9. Response to Recommended Conditions of Approval

A number of public authority submissions contained recommendations for approval and proposed conditions of approval. These proposed conditions include both issues outlined in the draft Statement of Commitments (Appendix 1 to the EA Report) and additional issues raised by the authorities in the submissions received.

Recommended conditions of approval (or in some cases, just recommendations) were received from:

- NSW Office of Water (NOW) (Section 9.1)
- Department of Environment, Climate Change and Water (DECCW) (Section 9.2)
- Department of Industry and Investment (I&I NSW) (Section 9.3)
- Hunter-Central Rivers Catchment Management Authority (HCRCMA) (Section 9.4)
- Land and Property Management Authority (LPMA) (Section 9.5)
- Dungog Shire Council (DSC) (Section 9.6)

This section provides Hunter Water's response to these proposed conditions or recommendations. These responses have been subsequently used in the developed of the Final Statement of Commitments (refer Section 10).

9.1 NSW Office of Water

No.	Recommended Condition	Hunter Water Response
Flows		
1	That the 30th percentile transparency rule form the starting point for an adaptive management approach to environmental flow conditions. This adaptive management approach must be developed in consultation with NOW and managed through the *Hunter Unregulated and Alluvial Water Sources 2009 Water Sharing Plan*	Hunter Water supports consultation with NOW with respect to the ongoing refinement of the environmental flow release strategy. This would be a continuation of consultation undertaken to date.
2	That the release of bulk transfers should mimic the seasonal natural flow regime. The conditions for release of these bulk transfers must be subject to an adaptive management approach, developed in consultation with NOW and managed through the *Hunter Unregulated and Alluvial Water Sources 2009 Water Sharing Plan*.	This is supported. This was an explicit consideration in the development of the preferred flow release strategy as documented in the EA Report and Working Paper D.
3	That bulk transfers be released in accordance with the approved cold water/blue green algae strategy	Refer response to recommendation 6.
4	Releases from Chichester must be used to make up any shortfalls in flows caused by valve capacity limitations at Tillegra when Tillegra Dam storage is low.	This is generally supported, however, it is noted that this may not always be practicable particularly during severe drought conditions. As a general comment, Hunter Water would manage the Williams River water resource holistically considering joint operation of Tillegra Dam and Chichester Dam.
5	The event based fresh releases should become a standard operation phase rule in any period when spills or run of river transfers have not been occurring. As with the transfer rules, the ongoing refinement of these rules needs to occur as part of an adaptive management approach, developed in consultation with NOW and managed through the *Hunter Unregulated and Alluvial Water Sources 2009 Water Sharing Plan*.	This is supported. As acknowledged in the EA Report, this is one of the NSW River Flow Objectives and is accommodated in the preferred operating strategy.
6	That the transparent releases from the dam be released in accordance with a cold water/blue-green algal management operating protocol that is developed by the proponent to the satisfaction of NOW.	Hunter Water supports inclusion of this management issue in the release strategy. It is noted that this is a fundamental water quality management issue. Hunter Water supports consultation with NOW with respect to development of the operating protocol. It is considered that the requirement to obtain the concurrence of NOW would unnecessarily duplicate existing licensing processes under the *Water Management Act 2000*.

No.	Recommended Condition	Hunter Water Response
7	That the proponent develops a water quality monitoring program for construction and post construction periods, to monitor in-dam and downstream water quality impacts, down to and below Seaham Weir. This should form part of a water quality management strategy to monitor and mitigate impounded and downstream water quality impacts that include mitigating the impact of stratification. This program should include, but not be limited to, monitoring and mitigation of phytoplankton, temperature, pH, metals, and nutrients, (dissolved oxygen in storage, COD* and BOD*) with impoundment monitoring undertaken at multiple levels in order to implement multi-level off-take protocols. (*in downstream river during construction and coffer diversion, and landfill)	This is supported. The Project Statement of Commitments includes preparation and implementation of a water quality monitoring program.
8	That the proponent develop a monitoring program and strategy for managing stratification below Seaham Weir to improve water quality downstream of the weir, and decrease the potential impact on fish passage. This could include a fish monitoring project to investigate the effectiveness of any mitigation.	This is supported. It is noted that Hunter Water has committed to upgrading the Seaham Weir fishway, and would support undertaking appropriate monitoring of its effectiveness. A fish monitoring project to investigate the effectiveness of any mitigation commenced in 2008/09 to collect baseline (pre-dam) data.
9	That the proponent establishes a suitable sedimentation and erosion control plan to manage and mitigate construction impacts.	This is supported. It is noted that this is typically a standard condition for major infrastructure project approvals.
10	That the proposed dam hydro-electricity plant be operated within the environmental flow and release strategy and that its operation not determine releases.	This is supported. The EA Report indicates that operation of the mini HEP plant would be required to conform to environmental and run-of-river flow releases.
11	That the proponent shall commence water temperature logging at Underbank, Tillegra and Dungog prior to construction of Tillegra Dam in order to assist with calibration and future operation of the off-take tower.	This is supported.

No.	Recommended Condition	Hunter Water Response
Estuary		
12	That further work be undertaken by the proponent to improve the modelling of the estuary, allowing the estuary requirements to be accurately quantified. Predictive modelling must be developed to the satisfaction of NOW.	This is generally supported. It is noted that additional investigations have been conducted and have included consultation with NOW. While Hunter Water would continue to liaise with NOW with respect to this issue, it does not consider it appropriate that the modelling be undertaken to the satisfaction of NOW. The modelling must simply be undertaken to a high technical standard with appropriate calibration, accuracy and precision. The model has been properly calibrated and is appropriate for providing guidance as a predictive tool.
13	That further work be undertaken by the proponent to improve transparency/translucency rules for Seaham Weir, developed in consultation with NOW, to improve connectivity between the estuary and river. These rules must be managed through the *Hunter Unregulated and Alluvial Water Sources 2009 Water Sharing Plan*.	This is supported. It is noted that this work has already commenced under Hunter Water's existing operating licence.
14	That the proponent upgrades Seaham Weir in order that flows can be transparently/translucently released through a range of flows informed through ongoing development of the *Hunter Unregulated and Alluvial Water Sources 2009 Water Sharing Plan*.	This is supported. The design work for the construction of the vertical slot fishway would include further development for control/release structures such as radial gates or valves.
15	The proponent shall: (a) utilise and complement survey sites established under existing regional water quality/ecosystem monitoring programs where ever possible; (b) for the Maitland to Raymond Terrace section, survey sites are to be established as least one (1) kilometre upstream of the upper tidal limits of Oakhampton and 5km upstream of Paterson on the Hunter and Paterson Rivers respectively; (c) collect environmental data, including river hydrology, water quality and macro-invertebrate assemblages, at the above sites; (d) establish fixed vegetation quadrats or transects in riparian and saltmarsh EEC vegetation and photograph points at sites. The proponent shall collect vegetation composition and structure data at each of these fixed quadrats; and (e) map the extent of mangroves in each of these river sections.	This is not supported. The assessment of the potential impact of the Project on the Hunter Estuary Wetlands together with additional work undertaken following public exhibition of the EA Report indicates the Project would have negligible impact on the estuary. Monitoring would be undertaken immediately downstream of Seaham Weir (as part of Hunter Water's existing operating licence). It is considered this would be sufficient to inform identification of water quality trends that could have bearing on the estuary, and to whether additional monitoring should be undertaken. Hunter Water therefore considers this condition would not be reasonable and if implemented would require it to undertake work that from a statutory perspective more appropriately rests with other authorities.

