AGENDA
WORKS AND SERVICES COMMITTEE
17 OCTOBER 2016

MEMBERSHIP:
Mr M Kneipp (Administrator).

The meeting is scheduled to commence at  pm.

WSC16/8 REPORT OF THE WORKS AND SERVICES COMMITTEE - MEETING 19 SEPTEMBER 2016 (ID16/1877) 5
The Committee had before it the report of the Works and Services Committee meeting held 19 September 2016.

WSC16/9 BUILDING SUMMARY - SEPTEMBER 2016 (ID16/1860) 10
The Committee had before it the report dated 11 October 2016 from the Director Environmental Services regarding Building Summary - September 2016.

WSC16/10 LEASES/LICENCES AT WATER AND SEWER SITES (ID16/1861) 22
The Committee had before it the report dated 6 October 2016 from the Director Technical Services regarding Leases/Licences at Water and Sewer Sites.

WSC16/11 QUARTERLY PLANT REPORT (ID16/1678) 24
The Committee had before it the report dated 5 October 2016 from the Manager Fleet Management Services regarding Quarterly Plant Report.
WSC16/12  MOGRIGUY AND WESTELLA ROADS - CRITERIUM AND ROAD RACES 2017 DUBBO CYCLE CLUB SEASON (ID16/1879)

The Committee had before it the report dated 10 October 2016 from the Manager Technical Support regarding Mogriguy and Westella Roads - Criterium and Road Races 2017 Dubbo Cycle Club Season.

WSC16/13  DUBBO TRIATHLON RACES 2016/2017 (ID16/1881)

The Committee had before it the report dated 10 October 2016 from the Manager Technical Support regarding Dubbo Triathlon Races 2016/2017.

WSC16/14  PROPOSED ROUNDABOUT IMPROVEMENTS AT THE INTERSECTION OF ST ANDREWS DRIVE AND CYPRUS POINT DRIVE, DUBBO (ID16/1882)

The Committee had before it the report dated 10 October 2016 from the Manager Technical Support regarding Proposed Roundabout Improvements at the Intersection of St Andrews Drive and Cypress Point Drive, DUBBO.

WSC16/15  NORTH STREET DUBBO PEDESTRIAN REFUGE ISLAND (ID16/1883)

The Committee had before it the report dated 10 October 2016 from the Manager Technical Support regarding North Street Dubbo Pedestrian Refuge Island.

WSC16/16  DUBBO REGIONAL COUNCIL'S RURAL BIODIVERSITY REPORT (ID16/1880)

The Committee had before it the report dated 10 October 2016 from the Manager Landcare Services regarding Dubbo Regional Council's Rural Biodiversity Report.
WSC16/17 TENDER FOR SUPPLY OF WATER TREATMENT CHEMICALS (ID16/1867)
The Committee had before it the report dated 6 October 2016 from the Director Technical Services regarding Tender for Supply of Water Treatment Chemicals.

*In accordance with the provisions of Section 9 (2A) of the Local Government Act 1993 the General Manager is of the opinion that consideration of this item is likely to take place when the meeting is closed to the public for the following reason: information that would, if disclosed, prejudice the commercial position of the person who supplied it (Section 10A(2)(d)(i)).*

WSC16/18 REPLACEMENT OF PLANT NUMBERS 154 AND 162 WITH TWO 10,400 GVM 4X2 DUAL CAB TABLE TOP TRUCKS WITH CRANES (ID16/1854)
The Committee had before it the report dated 5 October 2016 from the Manager Fleet Management Services regarding Replacement of Plant Numbers 154 and 162 with Two 10,400 GVM 4x2 Dual Cab Table Top Trucks with Cranes.

*In accordance with the provisions of Section 9 (2A) of the Local Government Act 1993 the General Manager is of the opinion that consideration of this item is likely to take place when the meeting is closed to the public for the following reason: information that would, if disclosed, prejudice the commercial position of the person who supplied it (Section 10A(2)(d)(i)).*

WSC16/19 REPLACEMENT OF PLANT NUMBER 1166, A CASE FOUR WHEEL DRIVE FRONT END LOADER (ID16/1851)
The Committee had before it the report dated 6 October 2016 from the Manager Fleet Management Services regarding Replacement of Plant Number 1166, a Case Four Wheel Drive Front End Loader.

*In accordance with the provisions of Section 9 (2A) of the Local Government Act 1993 the General Manager is of the opinion that consideration of this item is likely to take place when the meeting is closed to the public for the following reason: information that would, if disclosed, prejudice the commercial position of the person who supplied it (Section 10A(2)(d)(i)).*
WSC16/20 REPLACEMENT OF PLANT NUMBERS 155, 156, 157 AND 158, FOUR 10,400 GVM 4X2 DUAL CAB TIPPING TRUCKS (ID16/1852)
The Committee had before it the report dated 5 October 2016 from the Manager Fleet Management Services regarding Replacement of Plant Numbers 155, 156, 157 and 158, four 10,400 GVM 4x2 Dual Cab Tipping Trucks.

In accordance with the provisions of Section 9 (2A) of the Local Government Act 1993 the General Manager is of the opinion that consideration of this item is likely to take place when the meeting is closed to the public for the following reason: information that would, if disclosed, prejudice the commercial position of the person who supplied it (Section 10A(2)(d)(i)).

WSC16/21 REPLACEMENT OF PLANT NUMBER 719, A 26 TONNE LANDFILL COMPACTOR (ID16/1853)
The Committee had before it the report dated 6 October 2016 from the Manager Fleet Management Services regarding Replacement of Plant Number 719, a 26 Tonne Landfill Compactor.

In accordance with the provisions of Section 9 (2A) of the Local Government Act 1993 the General Manager is of the opinion that consideration of this item is likely to take place when the meeting is closed to the public for the following reason: information that would, if disclosed, prejudice the commercial position of the person who supplied it (Section 10A(2)(d)(i)).

WSC16/22 TENDER FOR THE CLEANING OF DUBBO’S CENTRAL BUSINESS DISTRICT 2016-2019 (ID16/1739)
The Committee had before it the report dated 21 September 2016 from the Manager Parks and Landcare Operations regarding Tender for the Cleaning of Dubbo's Central Business District 2016-2019.

In accordance with the provisions of Section 9 (2A) of the Local Government Act 1993 the General Manager is of the opinion that consideration of this item is likely to take place when the meeting is closed to the public for the following reason: information that would, if disclosed, prejudice the commercial position of the person who supplied it (Section 10A(2)(d)(i)).
The Committee had before it the report of the Works and Services Committee meeting held 19 September 2016.

**MOTION**

That the report of the Works and Services Committee meeting held on 19 September 2016, be adopted.
Mr M Kneipp (Administrator) assumed chairmanship of the meeting.

The proceedings of the meeting commenced at 5.41 pm.

WSC16/1 BUILDING SUMMARY - AUGUST 2016 (ID16/1700)
The Committee had before it the report dated 12 September 2016 from the Director Environmental Services regarding Building Summary - August 2016.

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends that the information contained in the report of the Director Environmental Services, dated 12 September 2016 be noted.

CARRIED
The Committee had before it the report dated 13 September 2016 from the Manager Environmental Control regarding Asbestos Policy (for the former Dubbo LGA).

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends:

1. That the revised Asbestos Policy, as attached as Appendix 1, be adopted.
2. That a review of the former Wellington Council asbestos management documents and processes be undertaken prior to July 2017.

CARRIED

The Committee had before it the report dated 13 September 2016 from the Manager Civil Infrastructure and Solid Waste regarding Proposed Renewal of Lease of Telstra SCAX Site at Ballimore.

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends:

1. That Council agree to a 4 x 5 year consecutive lease being granted to Telstra Corporation Limited (ACN 051 775 556) in respect of its SCAX site on Lot 5, Section 2 in DP 758046 in Bunyip Street, Ballimore.
2. That the terms of the lease be in accordance with the IPART Review of Rental Arrangements for Communication Towers on Crown Land – July 2013.
3. That all necessary documentation in relation to this matter be executed under the Common Seal of the Council.

CARRIED

The Committee had before it the report dated 9 September 2016 from the Director Parks and Landcare Services regarding Dubbo Street Tree Masterplan.

Moved by Mr M Kneipp (Administrator)
MOTION

The Committee recommends:

1. That the information contained in the report of the Director Parks and Landcare Services, dated 9 September 2016 be noted.
2. That the Dubbo Street Tree Master Plan be placed on public exhibition for a minimum 28 days to seek submissions from the public regarding the proposed adoption of the plan.
3. That following consideration of submissions received during the Public Exhibition period, a further report be prepared for Council.

CARRIED

WSC16/5  BOUNDARY ROAD EXTENSION - TREE REMOVAL AND REPLACEMENT (ID16/1685)

The Committee had before it the report dated 7 September 2016 from the Director Parks and Landcare Services regarding Boundary Road Extension - Tree Removal and Replacement.

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends that the proposed 2:1 offset planting of the native vegetation identified for removal be deemed appropriate for the Boundary Road extension (Wheelers Lane to Alexandrina Avenue), subject to the findings and recommendations of the Part V assessment.

CARRIED

WSC16/6  EXTENSION OF LEASE TO CHARLES STURT UNIVERSITY ON LOT 15 DP 1031922 (PREVIOUSLY PT LOT 4 DP 819754 AND PT LOT 5 DP 819754) (ID16/1684)

The Committee had before it the report dated 7 September 2016 from the Director Parks and Landcare Services regarding Extension of Lease to Charles Sturt University on Lot 15 DP 1031922 (previously Pt Lot 4 DP 819754 and Pt Lot 5 DP 819754).

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends:

1. That the existing lease for the area of land now known as Lot 15 DP 1031922 to Charles Sturt University be extended for a further 21 years at the peppercorn rate of $1 p.a. and subject to the original lease conditions.
2. That any necessary documents be executed under the Common Seal of the Council.

CARRIED

At this juncture the meeting adjourned, the time being 5.47pm.
The meeting recommenced at 6.08pm.
WSC16/7 TENDER FOR THE REPLACEMENT OF PLANT 282 AND 284, TWO CCF CLASS 15 MOTOR GRADERS (ID16/1697)

The Committee had before it the report dated 12 September 2016 from the Manager Fleet Management Services regarding Tender for the Replacement of Plant 282 and 284, Two CCF Class 15 Motor Graders.

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends that members of the press and public be excluded from the meeting during consideration of this item, the reason being that the matter concerned commercial information of a confidential nature that would, if disclosed, confer a commercial advantage on a competitor of the Council (Section 10A(2)(d)(ii)).

CARRIED

Moved by Mr M Kneipp (Administrator)

MOTION

The Committee recommends:

1. That the tender from Westrac for the supply of two Caterpillar 12M motor graders for the purchase price of $701,500.00 GST exclusive, be accepted.

2. That the offer of Pickles Auction for the outright purchase for plant numbers 282 and 284, two Caterpillar 120M motor graders for a total value of $232,727.28 GST exclusive be accepted.

3. That the documents and considerations in regard to this matter remain confidential to Council.

CARRIED

The meeting closed at 6.12pm.

............................................................................................................................
CHAIRMAN
REPORT: Building Summary - September 2016

AUTHOR: Director Environmental Services

REPORT DATE: 11 October 2016

TRIM REFERENCE: ID16/1860

EXECUTIVE SUMMARY

Information has been prepared on the statistics of the number of dwellings and residential flat buildings approved in the Dubbo Regional Council Local Government Area and statistics for approved Development Applications for the information of Council.

FINANCIAL IMPLICATIONS

There are no financial implications arising from this report.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

That the information contained in this report be noted.

Melissa Watkins
Director Environmental Services
REPORT

Provided for information are the latest statistics (as at the time of production of this report) for Development Applications for the Dubbo Regional Council.

1. Residential Building Summary

Dwellings and other residential developments approved during September 2016 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Dubbo</th>
<th>Wellington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwellings</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Other residential development</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>(No. of units)</td>
<td>(13)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

For consistency with land use definitions included in the Dubbo Local Environmental Plan 2011, residential development has been separated into ‘Dwellings’ and ‘Other residential development’. ‘Other residential development’ includes dual occupancies, secondary dwellings, multi-unit and seniors living housing.

These figures include Development Applications approved by Private Certifying Authorities (Complying Development Certificates).

A summary of residential approvals for the former Dubbo City Council area since 2009-2010 is provided attached as Appendix 1.

2. Approved Development Applications

Dubbo

The total number of approved Development Applications (including Complying Development Certificates) for September 2016 and a comparison with 2015 figures and the total for the financial years to date for 2016 and 2015 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>1 September 2016 – 30 September 2016</th>
<th>1 July 2016 – 30 September 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of applications</td>
<td>58</td>
<td>198</td>
</tr>
<tr>
<td>Value</td>
<td>$9,633,376</td>
<td>$41,002,113</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>No. of applications</td>
<td>74</td>
<td>234</td>
</tr>
<tr>
<td>Value</td>
<td>$16,014,002</td>
<td>$71,312,864</td>
</tr>
</tbody>
</table>

A summary breakdown of the figures for September 2016 and 2015 is included in Appendix 2 and Appendix 3 and the year-to-date figures are included in Appendix 4 and Appendix 5.
Wellington

The total number of determined Development Applications (including Complying Development Certificates) for September 2016 and a comparison with 2015 figures are as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of applications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 September 2016 – 30 September 2016</td>
<td>9</td>
<td>$418,125</td>
</tr>
<tr>
<td>1 September 2015 – 30 September 2015</td>
<td>6</td>
<td>$274,000</td>
</tr>
</tbody>
</table>

Summaries of the determined Development Applications for Wellington for September 2016 and 2015 are included in Appendix 6 and Appendix 7.

The information included in this report is recommended for notation.

