APPENDIX 5

RECREATION AND TOURISM POTENTIALS REPORT

(Jenny Rand & Associates)
TILLEGRA DAM
ASSESSMENT OF RECREATION & TOURISM POTENTIAL
July 2008
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for:  
**PLANNING WORKSHOP AUSTRALIA**

by  
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1. INTRODUCTION

1.1 Background

In 2006 the NSW State Government announced its strategy for securing the future water needs for the Lower Hunter and Central Coast Regions of NSW. The Strategy included a proposal to build Tillegra Dam. Tillegra Dam is to be located on the Williams River in the foothills of the Barrington Ranges in Dungog Shire. Tillegra Dam will create a large water body (2,000 ha) that has the potential to be used for a range of recreation and tourism activities. The Dam is to be operated by Hunter Water.

In 2007 Dungog Shire Council commissioned Planning Workshop Australia to prepare a Shire-wide land use strategy as a basis for a review of the existing Local Environmental Plan or the preparation of a new Plan, taking into consideration the potential impacts of Tillegra Dam.

The potential impacts of and opportunities for the Dam in terms of recreation and tourism in the Shire and surrounding region is being assessed as part of the Planning Brief.

1.2 Terms of Reference

Planning Workshop in conjunction with Dungog Shire Council has commissioned Jenny Rand and Associates to:

- Assess the recreational and tourism potential of the proposed Tillegra Dam.
- Identify and explore potential impacts of the Dam on the tourism industry.
- Explore the ability of the infrastructure and facilities available in the Shire to support recreation and tourism use of the Dam.

1.3 Study Tasks

Tasks undertaken in the preparation of this study included:

- Inspection of the Dam site and assessment of its relationship with Dungog and the surrounding attractions.
- Meetings with representatives from Hunter Water, Dungog Shire Council, NSW Department of Planning, Planning Workshop and the Tillegra Dam Community Consultative Committee and telephone interviews with the Waterways Authority and Tourism NSW.
- Business and Community Workshops - Tourist Association and Tourism Operators, Dungog Chamber of Commerce, Dungog Business Community, and community workshops in Dungog, Clarence Town, Gresford and Paterson.
- Telephone interviews with Managers of Water Storage Dams - Grahamstown, Lostock, Lake St Cadair, Lake Liddell, Glenbawn, Keepit, Copeton, Burrendong, Wyangala / Grabine and Burrenjuck.
- Telephone interviews with lakeside and riverside reserve managers - Port Stephens Shire, Maitland City, Wyong Shire and Gosford City.
- Telephone interviews with potential users of Tillegra Dam - Boating Industry of Australia, Australian and NSW Waterski and Wakeboard Federations, NSW Hydroplane Association, Raymond Terrace Aquatic Club, Newcastle University Water Ski Club, Myuna Bay Tournament Waterski Club, NSW 4WD Association, Mountain Bike Australia and the Hunter Mountain Bike Association.
2. TILLEGRA DAM PROPOSAL

2.1 The Dam Setting

The proposed Tillegra Dam will be located on the Williams River, in the foothills in the Barrington Ranges in Dungog Shire. The Dam wall is approximately 12km north of the township of Dungog. Dungog Shire is located in the Lower Hunter region. The Shire covers an area of 2,248 square kilometres and is bounded by the LGA's of Port Stephens Shire to the south east, Great Lakes and Gloucester Shires to the north and north-east, Singleton to the west and Maitland City to the south.

Dungog is a rural shire, with the main economic activities being grazing, dairying, forestry and tourism. In 2006, Dungog Shire had a population of 8,500. The township of Dungog, with a population of around 2,100 people, is the administrative and service centre for the Shire. It is the closest town to Tillegra Dam and will be the service centre for the Dam. Dungog has a small shopping centre that is anchored by an IGA supermarket. There are a number of eateries in town as well as a few lifestyle, gallery and boutique shops targeted to the visitor market. The town has a hospital, two pub hotels, motel and two licensed clubs.

There are three main villages, Clarence Town, Gresford-East Gresford and Paterson. Clarence Town, population 820, is located on the Williams River in the south-eastern corner of the Shire. The River is the town's main attraction, with people coming into Clarence Town to camp by the River, fish and go boating and water skiing. Gresford, East Gresford and Paterson are located in the Paterson River Valley along the western side of the Shire. Gresford and East Gresford have a combined population of around 300 people while Paterson has a population of around 340 people. Gresford is the gateway to the upper Paterson and Allyn River valleys and has an emerging wine industry. There are also a number of very small villages, including Vacy and Martins Creek spread throughout the Shire.

Tillegra Dam is located approximately 36km from Clarence Town, 37km from Gresford and 45km from Paterson. If the Dam becomes a quality recreational area and/or tourist attraction, it will draw people into the Shire, with visitors driving through these villages to access the Dam.

The Shire incorporates the catchment areas of the Allyn, Paterson and Williams Rivers, with these rivers dividing the Shire into three distinct river valleys that run north west-south east from the Barrington Ranges to the Hunter River. The upper catchment areas in the north of the Shire are rugged and steep with the terrain graduating to hilly in the central and southern areas of the Shire.

Tillegra Dam is located in the foothills of the Barrington Ranges. The Dam will have the most scenically attractive settings of all water storages in the Hunter Region, combining very attractive rural scenery with the mountainous backdrop of the Barrington Ranges. The Williams River Valley is relatively narrow with high ridges and steep side slopes dividing the valley from the Chichester River Valley to the east and the Allyn River Valley to the west. The Barrington escarpment lies to the north, with the forested, rugged ranges forming the backdrop for the Dam.

The Upper Williams River Valley is one of the main tourist attractions in Dungog Shire, with the primary destination being the Barrington National Park (see Section 4.1). The Park is located approximately 30km north of the Dam wall and accessed via Salisbury Road, which is the Dam access road. There is a picnic area, walking trails and accommodation at the Williams River picnic area within the Park. The Chichester River Valley is the other major visitor destination in this part of the Shire, with the attractions being the Chichester Dam (16km by road from the Tillegra Dam wall) and the Chichester State Forest.
2.2 The Proposed Dam

The proposed Dam is to be developed and operated by Hunter Water. It has a lead time of approximately 10 years, with 5 years for planning, design and construction and 3 to 5 years to fill, depending on rainfall. The Dam will be used to supplement the domestic potable water supply for the Lower Hunter and Central Coast areas. The first water is expected to be available for use in 2013. The Dam will also be used to generate hydro-electricity. Hunter Water will also plant in the order of 1.5 million trees in the Dam catchment area to offset the carbon emissions produced in operating the Hunter water supply system.

Tillegra Dam will have a storage capacity of 450 gigalitres. The Dam waters will extend approximately 10km along the Williams River Valley, with the main 'trunk' area being approximately 5.5 km long and around 1 to 1.5km in width. The Dam will have three 'arms', with the Dam branching adjacent to the wall to create a small, wide arm just south of the wall, with the main trunk extending up the Williams River Valley to Quart Pot, where it branches into 2 arms, one following the Williams River to the Tunnibuc area, and the other extending west along Quart Pot Creek.

At full water level Tillegra Dam will have a surface area of approximately 2,000 hectares. In terms of surface area, it will be the third largest dam in the Hunter Region, with Grahamstown being the largest (2,800 ha) followed by Glenbawn Dam (2,615 ha). Tillegra will be approximately double the size of Lake Liddell, 4 times the size of Lake St Clair and 8 to 10 times the size of Lostock and Chichester Dams.

Hunter Water is proposing to operate Tillegra Dam at around 90% capacity. Tillegra, Chichester and Grahamstown are the only dams in the region in which the water level is retained at or close to full capacity. In contrast, the Dams operated by State Water to provide water for agriculture, experience significant fluctuations in water level. For example, over the past 6 years, the water level in Glenbawn Dam has fluctuated between 29% and 54%, Lake St Clair between 32% and 60%, and Lostock Dam between 75% and 100%. As discussed in Section 7.1, visitation levels and recreational use of water storage dams relates directly to water levels, with high water levels corresponding to high visitation and use. With the dams in the Region being in relatively close proximity to each other, dam users will 'move' between the Dams depending on water level. For recreational purposes, the high water levels at Tillegra Dam will provide it with a strong competitive advantage over other Dams in the region.

As the water from Tillegra Dam is to be released into the Williams River and then extracted downstream at Seaham for storage and treatment, the water from the Dam does not need to meet the same stringent water quality parameters as that from Chichester Dam. As such, a wider range of activities can be undertaken on the Dam and within the catchment area. Hunter Water has advised that boating and primary contact activities such as swimming will be permissible at the Dam. Development (subject to satisfactory pollution control measures) will also be permissible around the Dam foreshore.

2.3 Access

Access to Tillegra Dam

Tillegra Dam is accessed via Dungog. Dungog is linked to surrounding centres by a network of regional roads - the Clarence Town Road to Raymond Terrace and then onto Newcastle or Port Stephens; the Dungog Road to Paterson and then onto the Maitland and Cessnock areas; the Glendonbrook and Bingleburra Roads to Gresford and west to Singleton and the Upper Hunter, and the Stroud Road connecting north to Gloucester or through to Great Lakes Shire and the Taree area.

From Dungog, access to Tillegra Dam is from the Chichester Dam Road and the Salisbury Road. Travellers arriving from Clarence Town and Paterson will come through Dungog. Travellers coming via Gresford, can access the Dam via Bingleburra Road and then the Chichester Dam and Salisbury Roads, or via the Allyn River Road and the Salisbury Gap Road, which provides access to the upper
reaches of the Dam. The first route is fully sealed, while the upper section of the Allyn River Road and the Salisbury Gap Roads are gravel.

All of the access roads into the Shire are two lane roads, that are relatively narrow and winding and in relatively poor condition. Chichester Dam and Salisbury Roads are very narrow local roads that are also in poor condition. In their present condition, the roads will be a deterrent to visitors, particularly to those towing a caravan or boat.

The poor condition of the access roads could also become an issue during the Dam construction phase, with workers opting to stay in the Shire rather than commuting each day from the Lower Hunter. As discussed in Section 6.3, Dungog does not have the accommodation to cater for an influx of construction workers.

Dungog is accessible by train, with the town having both Cityrail and Countrylink services. Being only 12km from Dungog, it is feasible to access the Dam by taxi or bicycle. Alternatively, the operator of any accommodation at the Dam could also run a courtesy bus service. Consideration should be given to establishing a cycle track between Dungog and Tillegra Dam, possibly along the pipeline corridor (preferred), or as part of the upgrading of the Chichester Dam and Salisbury Roads. This would enable cyclists to catch the train to Dungog and then cycle out to the Dam.

**Access around the Dam**

The section of Salisbury Road from Tillegra to Underbank will be inundated by the Dam, with this section to be relocated to higher ground along the eastern side of the Dam. This road will provide access to the Dam wall as well as to the eastern and northern foreshore areas.

The section of the existing Salisbury Road from Underbank to Quart Pot and the Chichester Road in the Tunnibuc area will remain open and provide access to the upper arms of the Dam.

At this stage there are no firm proposals to provide vehicle access to the western foreshore of the Dam or to the southern arm of the Dam (south of the Dam wall). Hunter Water is exploring options to provide access to properties in the Quart Pot area on the north western side of the Dam, however these roads are likely to be designed to provide property access rather than access to the foreshore.

There are a number of local gravel roads providing access to the Myall Creek area in the vicinity of the southern arm of the Dam. Whether these roads will remain open and/or provide foreshore access for visitors is yet to be determined. Providing access to the southern arm and western foreshore would increase the range of development options available and also provide access for emergency vehicles.

**Access to Markets**

Tillegra Dam is located approximately 250 kilometres north of Sydney and 65 kilometres north west of Newcastle. Travelling distances and times from potential source markets are summarised in Table 2.1.

<table>
<thead>
<tr>
<th>Centre</th>
<th>Distance (km)</th>
<th>Travelling Time (hrs)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney CBD</td>
<td>250km</td>
<td>3 hours</td>
</tr>
<tr>
<td>Central Coast</td>
<td>150km</td>
<td>1.7 hours</td>
</tr>
<tr>
<td>Lake Macquarie</td>
<td>85km</td>
<td>1 hour</td>
</tr>
<tr>
<td>Newcastle</td>
<td>75km</td>
<td>1 hour</td>
</tr>
<tr>
<td>Port Stephens (Nelson Bay)</td>
<td>100km</td>
<td>1.2 hours</td>
</tr>
<tr>
<td>Raymond Terrace</td>
<td>65km</td>
<td>45 mins</td>
</tr>
<tr>
<td>Maitland</td>
<td>65km</td>
<td>50 mins</td>
</tr>
<tr>
<td>Cessnock</td>
<td>105km</td>
<td>1.2 hours</td>
</tr>
<tr>
<td>Singleton</td>
<td>80km</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

* Approximate distance and travelling time
For day trips, Tillegra Dam is readily accessible to the Lower Hunter, Port Stephens Shire and the Singleton, Maitland and Gloucester areas. At the 2006 Census there were 528,600 people resident in these areas. Residents of these areas are also potential weekend, short breaks and holiday markets for the Dam. In addition, for weekend stays and short breaks, the Dam will potentially draw from a wider area than the Hunter. For short stays, it is within the ‘acceptable’ driving range for the Sydney, Central Coast, Upper Hunter LGA and Great Lakes areas. The total population within 3.5 hours drive of the Dam is around 5.3 million people. For longer stay holidays, Tillegra Dam has the potential to draw from a wider area again. Newcastle and Port Stephens LGAs both attract holiday markets from the Central West of NSW (Dubbo region) and from the southern parts of the North West Region (Gunnedah - Tamworth), with these markets also available to Tillegra Dam.

Table 2.2 Population within 3.5 hours drive of Tillegra Dam

<table>
<thead>
<tr>
<th>Local Government Area</th>
<th>Estimated Resident Population 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Hunter</strong></td>
<td></td>
</tr>
<tr>
<td>Cessnock</td>
<td>46,206</td>
</tr>
<tr>
<td>Dungog</td>
<td>8,500</td>
</tr>
<tr>
<td>Maitland</td>
<td>61,880</td>
</tr>
<tr>
<td>Newcastle</td>
<td>141,753</td>
</tr>
<tr>
<td>Lake Macquarie</td>
<td>183,138</td>
</tr>
<tr>
<td>Total Lower Hunter Sub-Region</td>
<td>441,377</td>
</tr>
<tr>
<td><strong>Upper Hunter</strong></td>
<td></td>
</tr>
<tr>
<td>Muswellbrook</td>
<td>15,236</td>
</tr>
<tr>
<td>Singleton</td>
<td>21,937</td>
</tr>
<tr>
<td>Upper Hunter</td>
<td>12,976</td>
</tr>
<tr>
<td>Total Upper Hunter-Sub Region</td>
<td>50,149</td>
</tr>
<tr>
<td><strong>Central Coast</strong></td>
<td></td>
</tr>
<tr>
<td>Gosford</td>
<td>158,157</td>
</tr>
<tr>
<td>Wyong</td>
<td>139,801</td>
</tr>
<tr>
<td>Total Central Coast</td>
<td>297,758</td>
</tr>
<tr>
<td><strong>Surrounding Areas</strong></td>
<td></td>
</tr>
<tr>
<td>Gloucester</td>
<td>4,802</td>
</tr>
<tr>
<td>Port Stephens</td>
<td>60,484</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>32,766</td>
</tr>
<tr>
<td><strong>Sydney Metropolitan Area</strong></td>
<td>4.5 million</td>
</tr>
<tr>
<td><strong>Total within 3.5 hours drive</strong></td>
<td>5.3 million</td>
</tr>
</tbody>
</table>

Source: Australian Bureau of Statistics - 2006 Census

Access to Tourist Attractions in the Surrounding Area

At this stage, minimal consideration has been given to how the Dam will link to tourist attractions and facilities within the surrounding area. The attractions in the surrounding area include:

- Williams River Picnic Area of the Barrington Tops National Park
- Chichester State Forest
- Chichester Dam
- Allyn River Valley

Salisbury Road provides the link between Tillegra Dam and the Williams River Picnic Area / Barrington Tops National Park. While the section of Salisbury Road adjacent to the Dam will be relocated, with the quality of the road improved, there is no provision to upgrade the road from the northern end of the Dam through to the Williams River Picnic Area in the Barrington Tops National
Park. This road is already in very poor condition and needs to be upgraded to accommodate the increased visitor traffic that will be generated by the Dam. From the Williams River Picnic Area the Williams Top Road (Forestry Road) connects across to the Allyn River Road. This road will also attract increased traffic, which will have implications for on-going maintenance.

Tourist traffic is also expected to increase on the Salisbury Gap Road, with this road providing the link between the Dam and Gresford, and between the Dam and the Upper Allyn River Valley (Ladies Wells area).

A road link from Tillegra Dam across to the Chichester Dam Road needs to be established to provide direct access from Tillegra Dam to the Chichester Valley and the Chichester State Forest. A mountain bike / cycling trail also needs to be provided between the two areas, with this trail linking with the forest trails in the Chichester State Forest.

2.4 Attributes of the Dam

From a tourism and recreation perspective, key attributes of the proposed Dam include:

- Proximity to major population centres, with the Dam being less than 1.5 hours drive from all major centres in the Lower Hunter Region. Around 530,000 people reside within 1.5 hours drive of the Dam, with 5.3 million people residing within 3.5 hours drive of the Dam.

- Close proximity to Dungog with the Dam close to services and potentially able to be accessed by public transport.

- Beautiful setting in the foothills of the Barrington Ranges, close to both the Barrington Tops National Park and the Chichester State Forest.

- Large water body, capable of accommodating a range of uses. Due to the surrounding topography, the waters will be relatively protected.

- Proposal by Hunter Water to maintain the Dam at 90% capacity, with the Dam not expected to have the significant fluctuations in water level experienced at other storage dams.

- Good access to the eastern foreshore and the upper arms of the Dam.

2.5 Possible Activities & Development Potential

The activities undertaken at the Dam and the development permitted will be determined by a range of factors including:

- The on-water uses permitted by Hunter Water - this decision will be fundamental to determining the development potential of the Dam.

- The physical characteristics of the water body - depth, fetch, channel width, underwater trees and snags, water range (draw-down morphology) etc.

- Restrictions placed on access to different areas of the Dam - including exclusion zones, speed limits, no wake zones and activity zones.

- Physical characteristics of the foreshore areas - topography, soil type and depth, vegetation, visual impacts etc.

- Access provisions - public, management, emergency.

- The level of interest in developing and operating facilities at the Dam by the public and/or private sector.
- Costs and logistics of servicing the recreation areas and maintaining access roads.
- Safety considerations in terms of supervision and emergency access.

Hunter Water has advised that Tillegra Dam will be able to be used for recreational activities, with on-water activities, including motorised boating, expected to be permitted on the Dam. A boating exclusion zone will operate near the Dam wall.

The water body is of sufficient size and depth to accommodate a range of activities, with space available to separate powered and non-powered boating if deemed necessary. The realigned Salisbury Road will have the potential to provide access to a number of areas along the eastern foreshore if required, while the Old Salisbury and Chichester Roads will provide access to the upper arms of the Dam. Given the topography, the Dam waters are likely to be relatively protected. On-water activities could potentially include:

- Recreational boating - general boating
- Power boating
- Jet boating
- Water skiing
- Wake boarding
- Other towing activities including biscuits
- Personal watercraft (jet skis)
- Fishing
- Swimming
- Canoeing / Kayaking
- Rowing
- Sailing (depending on the wind regime)
- Para-sailing
- House-boats
- Charter boats / boat hire / dam tours

The foreshore topography will range from undulating to steep. There appears to be suitable land for developing a range of accommodation as well as recreational activities and facilities. These could include:

**Accommodation:**

- Camping - car based and boat based
- Caravan Park
- Cabins
- Lodges
- Boutique Hotel
- Resort
- Residential conference centre

**Recreational Facilities / Activities**

- Mountain bike trails - around the dam foreshore and linking across the ridge to the Chichester Valley and Chichester State Forest
- Walking trails
- Picnic and barbeque areas
- Tennis courts
- Adventure playground / jumping pillow
- Water slides
- High ropes courses / Abseiling platforms / Flying foxes

The southern arm of the Dam (south of the wall) is removed from the main water body. There may be potential to use this area for a speciality use, for example - an up-market fishing lodge, an eco lodge, boutique resort, a health retreat, accommodation and conference centre, mountain bike park with accommodation etc.
Hunter Water’s proposal to plant 1.5 million trees around the Dam foreshore provides the opportunity to plan for a network of walking, cycling and mountain-biking trails around the foreshore. This would involve a similar approach to that taken in the ACT in the development of the Mt Stromlo Forest Park following the 2004 bushfires. There is also opportunity to undertake some ‘feature’ planting, which in the future would provide additional attractions for the Dam and the Shire - for example - an arboretum, a rainforest valley, an Antarctic Beech forest, a Wollemi Pine Forest etc.

