23 November 2009

The Director Major Infrastructure Assessment
Department of Planning
PO Box 39
SYDNEY NSW 2001

At: Ms Anna Scott
Submission on Tillegra Dam EAR Application No 07_0156

Dear Ms Scott

DUNGOG SHIRE COUNCIL SUBMISSION ON THE ENVIRONMENTAL ASSESSMENT REPORT FOR THE TILLEGRA DAM

This response has been prepared by Council Staff in consultation with Councillors and the community. It provides comment on the proposed construction of Tillegra Dam, an assessment of the adequacy of the Environmental Assessment Report (EAR) and a set of conditions that Council requests be applied to the project, should the dam proceed.

As stated in our previous response to the adequacy review, Dungog Shire Council has limited staff resources to provide detailed commentary on all aspects of the EAR. This assessment concentrates primarily on the areas that directly affect our community, in particular, the Social and Economic and the Roads and Other Infrastructure Assessments. A brief commentary is provided in a number of areas; however Council has relied on submissions by State Authorities and others to provide a technical and detailed response on the EAR in many aspects of the project. Dungog Shire Council’s comment on individual areas of the EAR is provided as Annexure 1 to this correspondence.

Our submission in brief is that Council has found, despite ours and other’s concerns being expressed at the adequacy review stage, the EAR has been re-presented with only minor changes. As provided it still fails to address the DGRs in many areas. Of major concern is the inadequate assessment of this projects impact on our community and Council’s infrastructure. Other areas of concern relate to the lack of information available and the failure to apply the precautionary principle in assessing areas of the project including; the geology, fluvial geomorphology, project justification and ecology. The EAR also fails to provide specific commitments by HWC to mitigate the impacts in many of the aforementioned aspects of the project.

Council requests that all the issues raised in this correspondence are addressed prior to further assessment by the Department and that once the assessment process is complete, this matter be finally determined by the NSW Government. If the dam is to be approved Council requests that the Statement of Commitments include the conditions provided as Annexure 2 to this correspondence. If the dam is not approved, the option of a dam on the Williams River in future must be finally ruled out by the NSW Government. If the dam is not
to proceed, an appropriate Plan of Management for the withdrawal of this project and financial assistance program must be developed in consultation with all stakeholders.

This submission on the EAR should also be considered in light of the Council's resolution at it's October 2009 meeting to not support the proposed Tillegra Dam project. This resolution was based on a majority of Councillors' view that the EAR as provided by the Hunter Water Corporation (HWC) had failed to adequately assess and compensate for the social and economic impacts on our community and infrastructure. The resolution also called on the NSW Government and HWC to address specific inadequacies in the EAR and commit to an Upper House Inquiry into the need for the dam. A copy of this resolution is provided as Annexure 3 to this correspondence.

Council thanks Planning NSW and HWC for their assistance in the assessment process todate and for the opportunity to provide comment on the Tillegra Dam proposal. Council asks that this submission is given the Departments full consideration and advises that Council staff are available to discuss any of the matters raised once all submissions are considered by the Department and HWC. In the interim should you require clarification on any of the issues raised in this correspondence please contact me on 4995 7777.

Yours faithfully

Craig Deasey
GENERAL MANAGER
ANNEXURE 1

DUNGOG SHIRE COUNCIL COMMENT ON THE TILLEGRA DAM ENVIRONMENTAL ASSESSMENT REPORT (EAR)

The following comment is provided within general headings but not in the order as presented in the EAR.

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SOCIO-ECONOMIC ASSESSMENT

Council's concerns on the Socio-Economic Assessment in this area were raised at the adequacy review stage and have still not been addressed.

The general response to this area of the EAR is that it fails to adequately consider the impacts on our community in the social and economic areas and also fails to provide adequate mitigation for what will be significant impacts. The modeling that was originally proposed and adopted in the first draft of this report by Hunter Water Corporation (HWC) focused on regional impacts and used the Cost Effectiveness Analysis (CEA) model to weigh the cost and benefits when assessing the dam and its various alternatives.

Despite the Director Generals Requirements (DGRs) that HWC consider the broader costs of the project and the inadequacy of the CEA approach being previously identified by the community and Council, the EAR continues to pay scant regard to the local impacts. Council refers to the work of Dr Geoff Wells for the No Tillegra Dam Group “Technical Comments on the Socio-Economic Assessment undertaken by Hunter Water Corporation and Aurecon for the Tillegra Dam Planning and Assessment Report” Nov 2009. and notes that the CSIRO have supported Dr Wells's assessment.

In response to the failure of the EAR to address this issue Council resolved at the October 2009 meeting, in part, to specifically request that the State Government and HWC provide.

1. (c) A comprehensive analysis of the social, environmental and economic costs, both positive and negative, associated with the Tillegra Dam utilising current best practice as contained in the Millennium Ecosystem Assessment and Benefit Cost Analysis approaches for evaluation and reporting.

In Addition to the above, the inadequacy of the current assessment is highlighted in that the EAR specifically omitted or failed to adequately address:

- The increased demand on limited housing resources caused by the increase work force in the construction phase. The EAR states that there will be no significant increases in demand for local accommodation however; HWC has previously advised that many aspects of the project management will remain the role of the appointed contractor. If left to the eventual contractor, preference could be skewed towards encouraging people to reside in the area as opposed to commuting a considerable distance on a currently dangerous road. Given the length of the construction time if even a small percentage of the workforce elects to reside in the Dungog community, the increased pressure will be significant on an already very tight rental and tourist accommodation market. This demand will be further increased by the loss of housing (50-60 residences) in the inundation area and additional demand related to other large projects in the Shire.