No.	Recommended Condition	Hunter Water Response
Downstream impacts		
16	The proponent should quantify the impact on floodplain wetlands in terms of their support of Groundwater Dependent Ecosystems where hydrological connections remain. The proponent's consideration of the implications of the Dam upon lateral connectivity of channel/aquifer interactions is not adequate.	This is not supported. A basic conceptual model was included in the EA Report addressing the lateral connectivity of groundwater and the dam. The development of the preferred operating strategy explicitly considered downstream water quality, hydrological and ecosystem maintenance requirements. The preferred strategy accommodates these requirements. The EA Report also considered groundwater movement. The preferred environmental release strategy would maintain the existing status quo of groundwater movement and connectivity within the Williams River.
17	The proponent should develop a conceptual model that demonstrates the complex temporal and spatial impacts that the Tillegra Dam will have on the Williams River. The model predictions should form the basis for any future monitoring program to be implemented over a suggested 25 year period.	This is not supported. It is considered this issue has been adequately addressed through the environmental assessment and that the monitoring committed to acknowledges the uncertainty regarding the identified impacts
18	Readjustment of the river will involve incision and based on the character and behaviour of the Williams River between Tillegra and Glen William, it is expected that bed incision will not be localised. As such the proponent is requested to continue to utilise the established survey sites (W1, W2, W7, W8, W9, W10, W11 and W12, Figure 10.2, Volume 1 of the EA) for the collection of geomorphic data.	This is supported.
19	Prior to construction, the proponent shall develop and submit for the approval of the Director-General a Geomorphic and Aquatic Habitat Enhancement Program for the Tillegra to Seaham Weir section of the Williams River. The program shall trial the effectiveness of the reintroduction of large woody debris in different sections of the Williams River and monitor the effectiveness on bed and bank stability, and biodiversity habitat. The proponent shall report on the outcomes of the Program annually for the first five years. If the program is unsuccessful, it should be expanded by the proponent along the full section of the river between Tillegra Dam and the Seaham Weir.	This is supported. This is essentially provided for through the Project Statement of Commitments. It is noted that the I&I NSW offset package agreed to and adopted for the Project exceeds this commitment as it requires large woody debris to occur along the full section of the river, without trial. A woody debris trial has previously been undertaken at Munni which is considered to have sufficiently proven the value of large woody debris for riverine geomorphology and habitat.

No.	Recommended Condition	Hunter Water Response
20	The proponent shall establish fixed vegetation quadrats in riparian vegetation and photograph points at sites W1, W2, W7, W8, W9, W10, W11 and W12. The proponent shall collect vegetation composition and structure data at each of these fixed quadrats or transects.	This is not supported. The Project is not considered likely to have an impact on existing riparian vegetation. Channel contraction has been predicted to potentially allow riparian vegetation to expand into the existing channel. The Project, however, is not predicted to remove or otherwise affect existing vegetation.
21	It is not clear how Hunter Water Corporation is going to address the long-term impacts on the physical character of the Williams River and its impact on geomorphology and ecosystem health. Prior to construction, the proponent shall develop and submit for the approval of the Director-General a Comprehensive Downstream Monitoring Program. The Program shall be developed in consultation with the NOW and designed to inform the development of an adaptive flow regime. It shall; (a) monitor an appropriate range of environmental variables, including (but is not necessarily limited to) water quality (phytoplankton, temperature, salinity, pH, metals, nutrients , dissolved oxygen). stream flow, stream geomorphology including channel stability and nature of bedload (the latter only upstream of Seaham Weir), EEC vegetation health, and aquatic system health; (b) monitor variables at a frequency and time appropriate to the dynamic nature of each parameter, but not less than annually; (c) monitor channel in the Low Sinuosity Planform Controlled Gravel reach; (d) quantify the nature and extent of any recorded changes; (e) describe ameliorative measures, including a time frame for management actions and in the case where impacts are considered to be unavoidable the Program shall describe how such impacts will be offset; and (e) report back on the outcome of any prior ameliorative actions of offset measures.	This is generally supported. A monitoring and management program for aquatic ecosystems has already been developed by I&I NSW and committed to by Hunter Water. This program would be complementary to Hunter Water's existing water quality monitoring program which would be adjusted and expanded for the Tillegra Dam project, and include provisions for hydrological and geomorphology monitoring and reporting. The program would include ameliorative measures on identified issues and provision for review and continual improvement. The full program would be developed in consultation with both NOW and I&I NSW.
22	The proponent shall review the appropriateness of the flow regime annually based on results of the Comprehensive Downstream Monitoring Program.	This is supported. This would be consistent with the preferred adaptive management approach which is implicit in the preferred operating strategy.
23	The proponent shall submit a Comprehensive Downstream Monitoring Report to the Director-General and NOW annually for the first five years, and five yearly for the next 25 years, or as otherwise agreed in writing by the Director-General. The first report shall be submitted three months following the anniversary of the Project Approval. The proponent shall make these Reports available to the public via its website.	This is supported.

No.	Recommended Condition	Hunter Water Response
24	Prior to project approval, the proponent shall develop and submit for the approval of the Director-General a Biodiversity Offset Package to offset the impacts of the Dams' footprint. The package shall include but not be limited to: (a) The location, size and vegetation description of the proposed offset(s); (b) Demonstration that offsets fulfil the requirements set out in DECCW's 'Principles for the use of biodiversity offsets in NSW'; (c) The connectivity value of any proposed offset(s) with other areas of conservation value: and (d) Details proposed legal mechanisms to secure the protection of offset(s) on perpetuity.	This is supported. DECCW has provided concurrence to the inclusion of a national park proposal within the Final Statement of Commitments which addresses these issues.

9.2 Department of Environment, Climate Change and Water

No.	Recommended Condition	Hunter Water Response
GENERAL		
Obligation to prevent and minimise harm to the environment		
1	All practicable measure must be taken to prevent and minimise harm to the environment as a result of the construction, operation and maintenance of the development.	This is supported
Maintenance of plant and equipment		
2	All plant and equipment installed at the premises or used in connection with the licensed activity; (a) must be maintained in a proper and efficient condition; and (b) must be operated in a proper and efficient manner.	This is supported.
AIR		
Dust Emissions		
3	The proponent shall design, construct, commission, operate and maintain the project in a manner that minimises or prevents the emission of dust from the project site, including wind blown, construction generated and traffic generated dust.	This is supported.
4	The proponent shall take all practicable measures to ensure that all vehicles entering to leaving the site carrying a load that may generate dust, are covered at al times except during loading and unloading. Any such vehicles shall be covered to enclosed in a manner that will prevent the emissions of dust from the vehicle.	This is supported.
5	All activities on the site shall be undertaken with the objective of preventing visible emissions of dust beyond the site boundary. Should visible emissions occur at any time, the proponent shall identify and implement all practicable dist mitigation measures, including cessation of relevant works, as appropriate.	This is supported.
Monitoring and meteorological parameters		
6	The proponent shall install, operate and maintain a meteorological monitoring station to monitor weather conditions representative of those on the project site.	This is supported.
7	The proponent must monitor (by sampling and obtaining results by analysis) the parameters rainfall, wind speed @10m, wind direction and sigma theta @10m, temperature @2m and @10m, solar radiation with sampling methods, units, averaging period and sample frequency, as specified by DECCW.	This is supported.