Appendices:
1 Building Summary (Dubbo)
2 Approved Development Applications - September 2016 (Dubbo)
3 Approved Development Applications - September 2015 (Dubbo)
4 Approved Development Applications - 1 July 2016 to 30 September 2016 (Dubbo)
5 Approved Development Applications - 1 July 2015 to 30 September 2015 (Dubbo)
6 Approved Development Applications - September 2016 (Wellington)
7 Approved Development Applications - September 2015 (Wellington)
<table>
<thead>
<tr>
<th></th>
<th>JUL</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>TOTAL</th>
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<tr>
<td><strong>2009/2010</strong></td>
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<tr>
<td>Dwellings</td>
<td>20</td>
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<td>16</td>
<td>14</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>7</td>
<td>12</td>
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<td>128</td>
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<td>1</td>
<td>1</td>
<td>3</td>
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<td>2</td>
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<td>1</td>
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<td>12</td>
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<td>(No of units)</td>
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<td>(2)</td>
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<td>(-)</td>
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<td>(-)</td>
<td>(4)</td>
<td>(-)</td>
<td>(26)</td>
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<td><strong>2010/2011</strong></td>
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<tr>
<td>Dwellings</td>
<td>8</td>
<td>15</td>
<td>10</td>
<td>7</td>
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<td>6</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>9</td>
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<td>82</td>
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<td>0</td>
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<td>-</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>12</td>
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<tr>
<td>(No of units)</td>
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<td>(0)</td>
<td>(5)</td>
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<td>(7)</td>
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<td>(22)</td>
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<td><strong>2011/2012</strong></td>
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<td>Dwellings</td>
<td>6</td>
<td>12</td>
<td>10</td>
<td>6</td>
<td>7</td>
<td>16</td>
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<td>8</td>
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<td>13</td>
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<td>Dwellings</td>
<td>23</td>
<td>17</td>
<td>25</td>
<td>20</td>
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<td>15</td>
<td>19</td>
<td>15</td>
<td>10</td>
<td>18</td>
<td>14</td>
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<td>14</td>
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<tr>
<td>Flat Buildings</td>
<td>-</td>
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<td>1</td>
<td>-</td>
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<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>9</td>
<td>5</td>
<td>15</td>
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<tr>
<td>(No of units)</td>
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<td>(2)</td>
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<td>(-)</td>
<td>(2)</td>
<td>(46)</td>
<td>(1)</td>
<td>(2)</td>
<td>(2)</td>
<td>(39)</td>
<td>(-)</td>
<td>(65)</td>
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<td><strong>2014/2015</strong></td>
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<tr>
<td>Single dwellings</td>
<td>19</td>
<td>34</td>
<td>19</td>
<td>21</td>
<td>13</td>
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<td>14</td>
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<td>20</td>
<td>19</td>
<td>15</td>
<td>20</td>
<td>222</td>
</tr>
<tr>
<td>Multi unit housing</td>
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<td>1</td>
<td>6</td>
<td>5</td>
<td>6</td>
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<td>-</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>5</td>
<td>54</td>
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<tr>
<td>(No of units)</td>
<td>(6)</td>
<td>(2)</td>
<td>(31)</td>
<td>(50)</td>
<td>(6)</td>
<td>(21)</td>
<td>(-)</td>
<td>(87)</td>
<td>(4)</td>
<td>(1)</td>
<td>(25)</td>
<td>(10)</td>
<td>(243)</td>
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<td><strong>2015/2016</strong></td>
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<tr>
<td>Single dwellings</td>
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<td>21</td>
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<tr>
<td>Multi unit housing</td>
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## Approved Development & Complying Development Applications
for former Dubbo LGA and Private Certifiers-Period 1/09/2016 - 30/09/2016

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<th>New Developments</th>
<th>Est. S</th>
<th>Additions and Alterations</th>
<th>Est. S</th>
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<th>New Exs.</th>
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**Total Number of Applications for this period: 58**

***Note: There may be more than one Development Type per Development Application Statistics include applications by Private Certifiers

--------- End of Report ---------

F:/Authority/crystal/Applications/Approved Statistics LGA V1.0.rpt
### Approved Development & Complying Development Applications
for former Dubbo LGA and Private Certifiers-Period 1/09/2015 - 30/09/2015

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<th>Ext. S</th>
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<th>New Ext.</th>
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**Total Number of Applications for this period: 74**

***Note: There may be more than one Development Type per Development Application Statistics include applications by Private Certifiers***
### Approved Development & Complying Development Applications
for former Dubbo LGA and Private Certifiers-Period 1/07/2016 - 30/09/2016

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<th>Development Type</th>
<th>Number of Applications</th>
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<th>New Developments</th>
<th>Est. S</th>
<th>Additions and Alterations</th>
<th>Est. S</th>
<th>New Dwellings</th>
<th>New Ests.</th>
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### Approved Development & Complying Development Applications

for former Dubbo LGA and Private Certifiers-Period 1/07/2016 - 30/09/2016

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<th>Development Type</th>
<th>Number of Applications</th>
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<th>New Developments</th>
<th>Est. S</th>
<th>Additions and Alterations</th>
<th>Est. S</th>
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<th>New Lots</th>
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**Total Number of Applications for this period: 198**

*** Note: There may be more than one Development Type per Development Application Statistics include applications by Private Certifiers

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<th>Additions and Alterations</th>
<th>Est. S</th>
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<th>New Ext.</th>
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<td>1</td>
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<td>Factory/Production Building</td>
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<td>820,000</td>
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<td>270,000</td>
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<td>Warehouse/storage</td>
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<td>Infrastructure - Transport, Utilities</td>
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<tr>
<td>Entertainment/Recreational Building</td>
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<td>Signs/Advertising Structure</td>
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<td>Child Care - Centre Based</td>
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<td>Change of Use - Commercial</td>
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<tr>
<td>Parks/Reserves</td>
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**Approved Development & Complying Development Applications**  
for former Dubbo LGA and Private Certifiers - Period 1/07/2015 - 30/09/2015

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Number of Applications</th>
<th>Est. S</th>
<th>New Developments</th>
<th>Est. S</th>
<th>Additions and Alterations</th>
<th>Est. S</th>
<th>New Deedsplit</th>
<th>New Lots</th>
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<tbody>
<tr>
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<td></td>
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<tr>
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<td>Miscellaneous</td>
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<td><strong>Totals for Development Types</strong></td>
<td><strong>249</strong></td>
<td><strong>71,312,864</strong></td>
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**Total Number of Applications for this period: 234**

***Note: There may be more than one Development Type per Development Application***

Statistics include applications by Private Certifiers

-------- End of Report --------
## Register Listing

<table>
<thead>
<tr>
<th>Application No.</th>
<th>Applicant</th>
<th>Property Address</th>
<th>Type of Work</th>
<th>Current Status</th>
<th>Cost</th>
<th>Received</th>
<th>Determined</th>
<th>Days in Council</th>
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</thead>
<tbody>
<tr>
<td>20/2016/26</td>
<td>Mr Mitchell Wayne Schneider</td>
<td>88-88 Wellington Street GEURIE</td>
<td>Dual Occupancy (Detached) and Two (2)</td>
<td>Determination Made</td>
<td>$27,000</td>
<td>27/05/2016</td>
<td>26/09/2016</td>
<td>122</td>
</tr>
<tr>
<td>20/2016/34</td>
<td>Mrs Donna Anne Louisick</td>
<td>54 Raymond Street WELLINGTON</td>
<td>Shed</td>
<td>Determination Made</td>
<td>$12,000</td>
<td>22/07/2016</td>
<td>5/09/2016</td>
<td>45</td>
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<tr>
<td>20/2016/37</td>
<td>Mr Warren William Taylor</td>
<td>1 Cousin Drive WELLINGTON</td>
<td>Shed</td>
<td>Determination Made</td>
<td>$525</td>
<td>27/07/2016</td>
<td>14/09/2016</td>
<td>49</td>
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<tr>
<td>20/2016/37.1</td>
<td>Mr Warren William Taylor</td>
<td>1 Cousin Drive WELLINGTON</td>
<td>Shed with attached Awning</td>
<td>Determination Made</td>
<td>---</td>
<td>23/09/2016</td>
<td>30/09/2016</td>
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<tr>
<td>20/2016/39</td>
<td>Mr Michael Joseph Nolan</td>
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<td>Dwelling and Shed</td>
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<td>20/2016/40</td>
<td>Mr Graham Kenneth Steele</td>
<td>24 Percy Street WELLINGTON</td>
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<td>20/2016/42</td>
<td>Webuilt Constructions Pty Lt</td>
<td>1094 Suntop Road SUNTOP</td>
<td>Farm Machinery Shed</td>
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<td>$12,000</td>
<td>26/09/2016</td>
<td>26/09/2016</td>
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<td>20/2016/43</td>
<td>Mr Ronald Neil Wheeler</td>
<td>80 Swift Street WELLINGTON</td>
<td>Garage</td>
<td>Determination Made</td>
<td>$300</td>
<td>26/09/2016</td>
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<tr>
<td>20/2016/45</td>
<td>Committee for the Provision</td>
<td>131 Maxwell Street WELLINGTON</td>
<td>Demolition of two residential buildings</td>
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<td>$26,000</td>
<td>9/09/2016</td>
<td>26/09/2016</td>
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418,125
## Register Listing

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<tr>
<th>Application No.</th>
<th>Applicant</th>
<th>Property Address</th>
<th>Type of Work</th>
<th>Current Status</th>
<th>Cost</th>
<th>Received</th>
<th>Determined</th>
<th>Days in Council</th>
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<td>20/2015/16</td>
<td>Mr Michael Salecich</td>
<td>24 Montefiores Street</td>
<td>36 Lot Subdivision and a road opening</td>
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<td>20/2015/29</td>
<td>Mr Marcus Andrew Clarke, Mrs Joanna Jane Clarke</td>
<td>2 Bank Street Wellington 4-6 Bank Street Wellington 11 Sutton Street Montefiores 13 Sutton Street Montefiores</td>
<td>Subdivision</td>
<td>Determination Made</td>
<td>NIL</td>
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<td>8/08/2015</td>
<td>36</td>
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<tr>
<td>20/2015/30</td>
<td>Mr Geoffrey Drummond Pias</td>
<td>11 Sutton Street Montefiores</td>
<td>Subdivision</td>
<td>Determination Made</td>
<td>NIL</td>
<td>2/09/2015</td>
<td>25/09/2015</td>
<td>23</td>
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<td>24/2015/24</td>
<td>David Burke Building</td>
<td>8 King Street Montefiores</td>
<td>Dwelling</td>
<td>Determination Made</td>
<td>22,000</td>
<td>18/08/2015</td>
<td>3/09/2015</td>
<td>16</td>
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<tr>
<td>24/2015/25</td>
<td>Mr Robert Milner, Mrs Hayley Milner</td>
<td>250 Geune Homestead Road Geurie</td>
<td>Swimming Pool</td>
<td>Determination Made</td>
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<td>1/09/2015</td>
<td>9/09/2015</td>
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REPORT: Leases/Licences at Water and Sewer Sites

AUTHOR: Director Technical Services
REPORT DATE: 6 October 2016
TRIM REFERENCE: ID16/1861

EXECUTIVE SUMMARY

Council has previously entered into lease and licence agreements with a number of organisations to have their telecommunication equipment sited on various Council owned properties. These include Council’s water reservoir sites at Bourke Hill, Newtown, Buninyong and Eulomogo, and the Water Depot in Macquarie Street. All these properties are utilised to operate Council’s Water and Sewer business. Essential Energy operates a two way communication system for their business activities from the Buninyong Reservoir site. They have requested to renew the licence for an additional 5 years.

FINANCIAL IMPLICATIONS

All income generated by licences/leases at water and sewerage sites will be allocated to the respective function.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

1. That Council resolve to renew the licence for Essential Energy on Part Lot 3, DP: 547696, be renewed for an annual fee of $6,038 with a 3% increase on each anniversary of the commencement date for a duration of 5 years.
2. That any necessary documents be executed under the Common Seal of Council.

Stewart McLeod
Director Technical Services
REPORT

Public and private telecommunication companies lease or have licences on Council’s water and sewerage sites to operate telecommunication equipment. There are currently twelve private and public transmitters operating from five of Council’s water and sewerage sites. Essential Energy have had a licence agreement to operate two way radio communication for their business since 2007 from Buninyong reservoir.

The image below indicates the site for the proposed telecommunications licence.

![Image of Buninyong Reservoir site](image)

It is recommended that Council endorse the licence renewal for a further 5 years to Essential Energy at the Buninyong Reservoir site for a fee of $6,038 per annum with a 3% increase on each anniversary.
REPORT: Quarterly Plant Report  
AUTHOR: Manager Fleet Management Services  
REPORT DATE: 5 October 2016  
TRIM REFERENCE: ID16/1678

EXECUTIVE SUMMARY

This report provides relevant information on the Dubbo Office plant and vehicle operation for the current financial year from 1 July 2016 to 30 September 2016, the end of the first quarter.

Crash damage was experienced to five light vehicles for the July to September period. The continued monitoring of crash reports indicates if there are any unexpected or serious issues with the fleet crash experience. No such issues were indicated.

It is considered that the plant and vehicle operation is generally satisfactory, considering the weather conditions, up to the end of the first quarter of the 2016/2017 financial year.

The plant utilisation rate to 30 September 2016 is 80.61% against a target of 85%. The specialised plant utilisation rate is 52.86% against a target of 55%.

FINANCIAL IMPLICATIONS

There are no financial implications arising from this report.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

That the information contained within this report be noted.

Steven Colliver  
Manager Fleet Management Services
REPORT

The aim of the Quarterly Plant Report is to provide a brief review of motor vehicle and plant operation at quarterly intervals during the course of the financial year. This method of reporting formalises the fleet management control process and provides an overview of the operation of the fleet for the year to date.

The utilisation percentages are calculated from data collected through the time sheet system and the result is based upon the premise that, "if the plant or vehicle is out of the depot it is working". This is the same system applied by any hire company providing plant or vehicles under a "dry hire" agreement, "dry hire" meaning supply of the plant or vehicle without an operator.

The availability percentages are calculated from the plant information system, the data being collected from information based on the workshop hours charged to the item only during the hours that the machine would have been operating. If servicing or repair is carried out outside of normal working hours, it does not reflect on machine availability.