With appropriate facilities, Tillegra Dam could also be a suitable venue for a range of events and activities including:

- Fishing tournaments
- Water skiing, wake boarding, power boat events
- Kite surfing competition / festival
- Rowing regatta
- Triathlon, biathlons, iron man etc
- Open water swimming carnival
- Novelty / community events - eg raft races
- Adventure racing - combining different activities - mountain bike, kayaking, swimming, cross country running etc
- Mountain bike events - cross country, off-road audax, MB orienteering etc.
- Car and motor cycle club rallies
- Caravan, campervan and motorhome club rallies
- Scout / Guide jamborees
- School excursions and camps

The various possibilities identified here are examined further in the following sections of this report.
3. COMMUNITY ATTITUDES TO TILLEGRA DAM

3.1 Community Consultation

In September 2007 a series of community workshops were undertaken in Dungog Shire to explore attitudes to Tillegra Dam, community needs and expectations in relation to the Dam and to identify potential issues and opportunities. Community workshops were undertaken in Dungog, Clarence Town, Gresford and Paterson. In addition workshops were also held with the Dungog Business Community, Dungog Chamber of Commerce and the Dungog Tourist Association and Tourism Operators.

The workshops covered a wide range of issues relating to the Dam and its potential impacts. The Workshop outcomes in relation to tourism and recreation are summarised below.

3.2 Attitude towards the Dam

The attitude towards Tillegra Dam varied throughout the community, with the sentiment generally being against the development of the Dam. If however the Dam is to proceed, there was a very strong view that the best outcome for Dungog Shire needs to be achieved. All sectors of the community were fully in support of the Dam becoming a major recreational resource for the wider region, with the community able to leverage effectively off the tourism and recreation generated.

The community also identified the need for the State Government to improve and expand the infrastructure available in the Shire to enable the Shire to accommodate the Dam and the resulting increase in visitation. There was also a strong view that Hunter Water should pay on-going royalties or compensation to the Shire for the on-going economic loss from the reduction of productive farming land and the loss of the families that farmed this land.

3.3 Desired Outcomes

From a tourism and recreational perspective, the desired outcomes that the Dungog community is seeking are:

- For the Dam to be developed as a regional recreational destination offering a wide range of recreational and tourism activities and facilities. The community was very strong in their view that they did not want to see Tillegra Dam operated in the same way as Chichester Dam, with Chichester Dam making a minimal contribution to tourism and recreation in the Shire.

- To significantly increase the level of visitation to the Shire, in particular to attract higher yielding visitors with high levels of disposable incomes.

- For the tourism and recreational facilities to be of a high standard, with the area professionally managed. The community is looking for development that is of sufficient scale that it has the resources to effectively market and promote the area.

- A style of development that is in-keeping with the character and lifestyle of the Shire, in particular:
  - Reflecting the natural beauty of the area - reinforcing the rural and bush setting
  - Having a strong 'eco-tourism' focus
  - Building with materials and to a scale that reflects the character of the area - eg using natural stone and wood, rather than prefab or massive, 'blocky' buildings.
  - Providing for outdoor, adventure based activities.
3.4 Activities & Facilities

The recreation and tourism activities and facilities identified by the Dungog Community as potentially suitable for Tillegra Dam are summarised in Table 3.1.

Table 3.1 Activities & Facilities Identified in the Community Workshops as Potentially Suitable for Tillegra Dam

<table>
<thead>
<tr>
<th>On-Water Activities</th>
<th>Shore-based Activities &amp; Facilities</th>
<th>Accommodation &amp; Support Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kayaking / Canoeing</td>
<td>Cycling</td>
<td>Accommodation</td>
</tr>
<tr>
<td>Power Boating</td>
<td>Mountain-biking</td>
<td>Up-market accommodation</td>
</tr>
<tr>
<td>Water skiing / tow activities</td>
<td>Walking trails</td>
<td>Eco tourism resort / lodge</td>
</tr>
<tr>
<td>Recreational boating</td>
<td>Horse riding trails</td>
<td>Bush retreat</td>
</tr>
<tr>
<td>Rowing</td>
<td>Triathlon course</td>
<td>Cabins</td>
</tr>
<tr>
<td>Sailing</td>
<td>Picnic / BBQ areas</td>
<td>Caravan Park</td>
</tr>
<tr>
<td>Para-sailing</td>
<td>Playgrounds</td>
<td>Camping Ground</td>
</tr>
<tr>
<td>House boats</td>
<td>Adventure racing course</td>
<td>Adventure lodge</td>
</tr>
<tr>
<td>Boat hire</td>
<td>Abseiling</td>
<td>Fishing lodge</td>
</tr>
<tr>
<td>Fishing</td>
<td>Ballooning / Gliding</td>
<td>Sport &amp; Rec camp for children</td>
</tr>
<tr>
<td>Tours</td>
<td>Boat ramps</td>
<td>School camp / s</td>
</tr>
<tr>
<td>Sea-plane</td>
<td>Fish cleaning</td>
<td>Other Facilities</td>
</tr>
<tr>
<td>Below Dam Wall</td>
<td>Boat sheds / storage</td>
<td>Tea rooms / café / eatery</td>
</tr>
<tr>
<td>White Water Rafting</td>
<td>Clubs / Club houses</td>
<td>Conference Centre</td>
</tr>
<tr>
<td>Canoeing / Kayaking</td>
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<td>Trout Farm / Aquaculture</td>
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<td>Dept of Fisheries Research Centre</td>
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There is a divergence of views within the community relating to the type of boating that should be permissible on the Dam. While the community workshops identified motorised / power boating as a desirable activity at the Dam, some residents who live in close proximity to the Dam do not want motorised boating due to possible noise impacts. According to the Boating Industry Association of Australia, motorised boats now have to meet strict noise emission standards, with noise no longer being the issue that it once was.

The Dungog Shire community also expressed the view that there is a need for cycling and mountain bike trails, in particular:

- Cycleway from Dungog to Tillegra Dam.
- Trunk cycle / walking trail around the Dam (full circuit), with branching walking and mountain-bike trails to various features such as lookouts and foreshore areas.
- Mountain bike track linking Tillegra Dam to the Chichester Valley and to the trails in the Chichester State Forest.
- A mountain bike trail linking Tillegra to Newcastle either following the water pipeline corridor or by utilising road reserves, travelling stock routes, Crown Land and State Forests. Where possible, the cycle trail should be separated from vehicle traffic.

3.5 Support Infrastructure

The Dungog Community has identified the need to upgrade infrastructure in the Shire to support the Dam, including:

- Upgrading the access roads into the Shire - including road widening, providing over taking lanes and repaving.
- Improving the local roads linking the Dam to the main attractions in the area, in particular to the Upper Williams Valley / Barrington Tops National Park, Chichester River Valley / Chichester State Forest.
Improving the recreational areas and facilities in the surrounding State Forests and National Parks to accommodate an increase in visitors.

- Improving health care services in Dungog, including emergency services.

### 3.6 Issues & Considerations

Key issues and concerns identified by the Dungog community included:

- Impact of the Dam on the Williams River - The Williams River is a key feature of the Shire and an integral part of the Shire's environment, character and economic well-being. The River is one of the Shire's major tourism and recreational assets, with the River known for its clear waters, native fish, platypus and attractive scenery. The River is popular for swimming, fishing, picnicking and camping, with the River below Clarence Town also popular for recreational boating and water skiing. The Dungog community wants to see the water levels in the River maintained, with consistent environmental flows to ensure the health of the River, plus additional water released for agricultural purposes.

- Restrictions that could potentially be placed on the Dam by Hunter Water. The community wants to see the Dam available for a full range of recreational activities, as well as access to the foreshore. The community is strongly against any concept of fencing the foreshore area to limit access to the waterway.

- Tree planting - the community wants to ensure that the tree planting program is undertaken in accordance with a development plan for the Dam and that the tree planting does not create bushfire risks or constraints for existing properties in the valley or for future use and development at the Dam and in the surrounding catchment area.

- The need to stock both the Dam and the river below the Dam with native fish, with the stocking rates being sufficient to support recreational fishing.

- The Tenure and Planning Controls for the land around the Dam - the community recognises that the land tenure arrangements and the planning controls need to be suitable to encourage investment in facilities, services and infrastructure at the Dam. The community would like to see land made available for development on a freehold or long lease arrangement, with the length of the lease sufficient to encourage investment. The need to revise the rural tourism provisions of the Dungog Shire LEP to facilitate the development of tourist accommodation at the Dam was also identified.

- The need for on-going compensation / royalties for the Shire as custodian of the area.

- Flexibility in the development plans for the Dam, in order to meet the future needs and expectations of the Dungog Shire and broader regional communities.
4. ATTRACTION & RECREATION BASE OF THE SHIRE

This chapter explores the potential for the proposed Tillegra Dam to become both a tourist attraction and recreational asset for Dungog Shire.

4.1 Attraction Base

The attraction base of Dungog Shire includes:

- Barrington Tops / the Barringtons – this is by far the most significant attraction within the Shire.
- Rural Scenery / scenic drives
- Dungog and the villages - historic buildings, arts and crafts, riverside reserves, eateries and, in Dungog, boutique shops and the historic theatre.
- Williams River – with the National Park picnic area, Bandon Grove, Dungog Riverside Reserve, Clarence Town riverside reserves being popular with both Shire residents and visitors. The tourism sector in Clarence Town is almost solely dependent on the River, with visitors coming into town to camp by the River, fish, boat and water ski. Visitors to Clarence Town help underpin the viability of the local businesses. Maintenance of current water levels and the retention of boating and water skiing in the area is critical for Clarence Town.
- Allyn & Paterson Rivers – in addition to being a scenic feature of the western side of the Shire, the picnic areas and swimming holes in Gresford and Paterson are popular with visitors, with the John Tucker Park at Paterson being popular with large groups (eg sporting club picnics).
- Chichester Dam – the picnic area at the Dam attracts some local and regional residents and the occasional coach tour group. Lack of access to the area above the Dam wall, and no access to the waterway above or below the Dam limits the appeal of the area (see Section 5.1).
- Lostock Dam – the Dam primarily attracts anglers and picnickers, with visitation concentrated in the warmer months (see Section 5.1).
- Wineries – there are two wineries in the Gresford area, Camry Allyn and the Northern Hunter Winery (Glendonbrook Wines). While the wineries don’t necessarily bring visitors into the Shire, they are an important local attraction that people visit while in the area.
- Bunna Bunoo Olive Grove, Gresford – this is a relatively new attraction that sells a range of olive products.
- Camelot Lavender & Llama Farm – this is a quality attraction located on the Dungog Road between Dungog and Paterson. The Farm is popular with coach tour groups.
- Harvest Trail – there are a number of farm gate outlets and specialty food producers in Dungog Shire that form part of the Hunter Harvest Trail.
- Museums – Dungog, Clarence Town and Paterson have small historical museums, with Paterson also having an historic rail motor museum. These attractions have limited opening hours and attract a few visitors.

In addition, the Shire hosts a number of events with the main events being Pedalfest, the Dungog Film Festival and the Tocal Field Days. The Thunderbolt Rally (Motorcycle rally) is also held in Dungog. Minor events include the Dungog and Gresford Agricultural Shows, Dungog and Gresford Rodeos, Heritage events at Tocal Homestead, Open Gardens and the monthly markets at Dungog, Clarence Town and Gresford.

The main attraction in the Shire is Barrington Tops / the Barrington Ranges, followed by the scenic
beauty of the area and the rivers and waterways.

**Barrington Tops / The Barringtons**

Barrington Tops is an iconic natural attraction that has a very high level of recognition in the marketplace. The area, hereafter referred to as the ‘Barringtons’, incorporates a number of National Parks, State Forests and Nature Reserves including, in Dungog Shire, Barrington Tops National Park (BTNP), Mount Royal National Park, Chichester State Forest (2 separate areas), Masseys Creek State Forest, Fosterton State Forest and a number of Nature Reserves. BTNP forms part of the Central Eastern Rainforest Reserve of Australia, with the Park being a World Heritage Area. 85% of the Park is wilderness.

Visitation to the BTNP is estimated by the Department of Environment & Climate Change (National Parks) to be in the order of 700,000 to 1,000,000 people per annum, with visitation concentrated in the northern and central areas of the Park. The Department of Primary Industries (Forests) estimates that the Chichester Forest area in Dungog Shire attracts around 250,000 to 300,000 visitors per annum, including more than 100,000+ campers. Within the Barringtons, the primary visitor nodes are:

- Barrington Tops - the plateau area, with Polblue being the focal point for visitation. This area is mostly accessed via Gloucester, with no vehicle access from Dungog Shire.
- Gloucester Tops - accessed via Gloucester.
- Williams - Allyn River area - accessed via Dungog Shire.
- Chichester State Forest - accessed via Dungog Shire.

The main attractions within the Dungog Shire area of the Barringtons are:

**State Forest:**
- Allyn River - Ladies Wells area
- Lagoon Pinch (start of the Careys Peak walking trail)
- Jerusalem Creek Forest Park and Falls
- Dundungra Falls and Arboretum
- Telegerry Forest Park - 4 camping areas and picnic area

**BTNP:**
- Williams River picnic area and river walk
- Burruga Swamp
- Mt Allyn Lookout

The highest profile attraction, Barrington Guesthouse, was destroyed by fire a few years ago, leaving the Shire without an iconic attraction and accommodation property.

The Barrington attractions are all located within close proximity to Tillegra Dam, with Salisbury Road being the main access road to the BTNP visitor facilities and an access road to the western (Allyn River) areas of the Chichester State Forest. The other attractions are accessed from the Chichester Dam - Wangat Road.

The Dungog Shire Tourism Plan (2004) identified that the southern (Dungog) end of the Barringtons is performing well below its potential, with issues including:

- Lack of definition and development of the visitor nodes, with the attractions and visitors areas not having a high level of recognition in the marketplace.
- Poor condition of the National Park and Forest access roads, including Salisbury Road and the connecting roads within the Forest.
- Declining visitor experiences as a result of environmental degradation due to over use. Over-crowding and resultant anti-social behaviour is also creating conflict between user groups. The Forest and National Park areas need a major capital injection to protect the assets and revamp and improve facilities, as well as sufficient funding and resources to effectively manage these areas.
Lack of investment by NPWS in visitor areas and facilities within the southern area of the Park. This is largely due to issues associated with the Wilderness classification of the southern areas of the Park.

There is potential for Tillegra Dam to play a pivotal role in capitalising more effectively on the Barrington attractions in Dungog Shire. The Dam is well positioned to provide a focal point and an accommodation node, with visitors using the Dam as a base to explore the Barringtons. While the Dam could relieve some of the pressure on the Forest camping areas, it is likely to significantly increase visitation to the area, which will increase the use of the access and internal forest roads, day use picnic areas and walking trails. The visitor areas are already operating at or close to capacity and will not be able to sustain additional use.

If DECC proceeds with the proposal to develop a rainforest canopy sky-walk in the Upper Williams River Valley, visitation to the area will be further increased.

An integrated development plan is needed to co-ordinate the use and development of the southern Barringtons area, with the Plan addressing access (walking, cycling and vehicles) and linkages, the provision of facilities and infrastructure and on-going resourcing and management.

The proximity of Tillegra Dam to the Barringtons provides the Dam with a strong competitive advantage over other water storage dams in the Hunter Region.

**Scenery**

The rugged topography of the Shire with its prominent ridge lines, steep slopes and fertile river valleys, backed by the Barrington Ranges, combines to create very attractive scenery. The beauty of the area is one of the key attractions of the Shire and one of the key reasons why people visit. Scenic driving is one of the main activities undertaken by visitors to the area. Stopping to take photographs of the scenery is very popular with visitors to the Shire, with this creating problems on the Shire's narrow roads.

The Williams River Valley is one of the scenic highlights of the Shire. Tillegra Dam will have an impact on the visual amenity of the area, with the impact being both positive and negative depending on the view-shed and also on the perspective of the viewer.

The planning for development at the Dam needs to address the importance of the scenery in terms of:

- Siting of Salisbury and other access roads to maximise views, while minimising negative visual impacts resulting from construction activities (eg cut and fill).
- Providing vantage points and lookouts where visitors can stop and enjoy the views. Salisbury Road is already a popular scenic touring route, with touring traffic expected to increase when the Dam comes on-line. Providing safe areas where vehicles can pull off the road to take in the view will be important.
- Designing and siting development and using appropriate landscaping to minimise visual impacts, when viewed from key vantage points.
- Designing and siting development to take advantage of views, with quality views being one of the attributes being sought be visitors to Dungog Shire, and also visitors to water storage dams. Accommodation with quality views can command a premium price.

**Rivers & Waterways**

The rivers and waterways are one of the primary attractions in Dungog Shire, with visitors frequently asking where they can access rivers for swimming and picnicking. ‘Wild Rivers’ are part of the
attraction base of the Barrington Tops area, with images associated with the area including the pristine, crystal clear rivers and creeks, waterfalls, and pools and rapids.

The rivers and creeks are a scenic and recreational asset. There is strong demand for both camp sites and accommodation with frontage to and/or views of the waterways, with visitors wanting foreshore access. The rivers and creeks in the Shire are popular with both local residents and visitors for swimming, fishing and picnics. The lower reaches of both the Williams and Paterson Rivers are popular for canoeing and kayaking, with the Williams River between Clarence Town and Seaham Weir also used for recreational boating, boat-based fishing and water skiing.

The development at Tillegra Dam needs to recognise the desire by both residents and visitors for access to the foreshore and waterway for a range of activities including swimming, boating, picnicking, camping and other forms of accommodation.

The Williams River is an integral part of the attraction base of both Dungog and Clarence Town, and river flows need to be maintained to ensure that there is no deterioration of the attraction or the experience. Clarence Town in particular is dependent on the visitation generated by the Williams River. Any decline in the amenity of the River that has the potential to impact negatively on visitation, needs to be addressed in determining the 'compensation' for the Shire.

4.2 Recreation & Sporting Facilities

The recreational and sporting facilities available in Dungog Shire are concentrated in Dungog, with limited facilities in the larger villages. The facilities are designed for local use, with the Shire not having the recreational or sporting facilities to host carnivals or larger events.

The sporting and recreational facilities available in the Shire include:

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<th>Facilities</th>
<th>Dungog</th>
<th>Clarence Town</th>
<th>Paterson</th>
<th>Gresford</th>
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LS = Lostock Dam
WR= Barrington Tops National Park Williams River Picnic area

There is a cricket ground at Tillegra on land that is now owned by Hunter Water, with the ground used by the local community each cricket season.

Dungog Shire is popular for motorcycle related activities. The Newcastle Motorcycle Club complex is located on Monkerai Road, near Dungog, with the Club hosting weekend events. In addition the Forests in the Shire are popular for off-road riding, with the Forests attracting off-road motorcycle tours, organised groups from motorcycle clubs and individuals. Dungog Shire also attracts the touring road bike market. Dungog Showground is used by the Central Coast American Motorcycle Club for their annual 'Thunderbolt Rally' which brings over 500 bikes into town for the two day event.
Tillegra Dam has the potential to be a quality recreational asset for Dungog Shire, with the Dam providing a range of passive and active recreational activities. Cycling and mountain-biking are both growing sports in Dungog Shire. The Dungog Pedalfest has become a regional event. Dungog also attracts the occasional long distance road cycling events. Mountain-bikers from both the Shire and the surrounding region also use the Forests in Dungog Shire for recreational and training rides. There is potential to build on these sports.

In addition to water-sports, Tillegra Dam provides the opportunity to increase the cycling and mountain biking infrastructure in the Shire. There is a need for a formed cycle way linking Dungog and the Dam, as well as a trunk cycleway circumnavigating the Dam, with branch trails off this trunk. A mountain bike trail linking the Dam across to the Chichester River Valley and through to the forest trails in the Chichester State Forest should also be considered. Another option, is the establishment of a mountain-bike park, potentially on the western side of the Dam, with the park providing a range of trails of varying length and technical specifications.

Mountain biking and cycling would provide the Dam with year-round land-based activities to support the on-water activities, in particular the cycling and mountain-biking would increase use of the area in the colder months when boating and water-ski activities drop-off.

