4.4.6
	Loss of water flowing down the Williams River available to keep the estuary 'clean'	6
	No data presented indicates that Dungog Council will be better of with the Dam	5.2.9
	Cost of the and payment. Impact on existing rate payers.	5.2.1
Robert Rolls	Need for the Dam and investigation of alternatives	3
	The proposed offset to loss of river connectivity by restoring fish passage to Seaham weir should be undertaken regardless of whether Tillegra Dam is constructed or not	4.3.4
	The loss of connectivity at Tillegra Dam will have significant impact on freshwater fish biodiversity	4.3
	Impacts of the dam will result in poor recruitment of Australian Bass and other fish species in the lower and upper William River	4.3.4 & 4.3.4
	The loss of water to the Hunter River estuary will result in impacts on the commercial fishery production and ecological productivity in the Hunter River estuary	6.2.4
Margaret Flannery	Upgrade and maintenance of roads in the area	5.3.6 & 5.3.9
	Recreational use.	5.2.10
	Community impacts during construction and operation	5.2.3 & 5.2.9
Peter Ainsworth	The climate change predictions used in the strategic planning and project justification as misleading and do not reflect the latest information	3
	Conflicting arguments are presented regarding future runoff and yield forecasts	3
	Drought scenarios have not been put in context with regional Hunter-wide impacts	3
	Hunter Waters justification for the project is based on unrestricted water access to Hunter Water customers. Higher demand should be addressed by other means	3
	Hunter Water has failed to recognise market instruments and water saving initiatives.	3
	The consideration for alternative presented contains false claims and errors. Tillegra dam was considered to have the least impact of the options considered - this statement cannot be made with a degree of confidence	3
	The 'do nothing' scenario relies on flawed analysis of climate change impacts and conflicting run-off and yield figures into the future	3
	The EA fails to adequately consider the Hunter Unregulated and Alluvial Water Sharing Plan	4.4.2
	The EA fails to adequately consider key objectives of the National Water Initiative and a thorough review of water supply arrangements in the Hunter region be investigated (5 dams in the area operated by two separate NSW Ministerial corporations)	3
	The proposal is contrary to Ecologically Sustainable Development principles	5.11
	The EA proposes a water extraction regime that accesses flows not available to extractors elsewhere in the Hunter Valley, in accordance with the rules of the Water Sharing Plan from the Hunter River developed in 2004	4.4.2
	The EA fails to acknowledge weed invasion potential due to altered hydrology	4.3.10
	The EA fails to acknowledge macro water sharing processes (flow rules)	4.4.2
	Foreshore erosion at low storage levels has not been assessed.	4.2.1
	Mass slope failure risk (foreshore erosion) has not been assessed	4.2.2

Respondent	Issue Summary	Section Ref.
	The risk of bed level erosion on tributaries has not been assessed.	4.2.3
	The potential for delta formation at the upstream limit of inundation in tributary streams, including the Williams River has not been assessed.	4.2.4
	The upstream assessment of fluvial geomorphology fails to assess impacts of the storage on other users or the environment	4.2
	The River Styles assessment has not been referenced and geomorphic character of the river has not been properly described	4.2.5
	The EA fails to recognise the importance of flood flows to freshwater floodplain wetlands and groundwater dependent ecosystems	7
	The EA misrepresents geomorphic processes and conventional riverine terminology and concepts.	4.2
	The EA presented a flawed assessment of bed stability impacts	4.2.6
	The EA claims of low risk bank instability are not justified.	4.2.7
	The EA fails to acknowledge the good condition of the Williams River and current management practices.	4.4.7
	The EA fails to acknowledge cumulative socio-economic impacts with other part 3A projects.	5.2.13
	The EA fails o provide adequate commentary regarding the fact that Chichester Dam already exists.	3
	The EA fails to acknowledge the cumulative impact of loss of 60GL of freshwater on Hunter River tidal pool water users	6.2.2
	The claims in the EA that the Hunter River dominates water inputs to the estuary are unfounded.	7.2.1
	The assessment of wetland impact relies on numerical model with obvious limitations and a limited data set to conclude no impacts on Ramsar wetlands	7.2.3
	The EA downplays the importance of freshwater flows to the estuary in comparison to sea level rise and tidal effect.	7.2.1
Ilona Renwick	Hunter Water nor the NSW Government have done anything to reduce water consumption in the Newcastle Region	3
	The dam is a costly solution to a non-existent problem	3
Katherine Holt	The dam is not a state government budget item and the entire cost is borne by Hunter Water customers.	5.2.1
	Concerns that the geotechnical information is not robust. The impact that the geotechnical findings will have on the overall cost of the dam.	5.4
	A detailed costing of the dam should be made available to the public.	5.2.1
	Impact of construction traffic on local roads.	5.3.1
	There needs to be site accommodation for the 280 construction workers.	5.2.9
	Requests that a legally binding guarantee to repair all roads involved in the construction phase and at completion of the project be a condition of approval for the project.	5.3.6
	A dam break study should be prepared and provided for public comment. The Director general appears to have exempted Hunter Water from providing the public with a dam break study.	5.5
Megan Benson	The consultants for Hunter Water have failed to justify the need for the proposal, especially in light of contradictory facts and figures.	3
	The report fails to justify the short term expenditure and long term ability for Hunter Water to pay for the infrastructure and maintenance of the dam without substantial cost to the community.	5.2.1
	There is a valid case for present infrastructure inadequacies to be addressed, appropriate maintenance/rectifications costed and long term management and effectiveness of present water infrastructure to be properly evaluated before presentation of a new infrastructure proposal.	3
	The proposal has not been fairly presented to the community. General community understanding that a future dam would not be contemplated for at least 20 years. Hunter Water is considered to be blatantly contradicting public information.	2 & 3
	Classifying the project as 'carbon neutral' is considered misleading.	5.10.6
	Proper costings of CO2 emissions offsets needs to be considered.	5.10.7
	There should be a separation of the emissions offsetting costings and the environmental mitigation measures/rectifications costings.	5.10.7
	Properties affected by the proposal should not have been purchased before	5.2.9

Respondent	Issue Summary	Section Ref.
	approval of the proposal. Permanent dislocation of 90 rural families has long term economic and social impacts.	
	Explanation of the circumstances leading to the decision to go ahead with the purchase of properties for this project - before project approval - needs to be made public and justified.	5.2.9
	The EAR does not present a thorough case that loss of agricultural land and native wildlife habitat will be ameliorated in the foreseeable future.	5.2.6
	The inevitable degradation of the Williams River catchment will encompass a much greater area than the Environmental Report refers. Costs to the community will be ongoing and are unaccounted for.	4 & 6
	Environmental impacts and cumulative impacts need to be fairly and comprehensively addressed.	5.1.6
	The consultants have failed to justify that the project will provide immediate and long term benefits and is justified.	3
	Inadequate and questionable community consultation process.	2 & 5.1.4
Gary Russell and Victoria Hamilton-Russell	The dam is unnecessary as the Hunter Valley currently has a secure water supply.	3
	The concern that the project is costly to build and that Hunter Valley residents will bear the costs when it is considered that the project lacks any solid evidence-based justification.	3 & 5.2.1
	Impact on prime pastoral land	5.2.6
	Loss of flora and fauna	4.5.2
	Trampling of previous generations' resting places and Hunter Valley farmers' properties.	5.2.6 & 5.6.5
	The economic impact of the dam on Dungog Shire Council due to costs of infrastructure degradation.	5.2.3 & 5.2.4
	Hunter Water and NSW State Govt have ignored geological and hydrological advice about the unsuitability of the bedrock of the proposed dam site for political ends.	5.4
	A more transparent dialogue with all major stakeholders is required.	2 & 5.1.4
Melissa Daley	Need to protect the Williams River and surrounding valley for future generations.	5.11.4
	Before constructing a dam, water saving strategies should be implemented.	3
	The dam is considered unnecessary because the Hunter Valley has more water than they can use and the Central Coast does not require the water either.	3
	The dam is expensive and the NSW Government have publicly stated that they will not be paying for the dam.	3 & 5.2.1
	Rate payers will potentially pay an extra $450 per year for the dam.	5.2.1
	The dam is destructive due to the environmental impact to the Williams River, one of the region's most precious assets. Destruction of the river is a short sighted investment strategy.	3 & 4
	Impacts of the dam on threatened species' health	4.5.2
Julia Charles	There is no justification for this dam and other water saving and water harvesting measures have not been adequately explored. The EAR has failed to justify the need for the dam.	3
	Climatologists predict an increase in rainfall for this area - Costs to the rate payers who don't need the water	3
	The EAR fails to properly assess the impact of the changed watercourse on the flora and fauna of the river and affected areas.	4
	Proposed offsets do not mitigate the terrestrial environmental impacts of the dam	4.5.4
	Production of significant levels of methane gas is ignored	5.10.1
	The social costs of the project are unable to be mitigated	5.2.9
	The loss of fertile farmland and displacement of farmers and inundation of Quart Pot Cemetery and loss of cultural 'place'	5.2.6 & 5.6.5
Garry Mason	We don't want a dam.	Noted
Robert and Jann Booth	The Millennium Ecosystem Assessment (MEA) has not been adopted to ensure that the demand or needs are identified for the end users of the Hunter Region.	5.2.2
	Uncertainty and social disorder of the community due to the dam proposal should be addressed in the EAR.	5.2.9

Respondent	Issue Summary	Section Ref.
	Stakeholder surveys are inadequate.	5.1.4
	The fundamental ecological concept of assuming change and explaining the resultant stability for this infrastructure. This is a test for an ecosystem reaching and maintaining equilibrium.	4
	The loss of fertile farmland.	5.2.6
	The concern of irreversible effects to terrestrial species	4.5.2
	The reduction in river flow will result in increased level of downstream salt levels. Needs to be addressed and quantified.	6.2.3
	No resolution of the acquisition of a historical stock route that is currently under claim by the Karuah Local Aboriginal Land Council.	5.7.2
	The water balance reflects a badly premised project.	3
	There is no detailed long term transparent Dam Condition Monitoring Plan. Section 11.37 contains 1 paragraph that addresses the issue and Section 6.27 refers to maintenance issues but does not define parameters.	4.5.6
	The inundation of Quart Pot Cemetery should not be allowed.	5.6.5
	Financial contributions ascribed to Dungog Shire for variation of the land use need further consultation with stakeholders. Dungog Shire Council require funding in perpetuity to offset loss of rateable land and assets.	5.2.9
	Section 16.1.3 provides mitigation measures that are grammatically and technically incorrect. Needs to ensure that it addresses vehicle reversing alarms.	5.8.1
	Air quality - 30 ug/m3 particulate TSP levels should be re-rated down to an acceptable 15 ug/m3.	5.9.3
	The Railcorp Quarry located at Martins Creek is of current concern to the local community from noise, dust and road damage. If materials sourced from this quarry are to be used during construction, an assessment of impacts of using this quarry on the local community should be considered (transport issues, egress routes, noise effects from increased production at the quarry)	5.2.13
	Consideration should be given to reconfiguring and enlarging the volumetric storage capacity of Lostock Dam and Chichester Dam. The water could be treated and connected to existing piping trunk mains. It is considered that the environmental impact would be minimal. The EAR does refer to constructing another dam downstream instead of augmenting the current dam, if Lostock Dam is augmented first, then it can carry the load until Chichester is re-commissioned.	3
	Encourage productive agricultural activities. Due to uncertainties about a dam, a lack of capital investment has resulted. Reducing the uncertainty about a dam will stimulate investment.	5.2.4
George Paris	The Hunter Valley was originally established with a high water storage capacity (due to BHP operations). With BHP closed, there remains much capacity about maximum projected usage.	3
	The cost of the dam for local residents and to supply users outside of the catchment (Central Coast).	3
	Instead of a dam, look at other alternatives. Why not provide the Hunter with improved passenger rail instead?	3
Margaret Henry	Negative impacts on the environment.	4 & 5
	Loss of prime agricultural land.	5.2.6
	Destruction of the landscape.	5.12
	Destruction of the heritage values of the landscape and the built environment.	5.6.3
	Social impacts on the people of Dungog.	5.2.6
	Costs to residents of the Hunter Valley for an unnecessary dam.	5.2.1
	Community education program to conserve water by restrictions, recycling storm water and implementing other conservation measures.	3
Fiona Thomas	The need for the Tillegra Dam has not been scientifically, economically, socially or environmentally justified.	3
	Professor Stuart White, Dr Charles Essery, Dr Peter Coombes and Eddie Harris have reported that there is no need for the dam. Their reports have been included in this submission.	3
	The IPART Terms of Reference of July 2008 excluded any review of the	3