- Impact on local businesses in the labour market area and in competition for services and local contractor resources.
• The impact on local economy caused by the removal of businesses and residents from within the inundation area. It has been estimated that the loss to the local economy could be as much as $6.5 million per year. The EAR continues to underestimate this impact by looking at farm income rather than economic turnover. The employment and expenditure generated by current and future activity in this area and its importance to the local economy has been significantly underestimated.

• The loss of rates, future dwellings and future Sec 94 contributions to Council by removing HWC properties in and around the inundation area will increase rate burden on remaining residents and impact on future infrastructure improvement in the Shire. The rate loss in particular will effectively increase individual rates across the LGA by approximately 2% yet HWC have proposed to meet this loss for three years only.

• The impact on the social fabric and local services caused by this project, firstly through the removal of residents within the inundation area and secondly through the construction and operation phases of the project. The proposal has already had a major impact on social cohesion and community structure. The report fails to address these issues or address the local social equity, socio economic groups, social displacement, workers interaction with the existing community, change management and the disadvantaged. These are all important socio economic considerations that are often required with smaller local development applications but are not considered in this major project. HWC have made an initial commitment to the Dungog Information and Neighbourhood Service (DiNS), this and other commitments need to be maintained and increased.

• There will be increased demand on available medical resources firstly in the construction phase by a large workforce and throughout the dam's operational life by people visiting the area, particularly the older demographic and recreational users. The social impact assessment makes no detailed recommendations in this regard. This shortfall would not be addressed through any future section 94 allocation; therefore provision for medical services should be addressed in the EAR and reflected in the Statement of Commitments (SOC).

• There are a number of significant projects that will run concurrently with the dam construction, that have not been identified in the EAR. The additional impacts of these projects should be factored into any social impact assessment for the dam. The major projects (not including ongoing work by other large operators such as ARTC & Country Energy) are:
  a. The AGL Gloucester to Hexham gas pipeline, a $200 million project that will require a workforce of around 200 to be located in the Shire to the east of Clarence Town.
  b. The Transgrid 132kv transmission line from Stroud to Tomago, a $55 million project through the length of the Shire.
  c. The construction by HWC of 30 Megalitre Clear Water Tank/s in Wade Street Dungog

The town of Dungog which will be the most immediately affected part of our Shire is a small community with a population of just over 2500 people and with already limited and under resourced infrastructure. A project of this size ($470,000,000 over four years) will have significant impacts on our community and increase the pressure on available resources. These impacts need to be assessed thoroughly and adequate mitigation identified within the SOC.
ROADS AND OTHER INFRASTRUCTURE

HWC have not carried out as required in the DGRs, a comprehensive Traffic Impact Assessment in relation to the construction phase or provided an assessment of the effects on roads and other public infrastructure as a flow on from public utilisation of the dam as a recreational resource.

The information provided in relation to the local and regional road and bridge network is drawn from existing and sometimes inappropriate or dated studies that fail to provide a true assessment of its current poor condition. In addition the EAR underestimates the full extent of increased traffic in the construction phase. As a consequence the EAR underestimates the contribution to road and infrastructure that will be required to support this project should it proceed and the ongoing support that will be required when operational.

The previously referred to Council resolution at the October 2009 meeting, in part, specifically refers to the inadequacy of the EAR in this area. A copy of this resolution is provided as Annexure 3 to this correspondence.

Other inaccuracies or omissions in the report include:

- The assessment fails to differentiate between the various classes of heavy vehicle currently using the road network when considering the level of increase in heavy vehicle movements during the dam and road construction phase.

- In particular 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).

- Traffic count data in Table 2 of this section of the EAR is estimated at 500 AADT whereas actual counts vary from 1157 North of Dungog to 618 South of Salisbury Road

- Structural details provided for Wallarobba Creek, Wallaroo Creek and Myall Creek bridges and the Rail Bridge on Main road 301 are incorrect

- Tabbil Creek Bridge is listed as being on Main Road 301 but is on Main Road 101 and the LG Clements Bridge South of Paterson is not referred to in the report

- The report underestimates the amount of material and traffic movements for the road and dam construction and proposes B Double transport (not permitted beyond Wordens Road on Main Road 301)

- The report nominates an overall 10-20% increase on sections of the route where Council estimates that on some local roads this increase could be as high as 60-70% with an increase of 150% in Class 3 vehicles on Salisbury Road.

- The report fails to address the hazard caused generally by the increase in heavy vehicle movements and the hazard to pedestrian safety with the main route passing a number of schools and sporting facilities within both Clarence Town and Dungog.

- The report fails to recognise the lost opportunity cost with the proposed inundation of Quartpot Bridge. This bridge was built in 2004 on HWCs advice that a dam would not be built in the next 20 years and could have been located in another area. Council is still meeting substantial loan borrowings for this bridge.

As with the socio-economic assessment, the report on Councils roads and infrastructure fails to adequately identify the impacts of this project at a local level and in addition contains many errors and omissions. As a consequence the Statement of Commitments (SOC) within the EAR does not include adequate compensation or mitigate against significant impacts that will be detrimental for many years.
If the project is to proceed additional assessment will be required and significant specific commitments made in this area.

**GEOLOGY**

With regard to the geology of the proposed dam structure and storage rim stability, Council draws the Department attention to issues raised in the independent report, completed for the NTDG “Submission on the Geology of the Tillegra Dam Site and Storage” G E Holt & Associates 2009.