Walking and cycling trails around the Dam and linking to Dungog and the Chichester Valley would also provide the Dam with ability to host a range of long distance and endurance events including orienteering (running and mountain bike), rogaining, triathlons, adventure racing, iron man style events, marathon, cross country (running and mountain bike) and off-road Audax. The venue would also be ideal for community / fun rides and walks.

4.3 Considerations for Tillegra Dam

Tillegra Dam has the potential to be a major tourist attraction and destination and a significant regional recreational asset. Planning for Tillegra Dam needs to take into consideration:

- The role of the Dam in the context of the ‘Barringtons’, with the Dam having the potential to become the focal point and accommodation node for visitors to the Barringtons. It has the potential to replace the former Barrington Guesthouse as the iconic accommodation property for the Shire.

- Developing strong links between the Dam and the Barringtons. The proximity to the Barringtons will provide the Dam with a strong competitive advantage over other water storages in the Hunter, and should be a key feature in the marketing and promotion of the area. The Dam strongly compliments the Barringtons - providing a ‘summer’ activity, where visitors can spend the hottest part of the day on / near the water and explore the surrounding forests in the morning and late afternoon when it is cooler.

- The demand for camping sites in the Barringtons is very high, with the camping areas being at capacity in peak times. There will be strong demand for camping at Tillegra Dam.

- Opportunities to provide cycle and walking trails around the Dam with links to Dungog and the Chichester River Valley and Chichester State Forest.

- Scenery - the scenery is a very strong component of the attraction base of the Shire, and one of the reasons why people visit the area. The Dam needs to capitalise on the desire for quality views in the design and siting of its accommodation and visitor facilities. (Note: quality views will translate into higher achieved room rates). Consideration also needs to be given to the design and siting of development to minimise negative visual impacts from any key vantage points in the surrounding area.

- Creeks and rivers are also a strong part of the attraction base of the Shire. Visitors and Shire residents will be seeking access to both the foreshore area and waterway.
The Williams River is an integral part of the attraction base of Dungog and Clarence Town, with it being the main attraction in Clarence Town and the basis for the village's tourism industry. The integrity of the River needs to be maintained.

A subregional development and management strategy is needed for the southern end of the Barringtons, to integrate the visitor facilities and infrastructure available in the Chichester State Forest, Barrington Tops National Park and at Tillegra Dam.
5. THE COMPETITIVE ENVIRONMENT - WATERWAYS

For on-water activities, Tillegra Dam will be competing with all larger water bodies in the Hunter Region, Central Coast and Port Stephens areas, namely:

- **Water Storage Dams:**
  - Chichester
  - Lostock
  - Grahamstown
  - Glennies Creek / Lake St Clair
  - Lake Liddell
  - Lake Glenbawn
  - Lake Keepit (Gunnedah Shire)

- **Coastal Lakes & Estuaries**
  - Brisbane Water and Tuggerah Lakes (Tuggerah, Budgewoi and Munmorah) on the Central Coast
  - Lake Macquarie
  - Port Stephens
  - Myall Lakes

- **Rivers**
  - Hunter
  - Williams

- **Beaches**
  - Numerous beaches extending from the Central Coast through Lake Macquarie and Newcastle Cities and Port Stephens Shire.

The activities undertaken at each of these waterways, facilities provided and the experience offered is detailed in the following sections.

5.1 Water Storage Dams

**Chichester Dam**

Chichester Dam is located at the confluence of the Chichester and Wangat Rivers, which are major headwater tributaries of the Williams River. The Dam is approximately 22km north of Dungog and 5km north east of Tillegra Dam. The two Dams are separated by a steep ridgeline.

Chichester Dam provides around 35% of the Lower Hunter potable water supply. The water is pumped from the Dam to reservoirs at Grahamstown and Newcastle. Water is also released down the River for both agricultural and domestic use.

As the water from Chichester Dam is for domestic consumption, no human contact is permitted, with no public access to the water above the Dam wall. A day-use picnic area is provided below the Wall. This area is managed by Hunter Water.

The Dam attracts a few thousand visitors per annum, with most visitors drawn from Dungog and Port Stephens Shires and the Lower Hunter. Visitors include family groups, retirees and coach tour groups (generally pensioners).

**Lostock Dam**

Lostock Dam is a small water storage dam located on the Paterson River approximately 13km north west of Gresford. The Dam is operated by State Water and was constructed to regulate flow in the
Paterson River to meet stock, domestic and irrigation requirements for the Paterson River Valley.

The Dam is open to the public. Boating is permissible however there is an 8 knot speed limit over the entire dam. The most popular activities undertaken at the Dam are fishing (primary activity) and picnicking. Minor activities include swimming, wind surfing, canoeing and bird watching.

Visitor facilities are relatively limited, with a picnic area and boat ramp above the Dam wall and a caravan park below the wall. The picnic area above the wall has recently been upgraded. There was a picnic area below the Dam wall, however State Water has recently closed this area to save money. The picnic area above the wall is popular in summer in calm weather, whereas the area below the wall was far more sheltered and was more popular in winter and on windy days.

The Lostock Dam Caravan Park is privately owned and operated. It is located below the Dam wall on the Paterson River, with the River bordering the Park on three sides. The Park provides 4 self contained cabins, 8 powered tourist sites, around 100 un-powered sites and 45 holiday vans that are privately owned.

The Dam attracts a few thousand visitors per year. Visitation is seasonal, peaking in the summer school holidays and on warmer weekends. Outside of school holidays, mid week visitation is low with the Dam attracting the occasional retiree, angler and coach tour group (usually seniors). On weekends the main users are anglers - both individuals and clubs, and families. Most visitors to the Dam and Caravan Park are drawn from the Hunter Region, primarily from the Lower Hunter.

Grahamstown Dam

Grahamstown Dam is located at Grahamstown, approximately 3km east of Raymond Terrace. The Dam is operated by Hunter Water and is an off-river storage used solely for potable water supply for the Lower Hunter. Access to the Dam is restricted to prevent potential contamination. Non-powered boating is permissible on the Dam, with sailing being the main activity. Electric motor boats are also permissible and are used by some anglers. Swimming and motorised (petrol) boating are not permitted.

There is a small recreation reserve on the southern foreshore of the Dam. Port Stephens Shire Council leases this area from Hunter Water, and in turn sub-leases it to the Grahamstown Sailing & Aquatic Club. The Club operates the area on behalf of Council, with the area only open to the public on weekends during the sailing season (October to April) and on Sundays during winter. There is no public access to the Dam or Reserve at other times.

The Club is primarily involved in a ‘Sailability’ Program which provides an introduction to sailing for people of all abilities, with the program specialising in sailing for the disabled. From Wednesday to Friday the Club runs sailing classes for schools and special needs groups, with sailing competitions on Saturday mornings. The Club also runs sailing programs during school holidays. Within the Hunter Region, there is a Sailability Program at Belmont with a program being introduced in the Upper Hunter, possibly at Lake Liddell, for the 2008/09 sailing season. The sailing season extends from October through to April. Visitors can bring their own sailing boat to the Dam, however the boats have to be inspected by Club Officials before they can be launched.

The Club House is available for hire by schools and community groups. The Club will allow motorhome and caravan groups to day overnight at the Reserve, provided that all rigs are fully self contained. There are no connections to power, water or drainage.

The Reserve attracts around 2,000 to 3,000 visitors per annum.

Lake St Clair / Glennies Creek Dam

Lake St Clair is the body of water created by Glennies Creek Dam. The Lake is located on Glennies
Creek, a tributary of the Hunter River, approximately 25km north of Singleton. Glennies Creek Dam is operated by State Water. The water if used for domestic water supply for Singleton City and for agricultural and mining purposes.

The Lake has two main arms, with an 8 knot speed limit on the western arm and in the upper reaches of the eastern arm. These areas are very popular with anglers as the submerged trees provide good fish habitat. Water skiing and power boating are undertaken on the trunk area of the Lake. This area is quite exposed and suffers from wind chop.

Lake St Clair Recreation Reserve is operated by Singleton Council. There is a caretaker who lives near the Dam and remains on site during peak periods. The Recreation Reserve has day-use picnic areas plus a camp ground and kiosk. The camp ground has 12 powered sites, with primitive camping permitted in the most other parts of the Reserve. The caretaker advised that there is a need for at least 10-12 more powered sites plus onsite cabins. Council would like to increase facilities and accommodation however the Lease from State Water for the area can be terminated on a week's notice, which is not conducive to investment.

The Lake is a significant recreational area for the Singleton and Muswellbrook areas. The Lake attracts around 10,000 to 15,000 visitor per annum. Visitation is concentrated on weekends and during school holidays, with peak visitation over the Christmas-New Year period, of up to 1,500 people per day, with a secondary peak at Easter, with up to 1000 visitors per day. Visitation fluctuates with water levels, with visitation almost halving when the water level falls below 35 - 40%.

The Lake draws primarily from the Hunter Region on weekends, with visitors starting to arrive on Thursday nights and Friday morning and departing Sunday afternoon. During school holidays, the Lake draws visitors from a wider area, including Sydney, Central Coast, Lower Hunter, Port Stephens and the Tamworth - Gunnedah - Liverpool Plains area.

The Lake attract a variety of users including:

- Families - primarily on weekends and during school holidays.
- Powerboat and jet ski enthusiasts - concentrated in summer.
- Anglers - individuals, small groups and fishing clubs - main weekend market year round.
- Social groups - such as church groups and 4WD clubs.
- Retirees - touring van market. This market is a relatively new market for the Reserve, with the Reserve generally having a few vans in most nights. Some retirees have stayed at the Dam for up to 3 months.

In terms of water craft on the Lake, around 60% are power boats, ski boats and jet skis, with the remainder being primarily fishing boats. According to the care-taker, a significant proportion of the watercraft on the Dam are owned by mine and mine-related workers.

Lake Liddell

Lake Liddell is located 15km south of Muswellbrook, and is visible from the New England Highway. The Lake was constructed to provide cooling water for Lake Liddell Power Station, with the water in the Lake supplemented by water from the Hunter River. The Lake is operated by Macquarie Generation.

The Lake has an industrial setting, with the Lake Liddell Power Station dominating the southern foreshore and the Liddell Open Cut Coal Mine, the eastern shore. The water quality of the Lake is lower than that of the water storage dams, with raised salinity and nutrient levels. It is not suitable for swimming. Powered and non-powered boating and fishing are permitted on the Lake. The Lake is also known as a bird 'hotspot', with the Lake having a large black swan colony and breeding ground.

A small recreation reserve has been developed on the northern foreshore. The reserve is Crown Land which is operated by a local Trust, with an on-site caretaker.

The Reserve provides very basic picnic facilities, camp ground, boat ramp and a large recreation hall. The camp ground has 4 powered sites ($3 per night). The recreation hall is used occasionally for
Trust meetings. The area was developed in the late 1960’s with the infrastructure and facilities now being in very poor condition. The Trust advised that is does not have the funds to maintain or improve the area.

Visitation is very low, estimated at around 3,000 visitors per year. Most visitors are local residents, however the camp ground attracts a few longer stay visitors (eg mine contractors) who are looking for ‘cheap’ accommodation. When the area first opened visitation was considerably higher, however most locals now use Glenbawn Dam and Lake St Clair which have far superior facilities and more attractive settings.

**Lake Glenbawn**

Glenbawn Dam is located on the Hunter River approximately 14km east of Scone in the Upper Hunter Valley. The Dam is 160km north west of Newcastle.

The Dam is operated by State Water primarily to regulate the flow of water in the Hunter River and provide water for agriculture and stock. Activities permitted on the Dam include powered and non-powered boating, swimming, and fishing.

The area below the Dam wall and the Eastern Foreshore adjacent to the Dam wall are managed by the Department of Lands as a State Park. The facilities provided include:

- **Below the Dam Wall**
  - Caravan Park 15 powered sites, 30 holiday vans sites, unpowered sites
  - Kiosk
  - Golf Course 3 holes
  - Tennis courts (2)
  - Recreation Hall - 50 people for functions and meetings
  - Oval
  - Caravan and boat storage (8 boat sheds) areas
  - Park office

- **Eastern Foreshore**
  - Camping - numerous areas
  - Cabins (8), bungalows (6) villas (4)
  - Boat ramps
  - Picnic areas and playground

Glenbawn State Park attracts in the order of 50,000 to 70,000 visitors per annum, the majority of whom are day trippers. Visitation varies in-line with water levels. The Lake draws visitors from Sydney, Central Coast, Hunter, the southern part of the New England area and the Narrabri district. Most weekend visitors are located within 2-3 hours drive of the Lake, with holiday-makers coming from further afield, including Sydney. An entry fee of $8 per vehicle applies.

Families and anglers are the main weekend and school holiday markets, with retirees, anglers and coach tour groups being the main mid-week markets. Groups attracted include fishing clubs, church groups, schools, Probus and View Clubs and bird-watchers.

Fishing is popular year round. The Lake hosts up to 9 fishing tournaments per year, with these each attracting around 100 competitors. Waterskiing, wakeboarding and jet ski activity is concentrated in summer, and are the main activities undertaken at the Lake during school holidays. The Rowing Club uses the Lake for training and hosts one event per year. Sailing, kayaking and canoeing are minor activities. The Lake also hosts one major Open Water Swimming Carnival each year with this attracting a few hundred competitors. When water was regularly released from the Lake, white water rafting and kayaking were undertaken on the river below the Dam wall. The river has been used for Secondary School Kayaking Championships and has hosted an international event. Since 2000 most major kayaking events have been held at the Penrith White Water Stadium.
The facilities that attract the most use are the picnic areas, playgrounds and boat ramps. The tennis, golf and oval facilities attract minimal use other than during school holidays. These facilities are located below the wall and incur a 'use' fee. In the past there have been a commercial boat hire operation however the consistently low water levels over the past 8 years have rendered this operation non-viable.

The cabins are the most popular form of accommodation, with the larger cabins (6 berth) filling first. The cabins are achieving an occupancy rate of around 35% and are booked out most weekends and school holidays. The caravan park is located below the Dam wall. Occupancy rates for both powered and unpowered short term (tourist) sites in the caravan park are low. People prefer to stay above the dam wall, and will camp in the primitive camping areas (toilets but no power) rather than stay in the caravan park. There is a waiting list for the holiday van sites.

Lake Keepit

Lake Keepit is located in Gunnedah Shire on the Namoi River, between Gunnedah and Tamworth. The Lake is operated by State Water with the water being used primarily for agriculture and stock with some domestic consumption.

Lake Keepit State Park is located on the southern foreshore of the Lake, with the Park managed by the Department of Lands. The Department of Sport & Recreation operates a Sport & Recreation Camp on the eastern foreshore of the Lake.

Lake Keepit State Park provides a range of facilities including:

- Self contained accommodation - 1 chalet, 2 x 6 bed ensuite cabins, 10 x 4 bed ensuite cabins and 7 standard cabins (no ensuites)
- Campotel units - permanent onsite tents which sleep up to 8
- Powered caravan sites (39), unpowered caravan sites (28) and bush camping (209 sites)
- Holiday van sites (69)
- Boat ramps
- Playgrounds
- Licensed Kiosk
- Tennis courts
- Golf course - 5 holes
- Fishing Club with Club house
- Soaring Club with airstrip and club house

Visitation is currently around 30,000 to 40,000 casual visitors per annum. Lake Keepit primarily draws from the New England - North West Region and the Hunter Valley. Water levels have been very low for the past 10 years with this having impacted significantly on visitation. Frequent users generally buy an annual State Parks pass, and move between Glenbawn, Keepit and Copeton State Parks, depending on water levels. With higher water levels and good weather, the Park can attract up to 5,000 visitors per day during the summer school holidays and around 4,500 per day over Easter.

The most popular on-water activity is fishing, with fishing occurring year-round. Water skiing and power boating are popular in summer, however these are water level dependent. Picnics are the main shore-based activity.

The Park offers a variety of accommodation, with the most popular accommodation being the Chalet (49% occupancy) followed by the 6 bed cabins (46% occupancy) and then the 4 bed cabins (41%) and the standard caravans (39%). The Park also has 8 permanent tents (8 beds per tent), with these being very popular for groups and fishing clubs. The park attracts around 7,200 camping / caravan nights per year, with the powered camp sites (39 sites) achieving an occupancy rate of 18% and the unpowered sites in the caravan park (28 sites) achieving 8%. There are also 209 primitive camping sites which achieve around 5% occupancy, which equates to just over 3,800 camp nights per year. The Park has 69 holiday van sites, with these being fully occupied with a long waiting list.
<table>
<thead>
<tr>
<th>Dam</th>
<th>Location</th>
<th>Operator</th>
<th>Purpose</th>
<th>Volume</th>
<th>Surface Area</th>
<th>Permitted Uses</th>
<th>Visitor Facilities</th>
<th>Accommodation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grahamstown</td>
<td>Raymond Terrace</td>
<td>Hunter Water</td>
<td>Domestic Water</td>
<td>190,000</td>
<td>2800</td>
<td>Sailing Canoeing</td>
<td>Picnic area</td>
<td>Nil</td>
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<tr>
<td>Chichester</td>
<td>Chichester / Wangat Rivers</td>
<td>Hunter Water</td>
<td>Domestic Water Supply - Lower Hunter</td>
<td>21,000</td>
<td>180ha</td>
<td>None</td>
<td>Picnic area below</td>
<td>Nil</td>
</tr>
<tr>
<td>Lostock</td>
<td>Paterson River, 13km north of Gresford</td>
<td>State Water</td>
<td>Stock Agriculture Domestic</td>
<td>20,000 million litres</td>
<td>220ha</td>
<td>Secondary Contact: Boating (&lt;8 knots) Windsurfing Canoeing</td>
<td>Picnic area Boat Ramp</td>
<td>Caravan Park: 4 cabins 8 powered sites 100 non-powered</td>
</tr>
<tr>
<td>Glennies Creek Dam / Lake St Clair</td>
<td>Glennies Creek 25km north of Singleton</td>
<td>State Water Council manages visitor facilities</td>
<td>Agriculture</td>
<td>283,000 million litres</td>
<td>540ha</td>
<td>Fishing Swimming Power &amp; non-power boating Water skiing &amp; wake boarding</td>
<td>Picnic area Boat ramp</td>
<td>Caravan Park 12 powered sites unlimited camping sites</td>
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<tr>
<td>Glenbawn Dam</td>
<td>Hunter River 15km east of Scone</td>
<td>State Water Dept of Lands - State Park</td>
<td>Regulate flow of Hunter River Stock Agriculture</td>
<td>750,000</td>
<td>2615</td>
<td>Fishing Swimming Swimming Power &amp; non-power boating Water skiing &amp; wake boarding</td>
<td>Picnic areas Boat Ramps Playground Cricket Oval Golf - 3 holes Tennis - 2 Recreation Hall Kiosk Park Office Walking Trails Archery Fishing Club Ski Club Rowing Club Archery Club Caravan &amp; boat storage</td>
<td>Below the Wall Caravan Park 15 powered sites 30 holiday vans camp sites Eastern Foreshore 8 cabins 6 bungalows 4 villas</td>
</tr>
<tr>
<td>Dam</td>
<td>Location</td>
<td>Operator</td>
<td>Purpose</td>
<td>Volume</td>
<td>Surface Area</td>
<td>Permitted Uses</td>
<td>Visitor Facilities</td>
<td>Accommodation</td>
</tr>
<tr>
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<td>----------------------------------------</td>
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<td>--------------------------------------------</td>
</tr>
<tr>
<td>Lake Liddell</td>
<td>15km south of Muswellbrook</td>
<td></td>
<td>Provide cooling water for Liddell Power Station</td>
<td>152,000</td>
<td>1133</td>
<td>Powered &amp; Unpowered boating Fishing</td>
<td>Picnic area</td>
<td>Camp ground - 4 powered sites</td>
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<tr>
<td>Lake Keepit</td>
<td>Namoi River 32km east of Gunnedah</td>
<td>State Water Dept of Lands - State Park</td>
<td>Regulate River flow Stock Agriculture</td>
<td>425,000</td>
<td>4130</td>
<td>Fishing Swimming Power &amp; non-power boating Water skiing &amp; wake boarding</td>
<td>Picnic areas</td>
<td>12 ensuite cabins 7 on-site vans 1 chalet (10 bed) 8 permanent tents 39 powered caravan sites 35 unpowered caravan sites 209 primitive camping sites 69 holiday vans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sport &amp; Recreation Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Canoeing / Kayaking
- Sailing
- Swimming

- 25m pool
- Abseiling & Ropes courses

- 11 x 14 bed dormitories cabins
- 1 cottage (14 bed) camping sites
5.2 Coastal Lakes & Estuaries

There are five major coastal lake and estuarine systems within 2.5 hours drive of Tillegra Dam:

- Brisbane Waters
- Tuggerah Lakes
- Lake Macquarie
- Port Stephens
- Myall Lakes

**Brisbane Waters**

Brisbane Waters is a broad shallow estuary located in Gosford City at the southern end of the Central Coast. Brisbane Waters has an area of approximately 27km² with an average depth of 5-6m. The estuary is tidal with mud flats exposed at low tide.