Respondent	Issue Summary	Section Ref.
	need for Tillegra Dam under instructions from the then Water Minister Nathan Rees.	
	The Tillegra Dam represents a hurried and somewhat ill-considered approach to developing a sustainable and cost-effective future for water in the Hunter Valley.	3
	Tillegra Dam is not required to meet the needs of water consumers in the Hunter Valley, yet water rates and usage charges in the region will rise to pay for this.	3
	The Hunter's opportunities to develop and implement urban water harvesting and recycling will be hampered, due to the massive investments required to build the dam.	3
	The dam is being built on a geological fault and will require significant and costly additions to ensure that the dam is safe and will not breach during a flood or seismic event.	5.4.5
	Consider different water supplies and potential sources for growth in demand. Investigate alternative water saving strategies.	3
	Rainfall data used is skewed towards other catchments. The choice of the last 30 years is far less relevant than the long-term 100 plus years of record available, but then perhaps it is the intention to illustrate a water shortage, HWC chooses the data that best supports their case for a new dam. The long term records show an increase for the Hunter Valley region.	3
	Population growth of 160,000 over the next 25 years is not a valid premise on which to justify the building of another dam at Tillegra or elsewhere in the region at this stage.	3
	The water needs of Gosford and Wyong (Central Coast) are not a significant justification for building a dam at Tillegra costing $400 million or more.	3
	The dam is costly and is likely to rise significantly to resolve geotechnical engineering issues.	5.4.7
	Inadequate and questionable community consultation process.	5.1.4
Bernadette Skuse	HWC and the State Government fail to justify the need for the dam.	3
	The EAR fails to satisfy the Director-General's Requirements.	5.1.6
	The EAR is flawed as it does not justify the need for additional water supply or alternative water saving strategies.	3
	The proposal has already caused much social discord for the people of the Hunter Valley.	5.2
	The EAR acknowledges that there are gaps in knowledge and research. Based on the Precautionary Principle the project must be denied approval.	5.1.6
	There is insufficient information about aspects of the inundation area. Why destroy something that is not fully known or understood?	4.6.2
	There is already little documented Aboriginal heritage history in the Williams Valley. The dam will wash away all evidence of the early inhabitants	5.7.2
Brian Doherty	The need for the dam has not been satisfactorily established.	3
	The EAR is flawed (spin, bias and disinformation)	5.1.6
	An inaccurate estimate of demand and supply of water in the Hunter Valley.	3
	The Environmental Assessment process does not allow for adequate community comment.	5.1.1
	The EAR does not provide a robust inventory of alternatives for sustainable water supply for the lower Hunter and assessment of the cost and effectiveness of the options supplied is limited and biased.	3
	Flawed economic modelling - there is no water scarcity in the lower Hunter and water use can decrease while the economy grows.	5.2.3
	An assumption has been built into the economic model. It has not been shown that there is water scarcity in the lower Hunter and it has not been shown that reduced water use will necessarily limit economic growth.	5.2.3
	EAR 12.12 Summary statement - "The increase in capacity in HWC water supply……..and supporting continued population and economic growth in the region" - is not justified by the evidence and should be dismissed.	3
	The EAR assumes that production capacity will rise due to the project and that additional income generated will more than cover the loan repayments. However, Hunter Water rate payers will be funding the dam. The effect on	5.2.1 & 5.2.4

Respondent	Issue Summary	Section Ref.
	the regional economy has not been accounted for.	
	The proposal will have unacceptable impacts on the Williams River and its environment.	4
	The permanent barrier to sediment flows will mean the riverbed below the dam will erode to bedrock, lowering the watertable throughout the Williams catchment and permanently alter the geomorphology.	4.2.8
	The EAR does not provide satisfactory mitigation for the environmental effects of the dam.	4.5.4
Judith Cousins	The dam will destroy agricultural land and wetland systems.	4.5.2 & 5.2.6
	The dam is at a cost to rate payers who obtain no benefit.	5.2.1
	Dams are old technology.	3
	Evaporation from dams is a huge waste of water.	3
	Impacts on the carbon footprint.	5.10.5
	Inadequate studies of environmental impact on plants and animals has been undertaken. What about bats, native orchids and quolls?	4.5.1
	Alternatives to the dam should be considered such as reducing population growth	3
Janet Sutherland	The EAR fails to justify the need for the dam.	3
	The environmental impacts of this dam would be destructive to the Williams River system.	4
	Funding for community vegetation rehabilitation projects is grossly inadequate.	4.5.6
	The dam will reduce the intensity of downstream high flow flushing and scouring events to maintain health of the river.	4.2.9
Warrick Thomas	Previously made a submission on 10 November 2009 and an expert identified on Friday 13 November 2009 (Associate Professor Michael Mahoney of Newcastle University) has confirmed the presence of Mixophyes ballbus (Stuttering barred frog) within the proposed inundation area.	4.5.2
	The EAR omitted the sighting of this frog and the EAR should be rejected based on the presence of this endangered frog.	4.5.2
	A species profile for the Stuttering Barred Frog has been provided in the submission and is attached.	4.5.2
Stephen Hicks	The cost of the dam would be higher than the overall cost for a desalination plant at Williamtown.	3
	Demand and supply calculations for the dam need to be revised.	3
	The capital requirement for a small desalination plant would be much less than for Tillegra Dam. A small desalination plant could be designed for expansion, and the time to increase capacity would be within a year, this small plant would effectively increase yield to a similar amount to that of the dam option, particularly if the Hunter experienced a shift to adverse climate conditions.	3
	Constructing a small desalination plant may incur a higher operation cost, however, in comparison to the interest on the reduced capital expenditure by not requiring Tillegra Dam these would seem quite acceptable, with interest totalling at least $20 million per year under the IPART scheme.	3
	The carbon emissions from the dam have been estimated at up to one million tonnes of carbon dioxide in its first 20 years of operation.	510.5
	Loss of riparian habitat as a result of the dam.	4.3.3
Carol Pasenow	The EAR does not justify the need for the dam.	3
	The loss of fertile farmland.	5.2.6
	Adverse effects to the Dungog community.	5.2.9
	The impacts of the proposal have not been fully assessed.	5.1.6
	A review of the actual water needs of the Hunter is required.	3
	The loss of cultural heritage, Quart Port cemetery, family history and attachment to the land will be lost.	5.6.5
	Inadequate and questionable community consultation process.	5.1.4
	The EAR has failed to identify whether Dungog Shire Council will be fairly treated or compensated if the proposal is approved.	5.2.9

Respondent	Issue Summary	Section Ref.
Denis Rothwell	The proposal will have unacceptable impacts on the Williams River and its environment.	4
	Cost of the project, including the cost to Hunter Water rate payers	5.2.1
	There is no need for Tillegra Dam for long term water security.	3
	Predicted rainfall in the Hunter will increase so climate change is not a valid argument for the dam.	3
	Drought security - The modelling used for Tillegra Dam is inadequate	3
	Population growth in the region over the next 25 years will not significantly change current demand with appropriate water saving measures.	3
	Planning documents do not mention the need for Tillegra these include the Draft Lower Hunter Regional Plan 2006, Review of operating license for HWC (2003-2006), Hunter Water IWRP 2006, 2006 Statement of Corporate Intent, Drought Management Plan, State Plan.	3
Daniel McKenzie	The potential for the dam to impact on threatened species.	4.5.2
Julia Wokes	The Tillegra Dam will impact on the availability of water to irrigate from the tidal pool of the Paterson River.	4.4.6
	With less water flowing down the Williams River, other sources will need to be considered including unregulated flows into the estuary	6
	There is uncertainty in timing, total costs, viability and identity of repayment of dam costs.	5.2.1
Stephen Osborn	The Tillegra Dam will impact on the availability of water to irrigate from the tidal pool of the lower Hunter River.	4.4.6
	The Tillegra Dam will impact on the salinity levels in the lower Hunter and Paterson Rivers.	6.2.3
Will Saunders	There is no justified need for the dam.	3
	The cost of the dam.	5.2.1
	Impacts on the environmental flows of the Williams River resulting in degradation to the health and aquatic ecology of the river.	4.4.1
	There is a contradiction in level of impact in relation to the Ramsar wetlands of the Lower Hunter. The flow to the estuary needs to be revised.	7.2.1
	There is no conclusive evidence climate change will affect the Hunter's water situation adversely. The claims in the EAR are unfounded.	3
	Filling times of the dam are conservative. They ignore environmental flows.	4.4.8
	Uncertainty in the modelling for the dam.	3
	There is no need for Tillegra Dam for long term water security. Drought security is not required.	3
	The EAR seems to promote the project rather than honestly assessing the environmental problems.	5.1.6
	The public consultation time for such a large proposal has been inadequate.	2 & 5.1.1 & 5.1.4
	The average quoted flow for the Williams River is 95.5 GL/yr. However, this is a 77 yr average and is skewed by the wet years of the 1950s and 60s. Actual flows do not appear to have been quoted in the EAR.	4.4.7
	HWC has not provided any assessment of the filling rate of the dam by ignoring all losses except evaporation.	4.4.8
Glenn Wall	Altered frequency, duration and timing of channel maintenance flow events in the Williams River downstream of Tillegra, potentially leading to changes in the physical channel structure that could impact ecological processes.	4.2.13
	Reduced sediment transport in the Williams River downstream of Tillegra due to trapping by the proposed dam, potentially leading to changes in the physical channel structure that could impact ecological processes.	4.2.8
	Reduction of the base level of the Williams River in the vicinity of the confluence with the Chichester River.	4.2.3
	The altered bed material transport regime would present a risk to increasing bank instability, but the risk is considered to be relatively low.	4.2.10
	The potential risks to stability of in-stream structures.	4.2.6
	Altered hydrology leading to altered channel and overbank hydraulics, meaning some physical features would experience reduced frequency of inundation.	4.2.13
	The risk of erosion of the channel banks within the Seaham Weir pool would more than likely not be increased significantly by operation of a dam at	4.2.13

Respondent	Issue Summary	Section Ref.
	Tillegra.	
	Erosion of the reservoir shoreline, largely due to the effect of wind waves, leaving an exposed bank and delivering a volume of eroded soil to the storage.	4.2.2
	Deposition of river-sourced inflowing bed material within the storage, potentially decreasing its capacity over time.	4.2
	The response provides a list of mitigation measures that are considered adequate to address the fluvial geomorphic impacts of the proposed dam.	4.2.15
	Flow management should be further assessed in conjunction with the Ecology Report and shoreline management techniques should be implemented and installed in wash/wake areas of the inundation area where deemed appropriate.	4.2
	The individual water supply options shown in the EAR (Socio-economic impacts) appear accurate.	3
	The Cost Effective Analysis or Cost Benefit Analysis modelling and the Monash University Computable General Equilibrium modelling supports the Tillegra Dam water supply option when compared to other competing project scenarios to meet the region's yield objective.	3
	The Tillegra Dam option produces a levelised cost of $1,661 per megalitre from a present value (ie discounted) of total costs of $377 million. This represents the lowest cost option to meet future expected water demand over the next 50 years.	3
	A socio-economic study, specific to Dungog Shire should be carried out that concentrates on the scoping and profiling of current impacts and the projecting and estimating impacts phases.	5.2.2
	The monitoring, mitigation and management and evaluation of impacts phases needs further examination and monitoring.	9 & 10
	Need to consider the cumulative impacts on the greater Dungog Shire (particularly the Regional Road network and community implications).	5.2.13
	Compensation should be given to Dungog Shire Council in consideration to road works and bridges constructed in the inundation area.	5.2.9
	The proceeds of bulkwater supplies to the Central Coast should not be returned to the NSW Government but Dungog Shire should receive a greater portion of this retained fund on a yearly basis.	5.2.9
	The sites selected for water sampling appear robust when considering the upper reaches of the Williams River (above the dam), the inundation area, the convergence of the Williams and Chichester Rivers, the Seaham weir pool and downstream of the Seaham Weir. However, sites W11, W12 and the Seaham Weir Pool samples were not conducted due to environmental constraints. This needs further clarification and/or explanation.	4.3.9
	Water quality versus Recreation Use should be determined using quantitative data in accordance with recreation currently enjoyed on the Williams River (be it swimming, sailing, motor boat activities).	5.2.10
	The prohibition of on water recreation on the dam during filling is reasonable, however a review of recreation use after 10 years is not. To remove the recreation use of the dam will create undue economic and social impediments. A review of risk/exposure management procedures, in accordance with National Health and Medical Research Council guidelines and the Guidelines for the Recreational Use of Water Storage Areas would be more appropriate and one would expect this to be carried out as part of the dams ongoing monitoring.	5.2.10
	Impacts may arise during the filling phase from the loss of larger base and peak flows for ecological processes related to magnitude and frequency of peak flows.	4.4.3
	The suggestions outlined in Working Paper D need greater scrutiny as regards impacts on fish passage.	4.3.9
	Need to ensure that offsets for the dam include restoring riparian habitat upstream and downstream of the inundation area.	9 & 10
	Given the large land area likely to be flooded or cleared as a result of the proposal, it is expected that a large number of hollow-bearing trees would be lost.	4.5.3
	The platypus will be unlikely to survive in the water deeper than 5 metres	4.5.2