The hire rates that are currently applied to the plant are calculated on a utilisation formula, which is based upon a figure of 1600 hours, this being the maximum number of "normal" working hours available under the current Award conditions. For specialised plant, the "normal" working hours available is varied, according to the individual plant item and the "average hour’s experience" for that item. Where this average is below 1000 hours, the justification to continue ownership of the item is investigated.

Fleet Operational Costs

In reviewing the operational costs of the plant and vehicle fleet for this quarter, the fleet exception reporting system indicates that the costs to date for maintenance and repair associated with the following item is above the average for the particular class of equipment:

Plant No 227
Kioti 4WD Tractor

Plant number 227 was purchased in November 2012. The maintenance cost for this period is $1,009.05 above normal expenditure for this class of equipment for the period under review. This expenditure was due to a clutch replacement.

No change to the standard replacement schedule for this plant item is indicated or recommended as a result of this repair.

Plant No 474
Isuzu NPR400 Sewer and Jetting Truck

Plant number 474 was purchased in March 2013. The maintenance cost for this period is $2,650.42 above normal expenditure for this class of equipment for the period under review.
This expenditure was due to the replacement of the high pressure mains cleaning hose. This hose is 200 metres long.

No change to the standard replacement schedule for this plant item is indicated or recommended as a result of this repair.

**Plant No 712**  
Dennis Eagle Garbage Truck

Plant number 712 was purchased in August 2013. The maintenance cost for this period is $1,649.40 above normal expenditure for this class of equipment for the period under review. This expenditure was due to the replacement of the vehicles front and rear engine mounts.

No change to the standard replacement schedule for this plant item is indicated or recommended as a result of this repair.

**Plant No 901**  
Bucher Compact Sweeper

Plant number 901 was purchased in August 2015. The maintenance cost for this period is $3,454.04 above normal expenditure for this class of equipment for the period under review. This expenditure was due to the replacement of the vehicles rear panels and guards. This damage was incurred when operating in the tight confines of the CBD.

No change to the standard replacement schedule for this plant item is indicated or recommended as a result of this repair.

**Workshop**

The Fleet Management Services Hawthorn Street Workshop has developed a number of KPIs in order to assess its competitiveness and operational effectiveness against commercial repair facilities. The primary comparison is in the Annual Plant Report. There is, however, one KPI that is measured on a quarterly basis, being the clearance ratio of service and maintenance defects. This KPI is reported in the Quarterly and Annual Plant Reports.

A target of 90% clearance of defects within a fourteen day period has been set. The defect clearance for the first quarter of the 2016/2017 financial year is 95%. The workshop staff are aware of the importance of this customer service indicator to the fleet management services function of Council and are working hard to sustain this level of service.

**Plant Utilisation**

The plant utilisation rate to the 30 September 2016 is 80.61% against the adopted policy target of 85%. The specialised plant utilisation rate is 52.86% against a target of 55%. Considering the extremely wet weather during this period I consider the utilisation to be satisfactory.
Crash/Damage Experience

The graph below is a summary of crash data for the first quarter of the 2016/2017 year and a comparison with previous year’s averages (1999 to 2015):

![First Quarter Graph](image1)

The graph below is a summary of crash data for the year to date figures of the 2016/2017 year and a comparison with previous years averages (1999 to 2015):

![Year To Date Graph](image2)

The reported crashes for this financial year to date are 5 for light vehicles and zero for plants, which is 2.24 less crashes than the average for the same year to date period in the previous financial years. The number of drivers at fault is 2, which is 2.53 less than the average for the same year to date period in previous years. The number of claims made against Council's insurer for the year to date period is 2. This is 0.06 less than the average for the same year to date period in previous financial years (1999 to 2015).
The total cost of the reported crashes during this period is $10,796.01. The total cost to Council, considering Council only pays the excess ($1,000) on those crashes where an insurance claim is lodged, is $3,040.00.

**External Plant Hire**

The graph below is a summary of external plant hire costs for the first quarter for the 2016/2017 year and is as follows:

![Graph of external plant hire costs](image)

The external plant hire year to date total expenditure to 30 September 2016 is $266,740. The external plant hire expenditure for the same period in the previous financial year was $283,828.

**Resource Sharing**

The IPWEA Regional Fleet Management Group Forum averages over 30 attendees from 14 rural councils. These forums share information on both workshop and fleet related issues and lay the platform for future resource sharing opportunities. The next meeting is scheduled to be held in Dubbo in November 2016.

**SUMMARY**

The results of the fleet operations are considered to be satisfactory. Plant hire costs recovery will continue to be monitored closely during the financial year to ensure that cost recovery is sufficient to meet the costs associated with the operation of the fleet.
REPORT: Mogriguy and Westella Roads - Criterium and Road Races 2017 Dubbo Cycle Club Season

AUTHOR: Manager Technical Support
REPORT DATE: 10 October 2016
TRIM REFERENCE: ID16/1879

EXECUTIVE SUMMARY

This report deals with the approval procedures required for bicycle road races on public roads as detailed in the Roads and Maritime Service’s Guidelines for Bicycle Road Races.

Dubbo Cycle Club Inc has requested approval to conduct its 2017 Class 2 competition season for Juniors and Seniors utilising Tighe and Gill Streets, Sheraton, Benolong, Allen, Burroway, Mogriguy, Wongarbon/Westella Roads in the Dubbo area and in the Wellington area, Arthurville, Suntop, Terrabella, River, Hermitage, Comobella Roads and Zaias Lane, between 1 January 2017 to 23 December 2017 (Application and Management Plans are attached to the report). A temporary road closure will be required to conduct criterium racing. A requirement of the guidelines is that bicycle road races be referred to the Local Traffic Committee for its consideration.

It is recommended that the Committee concur with the events as proposed and conditioned by Council and the NSW Police Service in accordance with the Guidelines for Bicycle Road Races.

FINANCIAL IMPLICATIONS

There are no financial implications arising from this report.

POLICY IMPLICATIONS

There are no policy implications arising from this report.
RECOMMENDATION TO THE LOCAL TRAFFIC COMMITTEE

1. That the application of the Dubbo Cycle Club Inc Racing Season 2017 between 1 January 2017 and 23 December 2017, be approved and undertaken in accordance with the Event and Traffic Management Plan as conditioned by the NSW Police Service and the following conditions of Dubbo Regional Council:
   
a. Criterium – Implementation of a temporary road closure of Tighe and Gills Streets and part of Allen Road, on Monday or Friday afternoons between 5.00pm and 8.30pm or alternate Saturday afternoons between 1.00pm and 5.00pm or Sunday mornings between 7.30am and 2.00pm or Sunday afternoons between 2.00pm and 5.00pm during daylight saving hours.
   
b. Sheraton Road – The southern section of Sheraton Road for Junior Racing commencing at the 60/100km/h speed signs (south of St John’s College), south for a distance of 1.9km and return on Sundays between 1.00pm and 4.30pm.
   
c. Burroway Road – Commencing 500m west of the Newell Highway at Brocklehurst for 18km to 200metres east of Rawsonville Bridge Road intersection and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
   
d. Mogriguy Road -Time trial course commencing 650m north of the Mendooran Road intersection for a distance of 10.5km to Mogriguy Village. Long course commencing 650metres north of the Mendooran Road intersection for 19km with turnaround being 5.1km north of the Coolbaggie Road intersection and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
   
e. Wongarbon – Wongarbon/Westella Roads - Short course, commencing in Barbigal Street 100metres north of Derribong Street for a distance of 15km and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm. Long course along Westella Road and Ballimore/Geurie Road for 25km to a turnaround 550metres south of the Golden Highway and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
   
f. Benolong Road – Sprint Course from a distance of 300metres east of the Wambangalang Creek Bridge for 9km to 50metres west of the Nubingerie Road intersection, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
   
g. South Geurie - Arthurville Road - Short course, commencing 400metres south of the bridge over the Macquarie River for a distance of 15km to a turnaround 600metres north-east of intersection of Hermitage Road, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
   
h. South Geurie – Arthurville Road - Middle course, commencing 400metres south of the bridge over the Macquarie River for a distance of 21km with the turnaround point being 3.2km on Suntop Road east of the intersection with Arthurville Road, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
   
i. South Geurie - Arthurville Road - Long course commencing 400metres south of the bridge over the Macquarie River for a distance of 30km to a turnaround
3.8km on Suntop Road west of the intersection of Renshaw-McGirr Way, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

j. South Geurie - Terrabella Road - Time Trial course, commencing 2.1km west of the intersection of Terrabella and Arthurville Roads for a 6.4km distance to a turnaround being 1.3km east of the bridge over Little River, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

k. South Geurie - Arthurville Road - Strada long loop, commencing 400 metres south of the bridge over the Macquarie River on Arthurville Road for a distance of 50.3km incorporating River Road 10.6km, Zaias Lane 3km, Bennetts Road 6.5km, Suntop Road 9km, Arthurville Road 2.2km, Hermitage Road 11.9km, Terrabella Road 0.35km, Arthurville Road 2.9km to the finish line, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

l. South Geurie - Arthurville Road - Strada short loop, commencing 400 metres south of the bridge over the Macquarie River on Arthurville Road for a distance of 42km incorporating Arthurville Road 4.3km, River Road 10.6km, Zaias Lane 8.1km, Arthurville Road 4.5km, Hermitage Road 11.9km, Terrabella Road 0.35km, Arthurville Road 2.9km to the finish, on Saturdays between 1.00pm and 5.00pm and on Sundays between 8.00am and 2.00pm.

m. North Geurie - Comobella Road, commencing 0.25km north from the intersection of Paxton and Fitzroy Streets for 13km to a turnaround 0.15km west of Cobbora Road, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

d. The approval for use of the Roads will alternate between locations in accordance with the nominated block dates.

2. Dubbo Cycle Club racing events held on a Saturday afternoon will be undertaken so as not to clash with the Orana Veterans Cycle Club events.

3. Dubbo Cycle Club shall provide a calendar of proposed race events at two (2) monthly intervals before commencement of the first event.

4. Dubbo Cycle Club shall, following the uptake of development within the newly released Industrial Subdivision off Yarrandale Road north of Purvis Lane incorporating Allen Road and Tighe and Gill Streets, liaise with the developer/business regarding any impacts or impediments that the criterium may have on operational functions or access and advise Council accordingly on such consultation and outcomes or contingencies developed to assist with the ongoing business and criterium activities.

5. Submission of Traffic Control Plans to Council for approval to be submitted a minimum of three (3) weeks prior to the first event. All traffic control measures contained in the plan are to be in accordance with Australian Standard AS1742.3 and the Road and Maritime Services NSW Guidelines for Bicycle Road Races and the Guide to Traffic Control at Worksites prepared by an accredited person.

6. All traffic control including the placement and removal of barricades and/or regulation of traffic is to be carried out by Traffic Controllers appropriately trained in accordance with the requirements of Australian Standard AS1742.3 and the Roads and Maritime Services accreditation requirements for Traffic Control Planners or Controllers as required. In this respect there is a requirement that Traffic Controllers and not marshals are to be provided at the start/finish and turnaround to stop all traffic whilst riders are:
   - Starting and finishing within a 60km/h or less speed zone.
• Assembled on the road carriageway immediately prior to a mass or staggered start.
• Undertaking the turn-around movement.
• Sprint to the finish line.

7. The NSW Police Service consent and conditions for bicycle races permit under the NSW Road Transport Act 2013 – Section 115 is required.

8. Council’s Administration Officer must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo Regional Council and NSW Police Service are specifically noted to be indemnified against any action resulting from the cycle race.

9. The applicant is to submit to Council all the appropriate documentation required accepting the above conditions before final approval is granted.

10. Approval is for a 12 month period commencing at the time final authorisation of all documentation is granted.

LOCAL TRAFFIC COMMITTEE CONSIDERATION

This matter was considered by the Local Traffic Committee at its meeting held on Friday 7 October 2016. The Committee had unanimous support in the adoption of the recommendation shown below.

RECOMMENDATION

1. That the application of the Dubbo Cycle Club Inc Racing Season 2017 between 1 January 2017 and 23 December 2017, be approved and undertaken in accordance with the Event and Traffic Management Plan as conditioned by the NSW Police Service and the following conditions of Dubbo Regional Council:

   a. Criterium – Implementation of a temporary road closure of Tighe and Gills Streets and part of Allen Road, on Monday or Friday afternoons between 5.00pm and 8.30pm or alternate Saturday afternoons between 1.00pm and 5.00pm or Sunday mornings between 7.30am and 2.00pm or Sunday afternoons between 2.00pm and 5.00pm during daylight saving hours.

   b. Sheraton Road – The southern section of Sheraton Road for Junior Racing commencing at the 60/100km/h speed signs (south of St John’s College), south for a distance of 1.9km and return on Sundays between 1.00pm and 4.30pm.

   c. Burroway Road – Commencing 500m west of the Newell Highway at Brocklehurst for 18km to 200metres east of Rawsonville Bridge Road intersection and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

   d. Mogriguy Road - Time trial course commencing 650m north of the Mendooran Road intersection for a distance of 10.5km to Mogriguy Village. Long course commencing 650metres north of the Mendooran Road intersection for 19km with turnaround being 5.1km north of the Coolbaggie Road intersection and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.
e. Wongarbon – Wongarbon/Westella Roads - Short course, commencing in Barbigal Street 100metres north of Derribong Street for a distance of 15km and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm. Long course along Westella Road and Ballimore/Geurie Road for 25km to a turnaround 550metres south of the Golden Highway and return on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

f. Benolong Road – Sprint Course from a distance of 300metres east of the Wambangalang Creek Bridge for 9km to 50metres west of the Nubingerie Road intersection, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

g. South Geurie - Arthurville Road - Short course, commencing 400metres south of the bridge over the Macquarie River for a distance of 15km to a turnaround 600metres north-east of intersection of Hermitage Road, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

h. South Geurie – Arthurville Road - Middle course, commencing 400metres south of the bridge over the Macquarie River for a distance of 21km with the turnaround point being 3.2km on Suntop Road east of the intersection with Arthurville Road, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

i. South Geurie - Arthurville Road - Long course commencing 400metres south of the bridge over the Macquarie River for a distance of 30km to a turnaround 3.8km on Suntop Road west of the intersection of Renshaw-McGirr Way, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

j. South Geurie - Terrabella Road - Time Trial course, commencing 2.1km west of the intersection of Terrabella and Arthurville Roads for a 6.4km distance to a turnaround being 1.3km east of the bridge over Little River, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

k. South Geurie - Arthurville Road - Strada long loop, commencing 400 metres south of the bridge over the Macquarie River on Arthurville Road for a distance of 50.3km incorporating River Road 10.6km, Zaias Lane 3km, Bennetts Road 6.5km, Suntop Road 9km, Arthurville Road 2.2km, Hermitage Road 11.9km, Terrabella Road 0.35km, Arthurville Road 2.9km to the finish line, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

l. South Geurie - Arthurville Road - Strada short loop, commencing 400metres south of the bridge over the Macquarie River on Arthurville Road for a distance of 42km incorporating Arthurville Road 4.3km, River Road 10.6km, Zaias Lane 8.1km, Arthurville Road 4.5km, Hermitage Road 11.9km, Terrabella Road 0.35km, Arthurville Road 2.9km to the finish, on Saturdays between 1.00pm and 5.00pm and on Sundays between 8.00am and 2.00pm.

m. North Geurie - Comobella Road, commencing 0.25km north from the intersection of Paxton and Fitzroy Streets for 13km to a turnaround 0.15km west of Cobbora Road, on Saturdays between 1.00pm and 5.00pm or Sundays between 8.00am and 2.00pm.

n. The approval for use of the Roads will alternate between locations in accordance with the nominated block dates.
2. Dubbo Cycle Club racing events held on a Saturday afternoon will be undertaken so as not to clash with the Orana Veterans Cycle Club events.