In this report Mr Holt advises that the data provided in the EAR is at the concept level and that there is conflicting historical opinion on the complexity of the geology in this area. The report proposes that all available geology and completed studies should be made available to allow community and peer review.

The geology available also fails to confirm the suitability of material for various uses proposed in the dam construction, particularly road construction. If these materials don’t meet the required standards, haulage from alternative sites will significantly increase impacts on the local road network.

The complexity of the geology in the dam area raises concerns in relation to community safety and the final cost of this project. Given the conflicting expert opinion in relation to the dam site geology, these matters should be resolved prior to the project progressing further in the assessment and approval process.

**FLUVIAL GEOMORPHOLOGY**

The effects of major dam construction on fluvial geomorphic processes are significant complex and hard to accurately predict. The report provided in the EAR fails to consider potential impacts or provide adequate mitigation in a number of areas.

In particular the report fails to address:

Upstream of the dam:
- The impact on the river and its ecology through the formation of deltas. These will form and progress upstream from the dam perimeter
- The potential for increased erosion where streams enter the dam as the water level varies over time and vegetation is lost below the maximum.

Within the dam storage area
- Foreshore erosion was assessed at the 96% level only
- Increased erosion and the potential to create retreating cut points and channel lowering in the dams tributaries.
- The impact of erosion on slope stability of slopes above the dam and the dam rim.
- Foreshore erosion should be assessed in relation to potential recreational activities such as power boating.

Below the dam
- The changed flow pattern, the removal of coarse sediment from stream flows and the potential to change geomorphic processes for the full extent of the river below the dam wall.
• The cumulative effect caused by barriers at both the Chichester and proposed Tillegra Dams sites and the separation of the catchment from the high energy areas of the river
• The report relies on predominantly alluvial sediments from the lower energy area of the river and tributaries to replace coarse sediments.
• The potential extent of bed lowering along the river due to sediment loss.
• The impact of a bed lowering in the river on its tributaries
• The impact of bed lowering and changed stream flows patterns on riparian vegetation
• The impact of bed lowering and changed stream flow patterns on seasonal and ephemeral wetlands.
• The impact on the vegetation and ecology in the weir pool.
• The impact of sediments in the weir pool as a result of increased scouring upstream

Considering the scale of this project and its potential to affect the full extent of the Williams River, its tributaries, ecology and the local community, the abovementioned issues should be addressed and considered in the assessment stage. It’s not appropriate to propose that impacts will be monitored and addressed after the dam is built. The precautionary principle should be applied.

TERRESTIAL AND AQUATIC ECOLOGY

Council’s expectation is that the Fluvial Geomorphology and Ecology assessments in the EAR will be subject to detailed commentary by the Department of Environment, Climate Change and Water, the Hunter Central Rivers Catchment Management Authority, the Commonwealth Department of the Environment, Water, Heritage and the Arts and other independent authorities.

Within this area Council welcomes and acknowledges the commitment by HWC to the creation of a substantial corridor around the dam. This is a significant link between habitat areas to the north and south of the dam area, however it must be seen in the context that this project will impact on the ecology throughout the whole catchment and at many levels.

The following comments are provided where the EAR has identified but not adequately addressed a number of these impacts.

The extent and significance of the changes to the stream bed and its impact on both in stream ecology and the riparian corridor are not recognised or adequately weighted in the EAR.

The downstream modification in the river channel, the loss of coarse sediments and changed flow patterns will:
• Impact directly on benthic species, particularly the macro invertebrates which in turn will affect all aquatic species within the system.
• Significantly change riparian vegetation and bank stability. A deeper channel will lead to bank collapse and as disturbed areas are opened up, there will be a change in riparian species and an increase in weeds.
• A lower stream bed and changed flow patterns will impact on the ecology of seasonal wetlands and tributaries downstream of the dam.
Barrier to species migration

- The dam wall will significantly alter the ecology of the river and stop or restrict species migration within the river and along the riparian corridor. HWC propose not to build a fish ladder and changing dam levels will limit the natural replacement of the riparian corridor around the perimeter.

Environmental Protection and Biodiversity Conservation

- The potential impact on the Kooragang Wetland from the diversion of up to 60 gigalitres /annum from the Hunter River estuary has not been fully considered. The proximity of the Williams River to the coast and the orographic influence of the Barrington Ranges provides for a unique dynamic between the two rivers. The contribution of the Williams during extended periods of drought in the Upper Hunter appears to be underestimated.

Current condition of the Williams River

- The EAR understates the condition of the Williams River, particularly between the proposed dam and the Seaham Weirpool and fails to recognise much of the previous work and direction by Council, the HCRCMA, DECC, landholders and the community to improve the river and riparian corridor. Work over many years includes; the construction of fish ladders, bank armoring and stabilisation, woody debris projects, weed control, improved farm management practices and replanting riparian vegetation.

JUSTIFICATION FOR THE PROJECT

The justification for the project has been a contentious issue from the outset and the EAR has not adequately addressed many of the concerns previously raised or those required in the DGRs.

The EAR needs to provide a reassessment of the various options using the BCA model, taking into account all costs for each option including the environmental, social and economic. These options, an assessment of future demand and a clear supply strategy should then be the subject of community consultation and review by an independent panel of experts and/or subject to an Upper House Review. Currently the community and future HWC customers are provided with HWC construction and operation costs to consider when weighing the options and much of the data provided in relation to future demand and supply in the EAR is arguable.