Respondent	Issue Summary	Section Ref.
	and the filling of the dam would result in burrows being progressively flooded.	
	Given the large area of native vegetation to be cleared or inundated, appropriate offset areas for fauna habitat are to be secured.	4.5.4
	The loss of methane emission from the inundation area with the loss of primary production is not given consideration.	5.10.1
	A comprehensive socio-economic study specific to Dungog Shire be carried out to identify all impacts, including the consequence of the Council Landfill.	5.2.9
	The mitigating and carbon offset initiatives need to be implemented to ensure Hunter Water achieves carbon neutrality for the project.	5.10.14
	Consider providing sheds and building materials to Dungog Shire prior to disposal.	5 & 9
	Existing concrete bridges that will be inundated should be given back to Dungog Shire Council for future use/bridge replacement.	5.2.9
	Relocation of the Cemetery - WHC should deal with people who want to cancel their internments sites and if relocations of Military graves are required, advice must be sought from the OAWG	5.6.5
	For the CEMP, HWC should initiate a Community Representative Committee immediately a determination is made regardless of approval or refusal	Noted
	The report fails to accurately identify the current level and the proposed increase in heavy vehicle movements greater than class 3 south of Dungog and does not consider the increase in heavy vehicle use of Chichester Dam and Salisbury Roads (both local roads).	5.3.2
	While it is acknowledged that the condition of the local roads is poor, it does not suggest that additional heavy vehicle traffic will have a further impact. In addition cumulative impacts resulting from the possible approval of the AGL Gas Pipeline and Upgrade of TransGrid distribution need to be taken into account as these impacts on the community and the infrastructure are enormous and have been disregarded.	5.3.2
	The statement that "It is difficult to predict the magnitude of any such increase as it would in part be dependent on the type of development which may take place (beyond that proposed as part of the Project)" is not correct. The scoping study carried out in the road access study demonstrates the expected traffic volumes and visitation numbers with only basic recreation infrastructure.	5.3.1
	The Working paper draws conclusions that do not accurately estimate the expected impact on our roads and infrastructure. The failure of the EAR to assess construction and operational traffic addressing heavy vehicle traffic generated only with a brief reference to the construction workforce light vehicle movements. Specific recommendations in relation to improving the accuracy of the Working Paper I are provided on page 22 of the submission.	5.3.2
	HWC should commit to installation of monitoring equipment to record levels of particulates during construction and work with affected residents to develop a practicable and satisfactory resolution to the issues in question.	5.9.2
	Need to ensure that all mitigation measures described in Section 7.1 Construction noise mitigation are implemented.	9 & 10
	The Munni House relocation needs further consideration.	5.6.4
	The report states in Section 5.1 Ethnohistory that the Aboriginal word "Munni" was recorded as the Aboriginal name for the area and is said to mean 'a good hunting ground'. However, further research needs to be undertaken. Page 26 of the submission provides further detail.	5.6.2
	Dot point three states 'the storage should be referred to as a dam and not a lake' is ill conceived and detracts from the tourist potential of the precinct.	Noted
	Of major concerns are the implications of suitable quarry material and no evidence of a foundation grouting plan.	5.4.1
	This submission also provides a précis of the comments made by others in relation to the dam.	
	The possibility for dam burst due to instability of the underlying geology.	5.4.9
	Concerns that the created 280 construction jobs are removing approximately 270 farm jobs by inundating the valley.	5.2.5
	There are recommendations provided in the submission in relation to potential water saving strategies that could be implemented.	3

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Sam McGuinness	CSIRO reports on the Hunter show that it is perhaps in the best position in terms of changes to rainfall under modelled climate change conditions.	3
	Since the announcement of Tillegra Dam the situation on the Central Coast has changed significantly as they are now implementing their own plans to secure the future water supply.	3
	HWC has grossly overestimated population increases in the Hunter.	3
	A range of demand management measures (other than the dam) could secure supply to sufficient levels at lower costs	3
	Scale of project appears to be very large when compared to demand - 450Gl to provide 50GL/year	3
	The cessation of water movement along the Williams River will impact on biodiversity of the region.	4
	The Precautionary Principle should be applied due to uncertainty in impacts.	4 & 5
	The loss of downstream flows and the impact during medium and high rainfall events.	4.4.3
Sylvia Graham	Alternative water saving strategies should be considered - which are more cost effective than building the dam	3
	The EAR fails to justify the need for the dam.	3
	Impacts on the community.	5.2.9
	Concerns about the potential for dam wall failure.	5.4.9
	Proposed offsets do not mitigate the terrestrial environmental impacts of the dam	5.10.14
	With holding water in the storage during filling will impact downstream water quality (eg stagnation, algal blooms and mosquito breeding).	4.1.4
	Concerns about the cost of the dam and those who will be paying.	5.2.1
Thomas Grant	Platypuses cannot survive in the long term in the deep waters of a large storage dam.	4.5.2
	Suggestions by the consultant (Terrestrial Ecology Working Paper E) that the increased foreshore areas may provide foraging areas for the platypus is not supported by overseas or Australian studies and observations (Hunt and Jones 1972), which show that the foreshores of large lakes are subject to changing water levels and wind wave actions that mitigates against the development of a productive macroinvertebrate fauna.	4.5.2
	While it may be possible to maintain a platypus population downstream of the proposed dam, this will depend on the development of an adequate long-term environmental flow strategy.	4.5.2
	The Tillegra Dam will disrupt the gene flow within the Williams River.	4
	Climate modelling indicates that the area where the Williams River is found is one which will experience less increase in drying condition and possibly slightly increased summer rains. Resulting in these becoming essential refuges for water dependent indigenous species including the platypus	4.5.2
Geoff Hyde	The substantial amount of freshwater flow into the Hunter River system is not adequately addressed in the EAR. The dam will have detrimental impacts on the lower reaches of the Williams River.	6
	No fish ladder device in the proposal will not enable migrating fish access to areas above the dam wall.	4.3.1
	The potential for cold water pollution to impact on fish and aquatic invertebrate assemblages.	4.3.11
	The dam will have an impact on river health with severe ecological consequences.	4
	EAR is flawed and the environmental monitoring was not adequate - monitoring of flooding take several years	5.1.6
	The EAR fails to justify the need for the dam.	3
	The mitigation measures proposed by Hunter Water are inadequate	4.5.4
Peter Hughes	The socio-economic costs are unacceptable as the CGE analysis is flawed in its assumptions and methodology.	5.2.3
	The dam proposal is inequitable.	5.2.4
	The environmental costs are unacceptable and have not been calculated into the EAR's economic analysis.	5.1.6
	Inadequate efficiency measures, reuse options and demand management policies are proposed and have not been included in the EAR's scenarios or	3

Respondent	Issue Summary	Section Ref.
	options.	
	Water demand forecasts by HWC appear overestimated.	3
	Water saving strategies should be implemented (eg effective demand management, re-use and efficiency policies). These will be sufficient to cope with expected climate change impacts	3
	The alleged cost of the dam is misleading. A full cost-benefit analysis should have been prepared for the EAR.	3
	The analysis of welfare impacts in the EAR is completely false, is based on erroneous assumptions and does not include costs/loss of income to Dungog Council.	5.2.4
	The dam is a tax revenue raising policy for the government.	3
	The EAR does not justify the need for the dam.	3
	The Lower Hunter Planning Strategy will be unable to be implemented if the dam proceeds.	5.1.5
	The likely impacts on Ramsar wetlands, and the loss of aquatic and riparian habitat is unacceptable.	7.2.1
	The proposal will have unacceptable impacts on the Williams River and its environment (eg water quality, increased salinity upstream impacting on agricultural activities, impacts on fluvial geomorphology).	4
	The loss of prime agricultural land.	5.2.6
	The impacts of the proposal on threatened species are unacceptable and the proposed offset strategy is poor.	4.5.4
	The dam will create significant greenhouse gas emissions and will not be carbon neutral as is claimed in the EAR.	5.10.5
David Smith	The proposal will have unacceptable impacts on the Williams River and its environment.	4
	The effect of the proposal on Seaham Swamp Nature Reserve (a significant breeding site for the Cattle Egret (Ardea ibis) has not been investigated in the EAR.	4.5.7
	The proposed offsets for riparian areas will not compensate for the loss of valuable riparian habitat.	4.5.4
	The EAR has not provided a rigorous investigation of the impacts of the proposal.	5.1.6
	The EAR fails to demonstrate a need for the project and goes against a number of the objectives of the Lower Hunter Regional Strategy.	3
	The environmental release strategy is not thought-out properly. Insufficient analysis of importance of Williams River inflows to the Hunter Estuary Wetland. No consideration given to future likelihood of increased importance of Williams River inflows with declining Upper Hunter catchment rainfall due to climate change predictions.	7.2.1
	The management of water quality impacts during construction has not been addressed in the EAR.	4.1.1
	The statement that "the channel would initially become more stable and have denser instream vegetation cover" is tantamount to saying it will become a weedy ditch. The channel flow will lead to changes in the physical channel structure, impacting on ecological processes. What remediation can be implemented?	4.2
	The large regular flood flows will be negated and will influence aquatic and riparian life for the full length of the river not just to the confluence with the Chichester River as claimed in the EAR.	4.4.4
	Why is the effect of decreased flow expected to be largely limited to the reach between Tillegra Dam and the confluence of the Williams and Chichester Rivers? The dam would permanently isolate the uppermost 54 kilometres of the main river channel and associated tributaries (representing approximately 15% of the total catchment at the Hunter River confluence). But this is more than 33% of the total river length.	4.4.4
	A fishway should be provided at the dam - 8 of the 12 species identified need to migrate to estuarine water for their life cycle. The EAR indicates that a provisions of a fishway would be too expensive	4.3.1
	During initial dam filling, water quality will be altered by the decomposition of vegetation inundated as water level rises, which has implications for greenhouse gas emissions.	5.10.5