3. Dubbo Cycle Club shall provide a calendar of proposed race events at two (2) monthly intervals before commencement of the first event.

4. Dubbo Cycle Club shall, following the uptake of development within the newly released Industrial Subdivision off Yarrandale Road north of Purvis Lane incorporating Allen Road and Tighe and Gill Streets, liaise with the developer/business regarding any impacts or impediments that the criterium may have on operational functions or access and advise Council accordingly on such consultation and outcomes or contingencies developed to assist with the ongoing business and criterium activities.

5. Submission of Traffic Control Plans to Council for approval to be submitted a minimum of three (3) weeks prior to the first event. All traffic control measures contained in the plan are to be in accordance with Australian Standard AS1742.3 and the Road and Maritime Services NSW Guidelines for Bicycle Road Races and the Guide to Traffic Control at Worksites prepared by an accredited person.

6. All traffic control including the placement and removal of barricades and/or regulation of traffic is to be carried out by Traffic Controllers appropriately trained in accordance with the requirements of Australian Standard AS1742.3 and the Roads and Maritime Services accreditation requirements for Traffic Control Planners or Controllers as required. In this respect there is a requirement that Traffic Controllers and not marshals are to be provided at the start/finish and turnaround to stop all traffic whilst riders are:
   - Starting and finishing within a 60km/h or less speed zone.
   - Assembled on the road carriageway immediately prior to a mass or staggered start.
   - Undertaking the turn-around movement.
   - Sprint to the finish line.

7. The NSW Police Service consent and conditions for bicycle races permit under the NSW Road Transport Act 2013 – Section 115 is required.

8. Council’s Administration Officer must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo Regional Council and NSW Police Service are specifically noted to be indemnified against any action resulting from the cycle race.

9. The applicant is to submit to Council all the appropriate documentation required accepting the above conditions before final approval is granted.

10. Approval is for a 12 month period commencing at the time final authorisation of all documentation is granted.

Mark Stacey
Manager Technical Support
REPORT

The Roads and Maritime Services Guidelines for Bicycle Road Races provides a comprehensive overview of the approval process and requirements of statutory bodies and the cycling organisation. An approval by the NSW Police Service under Section 115 of the Road Transport Act 2013 is required to conduct a cycle race on public roads. The measures set down in this document explain to the applicants how to make application and the minimum expectations for managing traffic and conducting a cycle race. Bicycle road races are categorised into a Class 1 and 2 events with the differentiation being that one impacts on major traffic transport systems and the other does not.

The request by Dubbo Cycle Club Inc for the use of Tighe and Gill Streets, Sheraton, Benolong, Allen, Burroway, Mogriguy and Wongarbon/Westella Roads in the Dubbo area and in the Wellington area Arthurville, Suntop, Terrabella, River, Hermitage, Comobella Roads and Zaias Lane is categorised as Class 2 events as follows.

Criterium

For the criterium racing, the course is located in the newly released industrial subdivision off Yarrandale Road north of Purvis Lane incorporating Allen Road and Tighe and Gill Streets. The subdivision is a “no through road” at present with no development and may accommodate criterium racing for some time. A temporary road closure and traffic management is required to facilitate the criterium. The criterium will be held on Mondays or Fridays between 5.00pm and 8.30pm or alternate Saturday afternoons between 1.00pm and 5.00pm, or Sunday mornings between 7.30 am to 2.00 pm or Sunday afternoons between 2.00pm and 5.00pm (Australian eastern standard daylight savings time) from 1 January 2017 to 23 December 2017. Following the uptake of development within the Industrial Subdivision, the Dubbo Cycle Club is to liaise with the developer/businesses regarding any likely impacts or impediments that the criterium may have on operational functions or access and advise Council accordingly of such consultation and outcomes or contingencies developed to assist with the ongoing business and criterium activities.

Junior Competition

The Junior competition is held in the southern section of Sheraton Road, the course commences at the 60/100km/h speed zone signs south of St John’s College, then south for a distance of 1.9km and return. Competition is undertaken on Sundays between 1.00pm and 4.30pm from 1 January 2017 to 23 December 2017. For the past 7 seasons the local residents and Quarry development have supported the Club’s program with no adverse impacts on access.

Senior Competition

The Senior Competition will be run on either Saturdays between 1.00pm and 5.00pm or on Sundays between 8.00am and 2.00pm from 1 January 2017 to 23 December 2017 on the following courses.
• Mogriguy Road - commencing 650metres north of Mendooran Road for a course distance of 10.5km (time trial) to Mogriguy Village and 19km (long course) with turnaround being 5.1km north of Coolbaggie Forest Road and return.
• Burroway Road - commencing 500metres west of Newell Highway for a distance of approximately 18km to 200metres east of the Rawsonville Road intersection and return.
• Wongarbon/Westella Road - commencing on Barbugal Street 100metres north of the intersection with Derringbong Street for a distance north of 15km (short course) and approximately 25km (long course) along Westella Road and Ballimore/Geurie Road, to a turnaround 550metres south of the Golden Highway intersection and return.
• Benolong Road – Sprint Course from a distance of 300metres east of the Wambanganang Creek Bridge for 9km to 50metres west of the Nubingerie Road intersection.
• South Geurie - Arthurville Road - Short course, commencing 400metres south of the bridge over the Macquarie River for a distance of 15km to a turnaround 600metres north-east of intersection of Hermitage Road.
• South Geurie – Arthurville Road - Middle course, commencing 400metres south of the bridge over the Macquarie River for a distance of 21km with the turnaround point being 3.2km on Suntop Road east of the intersection with Arthurville Road.
• South Geurie - Arthurville Road - Long course commencing 400metres south of the bridge over the Macquarie River for a distance of 30km to a turnaround 3.8km on Suntop Road west of the intersection of Renshaw-McGirr Way.
• South Geurie - Terrabella Road - Time Trial course, commencing 2.1km west of the intersection of Terrabella and Arthurville Roads for a 6.4km distance to a turnaround being 1.3km east of the bridge over Little River.
• South Geurie - Arthurville Road - Strada long loop, commencing 400metres south of the bridge over the Macquarie River on Arthurville Road for a distance of 50.3km incorporating River Road 10.6km, Zaias Lane 3km, Bennetts Road 6.5km, Suntop Road 9km, Arthurville Road 2.2km, Hermitage Road 11.9km, Terrabella Road 0.35km, Arthurville Road 2.9km to the finish line.
• South Geurie - Arthurville Road - Strada short loop, commencing 400metres south of the bridge over the Macquarie River on Arthurville Road for a distance of 42km incorporating Arthurville Road for a distance of 4.3km, River Road 10.6km, Zaias Lane 8.1km, Arthurville Road 4.5km, Hermitage Road 11.9km, Terrabella Road 0.35km, Arthurville Road 2.9km to the finish.
• North Geurie - Comobella Road, commencing 0.25km north from the intersection of Paxton and Fitzroy Street’s for 13km to a turnaround 0.15km west of Cobbora Road.
• All the roads within the Dubbo and Wellington area are considered low trafficked roads with minimal impact on the road network.

The Club will provide Council with a calendar at two (2) monthly intervals before the first event. The Orana Veterans Cycle Club races on a Saturday afternoon. The Club is seeking approval to undertake some events on Saturday afternoons. These events will not clash with the Orana Veterans Cycle Club.

Bicycle races of a repetitive nature can be approved on a 12 monthly basis. Conditions applicable to a cycle race of a minor impact can be undertaken in consultation with the NSW
Police Service and/or Roads and Maritime Services as considered necessary and dependant on the road classification and class of the event. The process can be managed under delegated authority however referral and concurrence of the Traffic Committee is required in accordance with the Cycle Race Guidelines.

General conditions that apply to organisations to conduct cycle races include compliance with the road rules, provision of traffic management and traffic control plans prepared by accredited persons together with accredited traffic controllers as considered necessary in respect of the road race, permit from the NSW Police Service and public liability insurance.

It is recommended that approval be granted to the Dubbo Cycle Club to conduct the 2017 Racing Season on the nominated roads within the Dubbo and Wellington area in accordance with the Event and Traffic Management Plan as conditioned by the NSW Police Service and Council.

Appendices:

1  Dubbo Cycle Club 2016/2017 - Application, Event, Traffic and Risk Management Plan
Special Event Resources

Special Event Transport Management Plan Template

Refer to Chapter 7 of the Guide for a complete description of the Transport Management Plan

1. EVENT DETAILS

1.1 Event summary

Event Name: Dubbo Cycle Club Road Races

Event Location: Warragamba Dam to Dubbo Showground

Event Start Time: Saturday, 5th November, 2016

Event Setup Start Time: 6am

Event Duration: Full Day

Event is: ☑ off-street ☑ on-street moving ☑ on-street non-moving

☑ held regularly throughout the year (calendar attached)

1.2 Contact names

Event Organiser: Dubbo Cycle Club

Phone: 68131111 Mobile: 0416337661 E-mail: ronald@node.com.au

Event Management Company (if applicable)

Phone: ☑ Fax: ☑ Mobile: ☑ E-mail:

Police

Phone: ☑ Fax: ☑ Mobile: ☑ E-mail:

Council: Western Plains Regional Council

Phone: ☑ Fax: ☑ Mobile: ☑ E-mail:

Roa ds & Traffic Authority (if Class 1)

Phone: ☑ Fax: ☑ Mobile: ☑ E-mail:

*Note: The Event Organiser is the person or organisation in whose name the Public Liability Insurance is taken out.

1.3 Brief description of the event (one paragraph)

Dubbo Cycle Club Road Races on the roads listed on locality maps as per calendar that will be published in print three weeks after on Saturday afternoon, Sunday morning, Sunday afternoon, Easter afternoon from the 21st January 2017 to 25th December 2017.
### 2 Risk Management - Traffic

#### 2.1 Occupational Health & Safety - Traffic Control
- Risk assessment plan (or plans) attached

#### 2.2 Public Liability Insurance
- Public liability insurance arranged. Certificate of currency attached.

#### 2.3 Police
- Police written approval obtained

#### 2.4 Fire Brigades and Ambulance
- Fire brigades notified
- Ambulance notified

### 3 Traffic and Transport Management

#### 3.1 The route or location
- Map attached

#### 3.2 Parking
- Parking organised - details attached
- Parking not required

#### 3.3 Construction, traffic calming and traffic generating developments
- Plans to minimise impact of construction activities, traffic calming devices or traffic-generating developments attached
- There are no construction activities, traffic calming devices or traffic-generating developments at the location/route or on the detour routes

#### 3.4 Trusts, authorities or Government enterprises
- This event uses a facility managed by a trust, authority or enterprise; written approval attached
- This event does not use a facility managed by a trust, authority or enterprise

#### 3.5 Impact on Public transport
- Public transport plans created - details attached
- Public transport not impacted or will not impact event

#### 3.6 Reopening roads after moving events
- This is a moving event - details attached
- This is a non-moving event

#### 3.7 Traffic management requirements unique to this event
- Description of unique traffic management requirements attached
- There are no unique traffic requirements for this event

#### 3.8 Contingency plans
- Contingency plans attached
3.9 Heavy vehicle impacts
- Impacts heavy vehicles - RTA to manage
- Does not impact heavy vehicles

3.10 Special event clearways
- Special event clearways required - RTA to arrange
- Special event clearways not required

4. MINIMISING IMPACT ON NON-EVENT COMMUNITY & EMERGENCY SERVICES

4.1 Access for local residents, businesses, hospitals and emergency vehicles
- Plans to minimise impact on non-event community attached
- This event does not impact the non-event community either on the main route (or location) or detour routes

4.2 Advertise traffic management arrangements
- Road closures or restrictions - advertising medium and copy of proposed advertisement attached
- No road closures or restrictions but special event clearways in place - advertising medium and copy of proposed advertisement attached
- No road closures, restrictions or special event clearways - advertising not required

4.3 Special event warning signs
- Special event information signs are described in the Traffic Control Plan
- This event does not require special event warning signs

4.4 Permanent Variable Message Signs
- Messages, locations and times attached
- This event does not use permanent Variable Message Signs

4.5 Portable Variable Message Signs
- The proposed messages and locations for portable VMS are attached
- This event does not use portable VMS

5. PRIVACY NOTICE

The "personal information" contained in the completed Transport Management Plan may be collected and held by the NSW Police, the NSW Roads and Traffic Authority (RTA), or Local Government.