The estuary is fringed by urban development around most of the foreshore. Brisbane Waters National Park is located in the southern and western areas of the catchment. Water quality is variable.

The estuary is used primarily by residents from the surrounding area, with the main activities being fishing and general boating, followed by sailing and recreational kayaking. Some water skiing is undertaken however this activity has declined significantly over the past decade due in part to increased siltation and water quality issues.

Accommodation around the Lake is limited with motels at Woy Woy and Gosford, and a few holiday houses available for short-term lettings.

**Tuggerah Lakes**

Tuggerah Lakes is a series of three interconnected coastal lagoons located primarily in Wyong Shire. The Lakes have a combined water area of 77km². The Lakes are shallow with an average depth of just less than 2m. The Lakes are tidal and experience fluctuating water levels which exposes extensive mud flats at low tide. Due to the narrow interconnecting channels, tidal flushing is minimal.

The Lakes are surrounded by urban development, with the Lakes affected by siltation and storm-water run-off, with nutrient enrichment resulting in algal blooms. The water quality is variable, with swimming not recommended. The northern-most lake, Lake Munmorah, provides cooling water for the Lake Munmorah Power Station. The Lakes are primarily a scenic resource and are popular for fishing. There are a number of caravan parks around the Lake, most of which were established more than 50 years ago when the Lakes were cleaner and deeper.

**Lake Macquarie**

Lake Macquarie is the largest salt-water lake in Australia. The Lake is approximately 21.8km long, up to 7.9km wide and covers an area of 110 km². The Lake has a predominantly urban setting, with the Vales Point and Eraring Power Stations located at the southern end of the Lake.

In the past, the Lake suffered significant siltation, pollution and nutrient enrichment problems. Six years ago an environmental management plan was implemented which included storm water management and the cessation of commercial fishing. The water quality of the Lake has improved significantly, with the Lake again suitable for swimming and primary contact.

Lake Macquarie is being promoted as a haven for water sports and water based activities. It is one
of the premier sailing destinations in NSW, with eight registered yacht and sailing clubs. The Lake hosts a range of sailing events including national and state regattas. The Lake also has a number of charter boat operators with houseboats, cruisers, yachts, catamarans, sports boats, fishing boats and runabouts being available for hire. For the larger boats, both skippered and bare-boat charters are available. Kayak, canoe and bicycle hire is also available around the Lake.

While sailing, followed by fishing are the most popular activities, the Lake is also used for water skiing, wake-boarding, jet skiing and power boating. There is a water ski tournament training course at Myuna Bay.

Accommodation available around the Lake includes the Rafferty Mercure Resort, up-market boutique hotels, motels, serviced apartments, holiday apartments and houses, caravan parks and bed & breakfast establishments. There are also two NSW Department of Sport & Recreation Camps on the Lake, Myuna Bay and Point Wolstoncroft.

**Port Stephens**

Port Stephens is a large estuary located north of Newcastle. The Port covers an area of 119 km² and extends inland approximately 24km. It ranges in width from 1.1km to 6.5km. Port Stephens forms part of the Port Stephens - Great Lakes Marine Park. Water quality is generally good with the Port suitable for swimming.

The southern foreshore area of the Tomaree Peninsula is intensively developed, with more than 22,000 people residing within 3km of the shoreline. Most of the western and northern foreshores remain in native forest.

Port Stephens is a high profile tourist destination area. The area is promoted as the 'Blue Water Paradise' and is known for its spectacular scenery, deep sea fishing and dolphin and whale watching cruises. All forms of recreational boating are undertaken on Port Stephens, with the Port having marina facilities to cater for the larger ocean-going yachts and cruisers.

The Port Stephens area has a concentration of visitor accommodation with around 50 hotels, motels and serviced apartments (from budget to luxury) providing more than 1,000 rooms, 15 caravan parks plus an extensive range of holiday houses and flats. The area also has a range of land-based recreational activities including golf, wineries, restaurants, shopping, toboggan rides, tours etc.

**Myall Lakes**

Myall Lakes encompasses three inter-connected freshwater lakes in Great Lakes Shire, just north of Port Stephens. The Lakes form part of the Port Stephens - Great Lakes Marine Park and are a designated Ramsar Wetland. The Lakes have a surface area of approximately 10,000 hectares. They are surrounded by the Myall Lakes National Park, with most of the Lake foreshores managed by the Department of Environment and Climate Change (National Parks & Wildlife Service).

Boating is permitted on the Lakes, with power boating, jet skiing and water skiing restricted to designated areas. General boating is the most popular on-water activity, with a number of boat-access-only camping areas spread around the foreshore. Boat and Houseboat hire is available from Bulahdelah and Tea Gardens. There are 16 DECC managed picnic areas around the Lake as well as 7 designated walking tracks through the National Park plus a number of longer distance trails. Mountain biking is permissible on the fire and management trails.

DECC operates 23 primitive camping grounds around the Lakes, with these ranging in size from 2 sites to 132 sites. There is also a caravan park resort, Eco Point Myall Shores Resort, which provides 76 cabins and villas, bunkhouse (120 beds in 24 rooms), camp ground, shop, licensed bar and restaurant, swimming pool, boat ramps and jetty, and boat and canoe hire. Eco Point is a potential development model for Tillegra Dam.
The Lakes are extremely popular, with the accommodation and the main camping areas being at capacity during the summer school holidays and at Easter, with relatively high occupancy rates during the spring and autumn school holidays and on weekends during summer. Families are the main visitor market. Other visitors include short-breaks couples, retirees, touring caravans, 4WD groups, anglers, bushwalkers, bird waters, canoeists / kayakers, and water sports enthusiasts.

5.3 Rivers

The rivers in Dungog Shire and surrounding region are part of the recreational base and tourism assets of the area.

The three major rivers in Dungog Shire, the Paterson, Allyn and Williams, each rise at Barrington Tops and are northern tributaries of the Hunter River.

The Paterson and Allyn Rivers are popular for swimming, fishing and camping and are a significant part of the attraction base of Barringtons area, Gresford, Vacy and Paterson. The Paterson River is navigable from its confluence with the Hunter River at Morpeth to Paterson (approximately 15km), however no skiing or aquaplaning is permissible on this reach. Water craft use of this reach is limited.

The Williams River is the largest river in the Shire, flowing through Dungog and Clarence Town to join the Hunter River at Raymond Terrace. The Williams River is one of Dungog's attractions, with the riverside picnic area being popular with both visitors and residents. Dungog has a small caravan park located adjacent to the River. The River is suitable for fishing and swimming. There are also a number of picnic areas located along the River, the most significant of which is Bandon Grove, which is a picnic and primitive camping area. There is concern that Tillegra Dam will reduce the flow in the River, which will have an adverse impact on the recreational and scenic value of the River in the Dungog area.

The Williams River is the main attraction in Clarence Town, with the Town having two popular riverside recreation reserves. The Williams River Caravan Park is located on the river bank, with the river being used for boating, swimming and fishing. The normal limit of navigation is located just north of the Clarence Town Bridge. In the past, waterskiing was a very popular activity in Clarence Town, however the introduction of 4 and 8 knot speed limits on the reach adjacent to Clarence Town and the banning of boats 2.4km upstream from Seaham Weir has resulted in a decline in water skiing in the area.

Until recently, water-skiing and wake-boarding were permissible from Seaham Weir through to Raymond Terrace. In 2006, as a result of river bank erosion, a no-wake zone was introduced in the mid-section of the River. This has restricted power boat activities to the Raymond Terrace area of the Williams River, and along the Hunter River, between Raymond Terrace and Morpeth (limit of navigation). Raymond Terrace is the focal point for water skiing, wake boarding and power boating, with the town having the infrastructure needed to support these activities.

Bank erosion is an ongoing issue along the Williams and Hunter Rivers. While the introduction of speed controls and no-wake zones is helping to reduce erosion it has concentrated power boating, water skiing and wake boarding into the reach of the River adjacent to Raymond Terrace. This has resulted in increased congestion. The Hunter Office of the Waterways Authority has advised that they would like to take the pressure off this area by providing appropriate areas for power boating, jet skiing and wake boarding at Tillegra Dam, with the relocation of wake boarding being the main priority.

Rowing occurs on the Hunter River between Raymond Terrace and Morpeth, with the activity centred
on Berry Park, 5km downstream of Morpeth. Rowing regattas are held occasionally on the River, however since 2000, many of the major State and National events hosted in NSW have been held at the International Regatta Centre at Penrith (former Olympic Venue).

5.4 Beaches

The beaches, extending from the Central Coast through to Port Stephens provide an alternative holiday destination and water-based recreational resource to water storage dams. The beaches are very popular in summer. Visitors holidaying on the coast are a potential day-trip market for Tillegra Dam.

5.5 Main Findings

- There are a diversity of waterways in the Hunter Region and surrounding area, including beaches, coastal lakes and estuaries, rivers and water storage dams. These waterways cater for a wide range of water-based recreational activities.

- There is some concentration of activities at specific locations within the Region, namely:
  - Lake Macquarie - focal point for sailing
  - Williams & Hunter River - power boating and water skiing, including competitive events
  - Myuna Bay on Lake Macquarie - tournament water ski training
  - Myall Lakes - house boats

*Water Storage Dams*

- The water storage dams are popular tourist attractions and recreational assets. The level of visitation is related to the activities that can be undertaken at the dam and the facilities and accommodation provided. The larger water storage areas with associated State Parks, attract significantly higher levels of visitation than the dams with minimal recreational activities and/or limited / poor quality facilities.

- The water storage dams in the Hunter and Keepit Dam at Gunnedah draw visitors from the Hunter Region, Central Coast and Sydney Metropolitan Area, with these visitors by-passing the range of coastal waterways to visit the dams.

- The water storage dams are subject to significant fluctuations in water levels. This impacts on the visual and recreational amenity of the dam. Visitation levels are directly related to water levels.

- Fishing is the most popular on-water activity at the water storage dams and in the coastal lakes, with fishing undertaken year-round. Most fishing is boat-based.

- Recreational boating, sailing, power boating and towing sports are summer sports, with activity concentrated from October through to March - April.

- While Dams are very popular for recreational boating, power boating and tow activities, the competitive / tournament component of these sports prefers river environments with protected waters (see Section 7.6).

- The water body is the main attraction. There is a strong preference for accommodation and facilities above the dam wall, with proximity to the water and water views strongly influencing the patterns of use within the recreation area and the choice of accommodation.
The accommodation and facilities at most of the Dams were developed more than 50 years ago, with facilities added as funds have become available. All of the dam recreation areas are on Crown Land and managed by public sector agencies or community Trusts. Budgetary constraints and land tenure arrangements impact on the level and type of investment in activities, facilities and services provided.

There is strong demand for on site accommodation across all accommodation types. Cabins are very popular and attract use year round. Caravan and camping are more seasonal, with camping in particular, concentrated in summer. The caravan sites, cabins and dormitory accommodation are usually fully booked during the summer school holidays and at Easter, with high occupancy rates in the spring and autumn school holidays and at weekends during the warmer months. There is a waiting list at all the State Parks for holiday van sites. There are also waiting lists for the boat sheds that are available at some Parks.

None of the dams in the Hunter Region offer lodge or resort style accommodation - this type of accommodation has proved popular on the coastal lakes and also on freshwater lakes in the Snowy Mountains, Tasmania and New Zealand. There is potential for Tillegra Dam to provide this form of accommodation.

The dams attract a diversity of markets with the primary markets being families and anglers, followed by boat-related users and retirees.

5.6 Comparative Analysis

In comparison to the other water storage dams in the Hunter Region, Tillegra Dam has the advantages of:

- Being the closest large recreational dam to the main population centres - the Lower Hunter, Central Coast and Sydney.
- Being readily accessible to the coastal holiday destination areas (from Central Coast through to Myall Lakes), to attract day-trip visitors.
- Having a very attractive setting, with superb scenery. The setting is more appealing than the setting of other recreational dams in the Region.
- Proximity to the Barrington Ranges, which is an iconic tourist attraction with a high level of marketplace recognition. The other Dams do not have the same level of accessibility and association to a major attraction.
- Tillegra is expected to experience minimum fluctuations in water levels. The Dam could expect to attract some ‘transfer’ demand from other water storages when water levels in these storages are low.
6. ACCOMMODATION & ASSOCIATED FACILITIES

This chapter provides an overview of the accommodation available in Dungog and at the water storage dams in the Hunter Valley and inland NSW, and identifies possible accommodation that could be developed at Tillegra Dam.

6.1 Demand for Accommodation at Water Storage Dams

With the exception of Chichester and Grahamstown Dams, the water storage dams in the Hunter Valley provide accommodation, with accommodation available including:

- Primitive camping - informal camping areas with very basic facilities
- Caravan sites - formed sites - mix of powered and unpowered sites
- Onsite caravans - no ensuite bathroom facilities
- Cabins and Cottages - self contained with ensuite bathroom facilities
- Permanent tents
- Bunkhouses
- Holiday van sites - where people can leave their caravans permanently on-site

Each of the Dam recreation areas were established 40 to 50 years ago, with the accommodation ‘evolving’ rather than being planned. With the exception of the Lostock Dam Caravan Park (which is privately owned), each of the recreation areas are on Crown Land and are administered by a Government Agency or Trust. The level of investment is largely governed by the lease conditions and/or the management structure. The Land Managers are not in a position to develop resort or lodge style accommodation.

The demand for accommodation is reasonably consistent across each of the Hunter dams and also consistent with the demand for accommodation at other large inland dams (Copeton, Keepit, Burrendong, Wyangala / Grabine and Burrinjuck), namely:

- There is a strong preference for accommodation above the dam wall, rather than below it.
- Access to the water is a key driver, with accommodation close to the water preferred over more remote accommodation.
- Views are also an important consideration, with the accommodation that has uninterrupted water views being more popular than accommodation with limited or no views.
- Self contained cabins & cottages achieve the highest occupancy rates, with cabins & cottages generally being booked out most weekends in the warmer months (October to April) and during the spring, autumn and summer school holidays, often with waiting lists during the Xmas - New Year period and at Easter.
- The demand is higher for larger cabins (6+ berths) than for the smaller 4 berth cabins.
- Bunkhouses/ dormitory accommodation is popular with fishing clubs, schools and social groups.
- There is a waiting list at all of the State Parks for holiday van sites.

There is opportunity for Tillegra Dam to provide a range of accommodation, including eco-resort or lodge style accommodation through to primitive camping.
6.2 Likely Demand for Accommodation from Tillegra Dam

The development of Tillegra Dam will result in an increase in the demand for accommodation within the Shire. During the construction phase, there is likely to be demand for accommodation from workers, contractors, consultants, regulatory officers, union representatives etc. Hunter Water owns a number of homesteads within the Dam catchment area that could potentially be utilised for key construction staff and workers. Other visitors will be looking for accommodation close to the Dam, with Dungog expected to be the preferred place to stay due to the range of facilities and services available. Properties in the Upper Williams Valley may attract some business, with Salisbury Lodge able to provide both accommodation and meals. There may also be some spin-off to the accommodation properties along the Chichester Dam Road area.

Once operational, the demand for accommodation will depend on the activities undertaken at the Dam and the facilities available. Demand will come from Dam users, with minimal or no demand from Dam staff and Dam-related workers. The more activities available, the greater the demand for accommodation. The preference however will be for foreshore accommodation as close as possible to the water. Experience at other water storage dams indicates that visitors who are coming to the area specifically to use the dam, will generally not stay in the surrounding towns unless they are coming for an event and the accommodation at the dam is not suitable or is booked out.

6.3 Existing Supply of Accommodation in Dungog Shire

There are in the order of 56 accommodation properties in Dungog Shire incorporating:

- 2 larger resorts - Eaglereach and the Barringtons Country Retreat
- 2 small motels - Dungog and Vacy, plus motel accommodation at Tocal Agricultural College.
- 5 pub hotels - Dungog (2), Clarence Town (1), Gresford (1) and Paterson (1)
- 7 bed & breakfast properties
- 3 caravan parks - Lostock Dam, Dungog and Clarence Town with powered sites also available at Gresford Showground.
- 26 properties providing self contained cabin, cottage and homestead accommodation.
- 1 farm stay
- Primitive camping - State Forests and Bandon Grove.

The stock of accommodation is summarised in Table 6.1.

Accommodation is concentrated in and around Dungog and the larger villages, and in the upper river valleys, in particular along the Chichester Dam and Wangat Roads, Main Creek Valley, and the Upper Williams and Allyn River Valleys.