No.	Recommended Condition	Hunter Water Response
GREENHOUSE GAS EMISSIONS		
8	Prior to the commencement of construction, a Carbon Offsetting Report shall be prepared and submitted for the approval of the Director-General. The report shall use the National Carbon Accounting Toolbox to confirm that calculations by the proponent to predict the number of hectares and trees required to offset the projects total carbon emissions is correct. The report shall contain recommended actions to address any identified shortfalls in emissions reductions.	This is not supported. A copy of the existing report prepared by I&I NSW that used the National Carbon Accounting Toolbox to predict the area and number of trees required to offset the Project's total emissions would be provided. A final audit of vegetation in the inundation area prior to flooding would be undertaken (to account for potential changes due to trees removed for woody debris trials and clearing for navigation). Auditing of progress in establishing the carbon offsets would occur on a five yearly basis. Interim annual reporting would occur within Hunter Water's catchment report prepared for IPART.
NOISE		
9	The proponent shall only undertake works associated with the project, other than blasting, (see Condition 12 below), during the following hours: (a) 7:00am to 6:00pm, Monday to Friday inclusive. (b) 8:00am to 1:00pm on Saturday; and (c.) at no time on Sunday and public holidays.	This is supported.
10	Not withstanding the above condition, works associated with the project, other than blasting, may be undertaken out-of-hours specified under that condition in the following circumstances: (a) the works do not cause noise to be audible at any sensitive receiver: or (b) for the delivery of materials required by the NSW Police or any other authority for safety reasons; or (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or (d) as approved through the process outlined in the following conditions of this approval.	This is supported.

No.	Recommended Condition	Hunter Water Response
11	The hours of activities specified under Condition 9 of the Approval may be varied with prior written approval of the Director-General. Any request to alter hours shall be: (a) considered on a case by case basis; (b) accompanied by details of the nature and justification for activities to be conducted during the out-of-hours work (c) accompanied by written evidence to the Director-General that appropriate consultation with potentially affected sensitive receivers and notification of relevant Councils(s) has been and will be undertaken, and all feasible and reasonable noise mitigation have been put in place; (d) accompanied by a noise impact assessment consistent with the requirements of the NSW *Industrial Noise Policy* for quarrying and with the *Interim Construction Noise Guideline* (DECCW 2009) for all other activities; and (e) accompanied by an appropriate Noise and Vibration Management Plan	This is supported.
12	Blasting associated with the project is only permitted during the following hours: (a) 9:00am to 5:00pm, Monday to Friday inclusive (b) 9:00am to 1:00pm on Saturday; and (c) at no time on Sunday or public holidays. This condition does not apply in the event of a direction from the NSW Police or other relevant authority for safety reasons.	This is supported.
Noise and Vibration Limits		
13	Construction Noise Management Levels (CNMLs) shall be established using the *Interim Construction Noise Guidelines* (DECCW 2009) for activities other than quarrying. Any activities identified as exceeding the CNMLs shall be managed in accordance with the Construction Noise and Vibration Management Plan (CNVMP). If noise is substantially tonal or impulsive in nature (as described in Chapter 4 of NSW *Industrial Noise Policy*) 5 dB(A) shall be added to the measured noise level when comparing the measured noise against appropriate criteria. The Proponent implement all feasible and reasonable noise mitigation measures with the aim of not exceeding relevant criteria.	This is supported.
14	The Proponent shall ensure that air-blast overpressure generated from blasting associated with the project does not exceed the criteria specified in DECCW submission (Table 1).	This is supported.
15	The Proponent shall ensure that ground vibration generated by blasting associated with the project does not exceed the criteria specified in DECCW submission (Table 2) when measured at the most affected residence or noise sensitive receiver.	This is supported.

No.	Recommended Condition	Hunter Water Response
16	The Proponent shall ensure that induced ground vibration (excluding blasting) associated with the project (operation of plant) does not exceed the criteria specified in DECCW submission (Table 3), when measure at the most affected residence or noise sensitive receiver.	This is supported.
17	Prior to commencement of works, the Proponent should consider the preparation of a Noise and Vibration Management Plan (NVMP) to meet noise limits specified. The plan should cover all activities. The plan should include items specified in DECCW submission (17a to 17o).	This is supported.
Operational Noise Limits		
18	Noise generated at the dam (from any associated infrastructure such as transfer pumps, transformers) must not exceed the noise limits presented in the DECCW submission (Table 4).	This is supported.
19	For the purpose of condition 18: Day is defined as 7am to 6pm Mon-Sat, 8am to 6pm Sun and PH; evening is defined as 6pm to 10pm Mon to Sun; and night is defined as 10pm to 7am Mon to Sat, 10pm to 8am Sun and PH.	Noted.
20	Noise from the dam is to be measured at the most affected point on or within the residential boundary or at the most affected point 30m from the dwelling (rural situations), where the dwelling is more than 30 m from the boundary to determine compliance with Condition 18.	This is supported.
21	Noise is to be measured 1m from dwelling façade to determine compliance with Condition 18.	This is supported.
22	The noise limits set out in Condition 18 apply under all meteorological conditions except for those specified in DECCW submission with respect to wind speed and stability class.	This is supported.
WATER		
Construction		
23	Except as may be expressly provided for under a condition of an Environment Protection Licence, the proponent shall comply with Section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters.	Noted. It is also noted that the EPL would need to include the following activities: (a) construction works required to be undertaken within the Williams River (such construction of the coffer dams and bridge piers) (b) potential pit burning of cleared vegetation that could not be otherwise beneficially reused (c) winning of fill material (ie 'extractive industry') from within/adjacent to the inundation area (d) transportation and use of fly ash. Additionally, while the environmental assessment has undertaken a Phase 1 investigation of potentially contaminated land within the

No.	Recommended Condition	Hunter Water Response
		inundation area, and which would be followed up should the Project be approved and Hunter Water able to gain access to properties, there may still be a residual risk from past activities or contaminating materials that may not be able to be detected. Further consultation may be required between DECCW and Hunter Water to clarify this issue with respect to managing potential liability under Section 120.
Tillegra Dam water quality		
24	The proponent shall develop and implement a Water Quality Monitoring and Management Program for the dam. The Program shall include, but not be limited to: the monitoring of phytoplankton, temperature, pH, metals, nutrients and dissolved oxygen. The Program shall monitor the vertical variability of parameters within the dam to assist with the selection of an appropriate withdrawal depth at the off-take structure.	This is supported.
25	The proponent shall commence water temperature logging at Underbank, Tillegra and Dungog prior to construction of Tillegra Dam in order to assist with calibration and future operation of the off-take tower. The data shall be used to inform and refine the recommended adaptive flow release regime (refer Condition 36).	This is supported.
FLORA, FAUNA AND THE LOWER HUNTER ESTUARY		
Compensatory Habitat		
26	Prior to project approval, the proponent shall develop and submit for the approval of the Director-General a Biodiversity Offset Package to offset the impacts of the dam's footprint. The Package shall include but not be limited to: (a) the location, size and vegetation description of the proposed offset(s); (b) demonstration that offsets fulfil the requirements set out in DECCW's thirteen 'Principles for the use of biodiversity offsets in NSW'; (c) the connectivity value of any proposed offset(s) with other areas of conservation value; (d) details of proposed legal mechanisms to secure the protection of offset(s) in perpetuity.	This is supported. It is noted that the identified matters are generally reflected in the offset packages identified in the Project Statement of Commitments.
Construction		
27	Pre-clearance surveys will be undertaken to identify all important features for threatened fauna directly located within the Tillegra Travelling Stock Route so that these can be avoided during construction or timed for appropriate removal so that impacts on fauna are minimised.	This is supported. This is already addressed in the Project Statement of Commitments.