Respondent	Issue Summary	Section Ref.
	The increased nutrient load in dams and changed biota would impact on the quality of the water.	4.1.2
	How many species (apart from bats) were not able to be identified during field survey?	4.5.1
	HWC has failed to identify the effect of the change in microclimate due to the creation of such a large body of water.	5.10.9
	The species Eucalyptus glaucina occurs in the locality. No studies have been completed for this species.	4.5.1
	The mitigation measures proposed by Hunter Water are inadequate	4.5.4
	Concerns that the proposed biodiversity corridor does not replace the already established habitat.	4.5.4
	Unacceptable impacts on the already small, fragmented and isolated habitats of threatened species.	4.5.2
	The statement that "there would be minimal impact of the dam on the Hunter estuary and on the Ramsar wetland" is not backed up with evidence that the flow, salinity, nutrient and other water quality changes (irrespective of the size of that change) will not have a permanent detrimental effect.	7.2.1
	There is no data or cited literature to substantiate that the distance of the dam approximately 100 km inland from the Ramsar wetland will not directly affect the site.	7.2.1
	The costs of the project are being borne by existing HWC's customers, not by those who will use the water (ie the Central Coast) - cost effective analysis does not include environmental services costs	3
	The EAR should describe what employment opportunities will be available during the construction and operation of the dam. Any workers attracted to the area will be, by and large, for the construction phase only.	5.2.5
	The tourist potential of the dam needs to be re-evaluated.	5.2.11
	Compensation should be given to Dungog Shire Council in consideration to road works and bridges constructed in the inundation area.	5.2.9
	The huge amount of water stored in this dam will only encourage future wasteful water use - in HWC's financial interest.	3
	The statement that "For some aspects such as ecological impacts, this was constrained due to a lack of suitable information. In general, however, it is considered these would not be significant". This is an inadequate statement.	5.1.6
	The proposal contravenes the 5 principles of ESD.	5.1.6
	The EAR should provide details on who the independent auditor is likely to be to assess sustainability performance. Also need to outline a procedure that shows external stakeholders being involved in assessing progress of sustainability implementation. Annual monitoring reports during construction is not sufficient.	5.10.16
	Consideration of alternative water saving strategies.	3
Ivor Growns	Even with the best available mitigation measures the biota in the Williams River and current ecological processes will be adversely affected by the dam.	4.3.3
	The multi-level off-take proposed for the dam will only minimise the release of cold, high nutrient and metal laden waters to the downstream reaches of the dam, not stop it altogether. It is highly likely that the water released from Tillegra Dam will be of different chemistry and temperature from that naturally occurring in the Williams River and will have ecological impacts on the downstream environment.	4.1.3
	There are no mitigation measures available to ameliorate the effects of Tillegra Dam on the downstream geomorphological characteristics of the Williams River.	4.2.15
	The EAR has failed to demonstrate that the proposed environmental flow strategy is the best option for the Williams River. It would be better not to build the dam on precautionary principles to maintain current diversity and healthy nature of the Williams River	4.4.3
	The EAR has failed to compare the planned management of the dam and river with existing water resource infrastructure in eastern Australia.	4.4.3
	HWC have not assessed all potential options for securing the water needs of the region.	3
Harold Johnston	Concerns about the cost of the dam and the cost estimations being	3

Respondent	Issue Summary	Section Ref.
	inaccurate.	
	If not all materials/aggregates will be won on site, this can only mean that there will be more truck movements through Dungog than anticipated in the EAR (ie more noise, dust, road damage, pedestrian danger etc).	5.3.2
	The Dungog Shire will need substantial financial assistance to be able to rectify any road damage.	5.2.9
	The EAR suggests that the Contractor for the dam will assess road and infrastructure condition. This assessment should be provided in the EAR.	5.3.1
	The extra 280 workers on site should be provided with their own medical staff and facilities. Dungog's current services are already utilised to full capacity.	5.2.4
	The EAR needs to accurately assess the amount of materials that cannot be recycled and consider whether this waste will be disposed of at the Dungog Shire landfill which could shorten the landfill's effective lifespan. The Dungog Council should be compensated for this occurrence.	5.2.13
	The loss of visitation to the Williams River (due to the spoiling of the river's natural environment) has not been assessed in the EAR. The number of visitors to the dam has not been adequately assessed.	5.2.7
Michael Downes	The dam should be made available for extensive recreational boating.	5.2.10
	The Dungog Shire will need substantial financial assistance to be able to rectify any road damage and to compensate for the loss of rates.	9 & 10
Gregory Fenwick	The socio-economic impact assessment contained with the EAR does not address the issues of most concern to the local population and the use of the Hunter Region as the basis for quantifying the impact of the dam on the local economy is deliberately misleading and not in line with the DGRs.	5.2.4
	The impact on the community of Dungog Shire has not been adequately addressed in the EAR.	5.2.9
Peter Hopton	The loss of prime agricultural land.	5.2.6
	The impacts on the Williams River and its environment.	4
	The impacts on the Dungog community.	5.2.9
	HWC have not sufficiently explored options associated with recycled water.	3
	Prior to considering other water supply options, HWC should assess their pricing structures for customers. Prices are fixed and the best way to achieve increased water efficiency is more appropriate pricing mechanisms that reward water frugal customers.	3
Maureen Kingston	The EAR implies that the monitoring of weeds etc will only occur during the establishment phase of the vegetation projects. There is also no indication how that monitoring is to occur. HWC needs to implement short and long term weed and pest management plans for all new plantings that are to occur. HWC should provide adequate funding for this planting and monitoring work. Independent auditing of the weed and pest management plans should be undertaken.	4.5.6
	There are significant safety and road maintenance issues associated with the existing roads in the area and are unlikely to cope with increased construction vehicles travelling through the area. Who will pay for upgrades to roads?	5.3.5
	Concerns about the volumes of vehicles passing through the area.	5.3.7
	The traffic volume reports used in the report are dated 2006 (Table 1 and Table 2.3) and are nearly 4 years old and do not reflect current road usage. Table 2.3 shows the wrong heading, refers to Tillegra Bridge River flows.	5.3.7
	No mention of traffic on Clarence Town Road, Lord or Hooke Streets has been made. No mention is made of any need to reseal parts of Hooke Street between Lord and Chichester Dam Road, other than its intersection with Lord Street.	5.3.6
	Estimates of daily movements along Salisbury Road is 279, with only 1% being heavy vehicles. However, from observations many of the vehicles are small cattle trucks, milk tankers, farm delivery vehicles, small school buses and logging trucks.	5.3.2
	It is not clear how the estimated total movements of heavy vehicles for the project was made. Are the calculations correct?	5.3.1

Respondent	Issue Summary	Section Ref.
	Concerns about transporting construction workers to site every day. Would coach buses be considered and factored into the vehicle movement calculations in Working Paper I? The submission has provided additional vehicle movement tables and has concluded that when the heavy truck and/or coach movements are converted to light traffic movements and the volume of light traffic, just for personnel alone are taken into account, it is ingenuous for Working Paper I to conclude that the 'impact of construction traffic on Shire roads would not be significant'.	5.3
	No assessment of the social impact on residents due to a significant increase in traffic volume in Dungog, Clarence Town or Seaham and loss of amenity.	5.2.9
	No consideration of whether traffic calming could be introduced at the High School level crossing in Hooke Street in view of the proposed significant number of vehicle movements and tendency for many vehicles to exceed designated speed limits.	5.3.7
	No consideration whether anti-compression brake notices be installed in Dungog, Clarence Town or Seaham on the roads affected (only Paterson has such signs).	5.3.7
	The Tillegra Dam Recreational Facilities Scoping Study provides some detail on the likely traffic flows if recreational use of the dam is permitted. This Scoping Study analysis should be considered in Working Paper I when assessing the impact of the dam's construction on roads and safety.	5.3.9
	Dungog and nearby towns will continue to get their water supply from the Chichester Dam and customers in the lower Hunter, Newcastle and Central Coast will benefit from the dam only.	3
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
	Impacts on rural amenity, during construction and if the dam becomes an attractive tourist destination.	5.12
J Capozzeli	Devastate the homes of 30 platypus families	4.5.2
	New infrastructure on the Central Coast means it no longer needs extra water	3
	Environmental studies undertaken for the project are too short with no information gathered across seasons.	5.1.6
	Greenhouse impacts underestimated particularly methane completely ignored.	5.10.1
Geoff & Heli Berry	Need for the Dam	3
	Displacement of 90 families	5.2.9
	Impacts on historic and cultural places eg Quart Pot Cemetery	5.6.5
	Disruption to seasonal flows of the Williams River and a decrease in deposition of silt over the river flats leading to the need to increase fertiliser use	4.2.16
	Failure to identify the Dam as the standout option	3
	EAR failed to assess viable alternatives - water harvesting, recycling and storage options	3
	The [estimated] cost has continued to escalate and is only marginally economically viable	3
	Unfair burden on Hunter Water ratepayers	5.2.1
	Unacceptable level of damage to terrestrial and aquatic ecology - ecosystem loss and fragmentation, inadequate environmental flows, thermal pollution and loss of biodiversity	4
	Mitigation measures in EAR inadequate	4.5.4
	Destruction of farmland	5.2.6
	Ongoing generation of methane gas equivalent to 27,000 new cars on road	5.10.1
	Need for the Dam	3
Natalie Johnson Bade	The Dam would destroy the only remaining healthy river in the Hunter	4.4.7
	The Dam would isolate upstream and downstream riverine environments	4
	Substantial and irreversible impacts on aquatic fauna	4.3.3
	Substantial and irreversible impacts on riparian vegetation, including endangered ecological communities	4.3.3

Respondent	Issue Summary	Section Ref.
	Reduce intensity of downstream flow flushing and scouring events	4.2.9
	Data and mitigations inadequate	5.1.6
	Alternatives not exhaustively investigated	3
Malcolm and Anne McDonald	Economic and social impacts on Dungog local government area	5.2.5
	Impacts on agricultural industries - closure of dairies, conversion of dairies to beef cattle (low input low output), un-kept land with minimal asset upgrades and pasture improvements, poor weed control	5.2.6
	Impacts on local commerce - loss of businesses and business confidence, depletion of Tourism during construction phase	5.2.4
	Impacts on social infrastructure - housing, roads services	5.2.4
	Suggestions - State Government to provide financial contribution to upgrade Dungog Council's road network, Perpetual funding to Dungog Council via $1 water rate levy, provide unlimited opportunities for downstream agriculture between the Dam and Seaham Weir, maximise recreational opportunities in and around dam (except trail bikes) allow small block subdivisions in Dam precinct.	5.2.10
Jennifer Bade	Floods best farmland in Australia	5.2.6
	Destruction of pristine river	4.4.7
	Potential destruction of Dungog	5.2.9
M Fallding	Proposal is not cost effective especially to provide 100% drought security	3
	Realistic alternatives not considered	3
	Environmental impact is substantial and not acceptable	4 & 5
Coral Robinson	Planning parameters and assumptions used to support project are fundamentally flawed and lack robust testing.	3
	Reliable system yield has been changed over time	3
	Lack of cost benefit analysis for different levels of reliability coupled with survey of a willingness to pay of HWC customers	5.2.1
	No sensitivity testing of reliable system yield [model] has been done	3
	Drought security trigger is above that applied anywhere else in Australia	3
	Water demand forecasts do not appear to be sound - ie broad brush rather than end use modelling, high population growth rates, BASIX reducing water use in new residential developments, effect of demand management programs ignored	3
Nadia Samperi	Irreversible detrimental impacts on ecosystems and wetlands of the Williams River due to impacts on flood cycle and fresh water [pulses] which keep river healthy	6 & 7
	Loss of farmland and local food production	5.2.6
	More environmentally sound and economical solutions are available eg water tank subsidies, stormwater harvesting	3
Felix Prentice	Hunter Water has had to scramble for justification since the announcement of the dam including implausible population projections for the Hunter	3
	Where is intergenerational equity?	5.11.4
	Loss of best farmland in Dungog and local food production which is reflected in land acquisition prices	5.2.6
	Should consider the combined effects of Chichester and Tillegra Dams on both river systems	4
	Should consider the combined effects of Chichester and Tillegra Dams on the broader community	5.2.13
	Should consider the combined effects of Chichester and Tillegra Dams on resource diversity	5.2.13
	$6 million lost income from inundated farms and the Dungog businesses servicing them	5.2.4
	Does EAR contain a dam break study and inundation plans? These issues should be included in the assessment of the socioeconomic effects of the dam	5.5
	[The EAR does not provide] justification for the inefficient, expensive harvesting and storage of water harvesting at Seaham in the usual course	3
	Mr Young told a meeting "Dungog will not pay for this dam … " now due to	5.2.1