I declare that the details in this application are true and complete, and understand that:

- The "personal information" is being collected for submission of the Transport Management Plan for the event described in Section 1 of this document.
- I must supply this information under the Road Transport Legislation (as defined in the Road Transport (General) Act 1999) and the Roads Act 1993.
- Failure to supply full details and to sign or confirm this declaration can result in the event not proceeding.
- The "personal information" being supplied is either my own or I have the approval of the person concerned to provide his/her "personal information".
- The "personal information" held by the Police, RTA or Local Government may be disclosed inside and outside of NSW to event managers or any other person or organisation required to manage or provide resources required to conduct the event or to any business, road user or resident who may be impacted by the event.
- The person to whom the "personal information" relates has a right to access or correct it in accordance with the provisions of the relevant privacy legislation.
6 APPROVAL

TMP Approved by: ___________________________ Event Organiser ___________________________ Date ___________________________

7 AUTHORISATION TO REGULATE TRAFFIC

Council's traffic management requirements have been met. Regulation of traffic is therefore authorised for all non-classified roads described in the risk management plans attached to this TMP.

Regulation of traffic authorised by: ___________________________ Council ___________________________ Date ___________________________

The RTA's traffic management requirements have been met. Regulation of traffic is therefore authorised for all classified roads described in the risk management plans attached to this TMP.

Regulation of traffic authorised by: ___________________________ RTA ___________________________ Date ___________________________

“Regulate traffic” means restrict or prohibit the passage along a road of persons, vehicles or animals (Roads Act, 1993). Council and RTA require traffic to be regulated as described in the risk management plans with the signs installed under the direction of a qualified person.
Schedule 1 Form - Notice of Intention to Hold a Public Assembly

SUMMARY OFFENCES ACT 1988 - Sec 23

To the Commissioner of Police

Craig Granger

at 418 Long St, Dubbo, NSW

on behalf of Dubbo Cycle Club

I, Craig Granger, hereby intiate, in accordance with the Summary Offences Act 1988, that a public assembly, being a procession of approximately 40 persons, from 1st January to 31st December 2017, or a public assembly of approximately 200 persons, will assemble at approximately 9am on Saturday 1st January 2017, and disperse at approximately 2pm on Sunday 2nd January 2017.

(a) a public assembly, not being a procession, of approximately 400 persons,

(b) a public assembly, being a procession of approximately 200 persons,

(Specify route, any stopping places and the approximate duration of any stops and the approximate time of termination. Additional pages may be attached)

The purpose of the proposed assembly:

Marshalling point: Start & Finish area

Cyclo Racing
The following special characteristics associated with the assembly would be useful for the Commissioner of Police to be aware of in regulating the flow of traffic or in regulating the assembly (strike out whichever is not applicable):

(i) There will be ______ (number) of vehicles and/or ______ (number) of floats involved.

The type and dimensions are as follows:

- Lead Vehicle
- Follow Vehicle
- Other Vehicles

(ii) There will be ______ (number) of vans, trucks, ambulances, etc. which will attend or address the assembly.

(iii) The following number and type of animals will be involved in the assembly:

(iv) Other special characteristics of the proposed assembly are as follows:

I take responsibility for organising and conducting the proposed assembly.

Notices for the purposes of the Summary Offences Act 1988 may be served upon me at the following address:

168 Fitzroy Street
Dubbo, N-S W
2830, Forbeside

Telephone No. 0405 807 007

Signed:

Capacity to act as the half of Dubbo Cycle Club

Date: 3-9-2016
APPLICATION BY DUBBO CYCLE CLUB TO CONDUCT CYCLE RACES IN THE WESTERN PLAINS REGIONAL COUNCIL AREA DURING 2017.

1. INTRODUCTION

The Dubbo Cycle Club is an incorporated club and seeks approval to conduct Class 2 Club level cycling events on various roads in the Western Plains Regional Council area.

EVENTS

The events would be conducted on Saturday afternoons between the hours of 1.00pm and 5.00pm or Sunday mornings between the hours of 8.00am and 2.00pm from 1st January to 23rd December 2017 (inclusive). These events would take place on the roads nominated on the days listed as per forwarded calendar table 1 month before and in 2 month blocks.

With Critérium racing to be conducted Monday or Friday afternoons 5.00pm to 8.30pm or alternate Saturday afternoons 1.00pm to 5.00pm or Sunday mornings 7.30am to 2.00pm or Sunday afternoons 2.00pm to 5.00pm.

Junior course at Sheraton Road on Sunday’s 1.00pm to 4.30pm.

Mogriguy Time Trial course
10.5 km from start line to the turn point.
Start and finish line is 650m north on Mogriguy road from the intersection with Mendooran road.
The turn point is 180m south on Mogriguy road from the intersection with Moonul street Mogriguy.

Mogriguy course
19 km from start line to the turn point.
Start and finish line is 650m north on Mogriguy road from the intersection with Mendooran road.
Turn point closest intersection is 5.1 km north of turn point which is Mogriguy road and Coobaggi, Forrest road

Burraway course
17.5 km from start line to turn point.
Start line and finish line is on the Burraway road 500m west of the intersection with the Newell Hwy.
The turn point is 200m east on Burraway from the intersection with Rawsonville Bridge road.

Benolong road sprint course
9 km from start line to the turn point.
Start line and finish line is on Benolong road 300m east of Wambangalong Creek bridge.
The turn point is 50m west on the Benolong road from the intersection with Nubingerie road.

Wongarbon short course
15km from start line to the turn point.
Start line is 100m north on Barbigal street from the intersection with Derribong street, with the finish line 300m north on Barbigal street from the intersection with Derribong street.
The turn point is 175m east of the T intersection on Westella road.
Wongarbon long course
25 km from start line to the turn point.
Start line is 100m north on Barbigal street from the intersection with Derribong street, with the
finish line 300m north on Barbigal street from the intersection with Derribong street. The turn point
is 550m south on the Westella road from the intersection with Golden Hwy (Cobbora road).

Sheraton Road south (Junior course)
The start point is at The End of School zone sign south of St Johns high school entrance and is
1.9 km from the start line to the turn point which is a dead end when the races are conducted on
Sunday afternoons.

FLETCHER'S INDUSTRIAL ESTATE
Critérium course
As I have no distances we would like to run Critérium racing around the square block of
of Tighe street Gill street and Allen road so it would be all left turns.
With the start and finish point being half way along the north bound part of Tighe street and the
race lengths would be between 15 minutes and 30 minutes +2 laps.

South Geurie short course.
15 km from start line to turn point.
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurville
road and 2.8 km north of the intersection with Terrabella road.
The turn point is 600m north east of the intersection of Arthurville road and Hermitage road.

South Geurie middle course
21 km from start line to turn point.
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurville
road and 2.8 km north of the intersection with Terrabella road.
The turn point is 3.2 km on the Suntop road east of the intersection with Arthurville road.

South Geurie long course
30 km from start line to the turn point.
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurville
road and 2.8 km north of the intersection with Terrabella road.
Turn point is 3.8 km on the Suntop road west of the intersection with Renshaw-McGrrr way.

South Geurie (Terrabella Road) Individual Time Trial Course
6.4 km from start line to the turn point.
Start line and finish line is 2.1 km west of the intersection of Terrabella road and Arthurville road.
The turn point is 1.3 km east of the bridge over the Little River on Terrabella road.

**South Geurie strada loop (long) 50.3kms**
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurville road and 2.8 km north of the intersection with Terrabella road. The loop turns left onto River Road at 4.3kms from the start line and travels river road for 10.6kms to the intersection with Zaias lane, tuning right on to Zaias Lane and travel 3kms to the intersection with Bennetts Road, turning left on to Bennetts Road and travelling 6.5kms to the intersection of Suntop Road and turning right and travel 9kms to the intersection with Arthurville Road and turn right onto Arthurville Road and travel 2.2kms to the cross roads of Arthurville, Little River and Hermitage Roads, continuing onto Hermitage Road and travel 11.9kms to Terrabella Road and turn right and travel 350 metres to the Arthurville Road and turn left and travel 2.9kms to the finish line on Arthurville Road 400metres before the Macquarie river on the Arthurville Road.

**South Geurie strada loop (short) 42km**
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurville road and 2.8 km north of the intersection with Terrabella road. The loop turns left onto River Road at 4.3kms from the start line and travels river road for 10.6kms to the intersection with Zaias lane, tuning right on to Zaias Lane and travel 8.1km to the intersection of Arthurville Road turn left on to Arthurville Road and travel 4.5km to the cross roads of Arthurville, Little River and Hermitage Roads, continuing onto Hermitage Road and travel 11.9km to Terrabella Road and turn right and travel 350 metres to the Arthurville Road and turn left and travel 2.9km to the finish line on Arthurville Road 400metres before the Macquarie river on the Arthurville Road.

**North Geurie**
13 km from start line to the turn point.
Start line is 250m north from the intersection of Paxton street and Fitzroy street, with the finish line 500m north of Paxton street and Fitzroy street Geurie.
The turn point is 150m on the Commabella road west of the Intersection with Cobbora road.

It should be noted that the roads used during Eastern Standard Time are quiet rural roads with very little vehicular traffic on Saturday afternoons and Sunday mornings at the times indicated.

A calendar has not been included at this stage. However, the Club will provide Council with a calendar at two (2) monthly intervals and before the first event. It should also be noted that this application seeks approval for use of the specific roads on Saturday afternoons. The Orana Veterans Cycle Club race on Saturday afternoons, however the club is seeking approval to undertake events on Saturday afternoons. These events will not clash with the events of the Orana Veterans Cycle Club.

2. **NATIONAL TRANSPORT REGULATIONS**

The Club is aware of the need to comply with the National transport regulations. In particular, we are cognisant of the requirement for consideration of public safety, convenience and consultation when conducting cycling events on public roads. In this regard, the Club believes that from experience gained over a number of years in conducting road events, combined with the process of consultation with State and Local Government
authorities and the Police, we have sufficiently considered all potential risks and control measures when conducting cycle events.

3. **PUBLIC SAFETY AND CONVENIENCE**

a) The Club has comprehensive Insurance Cover of which will be provided.

b) Safety for both cyclists and road users is the paramount criterion when choosing venues and when conducting events. The proposed courses have been designed to minimise the number of intersections and turning points involved. There are no crossroads. Start/finish and turn points have been chosen to ensure minimum sight lines of 200m for other road users.

c) There are no road closures required nor crossroads involved, and as noted above, the courses are on roads through rural areas carrying minimal traffic and cycling will not impinge upon residential amenity.

d) The Club’s commitment to rider safety is evidenced by the use of instructions read to riders prior to the start of an event to ensure all possible action is taken to maintain rider and public safety.

e) RTA standard approved road signs displaying the words “CYCLISTS RACE IN PROGRESS” will be placed at strategic locations on the course to warn motorists approaching from either direction of the start/finish and at the turn around point. Signs will be placed at other points on the course. Escort vehicles, with signage, flashing amber dome lights and UHF radio communication between vehicles, will precede and follow the riders.

f) One qualified club member will be rostered as Commissaire (Referee) and another club member will be rostered as race Marshal for each event to ensure all requirements are carried out prior to and during the event. A senior and experienced club member who holds a current drivers licence will be stationed at the Start/Finish line, and at the turn around point to ensure cyclists are stopped if there is the likelihood of a rider interfering with vehicular traffic.

g) Commissaire, Marshals and cyclist Controllers will be people with detailed knowledge and experience regarding the particular venue.

h) The Commissaire will not permit any event to commence unless the required vehicles and signs are in place. The turn-around Controller will be in place well before cyclists reach the point.

i) The Commissaire, Marshal and cyclist Controllers will wear identifiable safety vests and have a red flag to warn cyclists to stop if deemed necessary.

j) Marshals clearly understand the road rules and if necessary will slow down and/or stop cyclists to give priority to other road users at turning points or Start/Finish lines.

k) UHF radios are to be used for communication between lead and follow cars.
l) Our cyclists and officials are all experienced in riding on open roads for both racing and recreation and have developed considerable bike handling skills and a keen sense of road traffic awareness when turning or when being overtaken by vehicles.

m) All cyclists will be instructed to stay on the left hand side of the left hand carriageway on all roads to enable vehicles to overtake in a safe manner. Any cyclist who crosses the road centre-line is automatically disqualified from the event and the Club officials may take further disciplinary action.

n) The venues have been chosen to provide off-road parking at the Start/Finish area to ensure unhindered progress of other road users.

o) Club members are aware of their responsibilities to avoid damage to local flora and fauna and the need to preserve the area as per government requirements.

p) Any rubbish will be removed from the Start/Finish area and riders are forbidden to litter roadways during events.

4. **SUMMARY**

We endeavour at all times to foster a positive response to cycling in general from the local community, and we are willing to participate in any proposal that will further this cause. The Club requests that you give a favourable response to this submission.

The Locality maps together with start/finish and turnaround point diagrams, List of equipment, Traffic management plan, Guidelines for Chief Marshal/Duty Official, Marshal’s duties, Instructions to riders, and Insurance Certificate of Currency are in the attachments with this application.

**List of Attachments.**

Attachments other than this application.

- Locality Maps of current and proposed 2017 courses.
- Fletchers Industrial Pdf map.
- Special Event Transport Management Plan Template.
- Generic traffic management plan map.
- Emergency and/or Accident Procedure (non first aid)
- List of Equipment.
- Certificate of currency Insurance.
TRAFFIC MANAGEMENT PLAN

Courses.
Mogriguy/Eumungerie Road, Burnaway Road, Benolong Road and Wongarbon/Westella Road, Benolong Road, Sheraton Road, Geurie South, Geurie North and Terrabella Road, South Geurie Strada loop (long and short).