No.	Recommended Condition	Hunter Water Response
28	Prior to construction, the proponent shall undertake surveys of hollow-bearing trees within the Tillegra Travelling Stock Route at least one week prior to any clearing. Removal of any hollow-bearing trees shall be timed to avoid peak bird and bat breeding season (September to January inclusive).	This is supported. All practicable effort would be made to avoid clearing within the stipulated five month period. However, as the period covers a substantial time period during the year which also coincides with known annual low flow periods in the Williams River and during which some initial works must be undertaken, there may be some unavoidable overlap between commencement of construction works, clearing and the stipulated five month period.
29	Immediately prior to clearing, a suitably qualified and licensed ecologist shall survey the Tillegra Travelling Stock Route for the presence of Koalas. If Koalas are present then a buffer of a minimum of 100m shall be left around the immediate area of the Koala. A period of 48 hours shall elapse prior the ecologists resurveying the area. If the animal/s is still present and work cannot be delayed then the proponent shall engage a suitable qualified and experienced wildlife handler to capture and relocate the animal into nearby suitable habitat.	This is supported.
30	The proponent shall ensure that a suitably qualified and experienced wildlife handler is present during any tree removal and vegetation clearing in the Tillegra Travelling Stock Route to manage displaced wildlife.	This is supported.
31	The proponent shall erect before the start of construction and retain in good working order for the duration of the construction period, protective fencing to mark the limits of clearing (i.e. 'no go' areas) so that vehicles and other activities associated with construction, such as construction compounds and stockpile sites, do not enter adjacent areas of vegetation, particularly areas where threatened flora species and endangered ecological communities are present.	This is supported.
32	The proponent shall establish a number and variety of nest-boxes within the vegetated corridor east and south of the reservoir prior to any vegetation clearing events associated with dam construction. The nest-boxes shall be suitable for the needs of the known local hollow-dependent threatened fauna, erected in retained remnants above the high water level, particularly in areas where hollow bearing trees are absent or scarce. The number of next boxes is to be determined by a suitably qualified and experienced ecologist and the rationale recoded and provided to the proponent for its records. The use of the nest boxes is to be monitored on an annual basis for at least ten years and any suitable nest boxes are to be replaced during this time.	This is supported.

No.	Recommended Condition	Hunter Water Response
33	Prior to the construction, the proponent shall develop and submit for the approval of the Director-General a Pest, Weed and Disease Management Plan, covering both the construction and operational phases of the project. The Plan should include, but not be limited to, best practice management actions to be implemented by the proponent which will: (a) prevent the establishment and spread of weeds and pests; (b) control and eradicate established pest species; (c) prevent the introduction or spread of *Phytophthora cinnamomi* in Tillegra Dam catchment; and (d) prevent the introduction or spread of chytrid fungus in the Tillegra Dam Catchment.	This is supported.
34	The proponent shall ensure that bridges and culverts are inspected prior to the planned demolition to sure no roosting bats are present. The proponent shall implement the 'Bat Management Plan' (refer Working paper E, Volume 4).	This is supported.
35	The proponent shall install a combination of culverts, fauna fencing and any other appropriate measure (such as signage, speed humps or reduced speed limits) at any identified potential black spots in order to minimise the risk of road death for fauna along the proposed Salisbury Road realignment, prior to the opening of the new road to traffic.	This is not supported. Signage and speed limits are set by the relevant roads authority, not Hunter Water. Fauna fencing and culverts are not warranted based on the identified low risk to fauna in view of the existing low traffic counts for Salisbury Road, a rural road which has very few vehicle movements.
36	The proponent shall establish Platypus habitat in catchment watercourses and along the Tillegra Dam shoreline by placing semi-submerged logs and planting riparian vegetation around the shoreline at the full supply level.	This is supported.
37	The proponent shall not use barbed-wire in any fence erected in the Tillegra Dam project area.	This is supported with the following qualifications. Where ever practical, barbed wire would not be used, however, it may be required in some circumstances such as to secure chemical storage areas from unauthorised entry (ie for public safety). There may also be instances where adjoining landholders insist on its use in the replacement of rural fences, in which case Hunter Water would undertake to negotiate an appropriate outcome with the landholder.

No.	Recommended Condition	Hunter Water Response
Downstream impacts		
38	The proponent shall implement an adaptive flow regime from Tillegra Dam that will mimic the natural seasonal flow regime as closely as possible	This is supported. As noted elsewhere in this section, the development of the preferred operating strategy explicitly considered downstream water quality, hydrological and ecosystem maintenance requirements. The preferred strategy accommodates these requirements.
39	The proponent shall manage releases across Seaham Weir in a manner that complements the environmental releases from Tillegra Dam and minimises downstream impacts on the Hunter Estuary	This is supported.
40	The proponent shall review the appropriateness of the flow regime annually based on results from the Comprehensive Monitoring Program (refer condition 43)	This is supported. It is suggested, however, that major reviews be synchronised with reviews of NOW's water sharing plan. Plans are normally reviewed every five years in accordance with the NSW *Water Management Act 2000*.
Tillegra Dam to Seaham Weir		
41	Prior to construction, the proponent shall develop and submit for the approval of the Director-General a Geomorphic and Aquatic Habitat Enhancement Program for the Tillegra Dam to Seaham Weir section of the Williams River. The Program shall trial the effectiveness of the reintroduction of large woody debris in different sections of the Williams River and monitor its effectiveness on bed and bank stability, and biodiversity habitat. The proponent shall report on the outcomes of the Program annually for the first five years. If the Program is successful, it should be expanded by the proponent along the full section of the river between Tillegra Dam and Seaham Weir.	This is supported. It is noted that the identified matters are generally reflected in the offset packages identified in the Project Statement of Commitments. It is also noted that an enhancement program has been committed to pursuant to a submission from I&I NSW that would be implemented for the full section of the Williams River between Tillegra Dam and Seaham Weir.
Hunter Estuary		
42	The proponent shall within five years of commencing construction of the Tillegra Dam compile an Ecological Character Description (ECD) for the Kooragang Nature Reserve, the North Arm of the Hunter River, Fullerton Cove and adjacent parts of the Stockton Sand Spit. The proponent shall make this ECD available to the public via its website.	This is not supported. The obligation to prepare such an ECD is considered to more appropriately sit with the public authorities with statutory responsibility for management of the Kooragang Nature Reserve, ie DECCW and DEWHA.