Respondent	Issue Summary	Section Ref.
	IPART ruling all Dungog residents will pay for the dam	
	Need to outline alternatives for the community to consider	3
	Consultation flawed - not all stakeholders consulted, merits of scheme not discussed	5.1.4
	No accurate way to determine effect on river ecology due to changes in [river] flows	4.4.1
	No accurate measure of environmental flow	4.4.3
	No accurate measure of impacts on riparian fauna and flora or Ramsar wetlands of 10 year filling period or projected water releases	4.4.8
	No real assessment of whether project equally values human needs versus ecology	3
Kim Jennifer Bebensee	Environmentally/ecologically destructive to NSW last free flowing rivers	4.4.7
	Dam will flood Regent honeyeater, Swift parrot, bandicoot, and Spotted tailed quoll habitat	4.5.2
	Environmental surveys too short	5.1.6
	Greenhouse gas impacts radically underestimated	5.10.5
	Dam will make water bills more expensive	5.2.1
	Dam threatens tourism sector jobs	5.2.5
Skye Moore	EAR fails to justify the need for the dam or alternatives	3
	Socio-economic analysis does not indicate who will meet deferred payment for dam (IPART ruling) and likely steep rise in water bills due to lower population growth	5.2.1
	Unacceptable impacts on aquatic fauna and riparian vegetation, threatened species and EECs, high flow flushing and scouring	4.3
	Fails to identify water volumes required for long term health of Hunter Wetlands	7.2.1
	Doesn't account for methane emissions and climate change impacts	5.10.1
	Failure to recognise habitat values of paddock trees, values of 'Highly Modified Community' to threatened species especially for hollow dependant fauna species	4.5.3
	Proposal has not been assessed against Environmental Outcomes Assessment Methodology (EOAM) and offsets should be 10:1 - higher if Threatened Species Tool used	4.5.1
	Nest boxes will not be adequate 'no net loss' for hollow using species particularly [micro bats	4.5.4
	Inadequate investigation of purchasing biodiversity credits or formal conservation agreements (PVPs, VCAs)	4.5.4
Carolyn Maginnity	Inadequate justification for the need for the extra water storage and therefore fails to meet Director General's requirements	3
	Cost of the dam and deferred payment. Impact on existing rate payers without considering more efficient water planning strategies	5.2.1
	Impacts on biological and hydrological health of last healthy river in NSW	4.4.7
	Fails to adequately address impacts on aquatic fauna and riparian vegetation, threatened species and EECs, high flow flushing and scouring	4.4
	Fails to adequately address impacts on long term health of Hunter Valley Wetlands due to inadequate site-specific data	7.2.1
	Inadequate offsets for terrestrial environmental damage and vegetation rehabilitation projects	4.5.4
	EAR ignores generation of methane gas from rotting vegetation equivalent to 27,000 new cars on road	5.10.1
	Inadequate compensation for Dungog Shire residents	5.2.9
	No commitment to meet costs [of repairing] damaged roads	5.3.6
	No compensation for rate base loss	5.2.9
Ann-Marie Rohlf's	Reduction in native biodiversity and promotion of exotic species	4.5.2
	Tillegra Dam will further reduce health of Williams River on top of what Chichester Dam has as assessed under AUSRIVAS	4.3.9
	Drought security to be achieved through less expensive and less damaging means	3
	Loss of productive land when climate change predicted to render large areas	5.2.6

Respondent	Issue Summary	Section Ref.
	of NSW unfit for agriculture	
Nick Staheyeff	EAR fails to justify the need for the dam or alternatives	3
	No full cost benefit analysis that considers environmental costs values	3
	Impacts on Williams River include downstream bed scouring, bed lowering will cause downstream tributaries to "hang" and activate "nick" points	4.2.3
	No indication of which downstream tributaries will remain stable and which may degrade	4.2.11
	Unacceptable offsets for vegetation losses, should use EOAM instead	4.5.4
	May cause downstream water to become too salty for irrigation	6
	Fails to adequately address impacts on long term health of Hunter Valley Wetlands due to inadequate site-specific data	7.2.1
	No indication on how water will be removed under Water Sharing Plans	4.4.2
Neredah Gill	Failure to justify the need for the additional water storage	3
	EAR failed to assess viable alternatives - water harvesting, recycling and storage options	3
	Doesn't adequately address loss of regular flushing and scouring on river health	4.3
	Impacts on downstream wetlands	7.2.1
	The [estimated] cost has continues to escalate and could become burden on Hunter landowners	5.2.1
	Social impacts enormous within the local region - displacement of long term farming families	5.2.4
	Impacts on businesses - tourism benefit not indicated by existing dams	5.2.4
Tracy Norman	Failure to justify the need for the dam and climate information on Perth and UK irrelevant	3
	Outdated climate modelling used (Newcastle Uni model predicts slight rise in net rainfall)	5.10.8
	EAR failed to assess viable alternatives - water harvesting, demand management, recycling and storage options	3
	Increases in lenthic habitat will coincide with a reduction in lotic and terrestrial habitat	4.3.3
Petition (33 signatories)	Full recreational without restrictions in perpetuity	5.2.10
Trevor and Sarah Cameron	Need for the Dam and investigation of alternatives eg [desalination] plant, water conservation	3
	Impacts on Platypus	4.5.2
	Impact on terrestrial and fluvial vegetation (direct and indirect)	4.3.3
	Weed invasion caused by increased low and altered flows in the Williams River	4.3.10
	Risk of bed instability, 'head cuts' and bed lowering in tributaries	4.2.11
	Loss of sediment downstream	4.2.8
	Erosive flows downstream causing excessive erosion of the channel and banks	4.2.11
	River styles assessment not referenced	4.2.5
	Geomorphic character of river incorrectly assessed	4.2.5
	No assessment of impacts on freshwater floodplain wetlands or groundwater dependent ecosystems	7.2.1
	Cumulative impacts of Chichester and Tillegra Dams not assessed (vis-à-vis hydrology, geomorphology, ecology)	4 & 5.2.13
	Loss of prime agricultural land	5.2.6
	Impacts on historical landscape as a whole of the inundation area	5.6.3
	EAR does not recognise the link between items of indigenous and non-indigenous heritage items [found] and [their] context	5.6 & 5.7
	Archival recording not sufficient and no cost estimates for this	5.6
	Munni House of State significance not just local; partial relocation not acceptable; no feasibility study or cost benefit analysis, or costings of four options; will destroy the grouping of the buildings	5.6.4
	Impacts on Quart Pot Cemetery and no cost analysis for moving it	5.6.5
	Loss of aesthetic value	5.12
	Social impacts	5.2
	Loss of rural heritage	5.6

Respondent	Issue Summary	Section Ref.
	Submerging of the 30 km of revegetation works (time and money) under the Rehabilitation of the Williams River Tributaries Project, Large Woody Debris Projects, River Projects	4.5.1
	Impacts on last remaining healthy river in the Hunter	4.4.7
	Impacts on Ramsar wetlands of upper Williams River	7.2.1
	Triggers the EPBC Act	7
Ken Rubeli	Supports University of Technology's Institute of Sustainable Futures recommendation for sustainable water planning process and more demand management	3
	Environmental impact on the platypus population downstream from the dam Plus copy of report by Dr Tom Grant	4.5.2
Sunniva Boulton	Failure to justify the need for the dam and climate information on Perth, SE Queensland and other overseas places irrelevant	3
	EAR ignores generation of methane gas from rotting vegetation equivalent to 27,000 new cars on road	5.10.1
	Tillegra is an absurd level of drought security and based on 1980's when per capita consumption was much greater and there were a large number of heavy industrial users	3
	Insufficient investigation of alternatives	3
	Who will meet future cost after IPART deferment of payment and likely drop in population growth?	5.2.1
	Tillegra is an absurd level of drought security	3
	Hunter Water has ignored advice from its own consultants (such as the need to build a fishway)	4.3.2
	The data collection undertaken for the EA is inadequate	5.1.6
	Substantial and irreversible impacts on riparian vegetation, including endangered ecological communities	4.3.3
	Reduced high flow flushing and scouring needed for river health	4.2.9
Robyn Meinche	1 in 1 million chance of running out of water is ridiculous reason for building a dam without looking at recycling	3
	Substantial and irreversible impacts on Williams River - upstream and downstream environments affecting aquatic fauna and riparian vegetation	4.3.3
	Impacts on health of Hunter Estuary Wetlands	7.2.1
Robert Pollock	EAR fails to justify the need for the dam	3
	Dam is a business opportunity rather than an urgent water supply necessity	3
	As the dam will impact on the agriculture and ecology of the region and urgent need for the dam should be demonstrated.	3
	There are more sustainable ways to provide water security.	3
Mr JJ & Mrs SP Landers	Loss of highly arable land	5.2.6
	Impacts on last remaining healthy river in the Hunter	4.4.7
	Data collection for the EAR is limited and taken over an extremely short duration (2 seasons)	4.4.1 & 4.4.3
	Conflict between agriculture and recreational use of the dam	5.2.10
	Unnecessary planting of trees in valuable riparian agricultural lands and will compound wildfire threat	4.5.4
	Landslide impacts (picture enclosed of one near Chichester Dam)	5.4.8
	Impacts on historic and cultural places eg Quart Pot Cemetery	5.6
	Who will meet future cost after IPART deferment of payment and likely drop in population growth?	5.2.1
	Ongoing generation of methane gas equivalent to 27,000 new cars on road	5.10.1
Lea Mitchell	Insufficient investigation into impacts on local economy particularly wrt loss of farming enterprises and supporting businesses	5.2.4
	HWC needs to put in place an agreement with Dungog Shire Council to guarantee gains to local economy	5.2.9
Lea & Neville Mitchell	Inundation area of 2100 ha of agricultural land is a natural and financial resource the loss of which should be compensated for via annual annuity	5.2.6
W Flannery	Loss of productivity, rates revenue, etc will be negative but extra water storage is required	3
	Compensate Dungog by providing extensive opportunities for tourism and recreation	5.2.10
Patricia H	The Tillegra Dam will flood the cemetery where family is buried and options	5.6.5

Respondent	Issue Summary	Section Ref.
Middlebrook	of exhumation or leaving are not appropriate.	
	Alternative measures of water collection and storage should be considered	3
	The Williams River is the last healthy river in the Hunter and Hunter Water is already extracting water for Grahamston Dam	4.4.7
	The release of water from the dam will cause environmental damage because it will be deoxygenated and kill fish, platypus and micro-organisms	4.3.8
David Hepburn Watson	The dam will destroy platypus habitat and without relocation will kill approx 70 individuals	4.5.2
	Socio-economic issues have not been adequately addressed including financial loss for residents	5.2.1 & 5.2.4
	Increased traffic in the region will be more than the predicted 1% and will cause more damage to the roads than predicted	5.3.2
	Using the word 'cursory' with regards to the investigations is concerning. An EAR should be robust.	5.1.6
	The EA acknowledges 7 fish species that will be inhibited by dam wall however won't build fish lift because its too expensive. Loss of 5 species is not acceptable	4.3.3
	The release of water from the dam will cause environmental damage to animals and farmers	4.4.1
	Alternative water harvesting that is not environmentally damaging should be used	3
	Dungog council was informed in 2004 that dam was not needed and now they spent over $1M on bridge upgrades that will be inundated	5.3.4
	What happened between 2004 and 2009 to move the need for the dam from unwanted to essential?	3
	The dam has not been justified given the environmental damage	3
	The community has not been consulted on why the need has dramatically increased since 2004	5.1.4
	Geological studies were glossed over and info has been omitted from the public because they were detrimental to the project. This is of concern	5.4.1
Paul McNamara	The project will flood productive farm land	5.2.6
	Damage to biodiversity/fauna/flora above and below the dam will be extensive.	4.3 & 4.5
	The EAR does not prove that the delicate balance of the Williams River, Hunter Estuary and Ramsar Wetlands will not be damaged. We cannot afford to damage another Australian wetland/estuary ecosystem	7.2.1
	HWC is imposing its out-dated, ill conceived, unnecessary ideas on the Hunter community with this EAR	3
	Even thought the local area has been farmed, the Williams River is recognised as the healthiest remaining river in the Hunter	4.4.7
	The project will not have minimal impact and will destroy ecosystems on the river	4
	The 1997 World Commission on dams showed that dams were showing delays in construction, going over costs, less profitable than forecast, and led to irreversible loss of ecosystems and species. The technology is old	3
	Large shallow dams emit greenhouse gases from rotting vegetation and carbon inflow from watersheds	5.10.1
	The dam will result in reduced flows and the environmental flows argument is not believable	4.4.3
	The principle mechanism for mitigating impacts will be to not build the dam at all	3
	Noise, vibration, air quality, traffic and contamination impacts on the environment cannot be overcome by apologies or mitigation	5.8 & 5.9 & 5.3
	The destruction of a river cannot be called sustainable	4
Michael Post	It is true that Platypus exist in the Williams River	4.5.2
	The environmental studies are inadequate and fail to address the issues that exist in the subject environment	5.1.6
	The assessment is hastily prepared, inadequate and should be determined by the government to be as such and rejected.	5.1.6
J A Heleheat	The reduction in flows would lead to catchment deterioration (silt and debris build-up) and lack of pool flushing leading to poor water quality	4.1.4
	Additional hospital facilities/ and police capability will be needed if	5.2.4