Of the properties in the Shire, the ones that will potentially benefit directly from Tillegra Dam are those in close proximity to the Dam, primarily the properties in Dungog and immediate surrounds, Upper Williams River Valley and possibly those along Chichester Dam Road. The properties in Gresford, Vacy, Paterson and Clarence Town are unlikely to attract dam-generated visitation, other than possibly during a major event held at the Dam.
<table>
<thead>
<tr>
<th>Locality</th>
<th>Property</th>
<th>Type</th>
<th>Star Rating</th>
<th>Accommodation Units</th>
<th>Bed / Capacity</th>
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</thead>
<tbody>
<tr>
<td>Dungog Township</td>
<td>Tall Timbers Motel</td>
<td>Motel</td>
<td>3</td>
<td>11 rooms</td>
<td>35</td>
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<tr>
<td></td>
<td>Dungog Country Apartment</td>
<td>SA</td>
<td>3</td>
<td>2 apartments</td>
<td>14</td>
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<td></td>
<td>Bank Hotel</td>
<td>Pub Hotel</td>
<td>2.5</td>
<td>22 rooms - shared facilities</td>
<td>21</td>
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<tr>
<td></td>
<td>Royal Hotel</td>
<td>Pub Hotel</td>
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<td>24 rooms - shared facilities</td>
<td>36</td>
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<tr>
<td></td>
<td>Settlers Arms</td>
<td>B&amp;B</td>
<td>3</td>
<td>3 ensuite rooms/ 6 rooms shared facilities</td>
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</tr>
<tr>
<td></td>
<td>Dungog Caravan Park</td>
<td>Caravan Park</td>
<td>basic</td>
<td>6 powered sites</td>
<td></td>
</tr>
<tr>
<td>Dungog Surrounds</td>
<td>The Carriageway Resort</td>
<td>Resort</td>
<td>4</td>
<td>4 carriages, 2 cottages, 3 rooms</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Cangon Cottages</td>
<td>Cottage</td>
<td>3</td>
<td>2 cottages</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Cairsmore</td>
<td>B&amp;B</td>
<td>3.5</td>
<td>1 room</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Olivedale</td>
<td>B&amp;B</td>
<td>4</td>
<td>1 cabin, 1 motel style room</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Camelot Retreat</td>
<td>House</td>
<td>3.5</td>
<td>House</td>
<td>8</td>
</tr>
<tr>
<td>Fosterton</td>
<td>Fosterton Lodge</td>
<td>B&amp;B / Cabins</td>
<td>4</td>
<td>B&amp;B (1 room) + 2 cabins</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Horseshoe House</td>
<td>House</td>
<td>3.5</td>
<td>House - 4 bedroom</td>
<td>10</td>
</tr>
<tr>
<td>Chichester Dam Road &amp; surrounding area</td>
<td>Wangat Lodge / Melia / Overflow</td>
<td>Lodge + cottages</td>
<td>2.5</td>
<td>Lodge - 10 rooms, 2 cottages</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Ferndale Country Cottage</td>
<td>Cottage</td>
<td>3</td>
<td>1 cottage</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Ferndale Camping Area</td>
<td>Camp ground</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yawata Homestead &amp; Cottage</td>
<td>House / Cabin</td>
<td>3</td>
<td>1 house / 1 cabins</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Chichester Forest Cabins</td>
<td>Cabin</td>
<td>3</td>
<td>2 cabins</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Gully Falls House</td>
<td>House</td>
<td>4</td>
<td>House - 4 bedroom</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Blue Gum Cabins</td>
<td>Cabin</td>
<td>4.5</td>
<td>2 cabins</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Dusodie Holiday Farm</td>
<td>Farm Stay</td>
<td>2.5</td>
<td>1 cottage / 1 cabin</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Barringtons Country Retreat</td>
<td>Resort</td>
<td>4-4.5</td>
<td>8 motel rooms, 25 houses,</td>
<td>200</td>
</tr>
<tr>
<td>Upper Williams River</td>
<td>Salisbury Lodge</td>
<td>Resort</td>
<td>4</td>
<td>8 rooms</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Barrington Wilderness Cottages</td>
<td>Cottages</td>
<td>3</td>
<td>20 cottages</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Treetops Hideaway</td>
<td>Cottage</td>
<td>4</td>
<td>1 cottage</td>
<td>6</td>
</tr>
<tr>
<td>Locality</td>
<td>Property</td>
<td>Type</td>
<td>Star Rating</td>
<td>Accommodation Units</td>
<td>Bed / Capacity</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>---------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Main Creek Valley</td>
<td>The Bower Retreat</td>
<td>House</td>
<td>3.5</td>
<td>4 bedrooms</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Carawirry Cabins</td>
<td>Cabins</td>
<td>3</td>
<td>2 cabins</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Yeranda</td>
<td>Cabins</td>
<td>4</td>
<td>3 cabins</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Dingadee</td>
<td>House</td>
<td>2.5</td>
<td>1 house</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Noonameena</td>
<td>House</td>
<td>3</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Gresford - East</td>
<td>Tyraman Retreat</td>
<td>House</td>
<td>4</td>
<td>House</td>
<td>16-20</td>
</tr>
<tr>
<td>Gresford &amp; Surrounds</td>
<td>Camry Allyn Homestead</td>
<td>Guesthouse</td>
<td>4</td>
<td>7 rooms</td>
<td>15-20</td>
</tr>
<tr>
<td></td>
<td>Clevendon B&amp;B</td>
<td>B&amp;B</td>
<td>4</td>
<td>2 rooms</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Beatty Hotel</td>
<td>Pub Hotel</td>
<td>3</td>
<td>6 rooms</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Clements Road Farm House</td>
<td>House</td>
<td>2.5</td>
<td>4 rooms</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Showground Road Caravan Park</td>
<td>Caravan Park</td>
<td>basic</td>
<td>12 powered sites + camping</td>
<td></td>
</tr>
<tr>
<td>Vacy &amp; Surrounds</td>
<td>Vacy Village Motel</td>
<td>Motel</td>
<td>2.5</td>
<td>8 rooms</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Eaglereach Resort</td>
<td>Resort</td>
<td>4.5</td>
<td>40 houses - 100 rooms</td>
<td>200+</td>
</tr>
<tr>
<td></td>
<td>Banjo's Bushland Retreat</td>
<td>House</td>
<td>4.5</td>
<td>House</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Gum Trees Heaven</td>
<td>House</td>
<td>4</td>
<td>House</td>
<td>10</td>
</tr>
<tr>
<td>Paterson</td>
<td>CBC Bed &amp; Breakfast</td>
<td>B&amp;B</td>
<td>4.5</td>
<td>4 - 5 rooms</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Court House Hotel / Motel</td>
<td>Hotel / Motel</td>
<td>2.5</td>
<td>8 rooms</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>The Rileys</td>
<td>B&amp;B</td>
<td>-</td>
<td>1 room</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Rivendell</td>
<td>House</td>
<td>4.5</td>
<td>2 houses</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Tocal Campus</td>
<td>Campus</td>
<td>2.5</td>
<td>90 single rooms / 2 flats</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Tocal - Glendarra Motel</td>
<td>Motel</td>
<td>3</td>
<td>27 rooms</td>
<td></td>
</tr>
<tr>
<td>Clarence Town</td>
<td>Williams River Caravan Park</td>
<td>Caravan Park</td>
<td>3</td>
<td>5 cabins, caravan/camping sites</td>
<td>200+</td>
</tr>
<tr>
<td></td>
<td>Erringhi Hotel</td>
<td>Pub Hotel</td>
<td>2.5</td>
<td>5 rooms</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Clarence Town Holiday Lodge</td>
<td>Lodge</td>
<td>3</td>
<td>12 rooms</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Wharf Reserve</td>
<td>Camp Ground</td>
<td>basic</td>
<td>100+ unpowered sites</td>
<td>200+</td>
</tr>
<tr>
<td>Clarence Town Surrounds</td>
<td>Gumnut Glen Cabins</td>
<td>Cabin</td>
<td>4</td>
<td>4 cabins</td>
<td>19</td>
</tr>
<tr>
<td>Locality</td>
<td>Property</td>
<td>Type</td>
<td>Star Rating</td>
<td>Accommodation Units</td>
<td>Bed / Capacity</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------</td>
<td>-------------</td>
<td>--------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Allyn River Valley</td>
<td>Tristania Tops Cabins, Allyn Riverside Cabins, Gunyah Hut (State Forest), Allyn River Camping Areas (SF)</td>
<td>Cabins, Cabins, Cabin / camping, Camping</td>
<td>3, 4, basic</td>
<td>2 cabins, 2 cabins, 1 cabin, informal camping</td>
<td>18, 8, 20 max, 100+</td>
</tr>
<tr>
<td>Upper Paterson River Valley</td>
<td>Lostock Caravan Park</td>
<td>Caravan Park</td>
<td>3</td>
<td>4 cabins, 45 on-site holiday vans, 8 powered sites, camping sites</td>
<td>200+</td>
</tr>
<tr>
<td>Flat Tops Road</td>
<td>Jindabella Mountain Lodge</td>
<td>House</td>
<td>4.5</td>
<td>4 bedrooms</td>
<td>8</td>
</tr>
</tbody>
</table>
6.4 Demand for Accommodation - Dungog Shire

The demand for accommodation in Dungog Shire varies with the locality and the purpose of visit.

**Dungog**

The accommodation available in Dungog is limited, with only one motel (11 rooms), two pub hotels (46 rooms), a Bed & Breakfast property (9 rooms) and 2 serviced apartments.

The Dungog accommodation properties primarily service people coming into the area to work (eg road crews, Telstra linesmen, Government workers etc), with some tourist traffic on weekends. The Motel and Bank Hotel operate at or very close to capacity mid-week, while the occupancy rate at the Royal Hotel fluctuates between 50 and 100%. Without new accommodation, Dungog will not be able to meet the likely demand for accommodation generated during the Dam construction period.

There is concern that Dam workers will rent self contained tourist accommodation close to Dungog and/or the Dam during the construction phase, reducing the accommodation available for tourists.

The Dungog Caravan Park is designed for short-stay transit visitors and does not have the facilities to cater for longer stay visitors. There is no cabin accommodation available at the Park. The Caravan Park is also flood prone.

**Rural Areas**

The demand for accommodation in the rural areas of the Shire is generated by leisure-based short breaks and holiday markets. The main markets are:

- Couples - often looking for a 'romantic' escape or taking 'time out'.
- Groups of couples / adult friends
- Families - primarily visiting during school holidays
- Groups of families

Location, in terms of the quality of the site and proximity / access to attractions and activities, are important considerations for the leisure market. The strongest demand from the marketplace is for accommodation in, or within very close proximity to the Barringtons - the Barrington Tops National Park and the Chichester State Forest. The attributes being sought by the marketplace include:

- Location in very close proximity to the Barrington Ranges - most visitors want to be close to the Barrington Tops National Park.
- A very attractive bush or rural setting - views and setting are extremely important for the short breaks - romantic weekend market.
- River frontage or access to a creek / river / swimming hole. This is a major factor in summer and very important for the family market.
- An open fire-place (log fire), with air conditioning in summer.
- Properties that are in keeping with the surrounding environment, eg stone and timber cottages as opposed to transportable or prefabricated buildings. The setting and landscaping are also important in creating the 'right' atmosphere.

The weekend couples market generally seeks properties that offer privacy, while couples and families holidaying together prefer group accommodation or cabins clustered close together.
Quality, well located properties tend to have a reasonably high occupancy rate during spring and autumn weekends, public holiday weekends and school holidays. Properties with log fires are popular in winter. Occupancy is generally very low mid-week and in summer across most properties.

**Camping**

Camping is one of the most popular activities undertaken within Dungog Shire, with the preference being for camp-sites in the Barrington Ranges and along creeks and rivers, in particular along the Williams and Allyn Rivers.

Within the Barrington Ranges, camping is concentrated in the State Forests, with the most popular areas being at Ladies Well, White Rock and the Allyn River Forest Park on the Allyn River in the western section of the Chichester State Forest, and Telegerry Forest Park in the eastern section of the forest. The camping areas are primitive with facilities limited to pit toilets.

Based on vehicle surveys, State Forests estimates that the dedicated camping areas attract more than 100,000 campers per annum. Use of the State Forest camping and picnic areas has increased substantially in recent years. This is partly due to the transfer of forest areas within the Hunter Region to the National Parks and Wildlife Service, with the NPWS having introduced camping fees and other restrictions on campers.

Over-use is a major issue with the Forest camping areas having become degraded, with issues such as litter, destruction of vegetation to expand camp-sites and obtain firewood, pollution from human effluent and anti-social behaviour. Overcrowding and conflict between users are significant issues during peak periods.

6.5 **Issues with the Accommodation Sector**

The Dungog Shire Tourism Plan (2004) identified a range of issues with the accommodation sector, with the issues relevant to Tillegra Dam including:

- Capacity constraints - accommodation in Dungog is not sufficient to meet existing demand, with the motel and hotels operating at or close to capacity mid week. The accommodation throughout the Shire is generally booked out on long weekends and on public holidays. Capacity constraints limit the potential of the Shire to develop and grow events and activities and to attract markets such as coach tour groups.

- Lack of scale / capacity with dominance of very small properties most of which are not viable as stand-alone operations. The Plan identified a need for larger, commercially operated properties.

- Overuse of the camping sites within the Shire, particularly the forest sites, with demand for sites exceeding supply at peak times.

- Very strong fluctuations in demand - strong weekend and school holiday markets and low mid-week markets. The Shire experiences strong seasonal peaks and troughs. With the exception of Clarence Town, summer is the low season for most of the accommodation properties in the Shire.

- The prime locations for tourism development are often the most environmentally sensitive. Market demand is primarily for accommodation in or in very close proximity to the forests and/or rivers/creeks. Visitors are often looking for properties that have superb views, atmosphere (eg stone cottages, timber cabins), open fires and creek or river frontage. Some segments of the market are also seeking seclusion.

With the loss of the Barrington Guesthouse the Shire does not have an iconic accommodation
property that is well-known in the market place. There is opportunity for accommodation at Tillegra Dam to take on this positioning.

6.6 Conference, Meetings & Function Venues

Dungog Visitors Information Centre and accommodation properties within the Shire frequently receive enquiries from organisations looking to hold small conferences and meetings in the Shire, in particular in the Dungog and Barringtons area. The conference and meeting facilities available in the Shire are limited. The venues and facilities that are of a standard suitable for ‘commercial’ use (as opposed to community groups) are summarised in Table 6.2.

Table 6.2 Conference, Meeting & Function Venues in Dungog Shire

<table>
<thead>
<tr>
<th>Venue</th>
<th>Standard</th>
<th>Capacity - Delegates</th>
<th>Accommodation Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>venues without accommodation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dungog Services Club</td>
<td>Basic</td>
<td>150 - auditorium</td>
<td></td>
</tr>
<tr>
<td>Gresford Bowling Club</td>
<td>Basic</td>
<td>60 - meeting room</td>
<td></td>
</tr>
<tr>
<td>Clarence Town Bowling Club</td>
<td>Basic</td>
<td>100 - lounge bar area</td>
<td></td>
</tr>
<tr>
<td>venues with accommodation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eaglereach, Vacy</td>
<td>4.5 *</td>
<td>130</td>
<td>100 + 200+</td>
</tr>
<tr>
<td>Barrington Country Retreat</td>
<td>4*</td>
<td>25</td>
<td>25 lodges (up to 5 bedroom) 6 cabins Motel rooms 200+</td>
</tr>
<tr>
<td>CB Alexander Agricultural College, Tocal</td>
<td>3*</td>
<td>40 meeting room Lecture rooms Auditorium 100 - woolshed</td>
<td>25 single campus accommodation outside of teaching semesters 100 campus – limited availability 40 – motel</td>
</tr>
<tr>
<td>Salisbury Lodge</td>
<td>4*</td>
<td>8-20 meeting 50 function</td>
<td>8</td>
</tr>
<tr>
<td>Tyraman Retreat, Gresford</td>
<td>4*</td>
<td>16 overnight 30 day – theatre style</td>
<td>16</td>
</tr>
<tr>
<td>Camry Allyn House, Gresford</td>
<td>4*</td>
<td>12 – live in</td>
<td>12</td>
</tr>
<tr>
<td>CBC Bed &amp; Breakfast, Paterson</td>
<td>4.5*</td>
<td>5 meeting 45 function indoors 20 function outdoors</td>
<td>5</td>
</tr>
</tbody>
</table>

None of the accommodation properties in Dungog have meeting facilities. Meetings are generally held at the Services Club. The small meeting room at the Club is of reasonable standard, while the Auditorium area is very basic. Noise intrusion is a major constraint in using the Club rooms.

The meeting facilities at the Clarence Town and Gresford Bowling Clubs are also basic with noise intrusion being a problem. Each of the villages has a community hall, however these are only suitable for community style meetings.

Eaglereach and Tocal Agricultural College have purpose-built meeting rooms. The Barrington Country Retreat has a house that has been designed as a live-in conference facility with a large meeting room and associated facilities. Some of the other houses at the Retreat can accommodate small meetings and/or functions in their dining or communal rooms. There are also a number of large
houses within the Shire that are occasionally booked for a very small conference group (3-5 people).

There is opportunity to provide conference - meeting facilities at Tillegra Dam in conjunction with accommodation.

### 6.7 Implications for Tillegra Dam

In relation to visitor accommodation there is demand in Dungog Shire for:

- Additional motel accommodation in Dungog.
- A commercial caravan park in, or in relatively close proximity to Dungog. Tillegra Dam would be an optimal location for a holiday park (short term and long term holiday van sites), while Dungog is a more suitable location for a caravan park catering primarily for permanent / long term residents.
- Larger resort / eco lodge style accommodation properties - properties that have the scale to have professional management, generate employment and undertake marketing and promotion. Tillegra Dam potentially has the combination of attributes (setting, water frontage, range of activities, proximity to the Barrington's etc), that would support a quality resort.
- Accommodation with purpose-built conference and meeting facilities.
- Additional camping areas in or within close proximity to the Barrington Ranges and/or river or creek frontage.

Tillegra Dam provides the opportunity for Dungog Shire to address some of the accommodation issues including:

- Commercial caravan park targeted to the holiday and leisure markets.
- Additional camping areas / camping sites
- Larger resort / eco tourism lodge
- Accommodation with in-house conference and meeting facilities

There is sufficient area available around the Dam to provide different accommodation options targeted to different segments of the market. For example, the Dam could readily support a larger accommodation complex, similar in concept to Eco Point Resort at Myall Lakes on the eastern shore, boutique upmarket eco-lodge style accommodation on the southern arm of the dam, as well as camping in a number of primitive camping grounds around the foreshore.

Consideration should also be given to permitting house boats on the Dam as a supplementary form of accommodation.
7. POTENTIAL VISITATION - MARKET ASSESSMENT

The level and mix of visitation at Tillegra Dam will be supply-led and determined by the on-water and shore-based activities, facilities and services available.

Tillegra Dam has the potential to function as a recreation resource for residents of Dungog and the surrounding region and a day trip, short breaks and holiday destination area for both ‘general’ visitors and special interest groups. With the right facilities, there is also potential for the Dam to attract the conference and meetings market and to be used as an event venue.

7.1 Visitation to Water Storage Dams

The following review of visitation levels and patterns of visitation at water storage dams in the Hunter Region and inland NSW provides an indication of what could potentially be achieved at Tillegra Dam. The estimated visitation to the dams in the Hunter Valley and the larger recreational dams in inland NSW is summarised in Table 7.1.

Table 7.1 Estimated Annual Visitation to Water Storage Dams

<table>
<thead>
<tr>
<th>Water Storage Dam</th>
<th>Estimated Number of Visitors per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Water Levels</td>
</tr>
<tr>
<td>Large dams - with a range of on-water activities, accommodation &amp; recreational activities:</td>
<td></td>
</tr>
<tr>
<td>Glenbawn</td>
<td>35,000 - 40,000</td>
</tr>
<tr>
<td>Keepit</td>
<td>40,000 - 45,000</td>
</tr>
<tr>
<td>Copeton</td>
<td>30,000 - 40,000</td>
</tr>
<tr>
<td>Wyangala / Grabine</td>
<td>20,000 - 30,000</td>
</tr>
<tr>
<td>Burrendong</td>
<td>20,000 - 30,000</td>
</tr>
<tr>
<td>Burrinjuck</td>
<td>20,000 - 30,000</td>
</tr>
<tr>
<td>Smaller dams - some recreational facilities &amp; caravan / camping accommodation</td>
<td></td>
</tr>
<tr>
<td>Lake St Clair (power boating)</td>
<td>10,000 - 15,000</td>
</tr>
<tr>
<td>Lostock Dam (no power boating)</td>
<td>3,000</td>
</tr>
<tr>
<td>Dams - Limited activities and facilities</td>
<td></td>
</tr>
<tr>
<td>Chichester</td>
<td>&lt;3,000</td>
</tr>
<tr>
<td>Grahamstown</td>
<td>2,000 - 3,000</td>
</tr>
<tr>
<td>Lake Liddell</td>
<td>2,000 - 3,000</td>
</tr>
</tbody>
</table>

Source: Discussions with Dam Managers

The level of visitation to water storage dams is dependent on a range of factors including the activities permitted on the waterway, the restrictions in place, the diversity and quality of the facilities available and water levels.

Throughout regional NSW, visitation is highest at the larger water storage dams with associated State Parks. These dams cater for a range of on-water activities including fishing, power boating, water skiing, wake boarding and sailing and also provide on-site accommodation and shore-based recreational facilities.
Visitation at the larger dams is strongly related to water levels, with these dams attracting upwards of 50,000 visitors per year at high water levels. Over the past decade, most of these dams have been operating at water levels of less than 50%, with water levels falling to below 10% at some of the dams. Even with the very low water levels, visitation has been relatively significant and has exceeded visitation achieved at the dams that have limited facilities and/or limited access to the water (eg Chichester, Grahamstown).

The domestic water supply dams, Chichester and Grahamstown have the lowest visitation levels, attracting less than 3,000 visitors per annum. This reflects the restrictions on on-water activities, limited recreational facilities and no accommodation. The low level of visitation to Lake Liddell is primarily due to the very poor quality of the recreational facilities available, the 'industrial' setting, the lower water quality levels and the competition from nearby dams that offer more activities and far superior facilities. Visitation to Lostock Dam is also low, again reflecting the limited facilities available, the lack of accommodation above the Dam wall and the 8 knot speed limit which prohibits power boating and towing activities.

The market mix and pattern of visitation at the Dams that cater for power boating and towing activities and provide onsite accommodation, are very similar, with the key characteristics being:

- For day trips, the Dams primarily draw visitors from the surrounding region (up to 2 hours drive). For weekends, public holidays and school holidays the Dams draw from a much wider area. All Dams contacted drew some holiday-makers from the Sydney Region, while all Dams within 5 hours of Sydney reported some weekend / long weekend visitors from Sydney. Copeton Dam near Inverell, also draws visitors from South East Queensland, including visitors from Brisbane and the Gold Coast (5-6 hours drive) confirming that residents of major coastal urban areas will travel inland to the Dams.

- Fishing is the most popular activity, with fishing undertaken year round. Around 90% of anglers fish from boats.

- Recreational boating, power boating, jet skiing, water skiing, wake boarding and other tow activities are concentrated in the warmer months, starting around October and extending though to March - April.

- Picnicking and camping are the most popular shore-based activities.

- Visitation peaks during school holidays, at Easter and on the long weekends. All accommodation and powered sites are generally booked out from the end of December though to the last week in January. Over the Christmas-New Year period the dams can attract up to 5,000 visitors per day. Visitation is low in winter, with anglers being the main visitor market.

- Outside of school holidays, visitation is higher on weekends than mid-week.

- Families and social groups are the main weekend and school holiday markets.

- Anglers, retirees and coach tour groups (primarily seniors groups), are the main mid-week markets. The Dams are seeing an increase in the 'grey nomad' touring caravan and motorhome markets.

- The larger Dams host a range of events, with fishing tournaments being the main activity. Other events include open water swim meets, power boating and ski events, sailing and rowing events, community picnics, entertainment, car and motor cycle club rallies, scout jamborees etc.