No.	Recommended Condition	Hunter Water Response
Monitoring downstream impacts		
43	Prior to construction, the proponent shall develop and submit for the approval of the Director-General a Comprehensive Downstream Monitoring Program. The Program shall be developed in consultation with the Office of Water and designed to inform the development of an adaptive flow regime. It shall: (a) monitor an appropriate range of environmental variables, including water quality (phytoplankton, temperature, salinity, pH, metals, nutrients, dissolved oxygen), stream flow, stream geomorphology including channel stability and nature of bedload (the latter only upstream of Seaham Weir), ECC vegetation health, and aquatic system health; (b) monitor variables at a frequency and time appropriate to the dynamic nature of each parameter, but not less than annually; (c) quantify the nature and extent of any recorded changes; (d) describe ameliorative measures, including a time frame for management actions and in the case where impacts are considered to be unavoidable the Program shall describe how such impacts will be offset; and (e) report back on the outcome of any prior ameliorative actions of offset measures.	This is generally supported. A monitoring and management program for aquatic ecosystems has already been developed by I&I NSW and committed to by Hunter Water. This program would be complementary to Hunter Water's existing water quality monitoring program which would be adjusted and expanded for the Tillegra Dam project, and include provisions for hydrological and geomorphology monitoring and reporting. The program would include ameliorative measures on identified issues and provision for review and continual improvement. The full program would be developed in consultation with both NOW and I&I NSW.
44	The proponent shall submit a Comprehensive Downstream Monitoring Report to the Director-General and DECCW annually for the first five years, and five yearly for the next 25 years, or as otherwise agreed in writing by the Director-General. The first report shall be submitted three months following the anniversary of the Project Approval. The proponent shall make these Reports available to the public via its website.	This is supported.
45	For the Tillegra Dam to Seaham Weir section of the Williams River the proponent shall: (a) continue to utilise already established survey sites (refer site W1, W2, W7, W8, W9, W10, W11 and W12, Figure 10.2, Volume 1 of the EA); (b) continue to collect environmental data, including river hydrology, water quality, channel morphology, bed material sample size distributions, macro-invertebrate and fish assemblages, at the above sites; (c) establish fixed vegetation quadrants or transects in riparian vegetation, and photograph points at sites W1, W2, W7, W8, W9, W10, W11 and W12. The proponent shall collect vegetation composition and structure data at each of these fixed quadrats or surveys; and (d) monitor macrophyte communities as indications of terrestrial encroachment into the river in the Williams River from the dam to the Seaham Weir pool.	This is supported with the exception of vegetation quadrat monitoring of vegetation which is not predicted to be impacted by the Tillegra Dam project.

No.	Recommended Condition	Hunter Water Response
46	For the Hunter Estuary, including the Seaham Weir to Raymond Terrace section of the Williams River, the Maitland to Raymond Terrace sections of the Hunter and Paterson Rivers, the Raymond Terrace to Hexham section of the Hunter River and the Hexham to Ramsar Wetlands section of the Hunter River (including the Hunter Estuary National Park), the proponent shall; (a) utilise the complement survey sites established under existing regional water quality/ecosystem monitoring programs where-ever possible; (b) for the Maitland to Raymond Terrace section, survey sites established at least one (1) kilometre upstream of the upper most tidal limits of Oakhampton and 5km upstream of Paterson on the Hunter and Paterson Rivers respectively; (c) collect environmental data, including river hydrology, water quality and macro-invertebrate assemblages, at the above sites; (d) establish fixed vegetation quadrats or transects in riparian and saltmarsh EEC vegetation and photograph points at sites. The proponent shall collect vegetation composition and structure data at each site of these fixed quadrats or surveys; and (e) map the extent of mangroves in each of the river sections.	This is not supported. The assessment of the potential impact of the Project on the Hunter Estuary Wetlands together with additional work undertaken following public exhibition of the EA Report indicates the Project would have negligible material impact on the estuary. Monitoring would be undertaken immediately downstream of Seaham Weir (this is already a requirement under Hunter Water's existing operating licence). It is considered this would be sufficient to inform identification of water quality trends that could have bearing on the estuary, and to whether additional monitoring should be undertaken. Hunter Water therefore considers this condition would not be reasonable and if implemented would require it to undertake work that from a statutory perspective more appropriately rests with other authorities.
Climate change		
47	The proponent shall undertake an assessment of the implications if a 10% rainfall reduction on river flows and downstream ecosystems. Information from this assessment shall be used to refine impact predictions from the dam on downstream environments and inform the recommended adaptive flow release regime.	This is not supported. The effects of climate change cannot be attributed solely to Hunter Water. Climate change modelling by DECCW is also insufficiently developed to reliably predict climate change effects on a localised scale as noted in the EA Report. Hunter Water considers that this issue has been adequately considered through the determination of catchment yield which incorporated comprehensive sensitivity testing considering a range of factors including rainfall variability. The yield estimates formed the basis for development of the preferred environmental flow release strategy. While Hunter Water is confident that the predicted demand and consequent environmental assessment is accurate, it acknowledges the inherent uncertainty associated with climate change (which is a key part of the underlying rationale for the dam). For this reason Hunter Water has therefore committed to working

No.	Recommended Condition	Hunter Water Response
		adaptively within the water sharing process administered by NOW so that issues such as climate change can be addressed as better information progressively becomes available.
Aboriginal cultural heritage		
48	Prior to construction, the proponent shall prepare and submit a Construction Environment Management Plan (Statement of Commitment 1.1) that includes an Aboriginal Cultural Heritage Management Plan that specifically commits to the following points: (a) an ongoing construction personnel induction and cultural awareness training program as required (State of Commitment 8.13); (b) additional survey work in all areas associated with infrastructure that has not been subject to previous work and the implementation of appropriate mitigation measures developed in consultation with the Aboriginal community (Section 1.4 of Working Paper M); (c) work is not to commence in these areas until the relevant mitigation measures have been approved by the Director-General and DECCW; (d) the development of protocol relating to stop work procedures to be invoked in the event that skeletal remains or other Aboriginal objects are encountered during excavation (Statement of Commitment 8.5); and (e) the design and implementation of a research and salvage program by a qualified and experienced archaeologist and relevant members of the Aboriginal community that relates to all known sites, any sites subsequently discovered by further survey work, and any other sites inadvertently encountered (Statement of Commitment 8.11).	This is generally supported. However additional survey work would not be completed as a predictive model has been developed to understand the distribution of cultural heritage material in the landscape. Hunter Water would commit to using the model to conduct additional survey work related to the salvage and archiving of material in a manner that is supported by Aboriginal stakeholders.
WASTE		
49	The proponent must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environmental Operations Act 1997*. The above condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the *Protection of the Environment Operations Act 1997*	This is supported.
50	The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with DECCW's Waste Classification Guidelines.	This is supported.

No.	Recommended Condition	Hunter Water Response
51	Any liquid or non-liquid waste generated at the premises must be lawfully transported and disposed of at a facility that can lawfully accept that waste.	This is supported.
52	Hazardous or industrial waste must be stored and disposed on in a manner to minimise its impact on the environment including the appropriate segregation for storage and separate disposal by a waste transporter licensed by DECCW.	This is supported.
53	Adjustment to Commitment 13.3: The waste management approach for the Tillegra Dam project would implement the reduce/reuse/recycle waste hierarchy in accordance with the *Waste Avoidance and Resource Recovery Act 2001* and the NSW *Waste Avoidance and Resource Recovery Strategy 2007*	This is supported.