Respondent	Issue Summary	Section Ref.
	recreational facilities become available at the dam	
	Rate payers/Council will lose infrastructure. Is HWC prepared to reimburse council?	5.2.9
	The Dungog area should not have to be disadvantaged in order to supply water for regions outside of Dungog	5.2.9
	Rotting waste will lessen water quality and create methane emissions	5.10.1
	Permission should not be granted, government should consider the local community and all questions should be answered honestly by the department	5.1.7
	Siltation will become a dangerous problem during flood rains and rising river levels	4.2
	Irreplaceable prime agriculture land will be flooded	5.2.6
	The flooding of agricultural land will cause loss of skilled primary producers and kill the incentive to work within agriculture	5.2.6
	The project will cause health problems due to stress. Other hardships have already been created by this proposal	5.2.9
	The dam will flood a pristine environment	4.3 & 4.5
	Local people and businesses will be disadvantaged	5.2.4
	Increased traffic will put pressure on roads and increase safety risk	5.3.5
	Pollution, noise and disturbance will increase	5.8.6
Peter Wojtowicz & Anthony Skuse	The need for the Dam has not been justified and alternatives have not been properly assessed	3
	Hunter already has a large water storage capacity (95%) dam capacity and per capita consumption has reduced	3
	Unacceptable impacts on the Williams River and its environment	4
	Proposed offsets are inadequate to mitigate the terrestrial environmental impacts of the dam	4.5.4
	Fail to account for the methane gas emissions Claims of carbon neutrality have no credibility	5.10.1
Philipa Fowler Smith	Fail to justify need for extra water supply including inadequate demand forecasting. Alternatives have not been considered	3
	Decision based on political reasons not scientific evidence and needs of community	3
	Project has already negatively impacted on socio-economics and destroyed farming land	5.2.6
	Hunter river sediment will not be replenished once dam is built	4.2.8
	Financial loss in Dungog region. Loss of jobs	5.2.9 & 5.2.5
	Multiple corrections and additional information for Working Paper L Section 2 Contextual History	5.6.2
	Multiple corrections and additional information for Working Paper L, Section 3 Study Area Investigation Results	5.6.2
	Multiple corrections to Heritage Inventory Sheets	5.6.2
	Multiple corrections provided and relocation of fire station	5.6.2
Lionel Ridgeway (Elder of Worimbi Tribe)	The Williams River be will destroyed	4
	The Williams River is a sacred place for the Worimi tribe	5.7.2
	Local farmers will loose their livelihood and be forced to leave their property	5.2.6
	The project would destroy one of the last remaining river systems	4.4.7
	Other, more cost effective (both economic and environmental cost) alternatives should have been considered. Dams are old technology with large evaporation	3
Kathy Macdonald	Need for the Dam and information is inaccurate and unreliable	3
	Loss of biodiversity and habitat on the Williams River	4
	Inadequate mitigation measures	4.5.4
	Loss of fertile farming land and impacts on local community	5.2.6
	Cost of construction and ongoing cost to ratepayers	5.2.1
	Decision based on political reasons not scientific evidence and needs of community	3
Graeme Penney	No need for the dam. Current Barrington catchment is reliable and sufficient	3
	Less environmentally damaging alternatives are available	3

Respondent	Issue Summary	Section Ref.
	The cost of the dam will be passed to residents. It is probable that costs will blow out	3
	The dam will not improve, but will decrease the quality of life in the Hunter Valley	5.2.4
	Dam will destroy the Williams River and crucial habitat for animals	4
Josh Loh	Fail to justify need for additional water supply	3
	Fail to provide robust inventory of alternatives	3
	Damage to biodiversity/fauna/flora	4
	Change to Williams River flow	4.4.1
	Potential impacts to Hunter Estuary Wetlands and wetland report inadequate due to budget and time constraints	7
	Terrestrial mitigation is inadequate and fail to meet the DGRs	4.5.4
	Greenhouse impact from rotting vegetation (methane) was not considered	5.10.1
	Hunter Water have not control over final carbon neutrality	5.10.6
Graham Quint	Project location is within National Trust's proposed Paterson-Williams Rivers Landscape Conservation Area	Noted
	Munni House is listed on Trust Register and will be effected	5.6.4
	Concern on cumulative impact from residential, mining, dam impacts on historic, scenic and conservation significance of agricultural landscapes. Such landscapes have been identified by NT for listing since 1970's and are now under threat	5.6.3
	Loss of primary food production	5.2.6
	Heritage assessment does not address impact on whole agricultural landscape and has just looked at isolated cases	5.6.3
	Archival recording of heritage loss is not a substitute for loss of landscape and not appropriate mitigation	5.6.3
Marg Edwards	Need for the Dam	3
	Money should be spent elsewhere, including hospitals, roads and encouraging water saving technology	3
	The impact of the dam will be devastating.	4 & 5
	The social and environmental impact on the residents of Dungog is too hard to quantify.	5.2.9
Jennifer Chant	The need for the Dam has not been justified	3
	The proposal will impact on the health of the Williams River and everything downstream	4 & 6
	The social impact will be devastating with the whole town of Dungog and surrounding areas affected.	5.2.9
	The roads into Dungog and the proposed dam site will require a lot of work.	5.3.6
	Cost of the dam and payment. Impact on existing rate payers.	5.2.1
John Kaye	The need for the dam has not been justified in the EAR	3
	Arguments against the dam raised by the community and by water planning experts have not been refuted in the EAR and hence stand as valid reasons for rejecting the application	3
	The Hunter community have not been asked about their preference for water options yet are being forced to pay for Tillegra.	5.2.1
	There are cheaper, more robust and lower environmental impact water supply options that can be developed in increments to more accurately and adaptively match population growth in the Hunter.	3
	The quanta and timing if increase in household bills to pay for the dam have not been adequately identified in the EAR.	5.2.1
	The EAR fails to fully account for the site geology and consequently ignores the significant risk of substantial increases in cost of the dam	5.4.7
	The dam would have unacceptable impacts on the Williams River	4
	The proposal would inundate an important terrestrial ecosystem with unacceptable consequences on biodiversity	4.5.2
	The assessment of terrestrial and riverine species in the EAR is cursory and inadequate	4.5.1
	The volume of methane releases resulting from inundation and consequent anaerobic decay of vegetation has been under estimated in the EAR.	5.10.1
	The strength of community opposition in the Dungog region and throughout the Hunter indicates that the dam is unwanted, damaging and unnecessary.	3

A2.3 Public Submissions (Form Letters)

Thirteen different form letters were received and a summary of the issues raised and a reference to the section of the Submissions Report that addresses each issue is provided in Table A4.

Table A4 Public Submissions (Form Letters)

Form Letter	Issue Summary	Section Ref.
1	The EA does no present a satisfactory justification for the dam and does not provide a robust inventory of alternatives for sustainable water supply for the Lower Hunter Region.	3
	Cost of the dam and payment and the subsequent impact on existing rate payers.	5.2.1
	The EA fails to address the full implications of the environmental impact of the Dam on the Williams River and its environment and as such fails to meet the Director General's Requirements	4 & 5
	The water requirements from the Williams River for the Hunter Estuary Wetlands and impacts on the wetlands has not been specifically addressed	7
	Proposed offsets do not mitigate the terrestrial environmental impacts of the dam	4.5.4
	The greenhouse gas impacts of the methane emissions from rotting vegetation have not be investigated.	5.10.1
2	The need for the Dam has not been justified and alternatives have not been properly assessed	3
	Cost of the dam and payment and the subsequent impact on existing rate payers.	5.2.1
	The dam will have unacceptable impacts on the terrestrial and aquatic ecology of the river system. The EA does not properly assess these impacts	4
	The offsets to mitigate ecological damage are inadequate	4.3 & 4.5.4
	The social costs, including loss of agricultural land and the cemetery, are unable to be offset	5.2.6 & 5.2.9
	Methane gas emissions have not be considered	5.10.1
3	The need for the Dam has not been justified. The dam will provide an absurd level of drought security.	3
	The Dam will have impact on the biological and hydrological health of the Williams River which is one of the last remaining healthy rivers in the state.	4
	Hunter Water has ignored advice from its own consultants (such as the need to build a fishway)	4.3.1
	The data collection undertaken for the EA is inadequate	4 & 5.1.6
	The mitigation measures proposed by Hunter Water are inadequate	4 & 5
4	There will be an irreversible impact to the ecology of the Williams River.	4
	The need for the Dam has not been justified	3
	Environmental surveys were only undertaken for 2 months	4.5.1
	The EA fails to account for methane emissions	5.10.1
	There has been no community input into the decision. Hunter Water ratepayers must have their say.	2 & 5.1.4
	There will be significant damage to or loss of natural, Indigenous and European cultural heritage.	5.6 & 5.7
	There are major potential threats to water flows to Hunter Ramsar-listed wetlands.	7
5	There are no planning documents to justify Tillegra as the chosen option and previous documents don't mention or don't support it	3

Form Letter	Issue Summary	Section Ref.
	Tillegra is an absurd level of drought security and based on premise that Hunter customers should not have to face water saving measures	3
	Independent reports show that Tillegra is not needed based on climate change because rainfall in the Hunter will increase	3
	Tillegra is not needed for long term supply for the Hunter	3
	Tillegra is not needed for population growth	3
	The construction of the dam would threaten Ramsar listed Kooragang Wetlands	7
	The construction of the dam would eliminate habitat for platypus and a number of species of threatened fauna and flora	4.5.2
6	Overtaking lanes should be added on Clarence Town Road and Chichester Dam Road	5.3.6
	Good roads will be required for tourists associated with the dam	5.3.9
	Dam to be fully recreational	5.2.10
	All types of accommodation should be available for recreational use	5.2.10
	Range of recreational facilities are required including - walking tracks, cycle, motorbikes tracks, bird watching, lookouts	5.2.10
	Studies are required to help the community during construction and filling of dam	5.2.9
	Upgrade of poor roads in Dungog is required	5.3.6
7	Stimulus and job creation will be short term while loss of jobs from farms will be long term	5.2.5
	Independent reports show that Tillegra is not needed for climate change because rainfall in the Hunter will increase	3
	Tillegra is an absurd level of drought security and based on the premise that Hunter customers should not have to face water saving measures	3
	Tillegra is not needed for long term supply for the Hunter	3
	The construction of the dam would threaten Ramsar listed Kooragang Wetlands	7
	The construction of the dam would eliminate habitat for platypus and a number of species of threatened fauna and flora	4.5.2
8	There are no planning documents to justify Tillegra as the chosen option and previous documents don't mention or don't support it	3
	Tillegra is not needed for long term supply for the Hunter	3
	The construction of the dam would threaten Ramsar listed Kooragang Wetlands	7
	The construction of the dam would eliminate habitat for platypus and a number of species of threatened fauna and flora	4.5.2
	Independent reports show that Tillegra is not needed because rainfall in the Hunter will increase	3
	Tillegra is not needed for population growth	3
	Tillegra is an absurd level of drought security and based on premise that Hunter customers should not have to face water saving measures	3
	The alternative should be a sustainable urban water strategy that the public can support	3
9	The dam will inundate 3000 hectares of irreplaceable, prime agricultural land and eradicate 90 farms	5.2.6
	It would flood 22km of the Upper Williams River, threaten the Ramsar listed Kooragang Wetlands, eliminate platypus habitat and destroy biodiversity	4.5.2 & 7
	Construction of the dam is contrary to at least four Regional Strategy key objectives	5.1.5
	Alternative approaches need to be considered before destroying one of the last remaining healthy rivers in NSW	3 & 4
	The reason for the proposed dam have never been substantiated by the NSW Government and Hunter Water Corporation	3
	It is a costly infrastructure proposal when more efficient water planning strategies could be implemented	3