Locations. As per locality maps attached.
Appropriate signage will be put in place at strategic points on the courses. These are indicated on the Start/Finish and Turn Around Point diagrams, to warn other road users of the presence of cyclists.

Car Parking.
Competitors will park on the verge in the vicinity of, but well clear of the Start/Finish line. The road at each location has plenty of parking area, clear of the roadway. There are sight lines in excess of 150m in each direction.

Times.
The events on the Mogriguy/Eumungerie Road, Burnaway Road, and Wongarbon/Westella, Benolong Road, Sheraton Road, Geurie South, Geurie North, Terrabella Road, South Geurie Strada loop (long and short).
Road, will be on Saturdays between 1.00pm and 5.00pm and Sunday’s 8.00am and 2.00pm.
Sheraton Road Sundays 1.00pm to 4.30pm.
With Critérium racing to be conducted Monday or Friday afternoons 5.00pm to 8.30pm daylight savings months only or alternate Saturdays between 1.00pm and 5.00pm, Sunday mornings 7.30am to 2.00pm or Sunday afternoons 2.00pm to 5.00pm.

Traffic Management.

The Start Line. A Start/Finish marshal will be in place to keep the road free of obstruction. Riders will be called to the Start and kept off the carriageway until thirty seconds before the start. Riders will move off ONLY when the area is clear of other road users. High visibility club banners and appropriate signs warning of cyclists will be placed in both directions of the Start/Finish line as indicated on the diagrams.

The Finish Line. There will be a marshal, judge/timekeeper and observer on the road verge. The Finish line will be marked with a sign, a chequered flag, and an orange coloured traffic cone.

Turn Around Points. Each turn is located on a straight piece of roadway with clear sight lines in excess of 150m in each direction.
At the turn point and other strategic locations, appropriate signage will put in place to warn other road users of the presence of cyclists. The cyclist controller will stand to the side of the road with a red and a white flag. An orange coloured traffic cone will be put in the middle of the road. Priority will be given to through traffic. If necessary, riders will be signalled to stop and move off the carriageway.

Critérium course is a circuit type lay out and has no turn point but will have signs placed as per traffic management plan diagram less turn point section.
The Riders.
The riders will be briefed on the start line to:
(a) Adhere to the general road rules. In particular NOT to cross the centre line.
(b) Ride no more than two abreast, stay in the LEFT lane and generally keep left.
(c) To alert the group of any vehicles approaching from the rear,
(d) To give way to other vehicular traffic and allow it to pass safely.

Escort Vehicles.
Escort vehicles with signage, flashing hazard lights and 2 rotating amber lights, UHF radio, mobile ‘phone and First Aid kit will lead and follow riders.

GUIDELINES FOR CHIEF MARSHAL/DUTY OFFICIALS

Your Priorities.
a) Safely and effectively run events for riders.
b) Cause minimum inconvenience to other road users.
c) Comply with the Road Traffic legislation.

Prior to each Event.
(a) Confirm which course is to be used.
(b) Familiarise yourself with the NSW POLICE CONDITIONS for cycling events and the relevant Traffic Management Plan.
(c) Familiarise yourself with the Emergency Procedures which layout exactly what you should do in the event of an accident at your event.
(d) Ensure that the grading/handicap details have been updated and will be available at Sign On table.
(e) Confirm that all signs, UHF radios, etc., as per Equipment List attached, will be at the event. Ensure any batteries are charged.

Prior to Event Start.
(a) Confirm course length.
(b) Confirm starting order and times from the handicapper.
(c) If there is any doubt that the event will continue safely e.g., inclement weather, road works, traffic conditions, lack of marshals, etc., - discuss with committee members.
(d) Brief Marshals and Traffic Controllers on their locations, communication (‘phone, radio use), positioning of warning signs, Accident Management guidelines.
(e) Ensure escort vehicles are equipped with radios, signs, and flashing beacons, and that the drivers know the procedure.

NOTE:
Only club members who hold a current driver’s licence can act as Marshals.
If the minimum number of marshals is not available the event is to be cancelled.
In the event of the Turn Around Marshal not being there because of some unforeseen circumstance, riders will be briefed that the turn around point is neutral and each rider must STOP at the turn and give way to all traffic before proceeding.
(a) Ensure all marshals are familiar with Marshal’s Duties. Marshals’ musts have read a copy of the NSW Police Conditions.
(b) Besides the UHF radios, ensure officials have road worker’s safety vests, red and white flags, traffic cones and road signs to be positioned along the course.
(c) Assign a location to each Marshal and explain particular responsibilities associated with that location, e.g., positioning of warning signs.
(d) Brief all Marshals on limits of responsibility. Stress that if necessary, they are to stop riders to ensure other road users have right of way at turn points.
(e) Instruct the Marshal at the turn around point not to leave the location until the last rider has passed that point and to follow that rider back to the Start/Finish point, picking up, if necessary, any riders who have pulled out, or are unable to continue.

Communications.
Issue UHF radios to drivers and brief them on its operation.

Sign on Table Procedures.
(a) Ensure the following are available: Rider numbers (if necessary), Sign-on sheet, visitor’s book, cash tin/bag.
(b) Ensure all riders are financial Dubbo Cycle Club members and/or hold a current Cycling Australia race licence. This is particularly important for insurance purposes, especially at the start of each year. NO LICENCE, NO RIDE.
(c) Ensure any visiting riders are registered in the Visitor’s Book, so they can be followed up after the event.

Guidelines for Marshals.

Start line procedure.
(a) Call grades/handicap groups to the starting line in agreed starting order.
(b) Remind all riders waiting start to stay off the road. Ensure other traffic is safely managed and not inconvenienced.
(c) Conduct a roll call of all riders for each grade/handicap group to ensure all are present at start to hear briefing and introduce any visitors to the bunch.
(d) Brief each grade/group of riders on course details and safety issues, i.e.: Total distance.
   Crossing of centre line, if observed or reported, will result in DISQUALIFICATION.
   Urge riders to remind each other of this during the event.
   Location of turn around point.
   Location of any known hazards – road works, gravel/sand patches, bad potholes, causeways, etc.
   Keep to the left hand side of the left hand carriageway to enable any following vehicle to overtake the group safely. Riders at the rear of a group/bunch are to warn riders ahead of vehicles approaching from behind.

After the Event.
(a) Ensure all road signs and traffic cones have been retrieved from the course.
(b) Ensure site is left in a clean and tidy state. All rubbish to be properly disposed of in public rubbish bins (if available at site), or else returned to Club members’ homes and disposed of there.
MARSHTALS’ DUTIES.

The SAFETY of riders and other road users is your primary concern.

Equipment.
Reflective “Road Worker” vests.
Traffic Cones.
Red flag, Green flag.
Warning Signs “warning cyclists ahead”
UHF radio and/or mobile phone.

Obtain briefing from Chief Marshal/Duty Official.
Safety, locations, warning signs, timing, radio use, emergency procedures per the Accident Management Guidelines.

Setting up the Turn Point.
Ensure that at the turn point:
The turn point is not across double lines.
Your vehicle is safely parked well clear of the turn point.
You can be readily seen by oncoming traffic (150m sight line in both directions), and that you have a safety ‘refuge’ in case of danger to yourself.
Position Warning Signs so that traffic has adequate distance to slow/stop (80m before your position).
Riders have a clear edge to move to if they must stop before turning.

When Rider(s) approach.
You do not have the authority to stop traffic. If the situation demands, YOU MUST STOP THE RIDERS.
Look and listen for oncoming traffic from both directions.
Take up a safe position in readiness to signal rider(s).
Decide whether you must stop the rider(s) to allow traffic to safely pass — Show RED flag to rider(s).
OR if all clear, signal to riders that they may turn — Show GREEN flag to riders.
If traffic appears while riders are negotiating turn, attract drivers’ attention to the situation with clear and confident signalling.
At all times, show courtesy to other road users.

After last rider has turned.
Gather up signs/equipment.
Check immediate area; ensure that it is free of litter.
And act as a follow vehicle with signage and amber light active to follow the last rider back to the finish line.
INSTRUCTIONS TO RIDERS BEFORE EACH EVENT.

TODAYS RACE WILL BE RUN IN ACCORDANCE WITH DUBBO CYCLE CLUB RULES, AND THE REQUIREMENTS OF OUR RACE PERMITS.

YOU ARE REMINDED THAT WE ARE RACING ON OPEN ROADS, AND THAT CROSSING THE CENTRE OF THE ROAD WILL NOT BE TOLERATED.

RIDE NO MORE THAN TWO ABREAST, STAY IN LEFT LANE AND GENERALLY KEEP LEFT.

ALERT THE GROUP OF ANY VEHICLES APPROACHING FROM THE REAR.

GIVE WAY TO OTHER VEHICULAR TRAFFIC, AND ALLOW IT TO PASS SAFELY.

YOU MUST OBEY THE INSTRUCTIONS OF THE REFEREE, MARSHALS AND OFFICIALS, AND IF ASKED TO STOP, YOU MUST DO SO.

UNOFFICIAL PRIVATE VEHICLES ARE NOT PERMITTED TO FOLLOW, AND ANY VIOLATION WILL RESULT IN THE RIDER BEING PENALISED.

PUBLIC URINATION WILL NOT BE TOLERATED, AND OFFENDERS WILL BE PENALISED.

ANY RIDER WITHDRAWING FROM THE RACE IS ASKED TO ADVISE AN OFFICIAL SO WE CAN ACCOUNT FOR ALL RIDERS AT THE FINISH.

RIDERS ARE REMINDED TO CLAIM PLACINGS.

FOLLOWING THE ABOVE, GIVE DETAILS OF ANY DANGER SPOTS, ETC TO THE RIDERS IN EACH GROUP.
CURRENT AND PROPOSED DUBBO ROAD COURSES for 2017

Locality links d

https://goo.gl/maps/QLgt
Wongarbon short course
15 km from start line to the turn point.
Start line is 100m north on Barbigal street from the intersection with Derribong street, with the finish line 300m north on Barbigal street from the intersection with Derribong street.
The turn point is 175 m east of the T intersection on Westella road.

https://goo.gl/maps/HMmXT
Wongarbon long course
25 km from start line to the turn point.
Start line is 100m north on Barbigal street from the intersection with Derribong street, with the finish line 300m north on Barbigal street from the intersection with Derribong street.
The turn point is 550 m south on the Westella road from the intersection with Golden Hwy (Collabra road).

https://goo.gl/maps/r4b8u
Mogriguy Time Trial course
10.5 km from start line to the turn point.
Start and finish line is 650 m north on Mogriguy road from the intersection with Mendooran road.
The turn point is 180 m south on Mogriguy road from the intersection with Moonul street Mogriguy.

https://goo.gl/maps/DA4Ly
Mogriguy course
19 km from start line to the turn point.
Start and finish line is 650 m north on Mogriguy road from the intersection with Mendooran road.
Turn point closest intersection is 5.1 km north of turn point which is Mogriguy road and Coobagga Forrest road.

https://goo.gl/maps/HpZZN
Burraway course
17.5 km from start line to turn point.
Start line and finish line is on the Burraway road 500 m west of the intersection with the Newell Hwy.
The turn point is 200 m east on Burraway from the intersection with Rawsonville Bridge road.

https://goo.gl/maps/vnFfX
Benolong road sprint course
9 km from start line to the turn point.
Start line and finish line is on Benolong road 300 m east of Wambangalong Creek bridge.
The turn point is 50 m west on the Benolong road from the intersection with Nubingerie road.
FLETCHER'S INDUSTRIAL ESTATE
Criterium course

See attachment Fletchers.pdf.

As I have no distances we would like to run criterium racing around the square block of
of Tighe street Gill street and Allen road so it would be all left turns.
With the start and finish point being half way along the north bound part of Tighe street and
the race lengths would be between 15 minutes and 30 minutes + 2 laps.

https://goo.gl/maps/NkpE
Sheraton Road south (Junior course)
The start point is at The End of School zone sign south of St Johns high school entrance and
is 1.9 km from the start line to the turn point which is a dead end when the races are
conducted on Sunday afternoons.

https://goo.gl/maps/uOMMn0
South Geurie short course.
15 km from start line to turn point.
Start line and finish line is 400m south of the bridge over the Macquarie river on the
Arthuville road and 2.8 km north of the intersection with Terrabella road.
The turn point is 600m north east of the intersection of Arthuville road and Hermitage road.

https://goo.gl/maps/p7R1q
South Geurie middle course
21 km from start line to turn point.
Start line and finish line is 400m south of the bridge over the Macquarie river on the
Arthuville road and 2.8 km north of the intersection with Terrabella road.
The turn point is 3.2 km on the Suntop road east of the intersection with Arthuville road.

https://goo.gl/maps/AM2ZC
South Geurie long course
30 km from start line to the turn point.
Start line and finish line is 400m south of the bridge over the Macquarie river on the
Arthuville road and 2.8 km north of the intersection with Terrabella road.
Turn point is 3.8 km on the Suntop road west of the intersection with Renshaw-McGirr way.

https://goo.gl/maps/aiwM8qYxMst
South Geurie (Terrabella Road) Individual Time Trial Course
6.4 km from start line to the turn point.
Start line and finish line is 2.1 km west of the intersection of Terrabella road and Arthuville
road.
The turn point is 1.3 km east of the bridge over the Little River on Terrabella road.
https://goo.gl/maps/vZ8ZcyVVj8z

**South Geurie strada loop (long) 50.3kms**
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurlville road and 2.8 km north of the intersection with Terrabella road.
The loop turns left onto River Road at 4.3kms from the start line and travels river road for 10.6kms to the intersection with Zaisa lane, turning right on to Zaisa Lane and travel 3kms to the intersection with Bennetts Road, turning left on to Bennetts Road and travelling 6.5kms to the intersection of Suntop Road and turning right and travel 9kms to the intersection with Arthurlville Road and turn right onto Arthurlville Road and travel 2.2kms to the cross roads of Arthurlville, Little River and Hermitage Roads, continuing onto Hermitage Road and travel 11.9kms to Terrabella Road and turn right and travel 350 metres to the Arthurlville Road and turn left and travel 2.9kms to the finish line on Arthurlville Road 400metres before the Macquarie river on the Arthurlville Road.