- The Dams attract a range of organised groups including:
  - Fishing clubs and social groups of anglers

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- Coach tour groups
- School camps and excursions
- 4WD clubs and social groups
- Motorhome, caravan and campervan rallies and social groups
- Car and motor cycle clubs
- Scouts, Guides, Adventurers etc
- Church groups
- Family re-unions
- Institutional groups - nursing /retirement home groups, disability groups, welfare groups etc

The Dams that have a meeting / function room and on-site group accommodation also attract a range of small meetings and functions.

7.2 Potential Source of Visitors

Tillegra Dam has the potential to draw visitors from:

- Local and regional resident population with the Dam attracting day trippers, weekend, short breaks and holiday-makers.
- Sydney, Central Coast, Upper Hunter and possibly Great Lakes Shire for weekend, short breaks and holiday makers.
- Central NSW and the southern part of North Western NSW - primarily for holidays.
- Visitors staying in Dungog Shire and the surrounding region, coming to the Dam for a day trip or visiting the Dam as part of a scenic drive or visit to the Barrington areas.
- Special interests / activity based markets, coming to the Dam to undertake a specific activity - eg water skiing.

These sectors are discussed in the following sections. There is some overlap between the different data sets with, for example, residents of the Hunter Region, who take trips or holiday within the Hunter, being included in the visitor statistics.

7.3 Resident Population

As discussed in Section 2.3, Tillegra Dam is well located to attract patronage from the main population centres from Sydney through to Myall Lakes, with around 530,000 people residing within 1.5 hours drive of the Dam and 5.3 million people within 3.5 hours drive of the Dam (see Table 2.2).

Over the next 23 years (to the Year 2031), the population resident within 3.5 hours drive is forecast by the NSW Department of Planning, to increase by 1.38 million people, with growth concentrated in the Sydney Metropolitan area, Central Coast and Lower Hunter:

<table>
<thead>
<tr>
<th>Region</th>
<th>Additional Population by 2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney Metropolitan Area</td>
<td>1.1 million</td>
</tr>
<tr>
<td>Central Coast</td>
<td>100,000</td>
</tr>
<tr>
<td>Lower Hunter</td>
<td>160,000</td>
</tr>
<tr>
<td>Upper Hunter / Barrington Tops</td>
<td>4,320</td>
</tr>
<tr>
<td>Great Lakes Shire</td>
<td>14,850</td>
</tr>
</tbody>
</table>

The expected growth in population will increase pressure on the coastal holiday destination areas as
well as on recreational areas. Tillegra Dam provides the opportunity to provide a significant regional recreation area to service the Lower Hunter and Central Coast areas.

### 7.4 Visitors to Hunter Region, Port Stephens and Central Coast

Tillegra Dam will attract some day trips from visitors who are visiting the Hunter Region, Port Stephens and Great Lakes Shires and the Central Coast.

Based on figures provided by Tourism NSW, the Hunter Tourism Region (nine LGA's of the Hunter Valley - Barrington Tops area, excluding Port Stephens) attracts in the order of 2.2 million overnight visitors per annum and around 4.8million day trippers. Visitation in the Hunter Region is concentrated in the Lower Hunter with Newcastle, Wine Country (Pokolbin area) and Lake Macquarie being the main destinations.

#### Table 7.2 Estimated Visitation to the Hunter Region 2003-2007

<table>
<thead>
<tr>
<th></th>
<th>Estimated Visitation to the Hunter Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td><strong>Visits (’000)</strong></td>
<td></td>
</tr>
<tr>
<td>Domestic Overnight Trips</td>
<td>2018</td>
</tr>
<tr>
<td>International</td>
<td>95</td>
</tr>
<tr>
<td>Domestic Day Trips</td>
<td>4198</td>
</tr>
<tr>
<td><strong>Visitor Nights (’000)</strong></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>5304</td>
</tr>
<tr>
<td>International</td>
<td>1301</td>
</tr>
</tbody>
</table>

Source: Tourism NSW Regional Profiles

Characteristics of visitation to the Hunter Region in 2007 are summarised below.

- The majority (82.9%) of domestic visitors to the Hunter were from NSW, with Regional NSW generating 41% of visitors and Sydney 41.9%. 17.1% of visitors were from interstate, with 7% from Queensland and 5.9% from Victoria. International visitors come primarily from the United Kingdom (22.5%), New Zealand (13.1%) and the US (12.5%).

- The main reasons for visiting the Hunter in 2007 were:

<table>
<thead>
<tr>
<th></th>
<th>Visits</th>
<th>Nights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit Friends and Relatives</td>
<td>41.9%</td>
<td>47.8%</td>
</tr>
<tr>
<td>Holiday / Leisure</td>
<td>38.8%</td>
<td>35.6%</td>
</tr>
<tr>
<td>Business / Conference</td>
<td>15.7%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Other</td>
<td>4.1%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

For international visitors, 61.4% were on holidays, 25.6% visiting friends and relatives and 7.8% travelling for business purposes. Tillegra will draw mainly from the VFR and Holiday / Leisure markets.

- Using the Australian Travel Segments, 27% of domestic visitors to the Hunter were Pampadours (want luxury), 26% were Wanderers (primarily retirees - time to tour around), 17% were compatriots (families), 15% were peer group travellers (seeking a fun experience with others), 11% were True Travellers (looking for depth of experience) and 6% other markets.

- 85.3% of domestic visitors drove to the Hunter, 7.5% flew and 3.5% travelled by rail.

- For nights spent by domestic visitors, 52.5% were in homes of friends and relatives, 13.7% in standard hotels and motels and 10.9% in luxury hotels / resort 4-5 star. International visitors
preferred rented accommodation (42.1%) and staying with friends and relatives (24.8%).

- The Hunter Region attracted 4.821 million day trippers in 2007. 45.3% were holiday and leisure related, 31.1% to visit friends and relatives and 14.3% to undertake business.

Tourism Australia publishes Tourism Profiles for LGAs in regional NSW. The profiles are derived from the National and International Visitor Surveys and are based on the three year average to June 2007. The figures indicate the 'order of magnitude' of visitation.

Table 7.3 Estimated Visitation to LGA's within the Hunter and Central Coast Regions and Port Stephens and Great Lakes Shires

<table>
<thead>
<tr>
<th>LGA</th>
<th>Domestic Day Visitors</th>
<th>Domestic Overnight Visitors</th>
<th>International Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dungog</td>
<td>126,000</td>
<td>75,000</td>
<td>np</td>
</tr>
<tr>
<td>Newcastle City</td>
<td>1,959,000</td>
<td>903,000</td>
<td>59,000</td>
</tr>
<tr>
<td>Port Stephens</td>
<td>612,000</td>
<td>617,000</td>
<td>27,000</td>
</tr>
<tr>
<td>Lake Macquarie</td>
<td>434,000</td>
<td>220,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Cessnock City</td>
<td>543,000</td>
<td>322,000</td>
<td>29,000</td>
</tr>
<tr>
<td>Maitland City</td>
<td>395,000</td>
<td>151,000</td>
<td>np</td>
</tr>
<tr>
<td>Singleton City</td>
<td>188,000</td>
<td>144,000</td>
<td>np</td>
</tr>
<tr>
<td>Upper Hunter</td>
<td>np</td>
<td>114,000</td>
<td>np</td>
</tr>
<tr>
<td>Gloucester</td>
<td>np</td>
<td>103,000</td>
<td>np</td>
</tr>
<tr>
<td>Gosford</td>
<td>2,078,000</td>
<td>848,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Wyong</td>
<td>1,084,000</td>
<td>488,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>401,000</td>
<td>511,000</td>
<td>14,000</td>
</tr>
</tbody>
</table>

Source: Tourism Australia LGA Profiles NSW

These figures indicate that there are in the order of 4.370 million overnight visitors per year staying in the Hunter Region, Central Coast and Port Stephens Area, with a further 525,000 staying in Great Lakes Shire, with Tillegra Dam being accessible to these visitors for a day trip.

7.5 Visitation to Dungog Shire

Tourism Australia has prepared a visitor profile for Dungog Shire. The visitation estimates are based on a number of factors including the supply of commercial accommodation (motels, hotels, caravan parks etc). Visitors staying in the small accommodation properties and the primitive camping areas are not taken into account in the estimates, with the visitor estimates likely to be lower than the visitation achieved by the Shire. The visitor profile is summarised below:

- Dungog Shire attracts around 75,000 domestic overnight visitors per year and 126,000 domestic day trippers.
- 94% of overnight visitors to the Shire are from NSW, with 49% from Sydney and 45% from Regional NSW.
- 60% of visitors are on holidays, with 29% visiting friends and relatives.
- 34% of visitors stay with friends and relatives, 26% stay in caravans or camp, and 21% use motels, hotels, resorts or guesthouses.
- 96% drive to the Shire.
- 87% come specifically to stay in the Shire, with 13% staying in the Shire as part of a multi-
destination trip.

- 72% of visitors stay 1 to 2 nights, with 21% staying 3 to 4 nights.
- 51% of visitors are aged 15 to 44 years, with 31% being 45 to 64 years of age.
- Midlife singles and couples are the main market segment (34% of visitors) followed by families (29%), older working couples (19%) and retirees (18%).
- 51% of people visit the Shire with friends and/or family, 29% as adult couples and 16% by themselves.
- Bushwalking / visiting rainforest is the most popular activity undertaken (36% of visitors), followed by eating out (28%) and touring / scenic driving 26%.

In relation to Tillegra Dam, the salient points of the profile are:

- Dungog Shire is a destination area with people coming into the area primarily for holiday and leisure purposes.
- Based on the length of stay, Dungog Shire is primarily a weekend and short-breaks destination, with the Dam expected to attract these markets. In addition, the Dam will attract holiday-makers which will increase the length of stay in the Shire, with flow-on benefits for local businesses.
- There is demand for both clustered accommodation to cater for families and groups of friends, and also for more secluded / private accommodation to cater for the couples market.
- The importance of bush-walking / rainforest visits and scenic driving / touring in the activities that are undertaken by visitors to the Shire. The Dam is close to the forests and located on one of the main forest access roads and scenic drives. The Dam needs to be integrated with these attractions.

The following information on characteristics and patterns of visitation to Dungog Shire is taken from the Dungog Shire Tourism Plan (2004).

**Market Segments**

The Dungog Shire Tourism Plan (2004) found that the market segments attracted and the visitation patterns vary markedly throughout the Shire. These variations result from the attractions and accommodation available locally and the activities that visitors are looking to undertake while in the Shire. Broadly:

- Dungog, as the service centre for the Shire and the main rail access point, attracts a variety of market segments including business travellers, workers, day-trippers and visitors staying in accommodation in the central areas of the Shire - Main Creek, Chichester River Valley, Williams River (Salisbury Road) and Monkerai Valley. Dungog sees more of the middle to high income visitors than it does of the camping market.
- In Clarence Town, the Williams River is the main attraction with visitors coming to town to camp by the river, boat, waterski and fish. Visitation is concentrated during the warmer months, peaking in summer.
- Visitation to Paterson is strongly influenced by the events, conferences / meetings and activities held at the CB Alexander Agricultural College at Tocal. Day visitation is influenced by the proximity of Paterson to Maitland and Morpeth and to the availability of attractive riverside picnic areas, the historic hotel and the eateries.
The visitation to Gresford is mixed. Gresford services the camping and caravan markets that are staying at Lostock Dam in the Upper Paterson River Valley and in the State Forests on the Upper Allyn River. It also has a strong local holiday home market.

In the rural areas, the Chichester State Forest and the Upper Paterson and Allyn River areas attract mainly campers. Lostock Dam attracts anglers, day visitors (picnics and boating) and people with boats. The Allyn River camping area is very popular with families and social groups and clubs. The Upper Williams River Valley and the Main Creek area tend to attract visitors looking for a 'nature-based' experience and/or a rural / bush escape. Chichester Dam attracts some picnickers and coach groups. Chichester State Forest / Telegerry Forest Park attracts larger groups, 4WD enthusiasts, families and off-road motorcyclists.

The primary and secondary visitors markets (excluding VFR) attracted to the different areas within the Shire are summarised in Table 7.4.

**Table 7.4 Market Segments by Locality - Dungog Shire**

<table>
<thead>
<tr>
<th>Locality</th>
<th>Primary Markets</th>
<th>Secondary/Minor Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Towns &amp; Villages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dungog Township</td>
<td>Business travellers / workers</td>
<td>Walking / social clubs arriving by train</td>
</tr>
<tr>
<td></td>
<td>Short breaks</td>
<td>Coach tours - day</td>
</tr>
<tr>
<td></td>
<td>Day visitors - Country Drive</td>
<td>International FIT</td>
</tr>
<tr>
<td></td>
<td>Short-breaks market</td>
<td>Families</td>
</tr>
<tr>
<td></td>
<td>Retirees - FIT &amp; group</td>
<td>Cyclists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Show and Sporting events</td>
</tr>
<tr>
<td>Clarence Town</td>
<td>Seniors - day visitors from the surrounding region</td>
<td>Day coach tour groups</td>
</tr>
<tr>
<td></td>
<td>Seniors - staying on the river</td>
<td>Anglers - events</td>
</tr>
<tr>
<td></td>
<td>Anglers</td>
<td>Car clubs</td>
</tr>
<tr>
<td></td>
<td>Waterskiers / Boating</td>
<td>Pony clubs</td>
</tr>
<tr>
<td></td>
<td>Families - riverside camping</td>
<td>Social groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bowling - events</td>
</tr>
<tr>
<td>Paterson</td>
<td>Day visitors - country drive</td>
<td>Weddings &amp; functions</td>
</tr>
<tr>
<td></td>
<td>Barringtons through traffic</td>
<td>Coach tours - day</td>
</tr>
<tr>
<td></td>
<td>Picnickers - groups and individuals</td>
<td>Walking clubs (rail)</td>
</tr>
<tr>
<td></td>
<td>Conference / meeting delegates - Tocal</td>
<td>Short breaks</td>
</tr>
<tr>
<td></td>
<td>Major regional events - Steamfest, Morpeth Jazz Festival, Tocal Field Days</td>
<td>Car Clubs</td>
</tr>
<tr>
<td>Gresford-East Gresford</td>
<td>Day visitors from the surrounding resorts visiting the wineries / bistro</td>
<td>Special interest craft groups</td>
</tr>
<tr>
<td></td>
<td>Day visitors - Central Coast / Lower Hunter - country drive</td>
<td>Short breaks - couples</td>
</tr>
<tr>
<td></td>
<td>VFR / local functions</td>
<td>Daytrip coaches</td>
</tr>
<tr>
<td></td>
<td>Events - show / rodeo</td>
<td>Motorcycle groups</td>
</tr>
<tr>
<td></td>
<td>Barrington's traffic - camping</td>
<td>Motor Home &amp; Caravan Clubs</td>
</tr>
<tr>
<td></td>
<td>Second home / holiday home</td>
<td>Barrington traffic - non camping</td>
</tr>
</tbody>
</table>

**TILLEGRA DAM**

**ASSESSMENT OF RECREATION & TOURISM POTENTIAL**
### Rural Areas

<table>
<thead>
<tr>
<th>Rural Area</th>
<th>Primary Market Segments</th>
<th>Secondary Market Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Paterson River Valley / Lostock Dam</td>
<td>- Day trippers - picnics &amp; boating</td>
<td>- Anglers</td>
</tr>
<tr>
<td></td>
<td>- Families - camping</td>
<td>- Short breaks (non camping accommodation)</td>
</tr>
<tr>
<td></td>
<td>- Social groups - camping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Holiday van users</td>
<td></td>
</tr>
<tr>
<td>Upper Allyn River - Chichester State Forest</td>
<td>- Families - camping</td>
<td>- Short breaks (non camping accommodation)</td>
</tr>
<tr>
<td></td>
<td>- Social groups - camping</td>
<td>- Bushwalkers / nature based</td>
</tr>
<tr>
<td></td>
<td>- 4WD enthusiasts</td>
<td>- Guided tours</td>
</tr>
<tr>
<td></td>
<td>- Dirt bike riders</td>
<td></td>
</tr>
<tr>
<td>Upper Williams River - Barrington Guesthouse, Salisbury area</td>
<td>- Day visitors - sightseeing, picnics, dining, walking</td>
<td>- Conferences &amp; meetings</td>
</tr>
<tr>
<td></td>
<td>- Short breaks - couples &amp; groups of couples</td>
<td>- International groups</td>
</tr>
<tr>
<td></td>
<td>- Walkers / nature based</td>
<td>- International FIT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 4WD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Families</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Coach groups</td>
</tr>
<tr>
<td>Chichester Dam - Chichester Valley</td>
<td>- Short breaks - couples</td>
<td>- Conference &amp; meetings</td>
</tr>
<tr>
<td></td>
<td>- Short breaks - groups of couples</td>
<td>- International FIT</td>
</tr>
<tr>
<td></td>
<td>- Families - school holidays</td>
<td>- Campers</td>
</tr>
<tr>
<td></td>
<td>- Day visitors - picnics</td>
<td>- School groups</td>
</tr>
<tr>
<td>Chichester State Forest areas - Jerusalem Creek &amp; Tegherry Forest Parks</td>
<td>- Families</td>
<td>- Church groups</td>
</tr>
<tr>
<td></td>
<td>- Large social groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 4WD enthusiasts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Dirt bikes - individual, groups, tours</td>
<td></td>
</tr>
<tr>
<td>Main Creek</td>
<td>- Short breaks - couples</td>
<td>- Special interest groups</td>
</tr>
<tr>
<td></td>
<td>- Families</td>
<td>- Bird watchers</td>
</tr>
<tr>
<td></td>
<td>- Nature enthusiasts</td>
<td></td>
</tr>
<tr>
<td>Other rural (non Barringtons located)</td>
<td>- Short breaks - couples</td>
<td>- Families</td>
</tr>
<tr>
<td></td>
<td>- Short breaks - groups of couples</td>
<td>- Retirees</td>
</tr>
</tbody>
</table>

**Source:** Dungog Shire Tourism Plan (2004)

### Source of Visitors

Visitors to Dungog Shire are drawn primarily from the Hunter Valley, Central Coast and Sydney. Based on discussions with operators, the primary and secondary sources for each of the main market segments are summarised in Table 7.5.
### Table 7.5 Market Segment by Origin

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>Primary Source</th>
<th>Secondary Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short breaks couples - up-market</td>
<td>Sydney</td>
<td>Newcastle, Hunter</td>
</tr>
<tr>
<td>Short breaks - couples mid-market</td>
<td>Newcastle, Lake Macquarie</td>
<td>Sydney, Central Coast, Hunter</td>
</tr>
<tr>
<td>Groups of couples</td>
<td>Newcastle, Sydney</td>
<td>Central Coast</td>
</tr>
<tr>
<td>Families - non camping</td>
<td>Newcastle, Lower Hunter</td>
<td>Other Hunter, Central Coast</td>
</tr>
<tr>
<td>Families - camping</td>
<td>Newcastle, Lower Hunter, Central Coast</td>
<td>Other Hunter, Sydney</td>
</tr>
<tr>
<td>Day trippers - FIT sight seeing</td>
<td>Residents of &amp; visitors staying in Newcastle, Lower Hunter, Central Coast, Port Stephens</td>
<td>Other Hunter</td>
</tr>
<tr>
<td>Day trippers - picnickers</td>
<td>Lower Hunter - mainly Maitland &amp; Newcastle</td>
<td>Other Hunter</td>
</tr>
<tr>
<td>Waterskiers, boating</td>
<td>Lower Hunter, Port Stephens</td>
<td>Central Coast, Sydney</td>
</tr>
<tr>
<td>Retirees - FIT self drive</td>
<td>Sydney</td>
<td>All NSW &amp; Interstate</td>
</tr>
<tr>
<td>Coach Tour Groups - day trips</td>
<td>Lower Hunter, Central Coast</td>
<td>Port Stephens, Great Lakes Shire, other Hunter</td>
</tr>
<tr>
<td>Social groups - walking clubs (arrive by train)</td>
<td>Central Coast</td>
<td>Lower Hunter</td>
</tr>
<tr>
<td>Conferences &amp; Meetings</td>
<td>Newcastle, Sydney</td>
<td>Lower Hunter, other Hunter</td>
</tr>
<tr>
<td>4WD / Off-Road</td>
<td>Newcastle, Lower Hunter</td>
<td>Central Coast, Sydney</td>
</tr>
<tr>
<td>International</td>
<td>Mainly coming out of Sydney - visiting as part of a self-drive Hunter or North Coast trip</td>
<td></td>
</tr>
</tbody>
</table>

Source: Dungog Shire Tourism Plan (2004)

### Visitation Patterns

- Visitation to the Shire is seasonal. For all areas, excluding Clarence Town, visitation is concentrated in the cooler months, peaking in autumn and spring. Due to the heat, visitation in summer is very low in all areas, except Clarence Town. Tillegra Dam will provide a ‘summer’ attraction for the Shire, which will help address seasonality issues.