Form Letter	Issue Summary	Section Ref.
	Hunter Water's population figures show that the storage stimulation will not change from current demand	3
10	The need for the Dam has not been justified. The dam will provide an absurd level of drought security.	3
	Cost of the project, including the cost to Hunter Water rate payers	5.2.1
	Given the project is 'critical infrastructure' for the state, why are Hunter Water customers alone paying for the Dam	5.2.1
	The Dam will have impact on the biological and hydrological health of the Williams River.	4
	Hunter Water has ignored advice from its own consultants (such as the need to build a fishway)	4.3.1
	The offsets to mitigate ecological damage are inadequate	4.3 & 4.5.4
	The data collection undertaken for the EA is inadequate	4 & 5.1.6
11	There will be an irreversible impact to the ecology of the Williams River.	4
	The dam will impact on 30 platypus families	4.5.2
	The need for the Dam has not been justified	3
	Environmental surveys were only undertaken for 2 months	4.5.1
	The EAR fails to account for methane emissions in the assessment of greenhouse gases	5.10.1
	There has been no community input into the decision. Hunter Water ratepayers must have their say.	2 & 5.1.4
	The EA should fully address the impacts associated with the Williams River	4
	The EA should fully address the impacts associated with the Ramsar listed Hunter Estuary	7
12 & 13	Extension of time to respond to EA	5.1.1

In addition to the form letter issues submitted by respondents, 19 one respondents included modifications to the form letter template. A summary of the additional issues raised by these respondents is provided in Table A5.

Table A5 Form Letters – Additional issues raised

Respondent	Form Letter	Additional Issue Summary	Section Ref.
Suzannah Carey	2	The social costs, including loss of agricultural land and the cemetery, are unable to be offset	5.2.6 & 5.6.5
		Methane gas emissions have not be considered	5.10.1
		Hunter Water have made no commitment to supporting Dungog Council in meeting the cost of damaged infrastructure such as roads	5.2.9 & 10
Ilona Renwick	1	The land to be inundated should be used as agricultural land given the water shortages in the Murray-Darling basin	5.2.8
		More information regarding the economic benefits and who will be using the water from the dam is required	5.2.11
		Alternatives and water saving measures should be used rather than the construction of a dam	3
		A cost argument should be prepared to compare to the benefits of rainwater tanks as presented in the PhD thesis of Dr Peter Coombs	3
Patrick Ward	2	Given the project is 'critical infrastructure' for the state, why are Hunter Water customers alone paying for the Dam	5.2.1
Wendy White	1	The social costs of the project are unable to be mitigated	5.2
Roseanne Peel	2	There has been insufficient community consultation and an equity focused health impact assessment is required.	2 & 5.1.4
Tim Askew	1	The EA does not fully explore all the options or include all costs	3
Sharon Jakovsky	1	Agricultural value of the land and loss of cultural 'place', cemetery and other burial sites	5.2.6
		Water saving or harvesting measures have not been adequately explored.	3
		Terrestrial and aquatic ecology impacts are unacceptable as are loss of habitat, inadequate environmental flows and loss of biodiversity.	4.3 & 4.5
		More efficient water planning strategies could be investigated.	3
		Hunter Water has ignored advice from its own consultants (such as the need to build a fishway)	4.3.1
		The data collection undertaken for the EA is inadequate	5.1.6
John Wiggin	1	The dam will destroy much of the prime agricultural land in the region.	5.2.6
Milton Caine	1	Concerns about the potential for dam wall failure.	5.4.9
		The flow of the Williams River at the point of the proposed dam is insufficient to fill the proposed dam in ten years as is proposed.	4.4.8
Marilyn Austen	1	Impacts to arable farming land	5.2.6
Elaine Ruddick	1	There will be damage to good productive land.	5.2.6
Hayley Skehan	1	Consider other water saving strategies.	3
Joe Taranto	1	Alternative water supply sources and efficiency measures should be further considered	3
Jaden Harris	3	The need for the Dam has not been justified	3
Brett Murnain	1	Planning documents do not mention the need for Tillegra.	3
		Alternative integrated, sustainable supply options are not assessed in the EAR.	3
		The EAR has failed to identify whether Hunter Water will support Dungog Shire Council to meet the cost of damaged infrastructure such as roads during the construction phase of the project.	5.2.9 & 10
Amanda Hyde	1	The exhibition period of the EAR was insufficient to properly consider all the issues involved in the proposal.	5.1.1
Alison Monkley	1	Unacceptable impacts on the Williams River, threatened species and endangered Endangered Ecological Communities (EEC).	4.5.5
		The data collection undertaken for the EA is inadequate	5.1.6
Margo Slaven	2	Loss of natural landscapes, vegetation and habitat not properly justified	4.5.2
		Loss of rural land not properly justified	5.2.6
		Additional costs of dam not included	5.2.1
		Degree of water security is overkill	3

The form letters summarised in Table A4 were received from 2463 respondents. Details of the respondents for each of the letters received are presented in Table A6. The name/signature on some submissions was not clear and consequently the respondents name for that submission has been logged as 'Unknown' within Table A6. The majority of Wilderness Society postcards (Form Letter 11) were not provided to Hunter Water by the Department of Planning, with an example only provided, and as such the names of these submission respondents have not been logged. Whilst some respondents have not been identified, the issues raised by those respondents have been addressed within this submissions report.

Table A6 Form Letter Respondents

Respondents – Form Letter 1			
Christopher Moore	Grant Vote	Kenneth Kneipp	Carol Layton
Sharyn Munro	Mandy Wheatley	Alexis and John Nicholas	Shaun Stephens
Steve Phillips	Jan Hatch	Christina Naylor	Laurance Bowen
Andrea Wilson	Lawrence Hallinan	Liam Cooper	Cherie Heilbronn
Gerry Bailey	Grant and Jill Fraser	Marion Bannister	Siobhan Stanwell
Aran Davis	Bruce Lane	Irene Chapman	Jourdain Bonfante
Mario Bonfante	Joshua Brock	Milan Brooks	Garry Blyton
Charmian Eckersley	Geoff Pettett	Perry Hughes	Alan Atman
Anne McLaughlin	Alan Saxton	Jane Smith	Cameron Brown
Juliet Fowler Smith	Daniel Endicott	Christina Pender	Kathy White
James Ryan	Roslyn West	Lynnette Peterson	Gary Prowse
Greg Field	Nils Wiebkin	Julie Williams	B Pearce
Ruth Adams	Mark Thomas	Vanessa MacArthur	Rosemary Salmon
Robert Chapman	Phoebe Trongchittham	Lisa Harris	Chantal Byrnes
Fred Hardman	Rita Stewart	Cheryl Moody	John Ivanac
Terry Strachan	Alison Winn	Phillip Campey	Elizabeth Semetka
Louise Howell	Bruce Bailey	Carolyn Doherty	Hugo Weaving
Cathy Tull	Lenny Burgess	Katrina Campey	Joan Riveth
Eleanor Hobley	Greg Mason	Sally Davison	E Clarke
Christina Battle	Lesley Conway	Tina Clemens	Nevell Skuse
Yvonne Orr	Malcolm Clement	Carl Porter	Marion Armstrong
E. Lawson	Kate Smolders	J.J Korringa	Y Grace Parsons
David Penn	Sue Rodriquez	Fiona Mc Harty	Gary Ford
Kevin Lawlor	Gavin Doyle	Gary Ford	Ben Harris
Jodie Leonard	Trudi Cook	Francis Crane	Roshni Sharma
Selvanie Naidoo	Wendy Wolter	Kenny Graham	Unknown (3x)
Respondents – Form Letter 2			
Tom Boorer	Phillip Campey	Graeme Ballinger	Robert S. Muscat
Maria Riedl	Katrina Campey	Claudine Hansen	Jacqueline Soto
Katrina Vote	Tina Clemens	William Whitelaw	Elizabeth Mooney
Margery and Ross Street	Vicki Hyde-Smith	TA Skimmings	S.E.B. Hunt
Heather Sawyer	MJ Juffermans	Louise Knight	Lesley Norris
Thomas Smith	Craig Negle	Anita Ivancic	Michael Zrodlowski
William McKinnon Matthews	Anne M Middlebrook	Theresa Tayler	R.M.Armstrong
Gerald Steinmann	David Solmon	R Bissen	John Lee
Philippa Ditton-Phare	Andrew Harmer	Roshni Sharma	Gloria Rumbel
Christine Gay	Kenneth Grieves	Paul Dowdell	Anne Middlebrook
James Patterson	Rosemary Barr	Jenny Castly Shortland Wallssend Landcall	Louise Knight
Liz Stephens	Julia Grieves	Narelle Leite	Louise Knight
Neville and Irene James	Kenny Graham	Norma Pearce	T.A.Skimmings
V. Murnain	P Whitelaw	Warwick G. Thomas	Unknown (2x)

Respondents – Form Letter 3			
Louise West	Lyn Cottier	Susan Nodgins	Trudy Rennard
William H Ditton	Mark Short	G Long	B.Petrovski
Ky Fisher	Ben Foster	S. Parezarovic	Stephen Smith
Anna Robinson	Phillip Campey	Christopher Wallis	Milton Caine
Claire Dunn	Katrina Campey	W.G. Thomas	Denise Ferguson
Dennis Neader	Tina Clemens	J.R. Clements	Sharon Gottliebsen
Beverley McKinnon Matthews	Mark Carlin	Michael Rumbel	Susan Hodgins
Arthur Macalpine	Peter Dillon	Sue Bell	Stuart Reed
Les Fisher	Claire Kennedy	Helen Muscat	Kenny Graham
Pam Holley	Unknown (2x)		
Respondents – Form Letter 4			
Keith Parsons	Ann Hardy	Ross Edmonds	Jo Smith
Respondents – Form Letter 5			
Greg Williams	Christine Quinn	Barry Cooper	D.Boyd
Jessica Scully	Michael Parkinson	Danielle Martin	Wendy Arnold
Douglas Preston	Andrea Thomas	S.Graham	D.Forth
Rosemary Preston	Ann Giles	P.McNeil	Karen Morris
Janna Brown	T. Gillieatt	Susan Reynolds	Lynette Williams
Christine O'Mara	A.See-Kee	Katuscia Cummings	E.R.Sykes
Jacquelyn Linde	S. Dorado	Robyn Buckley	Dennise Wit
Debra Goodsir	M.Thomas	D/Moss	A.R.Dunsiae
Louise Vogl	Kevin Mills	Donna Purcell	Kate Tyson
Krystina Dron	Anne Saxton	Kim O'Donnell	Sander Heybroek
Brenda Moore	Alan Saxton	Linda Miller	G.M.Sanderson
Harry Greenwood	D.Cunningham	Aaron Saunders	Ros Mellor
Britt Awerbuch	M.Dunn	Brad Howard	A.Dunlar
Leanne McDonald	Angela Watters	Lyn Griffin	Cealy Rumbel
S.Eyre	Joan Black	Martin Murphy	Mark Wilkinson
Stephen Parsons	Terry Bourke	Gary Burrett	Becky Camer
Philip Joe	Caroline Lobsey	Leone Betts	J Williamson
Mavis Bickeita	Nicole Burg	Barbara Sin	Nicola Rosenthew
Jenny Studdent	Pam Saunders	Annette Hayward	Trevor Orchard
Lynette Farrell	Margaret Welch	Karyn Bailey	Helen Grant
Murray Pager	K.Smith	Brad Moore	Billie Stone
J&E Elliot	Fran Smith	Any Kummeling	Randel Edwards
S. Casey	Joss Kesby	Deborah Kummeling	Luke Ghant
Carol Kandlbinder	Norman White	Chris Davey	Kevin Lawrence
Joan Wells	Winchester	Sharon Williams	Valerie Lawrence
Michael Casey	J Davis	Karen Szoke	C.Dalrymple
Kathleen Edwards	W.Eastley	Robin Clark	Meredith Hughes
Tanya Skelton	T.F.Mosman	Merryn Dunn	S.Thomas
Renee Edwards	Lyn Ditz	Arron Masters	Lindsay Willoughby
R.Fishlock	Mark Delforce	G Spicer	Nikki Staadt
Glenn Rumble	M.Juvatoevitek	Aaron Jackson	Adam Sandford
Karaen Rumble	R.Wilson	C.Galbraith	V Zikos
Jean Allen	Belinda Owen	S.Trinka	Elena Morris-Britten
Dion Bailey	Kim Gogarty	Kristine Waddell	Elaine Perry
John Frew	Cherrie Spears	Julie Milburn	Sean Brown
David Rowcliff	Mary Edwards	Andre Margel	Katrin Gustafson
M.Wilkee	Wayne Todel	Jan McClelland	Kate Radford
S.Brock	Trevor Grills	Sharon Slattery	Jannike Lade
Donna Hucker	B.J.Garret	Pam Germon	Jason Clark
Tanya Price-Roy	David Grant	D.Cromanly	Greg Gordon
Jocelyn A. Douglas-Dunn	Hayden Jones	Maricen Cosc	Evelyn Bust
Roslyn Smee	Jason Franks	Dianne Charles	George Cox
Novka Waugh	Bruce Pye	Unknown (15x)	