Council again refers to its resolution of October 20 and the work of Dr Geoff Wells for the No Tillegra Dam Group "Technical Comments on the Socio-Economic Assessment undertaken by Hunter Water Corporation and Aurecon for the Tillegra Dam Planning and Assessment Report" Nov 2009.

INTEGRATED LAND USE PLAN (ILUP)

The ILUP provided in the EAR is a management tool for HWC and is too subjective and ambiguous to provide certainty and clarity for the community. The ILUP states a range of recommended actions; however these are vague and do not provide a mechanism for implementation. Actions and commitments need to be definitive and consolidated into the SOC.

The ILUP examines the specific precincts but does not draw a clear link between land use and water activities. This is an important aspect that requires further detailed assessment and the provision of a full water recreational use study.
To be effective the ILUP needs to be regularly reviewed by HWC in consultation with all stakeholders throughout the life of the project.

**MUNNI HOUSE**

The EAR proposes relocating Munni House at an estimated value of $2 Million. The heritage significance of the building is recognised, however it is questionable, based on Council's interaction with the community, whether this cost provides the optimum outcome.

At a similar cost a new, more practical and functional centre could be established that includes the salvaged elements of Munni House, other Aboriginal and European heritage items from the area and an interpretive centre in a new building. This building may be better located in Dungog, be operated in place of the existing Visitor Information Centre in Dowling Street and accommodate other services such as tourist information and facilities.

A more central location would allow visitors to gather information on all attractions in the area, including Chichester Dam before proceeding out to the Tillegra Dam site. The Tillegra Dam site below the wall could be operated as an unmanned camping, parking and viewing area with interpretive signage.

This option also has the benefit of providing a building that complies with the modern Building Code of Australia requirements i.e. fire safety and disabled access. Having to retrofit these components to Munni House would detract from the heritage significance and authenticity of the building. This alternative should be discussed further with potential stakeholders and amended in the SOC accordingly.

**RELOCATION OF QUARTPOT CEMETERY**

Council commends HWC on their staff, member of the Cemetery Committee and the community involved for the work done in relation to the possible relocation of the Quartpot Cemetery.

This issue will require an ongoing commitment and cooperation from all parties should the dam proceed. It will also require a specific commitment by HWC to resource counseling services for relatives and to provide information on the relocation, exhumation and administration process.

**MANAGEMENT AND MONITORING DURING AND POST CONSTRUCTION**

The EAR proposes that a number of Management Plans be developed in relation to the construction and post construction phases of the project. These plans should be made available for comment from the various stakeholders prior to adoption.

With regard to environmental issues including; noise, vibration, erosion and sediment control and road transport, a single contact must be nominated by the major contractor to manage compliance, respond to complaints and liaise with the community. Monitoring and compliance in relation to construction environmental management plans should be carried out by the Environmental Protection Authority (EPA) Staff of the Department of Environment, Climate Change and Water (DECCW).

Compliance in relation to Terrestrial and Aquatic Ecology and the monitoring of impacts, conditions of approval and commitments during and after construction should be carried out by DECCW and audited on a regular basis by an independent assessor. Audits should be available to all stakeholders with a single contact nominated by HWC to manage compliance, respond to complaints and liaise with the community.

The EAR proposes a Waste Management Plan to outline processes and commitments in relation to resource recovery and waste management in the construction phase and within...
the inundation area. This plan should include strict standards to require waste minimisation, reuse and resource recovery and be developed in consultation with DECCW and relevant staff from Dungog Shire Council.

If approved the SOC must include specific HWC commitments in the abovementioned areas.
ANNEXURE 2

RECOMMENDATIONS FOR INCLUSION IN THE STATEMENT OF COMMITMENTS (SOC)

The following are provided as a guide to commitments that Dungog Shire Council requests be included (but not limited to) in the SOC in the event that the Tillegra Dam is approved.

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ADMINISTRATIVE CONDITIONS

Ongoing Contribution to Land Use Planning Review

1 - Commitment - That HWC provide a contribution of $50 000 to Dungog Shire Council on a 5 yearly basis to complete a review of the land use planning framework around the proposed dam.

Reason - To ensure the developer driven changes are adequately and routinely reviewed. This will continue to ensure the best environmental and social outcomes are achieved.

Discussion: The subject area is being developed from a relatively static rural area to a highly dynamic water supply and tourist precinct. Such transformation brings new challenges in regards to land use planning. HWC have already made an important contribution towards the development of the Situation Analysis (SA) and Land Use Strategy (LUS) pivotal documents as Council works towards its Standard Instrument Local Environmental Plan. However, the Tillegra Dam environs will require continual monitoring and review. This is reflected in the HWC submission to the LUS where further modifications to the LUS are requested in the short term. These revisions are needed due to the dynamic nature of the EAR. Originally the EAR was proposed to be complete prior to the LUS being complete. Prior to construction there will be a number of changes to the proposal that will need to be reflected in the LUS. Therefore a strategic land use plan review of the Tillegra Catchment will be required on a 5 yearly basis at a currently estimated cost of $50 000, with the first review due prior to construction. It is an unreasonable expectation for the local Council to be burdened with this ongoing cost of review when the project has been initiated by the HWC. The ongoing cost of completing a land use plan for the Tillegra Catchment for the lifespan of the Dam should be worn by the Applicant/State Government.

Once off contribution to Tourism Development Control Plan

2 - Commitment - That HWC provide $20,000 for the review of the Dungog Shire Council Tourism Development Control Plan

Reason - To ensure recreation related uses around the proposed dam are strategically managed via a DCP.