https://goo.gl/maps/nPtX3N8BP3o

**South Geurie strada loop (short) 42kms**
Start line and finish line is 400m south of the bridge over the Macquarie river on the Arthurlville road and 2.8 km north of the intersection with Terrabella road.
The loop turns left onto River Road at 4.3kms from the start line and travels river road for 10.6kms to the intersection with Zaisa lane, turning right on to Zaisa Lane and travel 8.1kms to the intersection of Arthurlville Road turn left on to Arthurlville Road and travel 4.5kms to the cross roads of Arthurlville, Little River and Hermitage Roads, continuing onto Hermitage Road and travel 11.9kms to Terrabella Road and turn right and travel 350 metres to the Arthurlville Road and turn left and travel 2.9kms to the finish line on Arthurlville Road 400metres before the Macquarie river on the Arthurlville Road.

https://goo.gl/maps/zl68z

**North Geurie**
13 km from start line to the turn point.
Start line is 250m north from the intersection of Paxton street and Fitzroy street, with the finish line 500m north of Paxton street and Fitzroy street Geurie.
The turn point is 150m on the Commabella road west of the intersection with Cobboara road.
MARSHALLS TO STOP CYCLISTS WHEN VEHICLES ARE ON APPROACH

SIGNS WOULD BE PLACED AT A MINIMUM 5 KM THROUGH CYCLE ROUTE

TURNING POINT

5 KM

2 KM

1 KM

100M

ESCORT VEHICLE AHEAD OF CYCLISTS

ESCORT VEHICLE TAILING LAST CYCLIST

START / FINISH

Date: 19/10/2014 Project: CYCLE COURSE CONTRACTOR: DUBBO CYCLE CLUB
REP TOP: 64 MODIFIED TOP: DUBBO CYCLE CLUB-VARIOUS-COURSES-06/10/2014 APPROVED BY:
AUTHOR: STEVE WILSON CERTIFICATE No: 269301545 Exp: 26/12/2018 SCALE: NOT TO SCALE Copyright ©

Comments:
ADDITIONAL SIGNS WOULD BE PLACED BEFORE CRESTS AND BENDS.
SIDE ROADS WOULD BE SIGN POSTED.
MARSHALL OR LEAD VEHICLE TO BE POSTED AT INTERSECTIONS.
EMERGENCY AND/OR ACCIDENT PROCEDURES
(non first aid)

The below is a basic outline of what could be needed and used in the case of a racing accident, but it does not cover all or every possible scenarios that could possibly happen when conducting cycle road racing or group recreational riding.

Communication is key to seeking help and support for any incident so it would help if phones were carried and the emergency + app was installed.

At the scene check for any dangers to yourself, bystanders, the casualty/s and remove any hazards such as bikes, equipment or any thing else wear possible that may cause further accidents including bystanders and competitors who are not assisting.
But do not put your self in danger doing any of the above or any thing else.

If a First Aid person, or person who is not confident in helping is not at the scene first and you have a phone or two way radio call for assistance 000 or phone app Emergency + when it would be needed.

Where possible have 2 people with the injured and 2 in opposite direction approx 200 meters from the injured to worn and slow traffic but be off the roads edge and not in danger of becoming a casualty.

If the injured are able to move by them selves or with some assistance have them Move away from the road or road edge to be at a safe distance from the road. But still where possible have 2 people with the injured and 2 in opposite direction approx 200 meters from the injured to worn and slow traffic but be of the roads edge and not in danger of becoming a casualty.

Any extra bystanders or competitors should be well off the road and away from the casualty/s or competitors can continue on with the race or ride.

Your safety is most important you do not want to be a casualty from putting yourself in danger way.

If you have witnessed and /or assisted at an accident during a race you will need to see the Chief Marshall and/or commissionaire to supply information about the incident to help with the reports that are needed to be fill in.
**Instructions:**
The purpose of this guide is to outline the Australian/New Zealand Risk Management Standard ISO 31000:2009. Your identification of risks and the recommendation of control measures to reduce the level of risk to an acceptable or tolerable level are therefore crucial in the planning process for your on road event.

The risk management process consists of a series of steps that, when undertaken in sequence, enable continual improvement in decision-making. The elements of the risk management process are summarised in the following diagram:
What is risk? The Australian/New Zealand Risk Management Standard ISO 31000:2009 describes risk as follows:

Risk is the chance of something happening that will affect objectives – it is measured in terms of event likelihood and consequences.

Risk is measured in terms of:

- Vulnerability (weakness that can be exploited)
- Event Likelihood (frequency)
- Event Consequences (outcome possibilities)
Ask yourself:

- What could happen?
- How could it happen?
- Who could be harmed?
- What could be harmed?
- When could it happen?

The level of risk is determined by considering:

**Likelihood** and **Consequence**

The purpose of risk evaluation is to make decisions, based on the outcomes of risk analysis, about which risks need treatment and treatment priorities.

Risks deemed ‘tolerable’ are monitored in accordance with the risk management plan until treatment measures have been implemented.

Once the risks have been identified and rated (Initial Risk level) Treatments (counter measures, Control Measures, Proposed Controls) need to be considered. Treatments must be appropriate to the level and type of risk.

A risk treatment plan (Proposed controls) documents the actions that are proposed to treat the risk. It usually lists the following information:

- Actions to be taken and the risks they address.
- Responsibilities for implementing the plan.
- Resources to be utilised.
- Timetable for implementation.
• Mechanism and Frequency of review.

The design of the risk treatment measures should be based on a comprehensive understanding of the risks concerned; this understanding comes from an appropriate level of risk analysis.

REMEMBER RISK IS IDENTIFIED AS FOLLOWS

LIKELIHOOD X CONSEQUENCE = RISK

PROPOSED CONTROLS – What will be put in place

The risk table will provide you with a Risk Rating. This risk rating could be anything from Very Low to Extreme. The proposed controls section of your risk register is where you will outline your recommendations and plans to reduce the risk level if that is possible.

To change the risk level you want to come up with control measures which may do the following in relation to your identified risks;

• REDUCE THE LIKELIHOOD
• REDUCE THE CONSEQUENCES

Remember that it may not always be possible to reduce the consequences of a risk. Sometimes you can do both. But depending on the risk you have identified you may be only able to implement control measures that will reduce the likelihood.

The following scenario is a good way to think about this concept.
The risk: Death or Serious Injury as a result of crossing a roadway.

A group of 10 people want to cross a roadway. They plan to walk together slowly in a group during afternoon peak when the roadway is very busy. The consequences of this action would mean that most of the group would be killed or seriously injured.

Likelihood: Likely
Consequence: Major
Risk Rating: Extreme

Implementing control measures,

A group of 10 people cross the roadway. They walk in single file with a few seconds space between them. They cross on a pedestrian crossing.
The consequences of this action would mean that if a car doesn’t stop, then perhaps only one person will be killed or seriously injured.

Likelihood: Possible
Consequences: Minor
Risk Rating: Low

In both outcomes the consequence is DEATH or SERIOUS INJURY. However the control measures have been able to reduce both likelihood and consequences.

If this scenario was only one person wanting to cross the road, the consequences would be the same, it would only be the likelihood that you could change.
Writing up Proposed Control Measures

Control measures should be detailed. They should be specific to the identified risk and be actions that will either reduce the likelihood and/or the consequence of the identified risk. Remember that the risk register is a skeleton on which you are building your operational orders and venue operating plans. The treatment measures should avoid being generic statements. Where possible they should be clear and succinct and not lengthy. You can use dot points or short paragraphs in relation to your proposed controls. Avoid lengthy paragraphs that don't clearly articulate your proposed controls.

Key Risk Management Terms

The following terms and ratings are used in risk management. It is recommended that readers become acquainted with them, to better understand the basis of comments and recommendations made.

Likelihood – A description of how likely a risk is to occur.
Consequences – The harm to, or impact on the organisation's goals.
Controls – The processes that are used to address the identified risks.
Risk – A harmful event that could occur, measured in terms of both its consequences and likelihood.
Risk rating – An overall assessment of a risk, achieved by combining the consequences and the likelihood ratings of a risk. Such rating enables risks of differing consequences and likelihood to be comparatively assessed in terms of the relative seriousness and priority of treatment.
Risk consequence – The outcome of an event. For example the loss, injury, disadvantage or gain. It can be expressed qualitatively or quantitatively.
Risk level – An overall assessment of a risk, achieved by combining the consequences and the likelihood ratings of a risk. Such rating enables risks of differing consequences and likelihood to be comparatively assessed in terms of the relative seriousness and priority of treatment.
Risk likelihood – The probability of a risk occurring.
Risk treatments – See Controls
### Qualitative Measure of Consequence

<table>
<thead>
<tr>
<th>Risk</th>
<th>Consequence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Insignificant</td>
<td>No injury</td>
</tr>
<tr>
<td>2</td>
<td>Minor</td>
<td>Non lost time injury - disruption to working systems - financial loss - systems review</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
<td>Lost time injury - disruption to users - high financial loss - possible litigation, systems review - management concerns</td>
</tr>
<tr>
<td>4</td>
<td>Major</td>
<td>Permanent injury - major loss of service to users - major financial loss - possible litigation and fines - systems review by external agency - possible industrial action - public concern, ministerial media attention</td>
</tr>
<tr>
<td>5</td>
<td>Catastrophic</td>
<td>Death - complete loss of service or output - huge financial loss - possible fine and compensation, likely litigation - systems reviewed by external agency - impact on morale - industrial intervention - loss of public support - media attention</td>
</tr>
</tbody>
</table>

### Qualitative Measure of Likelihood

<table>
<thead>
<tr>
<th>Risk</th>
<th>Likelihood</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Almost Certain</td>
<td>Is expected to occur in most circumstances</td>
</tr>
<tr>
<td>B</td>
<td>Likely</td>
<td>Will probably occur in most circumstances</td>
</tr>
<tr>
<td>C</td>
<td>Possible</td>
<td>Might occur at some time</td>
</tr>
<tr>
<td>D</td>
<td>Unlikely</td>
<td>Could occur at some time</td>
</tr>
<tr>
<td>E</td>
<td>Rare</td>
<td>May occur only in exceptional circumstances</td>
</tr>
</tbody>
</table>

### Level of Risk Tolerance

<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Risk Tolerance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Extreme Risk</td>
<td>Not tolerated IMMEDIATE action required to reduce risk</td>
</tr>
<tr>
<td>H</td>
<td>High Risk</td>
<td>If elimination is not possible the risk must be constantly monitored by Command staff</td>
</tr>
<tr>
<td>M</td>
<td>Moderate Risk</td>
<td>If acceptable monitor using standard operating procedures</td>
</tr>
<tr>
<td>L</td>
<td>Low Risk</td>
<td>Manage by routine procedures</td>
</tr>
</tbody>
</table>
# ON ROAD EVENTS RISK REGISTER

## RISK REGISTER AND CONTROL PLAN – ON ROAD EVENTS

<table>
<thead>
<tr>
<th>REF</th>
<th>HAZARD</th>
<th>L</th>
<th>C</th>
<th>INITIAL RISK</th>
<th>RISK CONTROL PLAN</th>
<th>L</th>
<th>C</th>
<th>RESIDUAL RISK</th>
</tr>
</thead>
</table>
| 1   | Vehicular Traffic | C | 4/5 | H | • Use of the TCP  
• Marshall’s  
• Escorts vehicles  
• And possibly the riding formation (number of cyclists abreast) etc  
• Ensure all riders obey all the road rules.  
• Ensure riders have approved helmets.  
• Ensure both support vehicles have a first aid kit.  
• Call emergency services if needed.  
• Public Liability Insurance obtained | D | 2 | M |
| 2   | Severe Weather Conditions eg Rain – Hail – Heavy Fog – Severe Winds – Excessive Heat encountered at the commencement/during event. | D | 3 | M | • Check Weather forecasts.  
• Advise riders of any adverse weather conditions.  
• Keep riders up to date of weather conditions.  
• Have a guideline set out on what to do when extreme weather will delay or cancel the ride, and when and who will enact this. | D | 2 | 1 |
<table>
<thead>
<tr>
<th>REF</th>
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<th>RESIDUAL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Participant’s health deteriorates during the event, sunburn, dehydration, frostbite.</td>
<td>C 3</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>4</td>
<td>Participant involved in an incident during the event, resulting in serious injury.</td>
<td>C 3</td>
<td>M</td>
<td></td>
</tr>
</tbody>
</table>
## RISK REGISTER AND CONTROL PLAN – ON ROAD EVENTS

<table>
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<tr>
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<th>L</th>
<th>C</th>
<th>RESIDUAL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Participant involved in an incident during the event resulting in a</td>
<td></td>
<td></td>
<td>M</td>
<td>• Utilise the support vehicles to warn oncoming motorists of an incident up ahead.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>non serious injury that requires some degree of attention.</td>
<td>C</td>
<td>3</td>
<td></td>
<td>• Ensure all participants are made aware of possible road conditions such as traffic, road debris, animals, pot holes etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Ensure all riders obey all the road rules.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Ensure riders have approved helmets.</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Ensure both support vehicles have a first aid kit.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Utilise the support vehicle to carry the injured rider and bike if possible.</td>
<td>D</td>
<td>2</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Call emergency services if needed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Public Liability Insurance obtained.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>• Advise police of event.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REF</td>
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<td>RESIDUAL RISK</td>
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</tr>
<tr>
<td>6</td>
<td>Participants come across poor road conditions – road blocked/impassable during the event.</td>
<td>L</td>
<td>D 2</td>
<td>L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All riders to obey road rules.</td>
<td>C</td>
<td>E 1</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All riders to be made aware of the road conditions by the support team.</td>
<td>C</td>
<td>F 1</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lead Riders to use standard calls to advise of road conditions.</td>
<td>C</td>
<td>G 1</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Support team to keep abreast of road conditions and road works or road incidents and communicate to the riders.</td>
<td>C</td>
<td>H 1</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support vehicles to assist with their flashing lights and warning signs and protect riders on tight bends etc.</td>
<td>C</td>
<td>I 1</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guideline in place as to what will stop, or delay the ride and who will enact it.</td>
<td>C</td>
<td>J 1</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## RISK REGISTER AND CONTROL PLAN – ON ROAD EVENTS