Respondents – Form Letter 6			
JD Tickle	Ian Turner	Ruth Turner	A Gippel
Emma Tickle	Sally Turner	Simon Turner	Leonie Holmes
Edna Brooker	A Humphreys	Trevor Abbot Brooker	David Fredericks
Respondents – Form Letter 7			
Amy Hallett	Doreen Miners	Maybritt Redman	Tania Merrick
Julie Seymour	Sue Rummey	Kerry Hohol	Alexandra Berry
Jennifer Cooper	Geoff Berry	S.White	Gwendoline Lewis
Paul Owen	William Ditton	G.Linsley	Linda Todd
Catherine Rawson	Kath Ken	Jordan Rumble	Jasmine Todd
Julie Anne Redman	Lawsa Hancock	Stephen Manning	M.Nott
P J Kennedy	G. Aboody	Ann Manning	D.Saunders
Leanne Harkin	Graham Rummey	M.MacDonald	Margaret Billett
Debbie McHardie	Naomi Arrowsmith	Jason Drane	Vicky Schofield
J Markcy	Joh Call	Marie Welbourne	E Adams
Deborah Hamilton	M. Havesel	Alan Geyer	W.Fisher
A Ellis	Lawsa Hancock	Kyle Bannister	Donna Steel
C Ellis	Pauline Aboody	Heather Baldwin	Erika Perkins
Jason Mcgill	Lynette Farrell	Ron Newling	Janice Gorton
Angus Callander	Mandy Threlfell	Judy Collier	Sharon Gorton
A.deSain	Ronda Grosberud	Liz Brylynsky	Jean Jensen
Vanessa Jane Bower	Cathy Burgess	Simon Brownbridge	Debbie Godwin
B.Davy	G.Burgess	Geoff Evans	Debra Southward
Victor Cascar	Jann Ridley	Sonya Rumbel	Gary McVeish
N Saunders	Elizabeth Armstrong	Kevin Stone	Mel Ainsworth
Rosalie Howes	Deborah Hartman	Shirley Rumbel	Kylie Foletti
Chad Kummeling	Vinnie Hartman	Rich Keith	Ann Jeffries
Mary Thompson	Veronika Gudenus	Nikole Holden	Danny Woodland
Colin Taylor	Robert Smith	Mick Pritchard	T.Hudson
Unknown (7x)			
Respondents – Form Letter 8			
Belinda Haughey	Margaret Cutler	Yvonne Lawson	kathryn Cooper
Dianne Williams	S. Retallick	R Porrell	Adam Berry
Glenn Matthews	Terese Drane	K. Bargwanna	Sarah Breusch
Michelle Crowfoot	K. Ditton	Adrienne Pye	Sylvia Ray
Sean Masters	Colleen Gillin	L. Rumianek	Tony Sawick
Fiona Dawney	L.Farrell	Sally Burr	Pat Sawick
Luciano D.S Pedroso	G.Aboody	Greg Murphy	Greg de Lautour
Peter Harding	J.Hancock	Karen Waugh	M.Robertson
Craig Masters	Noleen Bulbert	V.Marshall	George Koutrourris
Holly Moore	Jess Bulbert	Donna Burrett	L.Hudson
Keirine Smith	Annette Bullen	McLeod	Ron Reid
Amy Moore	Bernard Ayrton	Adam Jones	Y Carmady
M.J. Hudson	M. McCallum	Skye Thompson	Karen Lanesbury
Stacey Byron	Natasha Flynn	T.Weels	Colin Smith
Patricia Law	Colleen Flynn	P.A.Dunn	J Kruse
Mr Bennett	Paula Morrow	Gary Wade	Scott Hopson
D. & P Doolan	Sheena Lowe	Tess Moffat	Karl Pesenow
Peter Doolan	T.Folpp	Nicole Bischoff	Robyn Lawler
P. Bell	Tania Hobbins	David Ewings	Sandra Thompson
Tyrone Roach	Jenny Fraser	S.Leary	James Thompson
Brad Bettison	Ian Ferrier	robert Pimm	Abigail Morrow
Amelia Booth	S.Graham	Barb Lambert	Judy Reading
Sharon Booth	Julie-Anne Moran	Darrell Herring	C.Rollings
Alice Landy	J.Stirling	Barry Reading	Britt Poole
Unknown (13x)			

Respondents – Form Letter 9			
Steve O'Mara	Lawsa Hancock	D.Beaver	M.Moore
Bronwyn Humphries	Hugh Griffith	Rachel Bailey	Mark Darr
Kerne Hain	Margaret Fraser	Costa Andrea	Vicki Sellens
Samantha Hogg	Vicki Davis	David Moore	Kerry McMillan
Glenn Hunter	toni Carrol	Diane Barry	Unknown
Michael John	Gail Denner	David Watt	Maureen Westley
Julie Pavlou Kirri	C.Fishlock	Amy Watson	Daphne Reper
Josie Leslie	Cokinna Gulliver	Corina Hess	Megan Pilgrim
Julie Hobson	Auzanne Ayers	Daniel Bashford	Jason Elsley
Madelin Fisher	Kim Hinton	M.Chapman	Mary McPhillips
Neville Williams	Caren Landsieder	Myrre Cox	L.McVeigh
Margaret Williams	Elizabeth Cooper	Rhiannon Noltorp	Ken Hill
Denise Daunt	Amy Shepherd	Ben Sippel	Carolyn Zietsch
Anne Higgins	E. Joe Muddle	Scott Middlebrook	Lesley Greenwood
Jo Duran	D.Gillin	Tom Bailey	Ted Zietsch
Henk Kummeling	Mark Bullen	Marie Bailey	Harvey Mitchell
Daniel Ramadge	Kathleen Cole	Ingrid Smith	Mary Talbet
Victoria Sturman	Jodie Cunningham	Loo Boothroyd	Mary Woolley
Jason McGuigan	Jaclyn Mobbs	Ben Johnston	Guss Viera
R Richard	A.Shortland	Michele Ashford	Michael Jarvis
Dallas Gradwell	Ron Watt	John Shepherd	A Jones
Mary Carr	Keith Parsons	John Smith	M McPhee
Kellie Gradwell	Chris Bentley	Paul Middlebrook	Barbara Fisher
Craig Wills	Mary Nerrs?	Matthew Smith	C.Hunter
Louise Wills	Cathy Forbes	Kevin Stone	Cheryl Mayo
Lorna Page	Sonya McDonald	Linda Ritchard	Peter Gummon
Paula Cole	Helen Train	Bruvel	Ian Fowler
Wendy Peacock	Natasha Flynn	Meghann Smith	Patt Bush
Daryl Peacock	C.Flynn	Unknown	D.Payne
Lynette Farrell	Aaron Bischoff	Mathew Wilkinson	James Moore
P.Aboody	Mark Rossita	J Quinn	Jeanette Evans
Unknown (7x)			

Respondents – Form Letter 10			
Sarah Slattery	Carrie Jacabi	Barbarra A. Rees	Cheryl Mayo
Ann Slattery	I.Simpson	Ross Billett	Todd Caban
Matt Bendall	Marin Babakhan	Michael Foot	Dianne Smith
J Quinn	Gennice Davies	Colleen Gillin	Christine Goldsmith
Veronica Caban	Paula Morrow	D.Lewis	John Olsen
Angela Phillips	Abigail Morrow	Brian Frost	Christine Hunter
Leanne Hoy	J.Field	H.Waugh	Kelly Heaney
Phil Maher	Gillian Jetson	George Fortune	Garry Heaney
Jessica Allan	S.M.MacCallum	L.Bye	G.Rummey
Lynne Jackson	Joan Dawson	D.Watson	John Olsen
Ian Fowler	J.Frew	Pauline Middleroobk	Teny Barton
Jack Downey	Brian Baldwin	Gay Edwards	Andrew Brien
Lindsay Evans	Kay Oliver	Wilma Stone	James Norman
Meighan Husband	Peggy Schubert	Geoff Moore	Glenn Newl
Michael Nievwenhuise	Peter Oliver	Lesley Darr	Christine Harvey
Judith Oliver	Caroline Holdom	Cecily Rumbel	Michael Halliday
D.Matthew	Rebecca Gilmour	Wilkinson	Geoff Tomlinson
R.Matthew	Rogger Billett	Colleen Keith	Brent Failns
Andrew Swanson	G.F. Hind	Garry Middlebrook	John Ellis
Bernard Ayrton	Graeme Fraser	R.Jeffries	Lyn Norman
G.Sprinks	Russell Merrick	Wayne Perry	Ian Norman
L.Howell	Rebecca Young	H.Townsend	Kit Fotune
Jane Watson	J.G.Philp	Kim Hopkirk	Elizabeth Howard
Michael McCallum	Unknown (4x)		

Respondents – Form Letter 11			
Wendy Butterworth	Julie Sheppard	Yvonne Bradley	Thomas Boyle
Bronwyn Humphries	Mal Anderson	Jessica Parkinson	Dylan Jones
K Dron	Andrew Clarke	Katrina Kay	Jesse Gollan
Jennifer Cooper	Ian Tanner	Benjamin Pettit	Dina Arabelovic
K Hain	Jullian Knoblauch	Suzanne Pettit	Jennifer Worthing
Dianne Williams	William Vorobroff	Jill Taylor	Kathleen Silvey
Jaime Holloway	Shannon Hartigan	Loreto Gray	Narelle Parkinson
Michelle Crowfoot	Candice Rogers	Meryl Talty	Mark Parkinson
Angela Lawrence	Sarah Prager	Carolyn Perry	Karen Webb
Glenn Matthews	Philip Oken	Greg Innes	Renee Livingstone
Samantha Hogg	Terry Boylan	Patricia Keating	Bill Livingstone
Wendy Butterworth	Hayley McFetridge	Kerry Small + Peter Wolfe	Julie Brooks
Jeanette Poppewell	Eleanor Olsen	Kate Meares	L. Laird
Geneve Cox	Mary Rogers	Karen Drury	Carol Silvey
Callum Coghlan	Greg Rogers	The Wilderness Society Postcard (1530x)	
Respondents – Form Letter 12			
David Smith	Warwick Thomas	Jane Hunter	Alan Saxton
Graeme Bennett	Philippa Ditton-Phare	Phillip Levy	Jennifer Chant
Sunniva Boulton			
Respondents – Form Letter 13			
Alan Glover	W.G. Thomas	Mal Anderson	Susanne Skates
Leonard Burgess			