9.3 Industry and Investment NSW

No.	Recommended Condition	Hunter Water Response
1	Hunter Water to monitor and model prawn catches and commercial fish catches in the Hunter River and offshore fisheries reliant on Hunter prawn and fish species, to determine the level of impact on the commercial fishing sector from the Project.	This is not supported. The assessment of the potential impact of the Project on the Hunter Estuary Wetlands together with additional work undertaken following public exhibition of the EA Report indicates the Project would have negligible impact on the estuary. Hunter Water therefore considers this condition would not be reasonable and if implemented would require it to undertake work that from a statutory perspective more appropriately rests with I&I NSW. It should be noted that monitoring is already underway (or soon will be) immediately downstream of Seaham Weir. Hunter Water would also commit to the provision of an Environmental Contingency Allowance (ECA) of 2.5 GL within the dam that could be used in any manner seen fit by I&I NSW and NOW to promote river and estuarine health.
2	Hunter Water to undertake monitoring of the geomorphic stability of the river system and have mitigation strategies in place, in perpetuity, to address any bed lowering, scouring or other impacts that arise as a result of the project.	This is supported. Hunter Water would undertake monitoring of the Williams River with respect to the effects of operation of Tillegra Dam.
3	Hunter Water to monitor water quality during the filling phase in order to avoid potential occurrence of poor water quality resulting in fish kills and that suitable quantities of water are released at the required times, as outlined in the EA.	This is supported. The potential impact of releases on downstream water quality during initial filling of the storage is explicitly acknowledged in the EA Report. The Statement of Commitments (both draft and final) identifies preparation and implementation of a water quality monitoring program to manage downstream water quality during all phases of the Project. The development of the preferred release strategy is documented extensively in the EA Report and related Working Papers. This explicitly considered water quality and maintenance of aquatic ecosystem health.

No.	Recommended Condition	Hunter Water Response
4	A condition be included that any expansion or increase in extraction of water or distribution of water be subject to further environmental assessment under the EP&A Act	This is not supported. A condition is not required to enforce the existing provisions stipulated under the EP&A Act. There is an obligation under the EP&A Act for additional assessment where a modification to an activity would not be consistent with the approval conditions. Water extraction and use is also governed under the *Water Management Act 2000.* Duplication of the above processes is considered unnecessary.
5	Implementation of the 'Tillegra Dam Aquatic Ecosystems Offset Package' in full as stated in the Draft SOC, including: a) Remediation of fish passage at four high priority barriers in the Hunter Catchment. Subject to final confirmation from I&I NSW this will include a fishway at Seaham Weir, Liddell Gauging Station (Hunter River at Jerries Plains), Dora Creek Weir and Barnsley Creek Weir. Alternative sites are listed in the NSW Weir Review for the Hunter and could include such sites as Cross Keys Road, Paterson River. b) The re-introduction of at least 10km worth of large woody debris into the Williams River to provide for enhance geomorphic and habitat diversity within the Williams River c) The sponsorship of a comprehensive monitoring and research program including components such as habitat mapping, fish surveys, movement patterns and habitat utilisation monitoring, PIT tagging and LWD monitoring. d) A five year community small grants scheme of $100,000 per year for the rehabilitation and management of wetlands, riparian zones and in-stream aquatic habitat within public lands.	This is supported. This commitment is restated in its entirety and unaltered in the Final Statement of Commitments. It is noted that the Terms of Approval in the approval conditions for major infrastructure projects typically make explicit reference to compliance with the final (or revised) Statement of Commitments provided by the proponent. It is expected that should the Project be approved, the above mechanism would adequately address this particular recommendation.
6	Access to the Native Dog Creek area should be reflected in the conditions of consent.	This supported. This is discussed in Section 8 as a modification to the Project from that described in the EA Report.
7	Angler access to buffer zones should not be restricted unless it is shown that anglers would have a detrimental effect on habitat or access is a hazard to public safety.	The buffer zone is intended first and foremost as a mechanism to manage water quality in the storage. Activities that could compromise the effectiveness of this would be excluded from the buffer zone. As acknowledged in the EA Report, the potential value of the storage as a recreational fishing resource is recognised and is reflected in Hunter Water's commitment to provide infrastructure to support recreational

No.	Recommended Condition	Hunter Water Response
		fishing (refer Section 12.10 of the EA Report and Working Paper N). Direct access to the storage would be available from the three identified recreation precincts, walking trails detailed in the draft ILUP, and from the Native Dog Creek area. The final ILUP would be routinely reviewed to ensure that recreational access is maintained yet managed where necessary to prevent detrimental impacts on storage water quality.
8	Provision of amenity such as fence stiles or gates for access be considered if fencing infrastructure is installed in those areas that are easily accessible to shore based anglers. (refer EA Sect 6.8)	This is supported.
9	The development of intensive aquaculture facilities for the production, breeding or rearing of fish on or around the storage for commercial purposes requires a permit under the *Fisheries Management Act 1994*. Should such a commercial venture be considered, then it is recommended that further advice is sought from I&I NSW.	Noted. At this point in time it is unlikely that Hunter Water would support this type of activity unless it could be demonstrated not to be a risk to water quality.
10	The enhancement of the storage for recreational fishing through fish stocking will need to be assessed and subject to formal approval under the Fish Management Strategy on Fresh Water Fish Stocking (2005).	Noted. Hunter Water would continue to liaise with I&I NSW with respect to this matter. I&I NSW has indicated to Hunter Water that fish stocking can and would occur.
11	The EA stated that if recreational access to the dam is considered to have a detrimental impact on infrastructure then restrictions may be requested to avoid any adverse impacts. I&I NSW require that Hunter Water seek concurrence of the I&I NSW where limitations on access to the impoundment affects recreational fishing.	This is not supported. Tillegra Dam is intended first and foremost as a water supply storage and maintenance of suitable water quality would be an operational priority. The use of the storage for fishing (and other recreational activities) is a secondary benefit. Hunter Water is willing to consult with I&I NSW with respect to any proposed access restrictions, however, it is not considered appropriate that it be required to obtain the concurrence of I&I NSW with respect to the manner of operation of its water supply infrastructure.
12	I&I NSW request the inclusion of fish cleaning facilities at suitable locations around storage for both convenience and amenity.	This is supported. This would be addressed through finalisation of the ILUP with respect to the recreation precincts identified in the Plan.

9.4 Hunter-Central Rivers Catchment Management Authority

No.	Recommendation	Hunter Water Response
Climate change		
1	Climate change information should be revisited to use the most up to date information and apply up to date information to modelling to re-examine business case.	This is not supported. A full response to issues raised in relation to climate change is provided in Section 5.10 of this submissions report which addresses this recommendation. This issue is already explicitly addressed through the determination of catchment yield which feeds directly into the business case development (together with many other issues).
2	An additional study should be invested in that relates to drought frequency and intensity in the Hunter Water supply area.	This is not supported. This issue is already explicitly addressed through the determination of catchment yield. The additional study would be an unnecessary duplication of work.
3	An independent review of climate change information by accredited experts be undertaken to inform the use of the best available information.	This is not supported. A full response to issues raised in relation to climate change is provided in Section 5.10 of this submissions report which addresses this recommendation.
4	All options should be reconsidered using a cost benefit analysis	This is not supported. The economic evaluation methodology used for the Project is one accepted by NSW Treasury. A detailed response to this issue is provided in Section 5.2 of this submissions report.
Native vegetation		
5	CMA recommends 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 off-sets in NSW.'	This is not supported. This methodology was specifically designed to consider issues relevant to the NSW *Native Vegetation Conservation Act 1997* and not major projects assessed under Part 3A of the EP&A Act. Hunter Water considers sufficient information has been provided, both in the EA Report and supporting documentation, and in this submissions report, that provides adequate justification for its preferred mitigation strategy.