Discussions - The proposed Tillegra Dam will have a pronounced impact on local leisure, recreation and tourism. This is supported by the Situation Analysis (SA) chapter - Jenny Rand Tourism Report.

The current DCP that governs tourist related development requires detailed review. The document is inadequate for the current development pressure experienced, however when Tillegra Dam construction is complete, a contemporary and innovate DCP for tourist development is required. This will have a favorable outcome for HWC also as positive development and design outcomes can be achieved around the Dam environs with the assistance of a new Tourist DCP. It is estimated the existing Tourist DCP can be comprehensively reviewed and updated for $20 000. Due to the direct influence Tillegra has...
on the tourist market and the need for the land use to be effectively managed (in further
detail to the Land Use Strategy), this contribution is deemed appropriate.

**Environmental Planning and Assessment Act Section 94 Contribution**

3 – Commitment – That HWC provide a Sec 94 A contribution of 2% of the total project
value.

**Reason** - Section 94 or S94A of the Environmental Planning and Assessment Act 1979,
enables local councils or other consent authorities to levy contributions for public amenities
and services required as a consequence of development. Developer contributions are
essential in maintaining access to the facilities and services that support the high quality of
life that residents of Dungog Shire Council enjoy. If a contribution is not levied this quality of
life and ability to access services and facilities will be reduced. The above rates are divided
in accordance with Council's current section 94 Plan.

**Discussion** - Dungog Shire Council's Developer Contributions Plan No 1 - 2004, stipulates a
section 94 transport and economic study is required for transport dependent developments.
The EAR does not include such a report and the Applicant has made no attempt to propose
any reasonable section 94 contributions in accordance with the existing section 94 plan.
Local developments are required to pay section 94; therefore in the interest of community
equity, major projects should also. This is particularly the case given the impacts of the
proposal and a comprehensive s94 contribution is viewed as essential by DSC.

In the absence of the required s94 transport and economic study, it is recommended the
Minister impose a section94A levy on the development. The Minister has the discretion to
impose a section 94A levy, in excess of 1% on the notice of determination. This has been the
case in other special interest areas, for example the Newcastle City Centre at 3% and
Gosford Growth precinct is even higher at 4%. It is suggested the significance and scale of
Tillegra warrants a section 94A levy to be imposed, higher than 1% being 2% of the total
project value. Based on an estimated project value of $470 Million this equates to a total
contribution of $9 400 000. These contributions are over and above requirements as part of
the DA conditions.

Based on the impacts to the Community and Council, the loss of the productive agricultural
capacity of the land and the ongoing burden to the community, this approach of a 2%
contribution is most strongly recommended and clearly justifiable. This money should be paid
over a 10 year period and distributed within the community services/facilities in accordance
with Council's existing developer contributions plan.

Specific projects within each category can either be allocated by Dungog Shire Council or a
community committee.

Utilising the rates from the community and Council adopted section 94 provides an approach
back by studies and justifiable. Refer to the table below;
The above contributions are not suitable to be provided as 'in kind'. This is typically due to the resource restrictions they directly place on DSC.

This level of contribution is required due to the infrastructure needs of the development including both the construction impacts and in particular the ongoing tourism related uses. The Jenny Rand Report states that large water storage dams with quality recreational facilities and a range of accommodation are important recreational and tourism assets for their local areas and can attract upwards of 20,000 visitors per annum. The report suggests that Tillegra will attract a higher visitation than this due to the proposed dam's competitive advantage including:

- **Tillegra will be the closest large, recreational freshwater body to the major population centres (Sydney, Central Coast and Lower Hunter).**

- **Proximity to Dungog (12km) with potential to access the Dam by public transport.**

- **Proximity to the Barrington Ranges / Barrington Tops National Park. This is an iconic attraction with a very high level of market-place recognition and attracts over 700,000 visitors per annum.**

- **Beautiful setting for the Dam - with scenery being one of the key attributes of Dungog Shire and one of the main reasons that people visit the Shire.**

- **The Dam is to be operated at 90% capacity and is not expected to experience the significant water level fluctuations that impact on other large water storage dams in the Hunter and inland NSW.**

For the reasons mentioned above, section 94 is fundamental to ensure the infrastructure is supported proportionally to the high level of tourism usage the dam will experience. These tourists will have direct impact on the services and facilities in the LGA. The whole approach...
to consider only construction and not the operational phase of the active recreational water body is both unrealistic and inequitable.

In the absence of a section 94 contribution as cited, the perceived socio-economic benefits to the local community and region as mentioned in the EAR will not be realised. Tourism cannot be marketed to the community, yet the Applicant makes no commitment towards section 94 or infrastructure to meet such demand.

It is most strongly recommended by Dungog Shire Council that a 2% section 94A levy be imposed on the development equating to a total contribution of 9.4 million dollars.

**Integrated Land Use Plan**

4 – Commitment - In the instances where the ILUP uses terminology such as ‘investigate’ or ‘consider’ or ‘subject to’, these commitments are to be clarified by the Applicant and included in the SOC.

**Reason** - To ensure the commitments alluded to in the ILUP are actually delivered for the community

**SPECIFIC CONDITIONS**

**Road Upgrading**

5 – Commitment - In accordance with the Dungog Shire Council Route Access Study the Applicant must contribute (HWC and/or the State Government) $2,000,000 pa for a period of five years (CPI indexed) of funding towards roads upgrading as referenced in the study.