- Visitation is concentrated on weekends with very low midweek visitation, other than for business or school excursion related travel. Most accommodation within the Shire is booked out for public holidays - long weekends in June and October and the Easter weekend.

- There is a high level of repeat visitation with visitors often using the area in a number of ways - as a couple looking to escape for the weekend, visiting with other couples - a social weekend and bringing their families. It is not uncommon for visitors to choose different accommodation depending on the purpose of their visit and who they are travelling with.

- Riverside camping is very popular in the warmer months and summer school holiday periods.

- Other than for peak periods, booking lead times are generally very short.

### Reasons for Visiting

Based on discussions with operators, the main reasons for visiting the Shire appear to be:

- To ‘escape’ from the day-to-day grind of urban living - visitors want to relax and unwind in an attractive rural or bush setting. The preference from visitors is to be as close as possible to the
Barringtons, with a creek / riverside location or a location with views preferred.

- Sight-seeing - 'a country drive' - Dungog Shire is one of the closest rural and mountainous areas to the Lower Hunter and Central Coast urban areas. In contrast to other areas also bordering the Lower Hunter, such as Port Stephens and the Hunter Wine Country, Dungog is perceived as being uncrowded, not ‘touristy’ and not over-commercialised (which is one of the main complaints about Wine Country).

- To visit the Barrington Tops National Park.

- To go camping - 'back to basics' or 'back to nature'.

### 7.6 Special Interest / Activity Based Markets

The recreational-based water storage dams attract a range of special interest / activity based markets. This section explores the characteristics of the main activity based market segments that are potentially significant users of Tillegra Dam and surrounding area:

**On-water**
- Anglers
- Boating enthusiasts / power boating
- Water-skiers and wake-boarders

**Shore-based**
- Mountain bikes
- Caravan & Motorhome
- Coach Tour Groups
- 4WD groups

**Anglers**

Fishing is the most popular activity undertaken at water storage dams. It is also the most popular activity undertaken in the coastal lakes. Fishing is undertaken year round, with the market incorporating individuals, families, small groups of friends and fishing clubs.

In 2000-01 a major survey, the National Recreational and Indigenous Fishing Survey (NRIFS) was undertaken Australia-wide to collect information on the recreational fishing. The key findings of this survey of interest for Tillegra Dam were:

- In 2000/01 there were an estimated 3.6 million anglers in Australia, with these anglers taking 23.2 million fishing trips per annum.

- NSW and Queensland have the highest numbers of anglers, 999,000 and 785,000 respectively.

- Almost half of anglers in NSW (482,739 anglers) lived in the Sydney Metropolitan area. The Hunter Region (131,348 anglers) ranked second, followed by the Mid North Coast (74,441 anglers) and the Illawarra Region (73,686 anglers).
### Table: Region of Residence vs. Anglers Participation

<table>
<thead>
<tr>
<th>Region of Residence</th>
<th>No Anglers</th>
<th>% of State</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney</td>
<td>482739</td>
<td>48.3%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Hunter</td>
<td>131348</td>
<td>13.2%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Illawarra</td>
<td>73686</td>
<td>7.4%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Richmond -Tweed</td>
<td>49995</td>
<td>5.0%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Mid North Coast</td>
<td>74441</td>
<td>7.5%</td>
<td>29.9%</td>
</tr>
<tr>
<td>Northern &amp; Central West</td>
<td>62894</td>
<td>6.3%</td>
<td>20.5%</td>
</tr>
<tr>
<td>North West &amp; Far West</td>
<td>28404</td>
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</tr>
<tr>
<td>South East</td>
<td>49264</td>
<td>4.9%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Murray - Murrumbidge</td>
<td>45729</td>
<td>4.6%</td>
<td>19.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>998501</strong></td>
<td><strong>100%</strong></td>
<td><strong>17.1%</strong></td>
</tr>
</tbody>
</table>

- Nationally, freshwater fishing accounts for 20% of fishing trips. Of the freshwater fishing trips, 55% were to rivers and 45% to dams. In NSW freshwater fishing accounted for 24% of fishing trips (1.85 million trips – 60.3% rivers and 39.7% dams and lakes).
- 57% of fishing is shore-based, with 43% from boats.
- Recreational fishing is more popular with males (2.3 million male anglers to 1.1 million female anglers), and is dominated by people aged 30-44 years.
- The majority of anglers nominated non-catch related factors as more important than catching a fish. The primary reasons for going fishing were ‘to relax and unwind’ (37% of respondents), ‘for sport’ (18%), to ‘spend time with family’ (15%) and ‘to be outdoors’ (13%). Only 8% of respondents nominated ‘catching a fish to eat’ as their primary motivation for fishing.
- Only 4.3% of anglers were members of Fishing Clubs, with males (5%) more likely to belong to a Club than females (3%). Around 5% of anglers participated in tournaments. 5.6% of anglers in NSW belonged to Clubs.
- Anglers are moving more up-market, with a growing trend to staying in cabins, apartments and lodges rather than camping. The quality of the boats used is increasing, with less ‘tinnies’ and more $30,000+ vessels.

The fishing market is segmented, with the market segments attracted to Water Storage Dams including:

- **Fishing Clubs** - Most fishing clubs organise weekends away (usually 6-10 trips per annum), with 1 to 2 of these trips each year often being to freshwater locations. Fishing club trips are generally weekend based, from Friday through to Sunday. An increasing number of the fishing clubs are organising family weekends away, rather than just groups of men. Group size tends to be in the order of 15-30 anglers (plus partners and families). Groups dominated by families generally prefer to camp while smaller groups of males will stay in cabins, pub hotels or camp, depending on the accommodation available.

- **Seniors / Grey Nomads** - Fishing is popular amongst retirees, with fishing being one of a range of activities undertaken while travelling. Retirees coming to Dams to fish generally have their own caravan, motorhome or camper van, or stay in cabins if available. Some retirees travel with a small boat as part of their rig, while others will hire a boat. Shore-based fishing is also popular, with travellers looking for water-front camp sites so that they can fish.

- **Families** – Dams are very popular with families. Visitation is concentrated in the summer school holidays, at Easter and the October Long Weekend. Families primarily camp (particularly if
travelling with other families), or stay in cabins. Most families/groups staying at Dams bring a boat, with fishing being one of a range of activities undertaken at the Dam.

- **Groups of Friends** - This market consists of hard-core anglers (mostly male) who organise fishing trips. Groups are generally in the order of 10-15 people. The two priorities are usually fishing and drinking. In the past this was primarily a camping market, however as the market has aged, there has been a shift to cabins.

- **Competitors** - competing in fishing tournaments at the Dams. The larger tournaments (eg Great Inland Fishing Festival held at Copeton Dam) attract around the 500-600 competitors, while smaller tournaments (eg the tournaments held at Glenbawn Dam) average around 100 competitors.

One market that the Snowy Mountains Dams attract that is not strong at the other water storage dams are individual, experienced anglers. This market comes mainly out of the capital cities, and is predominantly male, 40+ years of age, professionals or self employed with reasonably high disposable income. This market has a preference for up-market accommodation and tends to use fishing guides. This product is not available at the water storage dams throughout NSW.

**Boating Enthusiasts / Power Boating**

According to the Boating Industry Association of NSW, in June 2007 there were 214,063 registered recreational boats in NSW, representing around 92.4% of total registered boats in NSW. The number of new boats being registered per year has between 13,400 and 15,800 pa over the past 6 years, with slowing in growth over the past 4 years. Around 85% of registered boats in NSW are trailer boats (<6m in length).

There is a strong link between boat sales and the state of the economy / economic outlook. The slowing in new boat registrations is partially due to the slowing of the economy and partially to the increase in fuel prices. Based on discussions with Dam Managers, there has been a fall-off in boating activity in recent years, however they believe that this is mainly attributable to the drought and low water levels. There are some indications that rising petrol prices are having an impact on boating with people are finding it more expensive to both tow and operate their boats. Since Christmas, there has been an increase in the number of people wanting to store their boats at the Dams rather than tow them home. Some of the Dams also report an increase in visitation from local and regional residents holidaying at the Dam rather than towing their boats to the coast.

Fresh water dams are popular with boat owners as freshwater is not corrosive, and boat engines do not need to be flushed each time they are pulled out of the water.

Competitive powerboat racing is a relatively small sport. There are 9 power boat racing clubs in NSW, including the Raymond Terrace Aquatic Club, NSW Hydroplane Club at Singleton and the Port Stephens Regatta Club, with these clubs having around 150 competitive boats. There are 6 racing divisions - Displacements (inboard power boats), Hydroplanes (purpose built racing boats), Outboards, Drag Boats, Offshore boats and Juniors (small outboards). Hydroplane Boats travel at higher speeds and are less manoeuvrable than the displacements and outboard boats and as such have more stringent requirements and are not always suitable to river courses.

The Raymond Terrace Aquatic Club races on the Hunter / Williams River at Raymond Terrace. The Club has around 50 members and 20 competitive boats. It holds a monthly competition, and generally hosts a State or National event each year.

The NSW Hydroplane Association used to hold events on Lake Liddell however the fluctuating water levels were a major problem. The Association currently uses other venues including Toukley, the Raymond Terrace facilities, Lake Lyell near Lithgow and the Manning River at Taree. The Association is looking for a competition venue close to Sydney - Newcastle Region.
Factors taken into account in selecting locations for power boat competitions include:

- **Ability to establish a course** - power boats use a running start. The course needs to be at least 1.5km long (with the racing straight being 800 to 900 metres long plus space on either end to provide for the running start and the power down) and 80-100m wide for power boat events and 100-300m wide for the hydroplane boats. The Australian Power Boat Association recommends a course length of 1,800 to 2,400 metres.

- **Depth** - minimum depth of 3 metres and maximum of 20 metres, with around 10m preferred. The depth needs to be suitable to anchor the course marker buoys and also to recover boats and competitors if they have an accident.

- **At least 30m between the shoreline and the edge of the course.**

- **Protected areas** - minimal wind and chop.

- **Beach / foreshore area to leave the boats between races.** For National events and ‘Spectaculars’ boats are pulled in and out of the water after each race. This requires either two boat ramps each 2-3 lanes wide (preferred option) or one large (4-6 lane) ramp.

- **Control tower** - which has visibility of the total course.

NSW struggles to accommodate major power boat and hydroplane events. Major events, such as the Griffen Cup, Bundy Thunder or the TransTasman Challenge will attract 5,000 to 10,000 spectators. Currently these events are being mainly held at Yarrawonga in Victoria and on the Burnett River at Bundaberg in Queensland. There is a proposal being considered to include a powerboat racing course as part of the Nepean Lakes Scheme in Western Sydney.

Additional facilities needed to accommodate the large events (as opposed to Club racing) include:

- **Pit area** - large sealed area that is accessible to the boat ramp and can be screened off to prevent public access.

- **Flat, sealed area adjacent to the foreshore which can accommodate a small crane, to lift boats into and out of the water.**

- **Facilities to cater for 5,000 to 10,000 spectators.**

The NSW Hydroplane Club advised that if it had a venue, it would be looking to hold regular club days plus 3-4 larger events per year potentially including one major National / International event.

If a power boat club was to be based at the Dam, the Club would be looking to establish a club house / storage facilities with the storage facilities able to accommodate the rescue boat, buoys and other equipment (double garage size).

**Towing Activities - Water Skiing / Wakeboarding**

Tow activities are a very popular summer activity at the recreational water storage dams. Most of the use is recreational with the very occasional competitive event.

The Waterski and Wake Board Federation of Australia estimate that there are around 1.5 to 1.6 million people in Australia per year that participate in some form of water-skiing, wake boarding and/or biscuit riding. Most participants are recreationalists. The competitive ski / wake board market is relatively small, around 5-10% of participants.
The Waterways Authority advise that wake boarding is the fastest growing water sport in Australia. Wake boarding however relies on the boat creating ‘waves’ which can, in confined waters, result in bank erosion.

According to the Federation, large water storages are ideal for all forms of recreational skiing activities however they are generally not suitable for competitive events, unless there is a protected arm.

Competitive water skiing and wake boarding events require protected waters with no cross-winds. Most competitive racing in NSW is undertaken on the larger coastal rivers and the Murray River. Water storage dams are mainly used for training and for recreational skiing. In competitive racing, only one boat is used to tow all competitors.

Until 2006, the Williams River was the focal point for water skiing and wake boarding in the Lower Hunter Region, with activities undertaken on the River at Clarence Town, Seaham and Raymond Terrace. As a result of bank erosion, speed limits and no-wake zones have been introduced at various locations along the River. This has focused tow activities at Raymond Terrace. Congestion is a major issue. The Waterways Authority has advised that it would like to see these activities relocated elsewhere, in particular wake boarding which the Authority does not consider sustainable given the condition of the river banks.

Competitive water skiing and water ski training on the Williams River has been scaled back. A tournament training site has been developed at Myuna Bay on Lake Macquarie, with most training programs now undertaken at this site.

Zone 2 (Hunter Region) water skiers advised that they would potentially use Tillegra Dam 2 to 3 times per year for competitive events, provided that the water body is suitable for setting up a course, and the facilities are adequate. Course requirements include:

- Very calm water - no cross winds or chop
- No back wash - bank slopes of 30-45° to absorb rather than reflect the wash.
- Course length of 800 to 900m (preferred - 700 minimum) plus run-up and power down zones at each end
- Width 50m minimum for straight racing, 100m for slalom.
- Water depth 3 to 5 metres preferred.
- Control / judges tower
- Boat launching ramp
- Foreshore area to ski from

Tournaments are generally run over a weekend and attract around 100 to 150 competitors.

**Mountain Biking**

Cycle tourism is growing both in Australia and internationally, with mountain-biking being the strongest growing sector. According to Bicycle Industries Australia, there are on average 1.133 million bicycles sold in Australia each year with 69.8% of the adult bikes sold being mountain bikes (73.4% in NSW). There are 26 mountain bike clubs in NSW, including the Hunter Mountain Bike Association which has around 300-350 rider members.

According to Mountain Bike Australia, the majority of Mountain-bikers are recreational based with this market including a wide spectrum of people of varying levels of skill. The purpose built mountain bike trails attract a greater proportion of intermediate and advanced riders while the service trails, rail trails etc tend to attract family groups, older riders and beginners.

In selecting locations to ride, considerations include:
- Concentration of trails - looking for a network of trails that offer a range of experiences.
- Mix of trails - preference is for single trails, however fire trails are acceptable as a 'link' between single trails.
- Progression of trails - from easy through to advanced with a variety of challenges.
- Iconic country with attractive setting
- Safety / easy of navigation - preference being for defined track heads and marked trails.
- Support infrastructure close by.
- For down hill / gravity riding - options for getting back up the hill

Off-road riding is a relatively new activity, with the off-road disciplines still developing as people discover different ways to use mountain bikes. Competitive off-road events include:

- Mountain Bike
  - Cross Country (XC)
  - Down Hill (DH)
  - Mountain Cross / Gravity 4X Course (part of down hill)
  - Dirt Criterium
  - Trials (obstacle course)
  - Endurance
  - Timed events - eg 24 hour
  - Freestyle

- Orienteering & Rogaining - offshoot from mountain biking and generally organised by the orienteering associations

- AUDAX - long distance rides 35-200 km on dirt

- Polaris - bike navigation events - urban and dirt challenges - using mountain bikes

- Adventure Racing - multi-discipline which can include a cycle leg (usually mountain bike).

- Triathlon / Duathlon (combined disciplines - with an off-road cycling leg)

Each of these disciplines could potentially be undertaken at Tillegra Dam through the development of purpose-built mountain trails around the Dam and by linking these trails across to the trails in the Chichester State Forest.

According to Mountain Bike Australia, around 10% of 'regular' mountain bike riders belong to Clubs, with the Clubs undertaking a range of social and training rides and competitive events. Social rides attract between 30 and 150 riders, while Club events generally draw around 100-300 competitors. Open events attract from 500 to 3,000 competitors.

Club members spend around 10% of time competing and 90% riding for training and recreational purposes. Around 70 - 75% of serious mountain bikers are male, with the number of females increasing. For events, the ratio is around 80% men and 20% women, with this having shifted from 90:10 over the past decade.

There are three main groups of competitive riders:

- Males - Late teens / 20's - prefer downhill and extreme riding
- 30-50's - men and women - cross country, endurance and long distance trail riding
- 50's+ around 50% of this group compete in hard core cross country with the remainder participating in shorter, easier rides.
Mountain-bike riders, particularly the competitive riders, generally have relatively high disposable incomes and will travel to access trails. The preference is for cabin, lodge and motel accommodation, more-so than camping.

Within the Hunter Valley the main areas used for mountain-biking are the Awaba State Forest, Watagans (Ourimbah to Congewai Loop 30km), Glenrock State Conservation Area and around Caves Beach. The availability of areas to ride has been reduced with the transfer of State Forests to National Parks (DECC). DECC is currently looking to scale back riding at Glenrock.

The Hunter Mountain Bike Association, with the approval of State Forests, is currently developing a Mountain Bike Park in the Awaba State Forest. The Club has developed a downhill course and has started on constructing a cross country course (8km). The Club is also looking to put in around 40km of trails.

Both the Dungog Community and the Hunter Mountain Bike Association have suggested developing mountain bike trails around the Tillegra Dam foreshore, with the Dam having a network of trails that would allow for both recreational and competitive riding.

Track lengths needed for competitive riding include:

- Cross country - 6 to 10km circuit
- Endurance (8 hour) races - 10 to 15km circuit
- 12 and 24 hour races - 18 to 20km circuits
- Marathon - 110km point to point

According to Mountain Bike Australia, preference is for an area to provide a concentration of single trails of varying difficulty, with access to a network of long distance tracks, again of varying degrees of difficulty. For a day ride (for people wanting to ‘explore), single purpose built trails need to be about 40km in length, while mixed single - fire trail trails need to be 60-80km in length. Ideally trails should be looped from track heads where car parking and facilities are available. Any trail less than 10km in length is regarded as a 'short' ride by recreational riders. In addition to providing trails around the Dam foreshore, a network of trails would need to be identified in the Chichester State Forest, with a trail linking the Dam to the Forest. Consideration also needs to be given to establishing a cycle way from Dungog to the Dam and also from Dungog to Newcastle, either along the pipeline of by using State Forests, Crown Reserves, Road Reserves, Travelling Stock Routes etc.

The Hunter Mountain Bike Association and Mountain Bike Australia have suggested the following recent developments / proposals as examples for incorporating mountain bike parks into major regional recreation areas:

- Lysterfield Park in Victoria - Lake (82ha) and regional park incorporating the State Mountain Bike Centre (used for the Commonwealth Games), equestrian trails and walking trails as well as picnic areas, beaches and non-motorised boating activities.

- Traverston Dam in Queensland - currently going through the assessment process, with a proposal to develop the Dam as a major recreational and tourism destination, with mountain biking being one of the activities proposed.

- Stromlo Forest Park in the ACT - major recreation area including an international standard mountain bike park, road and criterion cycling circuits, walking trails, equestrian trails and facilities, general recreation areas and event staging areas. This Forest was completely destroyed by the 2004 fires in the ACT, with the ACT Government putting in the recreation facilities and infrastructure before re-planting the forest.
**Caravans, Campervans and Motorhomes**

The touring caravan, campervan and motorhome market is a growing market throughout Australia, with all Dams contacted for this study reporting an increase in the number of touring vans attracted. Some of the Dams are also attracting rallies and social outings from caravan, campervan and motorhome clubs and associations. Dungog Shire is seeing some growth in this market, albeit from a very small base, with an increase in travellers at both commercial and free camping areas. Gresford Showground has also been used by motorhome clubs from the surrounding region for rallies.

The peak industry group, the Campervan and Motorhome Club of Australia (CMCA) has over 50,000 members, with membership growing strongly. The CMCA has a regional Chapter structure, with each Chapter holding an annual meeting and also organising a number of trips each year. CMCA also hold State and National meetings and conventions, with these events attracting over 1,000 rigs. Other similar associations and clubs (eg Winabago Owners Association, Caravan Club of Australia) also regularly organise trips and rallies.

International visitors hiring Campervans to tour Australia are a growing market with hire companies, such as Britts and Kia, expanding rapidly and expecting this market to continue to grow strongly over the next decade.