No.	Recommendation	Hunter Water Response
6	CMA recommends an increase in the riparian offset proposal ratio of 1:3.2 calculated as an expression of stream length with 20 m buffer and consideration of riparian offsets in adjacent catchments with less ongoing risk.	This is not supported. Hunter Water considers the proposed mitigation measures described in the EA Report and as modified in Section 8 of this submissions report adequately address the identified impacts.
7	CMA recommends an assessment of land capability and soil landscape to inform the location of potential regeneration/revegetation options.	This is not supported. Existing remnant vegetation and the assessment conducted by I&I NSW shows that the regeneration/revegetation corridor can adequately support native vegetation suitable for sequestering carbon.
8	CMA recommends a revision of the corridor offsets locations to areas with higher proportions of remnant vegetation to improve resilience of the outcomes.	This is supported. Section 8 of this submissions report describes proposed changes to revegetation areas that are considered to provide greater value at both the local and regional scales.
9	The condition of adequate protection covenant mechanisms to ensure the ongoing protection of offsets.	This is generally supported subject to not constraining Hunter Water operations.
10	CMA recommends a specific biodiversity offset plan be developed to guide offset delivery to include: (i) site assessment; (ii) optimised site outcome for native vegetation regeneration/revegetation; (iii) site specific method of achieving outcome; (iv) site specific species lists; (v) protection covenant to be applied	This is supported. The Project Statement of Commitments includes the development and implementation of terrestrial and aquatic ecosystem offset packages.
River and waters		
11	CMA recommends that the upstream impacts and ongoing risks to geomorphic stability be addressed and mitigation strategies be developed and adopted.	The impact assessment identified the likely and potential geomorphic impacts associated with construction and operation of Tillegra Dam. It included identification and consideration of practicable impact mitigation measures.
12	CMA suggests that the fluvial geomorphology impacts are severely underestimated due to not using the most accurate information and recommends that the downstream geomorphic impact be reassessed and peer reviewed.	Hunter Water does not support this view. The fluvial geomorphology assessment was undertaken by a recognised authority with extensive experience and expertise in this field. The associated Working Paper provides a comprehensive documentation of the methodology employed and the justification for this.

No.	Recommendation	Hunter Water Response
13	CMA suggests that once the impacts are fully understood that a complementary package of costed strategies be developed to manage the river and tributaries post dam.	Hunter Water is of the view that a comprehensive assessment of likely and potential impacts has been conducted for the Project, sufficient to adequately inform the decision-making process. The EA Report explicitly acknowledges the limitation of existing information and knowledge through commitment to a range of monitoring activities which will inform the sustainable management of Tillegra Dam.
14	CMA suggests that the water quality and ecology impacts are understated and recommend that a long-term monitoring program be undertaken and the impacts to be reassessed and peer reviewed.	Hunter Water does not support this view. The EA Report and supporting Working Papers provide a comprehensive documentation of the anticipated water quality and ecological impacts, noting that it is impossible to be completely certain over the specific nature of individual impacts. The Project Statement of Commitments include undertaking monitoring of a wide range of factors including water quality and ecology. The monitoring programs would be developed in consultation with relevant stakeholders and the information be made publicly available.
15	CMA recommends that fish passage be incorporated at the dam.	This is not supported. This mitigation option was considered in the EA Report and it was identified there would be greater environmental value outcomes through the funding of a package of aquatic ecosystem enhancement measures in the Lower Hunter. This forms part of the Statement of Commitments and is supported by I&I NSW.
16	CMA suggests that the process for assessment through the Water Sharing Plan has been inadequate. A complete Water Sharing Planning process should be undertaken to develop the flow sharing and operational rules.	This is considered to be an issue for the CMA to discuss with the NSW Office of Water.
17	The CMA suggests that the demand predictions are not accurate and recommends that the demand management options be reassessed and peer reviewed.	This is not supported. No information is provided to support this view. Further, it is noted that demand predictions have been independently verified by IPART.
18	The CMA recommends that a full costing of the ongoing impact of the dam on the river and infrastructure that may be affected be undertaken and a cost recovery mechanism be factored into the price of the water.	The pricing of water is an issue that is managed separately by IPART as discussed in Section 5.2 of this submissions report.

No.	Recommendation	Hunter Water Response
19	CMA recommends all offsetting proposals, including riparian vegetation and large woody debris, account for the ongoing risks from the impacts of the dam and consideration be given to offsetting some of the impact in adjacent catchments to balance the risk	Hunter Water considers this recommendation is already adequately addressed through the offset packages described in the Project Statement of Commitments.
20	CMA suggests that a fish stocking program for Australian Bass would require ongoing funding and recommends costing of this proposal be reassessed should the fish passage at the dam not eventuate.	As indicated elsewhere, Hunter Water does not support the provision of fish passage at Tillegra Dam and has instead committed to a range of mitigation measures considered to give greater value environmental outcomes. Hunter Water has committed to working with I&I NSW to ensure the initial stocking of the storage. The subsequent management of the fishery would rest with I&I NSW which has existing mechanisms in place (such as the licensing of recreational anglers) that are considered to adequately address this issue.
21	CMA suggests that the impact of the estuary has been underestimated and that no offsetting of mitigation has been considered. The CMA recommends that additional assessment of the estuary impacts be undertaken and peer reviewed and a offsetting package to include the rehabilitation of Irrawang Swamp be included.	Hunter Water does not support this view or recommendation. The assessment of the potential impact of the Project on the Hunter Estuary Wetlands together with additional work undertaken following public exhibition of the EA Report indicates the Project would have negligible impact on the estuary, including Irrawang Swamp.
22	CMA recommends the stipulation for the community grants scheme to be on public land be removed to allow sites on private land also.	Submissions to the EA Report exhibition note the difficulty in giving effect to works on private land. Hunter Water shares this view and consequently this recommendation is not supported.

9.5 Land and Property Management Authority

No.	Recommended Condition	Hunter Water Response
1	Should any Crown roads be required to be constructed to service the development, these will need to be transferred to an appropriate roads authority (DSC or RTA) prior to construction.	Hunter Water proposes to fully construct the roads and ensure that the work is free of defects prior to transfer. Road re-alignment and standards would meet the requirements of the roads authority (Dungog Shire Council).
2	Zoning of land surrounding the waterbody: An appropriate consent condition and management intent should be included to zone relevant areas to allow assessment of development proposals on their merits.	Zoning of land falls under Part 3 of the EP&A Act and is a separate process to the Part 3A planning approval process. This is noted in the EA Report.
3	Inclusion of appropriate consent condition and management intent for transfer of lands to the Crown and reservation.	Hunter Water supports consultation with LPMA with respect to this matter.

9.6 Dungog Shire Council

In its submission, Council made a significant number of recommendations with respect to a variety of issues, including various matters relating to the provision of substantial funding which, it is presumed, are founded on Council's perceived view of the socioeconomic impact of the Project upon the Shire and its residents. The following table provides Hunter Water's response to Council's recommendations including those related to funding. The latter has been estimated to range from $60 million to $100 million depending on the time frame over which the calculations are made.

The expected and potential impacts of Tillegra Dam upon the wider Dungog community have been explicitly acknowledged from the very outset of the Project. This is clearly reflected through Hunter Water's proactive engagement with Council starting in November 2006 through to the present – and which would continue should the Project be approved.

This has also been reflected through the provision of substantial funding by Hunter Water both to date as documented in the EA Report (and which totals $1.2 million) and into the future through the Final Statement of Commitments. The commitments to maintain and fund roads, provide recreational infrastructure and undertake other works will cost in the order of $6 million. All of Council's affected infrastructure will also be replaced, to a far higher standard of quality than that which currently exists. Existing maintenance costs will be substantially reduced. The Project also provides a number of significant development opportunities for Council.