6 – Commitment - The road network north of the Dungog township to the proposed dam is to be upgraded to the current RTA standards.

7 – Commitment - That Hunter Water Corporation be responsible for continuing road maintenance from Chichester Dam road through to the end of the Council maintained section of Salisbury road throughout the life of the construction project.

8 – Commitment - That prior to commencement of construction a road dilapidation report is undertaken from Raymond Terrace through to the Dam construction site.

9 – Commitment - That prior to commencement a bridge condition assessment be undertaken on all bridge structures associated with the nominated travel route.

10 – Commitment - That Hunter Water Corporation fund 50% of the cost of replacement of Unwarrabin Creek Bridge and Wallaroo Creek Bridge.

11 – Commitment - That Council be compensated for the loss of three concrete bridges that have been constructed within the inundation area.

12 – Commitment - That Hunter Water be required to undertake road safety improvements at the Hooke Street, Chichester Dam & Common Road intersections to improve line of sight, enhance pedestrian safety and to minimise conflict with current road users.

13 – Commitment - That the construction of all new roads meets RTA standards for road design and construction and are consistent with Councils rural roads policy.
Reason - To ensure that roads and bridges meet the appropriate standard for construction and post construction users and to ensure road safety.

Discussion - The road condition in the EAR is identified as mostly poor, yet no firm commitment is made to road upgrades. The EAR does not adequately assess traffic implications for the life of the project and the contribution/construction as mentioned above will ensure the development is serviced appropriately.

Hunter Water has not undertaken a traffic impact assessment; the figures as regards heavy vehicle movements greater than Class 3 vehicles are understated with Council estimating that at a minimum there will be a 150% increase in heavy vehicle movements North of Dungog. Aside from the construction of the Dam wall a new road to replace Salisbury road has to be undertaken there will be significant construction vehicle movements within the inundation area and could result in damage to the road beyond the actual wall construction site.

With regard specifically to commitment 7 it is not financially practicable for the Council to maintain the last 13.5 km of road beyond the tie-in point of the new Salisbury Road as there are no sealed road links beyond Salisbury Road.

Cycle way Link

14 - Commitment - The development is to provide for a pedestrian and cycle way link between Dungog and the proposed dam.

Reason - To adequately service the development in regards to the ongoing tourist usage and to promote active and healthy communities.

Discussion - The dam will be a considerable attraction to cyclists and pedestrians users therefore connectivity with the main township of Dungog needs to be established. Such an approach is supported by the aims and research in the recently published 'Building Livable Communities in the Hunter Region'. The cycle way should be well defined and separate from the road verge to ensure traffic/user safety. Although, the Applicant's primary focus is constructing a water storage dam, a commitment in the EAR exists for recreation hence the facilities need to be constructed accordingly.

Landscaping

15 - Commitment - Landscape buffer should be planted and maintained for the length of the existing Salisbury road from Myall Creek Road back to the Chichester Dam Road. The buffer should be landscaped with appropriate plantings (at least 3 rows of semi mature species to create a tree lined avenue) to mark the entranceway to the environmental and recreational setting of the Tillegra district.

Reason - As recommended in the DSC Land Use Strategy and to create visual interest, screen properties on the approach to the water body and provide a sense of place.

Discussion - Due to the scale of the project the landscaping detail has not been paid particular attention or expansive detail. It is acknowledged that the environmental corridor will be created via HWC's commitment to planting 1 million trees. Such a prominent landscaped entry will contribute to maintaining the rural amenity and creating a sense of place. This was a recommendation of the LUS and needs to be reflected in the SOC. Other specific ancillary landscaped areas can be addressed when subsequent development applications are submitted.
Water Users Recreational Study

16 - Commitment - A detailed water users recreational study must be prepared and implemented in consultation with relevant authorities and stakeholders.

Reason - To ensure a study will manage the complex competing interest of the recreational water users.

Discussion - This will confirm what uses should be in what areas with appropriate segregation, buffers and the relationship with adjacent land uses. The current scenario of using broad icons in the ILUS and HWC stating it will be at the discretion of the community has no strategic merit. If HWC are committed to recreation uses for the community then a study should be commissioned to ensure such uses are coordinated and orderly. This has been raised through the LUS public meeting and written submissions.

Visitor Information Centre (VIC)

17 – Commitment- That HWC contribute half of the VIC operating costs which equates to approx $80 000 per annum.

Reason - To provide resources to cater for the increased usage of the VIC as a direct result of the Tillegra proposal.

Discussion - As the section 94 plan makes no provision for a contribution to the VIC, the Applicant or NSW Government should provide an additional contribution. There is a clear nexus between the committed recreational uses on the dam and the usage of the VIC. The VIC is significantly under resourced and relies on volunteer contributions to function. Based upon the figures in the Jenny Rand Tourism report and existing National Parks and Wildlife data, once complete, recreation use on the dam and the ancillary tourist uses could at least double the usage of the VIC. This contribution needs to be made to assist in the resourcing of this important community resource particularly where the evidence suggest the proposed development will have a major impact both initially and from a cumulative perspective.

Emergency Services

18 – Commitment – That HWC and the State Government make an additional and ongoing resource commitment to the Dungog area emergency services.

Reason - To provide emergency services to protect and enhance community safety.