Most rigs are now self-contained. Travellers tend to travel outside of school holiday periods and generally stay in a mix of commercial parks and 'free' areas. Most travellers do not have 'set' itineraries. As such travellers are relatively flexible in where they travel and how long they stay. The Dams report that travellers will often stay 5 to 7 days, with Lake St Clair having travellers who have stayed for up to 3 months. Factors that are important to this market, which influence travel patterns include:

- Word-of-mouth referrals from other travellers.
- Camping areas in scenically attractive areas, with water bodies and river foreshores being a favoured location.
- Rallies, meetings and events held by the caravan / motor home clubs and associations, with travellers slowly making their way to and from these activities.
- Safety - there is a fear and avoidance of areas that have a reputation for crime.
- Need to access facilities such as a dump point, laundry, power to recharge batteries etc
- The attraction base of an area and the events being held.

The provision of caravan and camping facilities at Tillegra Dam should enable Dungog Shire to build the touring van market and also to bid for club trips and rallies.

**Coach Tour Groups / Social Groups**

Coach tour groups are a small mid-week, day trip market for most of the water storage dams in the Hunter Valley and also for the larger recreational dams in inland NSW. Most coach tour groups are retirees and special needs groups, who visit dams primarily as a morning or lunch stop, with groups generally bringing their own picnic. These groups tend to use the large picnic shelters where available. Coach tour groups generally don't stay at the Dams as the accommodation available is not suitable for groups, with groups preferring motel style accommodation.

Dungog Shire attracts the occasional coach tour group, however the number of groups has decreased since the Barrington Guesthouse burnt down. Dungog also attracts walking groups (mainly seniors) who catch the train to Dungog, walk around town, have a meal and then catch the train home. These groups are mainly from the Lower Hunter and Central Coast.

With the loss of the Guesthouse, Dungog Shire does not have accommodation suitable for the coach tour market, with the few larger properties that are available being too expensive for the coach market.
With quality picnic facilities at Tillegra Dam, the Dam should attract some coach tour groups, particularly if the Dam is effectively packaged with the river-walk at the Williams River Picnic Area of the Barrington Tops National Park and other activities within the Shire (eg Camelot Lavender Farm, the wineries at Gresford, farm gate sales, the historic museums etc). There is potential for the local coach operator to meet the train and run tours for groups out to the Dam and the base of the Barringtons.

The ability of Tillegra Dam to attract overnight coach tour groups will depend on the accommodation provided at the Dam. The coach market will use mid-priced motel, lodges, guesthouse and resort accommodation. The market is typically looking for well presented 3.5 to 4 star properties, with a minimum of 25 rooms of the same standard, and an in-house restaurant or an adjoining eatery.

Most coach tour passengers are elderly and this influences the choice of accommodation. The features taken into consideration in selecting accommodation include:

- Size of the property - 25+ rooms. The demand is generally higher for twin share than double beds, particularly for seniors.
- Disabled / assisted access provisions.
- Package offered and price - for accommodation, dinner (2 course meal), bed and breakfast tour organisers are looking at around $80-$90 per person and will generally not go above $110 per person per night in regional areas.
- Ground floor rooms or properties with lifts preferred. (With elderly clientele the coach driver often has to deliver luggage to the rooms). The rooms need to be near the coach drop-off and pick-up point.
- Ensuite facilities for each room.
- Separate showers in the bathroom - tour organisers will generally not book rooms were the shower is over the bath.
- Facilities in the rooms - tea and coffee and own iron and ironing boards are essential, with hair dryers preferred.
- On-site parking for the coach (preferred but not essential).
- The rooms need to have air-conditioning and heating.
- On-site restaurant / dining room and the ability to provide group breakfast.
- An area for group interaction - can be outdoors if appropriately sheltered and heated in winter.

Coach operators prefer not to split a coach group between different properties or spread the group out over a wide area. Tillegra Dam has the potential to attract the overnight coach tour market if the accommodation available meets the requirements of this market.

4WD Market

The 4WD market is a market for the Dams, with the Dams attracting both 4WD club and visitors who drive 4WD and are looking for some ‘soft adventure’ driving. The Lostock Dam and Lake St Clair caravan parks both attract 4WD clubs and social groups with 4WD vehicles, who set-up camp at the Parks and explore the forest trails in the Barringtons.

Broadly the 4WD market incorporates a number of segments:

- Hard core 4 WD enthusiasts – looking for challenging trails (small proportion of the market)
- 4WD clubs – organize regular trips, with the trips designed for different skill levels.
- Beginners - Owners of 4WD who want to try their vehicle off-road on fire trails and gravel roads, but don’t have the technical skills for difficult terrain.
‘Soft Roaders’ – people who own the ‘light-weight’ vehicles with 4WD and All Wheel Drive capability, such as the Subaru Forester, RAV 4 etc. These vehicles are suitable for fire trails and gravel roads but don’t have the low range capability and/or clearance for hard core 4WD driving.

Outdoor recreationalists - There is a high level of 4WD and soft roader ownership amongst people involved in outdoor recreation - campers, bush walkers, mountain bikers, anglers, horse riders, boat owners etc, with these people using their vehicles to access the activities that they want to undertake. This market will use 4WD trails to access a landmark or attraction and to explore the surrounding area.

Commercial 4WD tour and tag-along operators and 4WD instructors.

Driver Training - including emergency services, government and council staff.

There are eighty 4WD Clubs in NSW registered with 4WD NSW. Of these, 36 clubs are Sydney-based, with 12 clubs in the Hunter, 4 on the Central Coast and 1 at Tamworth. Club membership is dominated by families, followed by ‘empty nesters’.

Most Clubs organise at least one trip per month, with the larger clubs offering at least one trip per week. The trip calendar is generally set 12-18 months ahead. In addition, Club members can organise trips amongst themselves, with these trips then registered with the Club for insurance purposes. Trip programs typically include a mix of extended trips (eg Simpson Desert), shorter trips (up to 14 days), weekend/short breaks (2-4 days) and day trips. Trips are generally graded in terms of difficulty, with soft roaders usually catered for on the easier grades (There is no Australia-wide grading system with each club having their own grading system). The number of vehicles participating on a trip is usually capped, with 6-10 vehicles for a difficult trip with ‘tight’ trails and up to 30 vehicles for ‘easy’ trips.

While most trips involve some unsealed roads and/off-road driving, Clubs also organise road trips, eg to winery areas, Warrumbungles National Park, inland dams, Myall Lakes etc. Camping is the preferred form of accommodation, although not the only form of accommodation used. Scenery, the quality of the camping area/s and the ability to participate in outdoor activities (eg bushwalking, fishing, canoeing) are key considerations in developing trip itineraries.

Camping is one of the primary activities undertaken by the 4WD market, with camping in natural areas being one of the main attractions of 4 wheel driving.

In recent years there has been a strong growth in sales of 4WD camper trailers, with these trailers proving very popular with the 4WD market. They are also popular with the grey nomad market as they are more cost effective and easier to tow than a caravan. The trailers can be taken on most 4WD trails. The trailers are changing the way people tour and camp, with the trailer containing the tent and cooking facilities.

The Hunter Region is popular for 4WD trips, with Clubs in Sydney, Central Coast and Hunter Region organising both day trips and 2-3 day touring trips to the Region. The highest profile 4WD areas in the Region are:

- Barrington Tops - with the Barrington Trail considered a 'must do' trail.
- Chichester State Forest
- Massey Creek State Forest - the Newcastle 4WD Club has a 4WD park in this Forest
- Stockton Beach / Stockton sand dunes
- Watagans - National Park and surrounding State Forests

There are also a number of 4WD tour operators and off-road motorcycle tour operators who run guided and tag-along tours in the State Forests and National Parks in the Barrington Region and other nearby areas of the Hunter.
With the proximity to Barrington Tops and the Chichester and Massey Creek State Forests, and being within 1 hour's drive of the Watagans and Stockton Beach, Tillegra Dam would be a 'logical' place for 4WD clubs and social groups to camp and use as a base to explore the surrounding region.

The availability of 4wd tours as well as self-drive trails in the area surrounding the Dam are 'soft adventure' activities that can be promoted to Dam users, increasing the attraction base of the Dam. A large camp kitchen with group facilities, plus a communal fire pit will prove popular with the 4WD club market and also with other groups (eg caravan and motorhome groups).
8. KEY FINDINGS & RECOMMENDATIONS

The proposed Tillegra Dam is located on the Williams River, on the southern side of the Barrington Ranges, approximately 12km north of Dungog. The Dam will be a large water storage area (around 2,000 hectares in surface area), that will be developed and operated by Hunter Water. Hunter Water has advised that the Dam will be available for recreational and tourism activities, including motorised boating. Activities on and around the Dam will need to be non-polluting and meet stringent environmental controls.

The Dungog community is seeking the 'best' outcomes from the Dam from environmental, community and economic perspectives. The community strongly supports the Dam becoming a regional recreational area and a major tourist attraction and destination.

The main finding of the assessment of potential recreation and tourism uses for the Dam are summarised below.

8.1 Potential of Large Water Storage Dams

- Large water storage dams with quality recreational facilities and a range of accommodation are important recreational and tourism assets for their local areas. These dams attract upwards of 20,000 visitors per annum, with the State Parks attracting in excess of 50,000 visitors per annum when water levels are high.

- Dams with limited access and or limited / poor standard facilities (eg Chichester, Grahamstown, Lake Liddell) attract very low levels of visitation (less than 3,000 people per annum) and make minimal contribution to the local economy.

- The larger water storage dams in both the Hunter Region and more remote inland areas of NSW, draw from a variety of source markets including the Sydney Metropolitan Area, Central Coast and Lower Hunter.

- Visitation levels are linked to water levels. Most of the dams used to supply water for agriculture, experience significant fluctuations in water levels.

- Fishing is the most popular on-water activity, followed by power boating and tow activities (water skiing, wake boarding etc). Fishing occurs year round, with other on-water activities concentrated in the warmer months.

8.2 Assessment of Tillegra Dam

Tillegra Dam has the potential to become a major recreational resource and tourist attraction for Dungog Shire and the Hunter Region. The main attributes and competitive advantages of the proposed Dam are:

- Tillegra will be the closest large, recreational freshwater body to the major population centres (Sydney, Central Coast and Lower Hunter). There are 530,000 people residing within 1.5 hours drive of the Dam and 5.3 million within 3.5 hours drive. By 2031, the population within the Lower Hunter area is expected to have increased by 160,000 people, while the population of the areas within 3.5 hours of the Dam is expected to have increased by 1.38million people.

- Proximity close 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. None of the other Dams are located close to major attractions. The Dam is ideally positioned to become the focal point for the southern end of the Barrington Ranges.

- 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.

- Size of the Dam (2000ha) - with the Dam potentially able to accommodate a range of on-water and foreshore based activities.

- 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.

8.3 Potential Contribution to Dungog Shire

Tillegra Dam has the potential to significantly diversify and strengthen the recreational and tourism product and infrastructure available in Dungog Shire including:

- Provide a focal point and an accommodation and service node for the southern end of the Barrington Ranges - replacing the former Barrington Guesthouse as an iconic location / accommodation.

- Provide a year-round attraction for the Shire, in particular provide water based activities in summer. This will help reduce the strong seasonal fluctuations in visitation currently experienced throughout the Shire.

- Potentially become a ‘soft adventure’ node, within the Barrington region, building on the outdoor activities / adventure tourism image that is emerging for the northern parts of the Barringtons.

- Provide additional accommodation within the Shire. The Dam is likely to help ease the pressure on the camping areas within the Barringtons. It also has the potential to provide a much needed caravan park for the Dungog area, and also to provide quality waterfront accommodation (eg lodge, guesthouse, resort) and potentially a conference and meetings venue.

- Potential to draw visitors through the Shire - with an increase in visitors moving through Dungog and the villages.

- Provide a venue to host a range of events that will bring visitors into the Shire on a regular basis.

8.4 Potential Negative Impacts on the Shire

The Dam has the potential to impact negatively on tourism in terms of:

- Reduction in water flows in the Williams River, which would impact on the tourism and recreational use of the River down stream, in particular in Dungog and Clarence Town but also potentially at Raymond Terrace and Seaham.

- Further deterioration of access roads into and through the Shire. The roads are already in very poor condition and cannot accommodate an increase in traffic, in particular an increase in heavy vehicles.
• If construction workers stay in the Shire, the loss of beds available for visitors.
• Increased use of the attractions and facilities in the Barrington Tops National Park and Chichester State Forests, further degrading already degraded areas.

### 8.5 Development Potential of the Dam

Tillegra Dam has the potential to be developed as an integrated recreation and tourism complex with potential uses including:

• On-water activities - including both motorised and non-motorised boating, towing activities, fishing, sailing, para sailing, house boats etc. There is a need in the Hunter Valley for a course/s for competitive water skiing, wake boarding, power boating and hydroplane racing, with Tillegra Dam being a possible location.

• Providing a mix of accommodation including the traditional camping, caravan and cabin facilities that are very popular at water storage dams, and also some up-market and/or specialty accommodation including lodge, resort, guesthouse, health spa, fishing lodge and/or boutique hotel.

• Using the proposed planting of 1.5 million trees to create an iconic feature that will become a tourist attraction in its own right in the future.

• Capitalising on the growth in mountain biking and cycle tourism by providing a network of trails both around the Dam and connecting to Dungog, the Chichester Valley and the Chichester State Forest and possibly from Dungog to Newcastle.

• Providing a base from which people can explore the southern end of the Barrington Ranges.

With the range of uses possible at the Dam, it will be important to ensure that non-compatible uses are segregated to minimise potential conflict.
<table>
<thead>
<tr>
<th>On water Activities</th>
<th>Shire-based Activities &amp; Attractions</th>
<th>Events</th>
<th>Accommodation</th>
<th>Support Infrastructure &amp; Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing</td>
<td>Cycling</td>
<td>Fishing tournaments</td>
<td>Up-market accommodation</td>
<td>Tea rooms / café / eatery</td>
</tr>
<tr>
<td>Kayaking / Canoeing</td>
<td>Mountain-biking</td>
<td>Water skiing, wake boarding</td>
<td>Eco tourism resort / lodge</td>
<td>Conference / meeting / function facilities</td>
</tr>
<tr>
<td>Power Boating / Hydroplanes</td>
<td>Walking trails</td>
<td>power boat / hydroplane racing / spectacular</td>
<td>Bush retreat</td>
<td>General store / shop</td>
</tr>
<tr>
<td>Water skiing</td>
<td>Picnic / BBQ areas</td>
<td>Kite surfing competition / festival / Sailing / Rowing regattas</td>
<td>Health Spa</td>
<td>Network of cycling, mountain biking and walking trails</td>
</tr>
<tr>
<td>Wake Boarding</td>
<td>Playgrounds</td>
<td>Entertainment / Concerts</td>
<td>Cabins</td>
<td></td>
</tr>
<tr>
<td>Other town activities</td>
<td>Adventure Playgrounds</td>
<td>Open water swimming carnival</td>
<td>Caravan Park</td>
<td></td>
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<tr>
<td>Jet Skis</td>
<td>Jumping balloon / pillow</td>
<td>Novelty / community events - eg raft races</td>
<td>Camping Ground</td>
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<tr>
<td>Recreational boating</td>
<td>Tennis courts</td>
<td>Adventure racing - combining different activities - mountain bike, kayaking, swimming, cross country running etc</td>
<td>Adventure lodge</td>
<td></td>
</tr>
<tr>
<td>Rowing</td>
<td>Basketball court</td>
<td>Mountain bike events - cross country, off-road audax, MB orienteering etc</td>
<td>Fishing lodge</td>
<td></td>
</tr>
<tr>
<td>Sailing</td>
<td>Lookouts</td>
<td>Car and motor cycle club rallies</td>
<td>Sport &amp; Rec camp for children</td>
<td></td>
</tr>
<tr>
<td>Para-sailing</td>
<td>Water slides</td>
<td>Caravan, campervan and motorhome club rallies</td>
<td>School camp/s</td>
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<tr>
<td>Wave / Kite Surfing</td>
<td>High and low ropes / abseiling courses</td>
<td>Scout / Guide jamborees</td>
<td>Conference Centre with accommodation</td>
<td></td>
</tr>
<tr>
<td>House boats</td>
<td>Arboretum / Forest attractions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boat hire</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jet boat rides</td>
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</tr>
<tr>
<td>Tours</td>
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<tr>
<td>Below Dam Wall</td>
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<tr>
<td>White Water Rafting</td>
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<tr>
<td>Canoeing / Kayaking</td>
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<tr>
<td>Trout Farm / Aquaculture</td>
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</tr>
</tbody>
</table>

TILLEGRA DAM
ASSESSMENT OF RECREATION & TOURISM POTENTIAL

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8.6 Potential Markets

Tillegra Dam has the potential to draw visitation from the resident population of the Hunter, Central Coast and Sydney Metropolitan Areas, as well as attract day trips from people holidaying in Dungog Shire and the surrounding region and special interest groups coming into the area to undertake and activity.

The different markets that could potentially be attracted to the Dam include:

Table 8.2 Markets that could potentially be attracted to Tillegra Dam

<table>
<thead>
<tr>
<th>General Recreation / Tourism Users</th>
<th>Special Interest / Activity Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirees, families, couples, groups visiting for:</td>
<td>Anglers</td>
</tr>
<tr>
<td>▪ Day trips</td>
<td>Water skiers / Wake Boarders</td>
</tr>
<tr>
<td>▪ Short breaks</td>
<td>Power boat / hydroplane</td>
</tr>
<tr>
<td>▪ Holidays</td>
<td>Boating enthusiasts</td>
</tr>
<tr>
<td>Touring caravan, campervan &amp; motorhomes</td>
<td>Canoeists / Kayakers</td>
</tr>
<tr>
<td>Coach tour groups</td>
<td>Cyclists / Mountain Bikers</td>
</tr>
<tr>
<td>School groups</td>
<td>Sailors/ wind and Kite Surfers</td>
</tr>
<tr>
<td>Social Groups</td>
<td>Bush walkers</td>
</tr>
<tr>
<td>Conference, Meetings &amp; Functions</td>
<td>Bird Watchers</td>
</tr>
<tr>
<td></td>
<td>4WD / Off road motor bike enthusiasts</td>
</tr>
<tr>
<td></td>
<td>Car and Motor cycle clubs</td>
</tr>
<tr>
<td></td>
<td>Endurance / long distance sports (marathon, iron man, adventure racing etc)</td>
</tr>
</tbody>
</table>

8.7 Infrastructure Improvements Required to Support Tillegra Dam

The following infrastructure improvements are required to enable Dungog Shire to capitalise effectively on the recreation and tourism potential of Tillegra Dam.

- Upgrading the access roads into and through the Shire, including the provision of overtaking lanes.

- Upgrading visitor facilities and infrastructure in the Barrington Tops National Park and Chichester State Forests to accommodate increased use. If possible, proceed with the development of the Sky Walk proposal at the Williams River picnic area within the National Park to further strengthen and consolidate the Barrington product.

- Upgrading Salisbury Road from Dungog through to the Barrington Tops National Park.

- Upgrading the Salisbury Gap Road to provide the link between the Williams and Allyn River Valleys, and improve access to the Dam from Gresford and the Upper Hunter Valley.

- Constructing a road link from Tillegra Dam across to the Chichester Valley and improve the roads in and through the Chichester State Forest.

- Providing a cycleway (preferably separate from the road) from Dungog through to Tillegra Dam, connecting to a trunk cycle track around the Dam and a network of mountain bike trails. Explore options for a cycleway link from Dungog to Newcastle.

- Providing access roads to the southern arm and western foreshore of the Dam.
Increasing the stock of motel and other accommodation in Dungog.

Ensuring that the Dam is effectively signposted from the major Highways surrounding the Shire.

Providing the road, water, sewerage and power infrastructure to support development and use of the Dam.

8.8 Directions Forward

For Tillegra Dam to become a significant recreational and tourism asset for Dungog Shire and the Hunter Region consideration needs to be given to:

- Recognition of the recreation and tourism potential of the Dam and a commitment by State Government Agencies to put in place the infrastructure and resources needed to achieve this potential.

- Preparation of a development and management strategy for the southern part of the Barrington Ranges, integrating the visitor facilities in the Barrington Tops National Park, Chichester State Forest (and other small forests in the area, Upper Williams River Valley, the Chichester Valley / Wangat area and Tillegra Dam.

- Preparation and implementation of an integrated land-use plan for Tillegra Dam that permits a range of on-water and shore-based recreation activities, accommodation and support infrastructure.

- Planning controls that will encourage investment and development in the area, while protecting the environment and the attributes that form the attraction base of the Shire.

- Land tenure arrangements (free hold, long leasehold) and a management regime that will facilitate major investment in the area.

- Provision of the infrastructure (eg roads, power, water, sewerage) needed to support development at the Dam.