As noted in the EA Report, the Project includes the construction of approximately 17 kilometres of road along the eastern and northern margins of the storage to replace the section of Salisbury Road that would be inundated. Road works also include provision of a new access to the Quart Pot Creek locality to replace the existing access which would be inundated. The value of these works is approximately $80 million.

The above is therefore noted for the attention of the Minister for Planning.

No.	Recommendation	Hunter Water Response
1	That Hunter Water provide a contribution of $50,000 to DSC on a 5 yearly basis to complete a review of the land use planning framework around the proposed dam	This is not supported. Hunter Water has already provided $323,000 to Council for a review of its planning documents.
2	That Hunter Water provide $20,000 for the review of the DSC tourism development control plan	This is not supported. Hunter Water has already provided $323,000 to Council for a review of its planning documents.

No.	Recommendation	Hunter Water Response
3	That Hunter Water provide a Sec 94 contribution of 2% of the total project value ($9.4M based on $470M)	This is not supported. From a purely statutory point of view, the Project falls under Part 3A of the EP&A Act and therefore Section 94 does not apply. There is no equivalent provision under Part 3A. Hunter Water has already made a significant financial contribution to Council in recognition of the effects of the Project on the community (refer Section 12.11 of the EA Report) and is committing to further funding (refer elsewhere in this table).
4	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.	No clarification is considered necessary. The use of this terminology reflects the **draft** status of the ILUP. The draft ILUP forms part of the EA Report and is therefore subject to any applicable conditions that the Minister for Planning considers appropriate to attach to the approval.
5	In accordance with the DSC Route Access Study the Applicant must contribute $2M pa for a period of five years (CPI indexed) of funding towards roads upgrading as referenced in the study	This is not supported. The NSW Government, through the Whole of Government Taskforce, has committed $2 million for roads. Half of this amount will be provided by Hunter Water.
6	The road network north of the Dungog township to the proposed dam is to be upgraded to the current RTA standards	Hunter Water would not commit to **upgrading** this section of road but would **maintain** the section of road between Dungog and Tillegra in a suitable condition for the duration of construction to ensure the safe passage of vehicles.
7	That Hunter Water 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	This is supported. The EA Report acknowledges the existing generally poor condition of routes likely to be used by construction traffic and notes the impact such traffic would have on pavement deterioration.
8	That prior to commencement of construction a road dilapidation report is undertaken from Raymond Terrace through to the dam construction site	This is identified as an impact mitigation measure in the EA Report.
9	That prior to commencement a bridge condition assessment be undertaken from Raymond Terrace through to the dam construction site	This is identified as an impact mitigation measure in the EA Report.

No.	Recommendation	Hunter Water Response
10	That Hunter Water fund 50% of the cost of replacement of Unwarrabin Creek bridge and Wallaroo Creek Bridge	This is supported. An allowance has been made in the additional commitment of $1 million for road works (which is being matched dollar for dollar by the RTA in accordance with the NSW Government announcement).
11	That Council be compensated for the loss of three concrete bridges that have been constructed within the inundation area	This is not supported. Hunter Water has already agreed to replace affected Council infrastructure through the construction of the new section of Salisbury Road which includes the provision of three new waterway crossings.
12	That Hunter Water be required to undertake road safety improvements at the Hooke Street, Chichester Dam and Common Road intersections to improve line of sight, enhance pedestrian safety and to minimise conflict with current road users	This is not supported. The EA Report included a safety audit which identified a range of safety issues on routes anticipated to be used by construction traffic. Hunter Water has already committed to undertaking road safety improvements to address these issues.
13	That construction of all new roads meets RTA standards for road design and construction and are consistent with Councils rural roads policy	This is supported.
14	The development is to provide for a pedestrian and cycle way link between Dungog and the proposed dam	This is not supported. Hunter Water has already made a significant commitment to recreational infrastructure around the dam as documented in the draft ILUP. The provision of such a facility is considered to more appropriately be the responsibility of Council.
15	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 entrance way to the environmental and recreational setting of the Tillegra District	This is not supported. This would require further land acquisition and Hunter Water is not prepared to commit to this. In addition to the financial aspect, this could cause unnecessary concern on the part of potentially affected property owners.
16	A detailed water users recreation study must be prepared and implemented in consultation with relevant authorities and stakeholders	This is not supported. It is considered this is already adequately addressed through the draft ILUP and the process described for its finalisation which includes consultation with relevant stakeholders.

No.	Recommendation	Hunter Water Response
17	That Hunter Water contribute half of the Visitor Information Centre (VIC) operating costs which equates to approx $80,000 per annum	This is generally supported provided funding is available in lieu of that committed to in relation to the proposed relocation of Munni House. Hunter Water would not, however, support ongoing funding.
18	That Hunter Water and the State Government make an additional and ongoing resource commitment to the Dungog area emergency services (This is not provided for in Section 94 fee breakdown in Condition 3)	This is conditionally supported. Hunter Water will commit to a management plan for worker accommodation that will consider social standards and strategies for ensuring that no issues arise. This plan would be developed in consultation with Council and community services such as police, ambulance, doctors, SES, etc. With regard to the bigger picture of the provision of services when the dam becomes operational, it is noted that the NSW Government generally maintains and funds those services and is likely to make adjustments to those services as may be deemed necessary at the time. This is not considered to be an issue for either Hunter Water or Council.
19	That Hunter Water commit $105,000 to acquisition of land in Dungog for the provision of visitor facilities.	This is generally supported provided funding is available in lieu of that committed to in relation to the proposed relocation of Munni House.
20	Within two years after completion of works, the Applicant must commission an independent person or team to undertake an Environmental Audit of the project (see submission of scope)	This is supported. It is noted that major infrastructure project approvals typically include such a condition.
21	Prior to commencement of construction, the applicant shall develop and implement a compliance tracking program, to track compliance with the requirements of this approval during the construction and operation of the project (see submission for scope)	This is supported. It is noted that major infrastructure project approvals typically include such a condition.
22	Prior to 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 (ER) independent of the design, construction and operational personnel. The applicant shall engage the ER during any construction activities, and throughout the ongoing operation life of the project. (see submission for proposed responsibility)	This is supported. It is noted that major infrastructure project approvals typically include such a condition.
23	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. (see submission for detail)	This is supported. It is noted that major infrastructure project approvals typically include such a condition.

No.	Recommendation	Hunter Water Response
24	Prepare and implement a community information plan which sets out the community communications and consultation processes to be undertaken during the construction and operation of the project (see submission for scope)	This is supported. It is noted that major infrastructure project approvals typically include such a condition.
25	Ensure there is a clear process established for community complaints. (see submissions for scope)	This is supported. It is noted that major infrastructure project approvals typically include such a condition.
26	That Hunter Water 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	This is not supported. It is noted this would not be consistent with past Part 3A approvals.
27	That Hunter Water provide continuing funding of up to $20,000 per annum to Dungog Neighbouring Services for a period of 10 years for counselling services	This is not supported. Counselling was an important service during the Project announcement and subsequently to this point in time. However, it is considered that many of the issues that were the basis for this are now resolved. This notwithstanding, Hunter Water would provide a tailored service to support remaining landowners in the Project area and families with an interest in the cemetery location to ensure that they have proper support for that process.