Discussion - The demand for emergency services will greatly increase as a result of the proposal. During construction the work force will require medical treatment from time to time. Further, given the nature of the recreation activities in and around the dam there will be an increase in local health and emergency services in Dungog. The power boat users, mountain bikers etc are all a real possibility to require emergency services from Dungog. Therefore, any proposal should provide funds towards local emergency services. This is not provided for in the section 94 fee breakdown. The proposed activities on the dam are such that in particular an increased police presence is required. The fact that significant volumes of people are being concentrated in one area and the associated activities – speed boats, camping & alcohol requires increased full time Police, NSW Maritime, State Emergency, Rural Fire and Ambulance Services.
Visitor Facility/Wayside Stop/Open Space/Parking/Public Toilet Facilities

19 – Commitment - That HWC commit $105,000 to the provision of visitor facilities in Dungog

Reason - To provide adequate facilities for people travelling to and from the proposal.

Discussion - As a result of the increased visitation to the Dungog Township, as tourists pass through on their way to recreate at Tillegra, there is definitely a need for a large, integrated visitor facility. This should include toilet facilities, large vehicle and trailer parking, visitor information facilities and picnic facilities. A second effluent dump point can also be located here.

The Dungog LUS identifies land suitable for this purpose being flood prone land on the corner of Hooke and Lord Streets, Dungog. This land is identified as a suitable central and focal park for visitors and tourists alike. The land is currently under private ownership and requires acquisition. A recent valuation valued the land at $105,000. The embellishments and services can be partially constructed from the section 94A levy parkland ledger; however it is suggested the acquisition costs be incurred by HWC. This is particularly relevant as this is an existing need in the community for this facility and the proposed development will dramatically increase such need.

Alternatively and in line with Councils submission in relation to Munni House, HWC may consider combining the proposal for the Munni House interpretive centre to be combined with a new Tourist VIC facility in the Town of Dungog. Councils comment on this area of the EAR is repeated below.

"The EAR proposes relocating Munni House at an estimated value of 2 Million dollars. The heritage significance of the building is recognised, however it is questionable, based on Council’s interaction with the community, whether this cost provides the optimum outcome.

At a similar cost a new, more practical and functional centre could be established that includes the salvaged elements of Munni house, other Aboriginal and European heritage items from the area and an interpretive centre in a new building. This building may be better located in Dungog, be operated in place of the existing Visitor Information Centre in Dowling Street and accommodate other services such as tourist information and facilities.

A more central location would allow visitors to gather information on all attractions in the area, including Chichester Dam before proceeding out to the Tillegra Dam site. The Tillegra Dam site below the wall could be operated as an unmanned camping, parking and viewing area with interpretive signage.

This option also has the benefit of providing a building that complies with the modern BCA requirements i.e. fire safety and disabled access. Having to retrofit these components to Munni house would detract from the heritage significance and authenticity of the building. This alternative should be discussed further with potential stakeholder and amended in the SOC accordingly."

ENVIRONMENTAL MANAGEMENT, MONITORING AND AUDITING

Environmental Audit Report

20– Commitment - Within two years after the completion of works, the Applicant must commission an independent person or team to undertake an Environmental Audit of the project. The audit shall;

a) Be carried out in accordance with ISO 19011:2002 – Guidelines for Quality and or environmental management systems auditing
b) Assess compliance with the requirements of the approval and other licenses and approvals applicable to the project

c) Assess the environmental performance of the project against the predictions made in the EAR

d) Review the inefficiencies of the environmental management of the project including and environmental mitigation work

e) Review the adequacy of the Applicant’s response to any complaints made about the project both during construction and operation.

This environmental audit report is to be submitted to both the Director General, DECCW and DSC within three months of completion. This report should detail the findings and recommendations of the audit.

Reason - To ensure ongoing environmental compliance.

Compliance Tracking Program

21 – Commitment - Prior to the commencement of construction, the Applicant shall develop and implement a Compliance Tracking Program for the project, to track compliance with the requirements of this approval during the construction and operation of the project and shall include, but not necessarily limited to:

   a) Provisions for periodic reporting of the compliance status to the Director-General including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operational commencement;

   b) A program for independent environmental auditing in accordance with AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;

   c) Procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;

   d) Mechanisms for recording environmental incidents and actions taken in response to those incidents;

   e) Provisions for reporting environmental incidents to the Director-General during construction and operation; and

   f) Provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

Reason - To establish a mechanism to monitor compliance of the project.

Independent Environmental Representative

22 – Commitment - Prior to the commencement of any construction or operational activities the Applicant shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Applicant shall engage the Environmental Representative(s) during any construction activities, and throughout the ongoing operational, life of the project. The Environmental Representative(s) shall be the Applicant's principal point of advice in relation to the environmental performance of the project and shall have responsibility for:

   a) Overseeing the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Applicant upon the achievement of these plans/programs;
b) considering and advising the Applicant on its compliance obligations against all matters specified in the conditions of this approval, the Statement of Commitments, permits and licences;

c) having the authority and independence to recommend to the Applicant reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Applicant that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur.

Reason - To ensure the EMPs and statements in the EAR are being fulfilled. To provide a direct and accountable contact in regards to ongoing environmental issues.

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

Provision of Electronic Information

23 - Commitment - Prior to the commencement of construction of the project, the Applicant shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project subject to confidentiality. The Applicant shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:

a) the current implementation status of the project;

b) a copy of this approval and any future modification to this approval;

c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;

d) a copy of each plan, report, or required monitoring program under this approval; and

e) details of the outcomes of compliance reviews and audits of the project.

Reason - To provide sufficient access of information to the community.

Community information Plan

24 – Commitment - Prior to the commencement of construction, the Applicant shall prepare and implement a community information plan which sets out the community communications and consultation processes to be undertaken during construction and operation of the project. The Plan shall include but not be limited to:

a) Procedures to inform the local community of planned investigations and construction activities, including blasting works;

b) Procedures to inform the relevant community of construction traffic routes and any potential disruptions to traffic flows and amenity impacts;

c) Procedures to consult with local landowners with regard to construction traffic to ensure the safety of livestock and to limit disruption to livestock movements;

d) Procedures to inform the community where work has been approved to be undertaken outside the normal construction hours, in particular noisy activities;
e) Procedures to inform and consult with those landowners who require landscaping on their property – in particular the landscaping requirements in this approval along Salisbury Rd.

f) Procedures to notify relevant landowners of the process available to review any potential construction impacts

Reason - To provide sufficient access of information to the community.

**Complaints Procedure**

25 - Commitment - Prior to the commencement of construction of the project, the Applicant shall ensure there is a clear process established for community complaints. The following shall be available for community complaints for the life of the project (including construction and operation):

a) 24 hour telephone number on which complaints about construction and operational activities at the site may be registered and retrievable;

b) a postal address to which written complaints may be sent; and

c) an email address to which electronic complaints may be transmitted.

The telephone number, the postal address and the e-mail address shall be advertised in a newspaper circulating in the locality and region on at least three occasions prior to the commencement of construction and at six-monthly intervals for two years following commencement of operation of the project. These details shall also be provided on the Applicant’s internet site. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public.

The Applicant shall record details of all complaints received through the means listed under the above condition of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:

a) the date and time, where relevant, of the complaint;

b) the means by which the complaint was made (telephone, mail or email);

c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;

d) the nature of the complaint;

e) Any action(s) taken by the Applicant in relation to the complaint, including timeframes for implementing the action; and f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General, DECCW and Dungog Shire Council upon request. The Applicant shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made.

Reason - To ensure there is an effective and transparent complaints procedure in place.
Community Enhancement Program

26 - Commitment - That HWC contribute for the life of the dam the provision of a local community infrastructure fund, the equivalent of 1% of the monies paid to NSW Treasury as a dividend to the State Government.

Reason - To provide a clear community offset from the proposed development

Discussion - With no local social impact assessment or a detailed recreational study undertaken there is the likelihood that the future recreational opportunities created on the water body will place an increased demand on Councils infrastructure. Council with a limited rate base should not be required to divert ratepayer funds to maintain, upgrade or establish additional infrastructure to meet the needs of increased outside visitation levels to the area as a consequence of the Dam.

The fund will provide for improvements to community infrastructure and services, opportunities for local economic development and sustainability initiatives.

Possible community infrastructure programs include;

1. Multipurpose indoor sporting and Cultural Centre
2. CBD beautification

Dungog Information & Neighbourhood Services (DINS)

27 - Commitment – That HWC provide continuing funding of up to $20,000 per annum to Dungog Neighbourhood Services for a period of 10 years for counselling services.

Reason - To provide appropriate counselling services to those affected by the dam.

Discussion - No local social impact assessment has been undertaken. At the announcement of Tillegra dam, Hunter Water Corporation committed funds to DINS to manage counselling services. When a final determination is made, additional support could be required for impacted landholders and their families. Also for members of the community who have to deal with the relocation of Munni cemetery. In particular those who are considering exhumation and relocation, those who are not proposing to relocate family members but will witness the sites inundation and the community in general who are affected by the inundation of homes and property.
1. Dungog Shire Council call on the NSW Government and HWC to provide:
   
a. A statistically robust attitudinal survey of the residents of the lower Hunter and Dungog Shire.
   
b. A commitment to undertaking an Upper House Inquiry into the need for the proposed Tillegra Dam and the information presented in the EAR in the NSW State Parliament.
   
c. A comprehensive analysis of the social, environmental and economic costs, both positive and negative, associated with the Tillegra Dam utilising current best practice as contained in the Millennium Ecosystem Assessment and Benefit Cost Analysis approaches for evaluation and reporting.
   
2. That Dungog Shire Council cannot support the proposed Tillegra Dam project as detailed in Hunter Water's EAR for the project because:
   
a) The Hunter Water EAR provides for grossly inadequate compensation to the residents of Dungog Shire for the imposition on the residents of the Shire for the proposed Dam;
   
b) Hunter Water has not made it a condition of approval of the project that the Dam be made available for recreational use on completion and filling;
   
c) Hunter Water has made no provision for a permanent source of funding to be paid by Hunter Water to Dungog Shire Council annually and in perpetuity from the profit to be made by Hunter Water from the operation of the Dam;
   
d) Hunter Water has made no adequate provision in its EAR to compensate Dungog Shire Council for the loss in perpetuity of:
      i) rate income from those properties acquired or to be acquired by Hunter Water in and around the proposed inundation area of the Dam; and
      
      ii) infrastructure built and installed by Dungog Shire Council in and around the inundation area over the past five (5) years
   
e) Hunter Water and/or the State Government have failed to make adequate provision for the upgrade of road infrastructure to be used by construction vehicles associated with the construction of the Dam. Such upgrading works estimated to cost not less than $20 million.
   
3. Advice to this effect is forwarded by letter to all relevant parties, including government and opposition members, Hunter Water, community organisations and to the media.
   
4. A Policy reflecting Councils' position is drafted for consideration and adoption by Council at its next meeting, to provide clear guidance to all Councillors and staff for all future dealings with the Tillegra Dam proposal.