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<th>C</th>
<th>RESIDUAL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Participants come across severe accent/decent on the road network during the event.</td>
<td>D</td>
<td>2</td>
<td>L</td>
<td>• All riders obey road rules. &lt;br&gt; • All riders to be made aware of the road conditions by the support team. &lt;br&gt; • The Support team to keep abreast of road conditions and road works or road incidents and communicate to the riders. &lt;br&gt; • Support vehicles to assist with their flashing lights and warning signs and protect riders on tight bends etc. &lt;br&gt; • Guideline in place as to what will stop, or delay the ride and who will enact it.</td>
<td>E</td>
<td>1</td>
<td>L</td>
</tr>
<tr>
<td>8</td>
<td>Participants have limited/no experience in participating in an event.</td>
<td>D</td>
<td>2</td>
<td>L</td>
<td>• All participants will be provided with the requirements and conditions likely to be expected during the ride. &lt;br&gt; • Riders encouraged to be realistic about their ability to continue.</td>
<td>E</td>
<td>1</td>
<td>L</td>
</tr>
<tr>
<td>9</td>
<td>Participants lose their way during the event.</td>
<td>E</td>
<td>1</td>
<td>L</td>
<td>• Support vehicle is to be behind the last rider so if they have not caught up with the group, the support vehicle can pick them up and bring them in. &lt;br&gt; • Extra support vehicle provided during this event which will help manage this.</td>
<td>E</td>
<td>1</td>
<td>L</td>
</tr>
</tbody>
</table>
## Risk Register and Control Plan - On Road Events

<table>
<thead>
<tr>
<th>REF</th>
<th>Hazard</th>
<th>L</th>
<th>C</th>
<th>Initial Risk</th>
<th>Risk Control Plan</th>
<th>L</th>
<th>C</th>
<th>Residual Risk</th>
</tr>
</thead>
</table>
| 10  | Participant's equipment/vehicle becomes unserviceable or unroadworthy during the event. | D | 2 | L            | - All riders are to provide a bike in appropriate condition  
- Riders encouraged to service bike pre-event - clean and lubricate chain, derailleur, and other components. Ensure brakes and gearing in good working order and fitted correctly.  
- Limited spares to be carried by the support team.  
- Bikes in inadequate condition to be excluded from participation. | D | 2 | L |
### RISK REGISTER AND CONTROL PLAN – ON ROAD EVENTS

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<th>C</th>
<th>RESIDUAL RISK</th>
</tr>
</thead>
</table>
| 11  | Participants suffer a mechanical/equipment breakdown/failure during the event. | D | 2 | L            | - All riders are to provide a bike in appropriate condition  
- Riders encouraged to service bike pre-event – clean and lubricate chain, derailleur, and other components. Ensure brakes and gearing in good working order and fitted correctly.  
- Limited spares to be carried by the support team.  
- Bikes in inadequate condition to be excluded from participation.  
- Rider to pull off to a safe location to attend to the breakdown.  
- If unable to repair on the side of the road, support vehicle to load the bike and rider and take to the next town. | D | 2 | L            |
| 12  | Pilot/rear escort vehicle/s suffers mechanical breakdown during the event. | D | 3 | M            | - Communicate immediately to other support vehicles for back up.  
- Spare vehicle to provide assistance and then take up the position of the vehicle that has broken down. | D | 2 | L            |
<table>
<thead>
<tr>
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<th>RESIDUAL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Support vehicle/s suffers mechanical breakdown during the event.</td>
<td>M</td>
<td>D</td>
<td>L</td>
</tr>
<tr>
<td>14</td>
<td>Participant attempts/participates in event when not authorised/licensed to drive/ride a vehicle, motor bike or boat.</td>
<td>L</td>
<td>E</td>
<td>L</td>
</tr>
<tr>
<td>15</td>
<td>Approved route unable to be traveled upon.</td>
<td>E</td>
<td>E</td>
<td>L</td>
</tr>
</tbody>
</table>

**Notes:**
- Communicate immediately to other support vehicles for back up.
- Make sure the position of the vehicle that has broken down is taken up.
- Have a list of all emergency services at each location and call for assistance if needed.
- All riders are to provide a bike in appropriate condition. All riders and support crew will have all appropriate licences and gear checked prior to riding in the event.
- Check the route prior to ride starting to ensure that there are no major roadworks or roads cut due to flooding etc.
- Seek alternate way around.
- If unable to go around the blockage, find out if it will only be for a short period of time and delay the ride.
- If for longer, ride will have to be called off.
## RISK REGISTER AND CONTROL PLAN – ON ROAD EVENTS

<table>
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<tr>
<th>REF</th>
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<th>C</th>
<th>RESIDUAL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Event cancelled prior/during the event.</td>
<td>E</td>
<td>2</td>
<td>L</td>
<td>• All participants, Police and Insurance will be advised of the cancellation and the reasons why.</td>
<td>E</td>
<td>1</td>
<td>L</td>
</tr>
</tbody>
</table>

**L** = LIKELIHOOD  
**C** = CONSEQUENCE
EXECUTIVE SUMMARY

This report deals with the approval procedures required for bicycle (triathlon) races on public roads. The Dubbo Triathlon Club is seeking approval to conduct the Club’s triathlon race season for 2016/2017 on Bligh and Macquarie Streets and Old Dubbo Road. This will be the second year the Triathlon Club has included an on road bicycle leg for the junior event. For the safety of junior competitors there is a need for a temporary road closure of Bligh Street south of Wingewarra Street to Macquarie Street. The junior event precedes the senior event that will be conducted as normal on the open road network.

A Traffic Management Plan will need to be developed for the temporary road closure. Consultation has been undertaken with the affected property owners being Poplars Caravan Park and Dubbo Square. Access is still available to both developments via Wingewarra and Bultje Streets and the northern Council Car Park driveway in Bligh Street however; oversized vehicles such as the Coles delivery semi-trailer and caravans may need to traverse several adjoining streets of the CBD. The Triathlon Club has consulted with Dubbo Square and the Poplars Caravan Park who have supported the road closures and foresees that there will be minimal if any impact on the customers. In the event that there is a clash of dates with the Sunday River Markets the Club will not run an event on that day.

It is recommended that approval be granted to the Dubbo Triathlon Club to conduct its 2016/2017 racing season as proposed including a temporary road closure of Bligh Street for the Junior Event as conditioned by Council and the NSW Police Force.

FINANCIAL IMPLICATIONS

There are no financial implications arising from this report.

POLICY IMPLICATIONS

There are no policy implications arising from this report.
RECOMMENDATION TO THE LOCAL TRAFFIC COMMITTEE

1. That the application of the Dubbo Triathlon Club be approved for the 2016/2017 Season as conditioned by the NSW Police Service and the following conditions of Dubbo Regional Council.

2. Approval shall be for the use of Bligh Street from Ollie Robins Oval south to Macquarie Street, Macquarie Street from Bligh Street to Hennessy Road, Old Dubbo Road from Hennessy Road south for a distance of 9 kilometres to the turnaround and return on the nominated days between 6.30am to 11.30am during the racing season from 16 October 2016 to 12 March 2017 – 16 October 2016, 23 October 2016, 20 November 2016, 18 December 2016, 15 January 2017, 19 February 2017 and 12 March 2017.

3. Approval for a temporary road closure of Bligh Street for the 4 junior triathlon events south of Wingewarra Street to Macquarie Street between 7.30am to 9.00am.

4. Submission of a traffic management plan to Council for approval to be submitted a minimum of three (3) weeks prior to the first event. All traffic control measures contained in the plan are to be in accordance with Australian Standard AS 1742.3 and the Roads and Maritime Services and NSW Guidelines for Bicycle Road Races and The Guide to Traffic Control at Worksites, prepared by an accredited person.

5. All Traffic Control including the placement and removal of barricades and/or regulation of traffic is to be carried out by traffic controllers appropriately trained in accordance with the requirements of Australian Standard AS 1742.3 and the Roads and Traffic Authority Accreditation Requirements for Traffic Control Planners or Controllers as required.

6. All competitors shall comply with the Australian Road Rules, for the cycle route.

7. All traffic advisory signs (“cyclists on road”) shall be placed in accordance with the approved traffic control plan.

8. The NSW Police Force consent and conditions for bicycle races permit under the NSW Roads Transport Act 2013, Section 115.

9. Council’s Administrative Officer must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo City Council, NSW Police Service and Roads and Maritime Services (RMS) is specifically noted to be indemnified against any action resulting from the Triathlon Races.

10. The applicant shall provide to the Managers of Dubbo Square and Poplars Caravan Park details of the Clubs 2016/2017 Race Season Schedule of Events nominating the Junior Events and the temporary road closure days and pre-event advice on any changes that may be required in addition to post event feedback with the developments and Council.

11. The applicant is to submit to Council all the appropriate documentation required accepting the above terms and conditions before a final approval is granted.

LOCAL TRAFFIC COMMITTEE CONSIDERATION

This matter was considered by the Local Traffic Committee at its meeting held on Friday 7 October 2016. The Committee had unanimous support in the adoption of the recommendation shown below.
RECOMMENDATION

1. That the application of the Dubbo Triathlon Club be approved for the 2016/2017 Season as conditioned by the NSW Police Service and the following conditions of Dubbo Regional Council.

2. Approval shall be for the use of Bligh Street from Ollie Robins Oval south to Macquarie Street, Macquarie Street from Bligh Street to Hennessy Road, Old Dubbo Road from Hennessy Road south for a distance of 9 kilometres to the turnaround and return on the nominated days between 6.30am to 11.30am during the racing season from 16 October 2016 to 12 March 2017 – 16 October 2016, 23 October 2016, 20 November 2016, 18 December 2016, 15 January 2017, 19 February 2017 and 12 March 2017.

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6. All competitors shall comply with the Australian Road Rules, for the cycle route.

7. All traffic advisory signs (“cyclists on road”) shall be placed in accordance with the approved traffic control plan.

8. The NSW Police Force consent and conditions for bicycle races permit under the NSW Roads Transport Act 2013, Section 115.

9. Council's Administrative Officer must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo City Council, NSW Police Service and Roads and Maritime Services (RMS) is specifically noted to be indemnified against any action resulting from the Triathlon Races.

10. The applicant shall provide to the Managers of Dubbo Square and Poplars Caravan Park details of the Clubs 2016/2017 Race Season Schedule of Events nominating the Junior Events and the temporary road closure days and pre-event advice on any changes that may be required in addition to post event feedback with the developments and Council.

11. The applicant is to submit to Council all the appropriate documentation required accepting the above terms and conditions before a final approval is granted.

Mark Stacey
Manager Technical Support
REPORT

The guidelines for Bicycle Road Races provides a comprehensive overview of the approval process and the requirement of those bodies and cycling organisations. Approval is required from the New South Wales Police Force under the NSW Road Transport Act 2013 Section 115.

Bicycle Road Race

A bicycle road race which forms part of a triathlon may be categorised as a Class 1 or 2 event with the difference being that one impacts on the major traffic transport system and the other does not. The request by Dubbo Triathlon Club for the use of Bligh and Macquarie Streets and Old Dubbo Road for the bicycle leg is categorised as a Class 2 event. A copy of the Dubbo Triathlon Club 2016/2017 Event Traffic and Risk Management Plan is attached to the report.

The bicycle leg of the triathlon is a time trial where there is no drafting or pack riding permitted. Club triathlon races are conducted on a Sunday morning with the swim leg undertaken in the Macquarie River. The run leg is an out and back course along the Macquarie River corridor south from Ollie Robbins. If the Macquarie River is inaccessible the swim leg will be held at the Dubbo Aquatic Leisure Centre where a short running transition is undertaken from the Dubbo Aquatic Leisure Centre along the southern side of the Talbragar Street rail corridor with Club Marshalls in attendance to advise competitors of the road crossings ahead. The cycle leg commences at Ollie Robbins Oval, then south into Bligh Street, Macquarie Street and along Old Dubbo Road to a turnaround at 9 km (Sprint Course) and a 20 km (Olympic Course).

Cyclists must undertake the road leg in accordance with the Australian Road Rules with marshals provided at strategic locations to give directions to cyclists. “Cyclists on road” warning signs are strategically placed along the route and at intersections. The triathlon cycle leg is distinctively different from a normal cycle race with no bunch start or sprint finish, and as such there is no considered requirement for traffic control.

Junior Road Race – Temporary Road Closure

The Junior Triathlon was held on the road (bicycle leg) for the first time last year to raise the profile, quality and experience for Junior Tri-athletes. In order to provide a safe and secure on road cycle leg a temporary road closure was implemented in Bligh Street commencing south of Wingewarra Street to Macquarie Street between 7.30am – 9.00am. The Senior Triathlon will commence at the completion of the Junior Triathlon utilising the traditional open road cycle course out along Old Dubbo Road.

Following completion of the swim the Junior Tri-athletes will ride south from the Ollie Robins Oval boat ramp along the river corridor access road, through the sealed car park to Bligh Street then south in Bligh Street to Macquarie Street and return. The exit onto Bligh Street occurs just north of the southern Council’s Bligh Street Public Car Park entry/exit access and Dubbo Square entry/exit access. The northern road closure in Bligh Street will occur south of
Wingewarra Street enabling access to the northern entry/exit driveway to Council’s Bligh Street Public Car Park. Access to Dubbo Square is still available through Council’s car park and from Bultje Street. Intersection road closures will be required at Bultje Street, Ian Drake Drive, Sandy Beach Road and at Macquarie Street. River access would still be available via Tamworth Street, South Street and Sandy Beach Road.

The temporary closure of Bligh Street will potentially have some minor impacts on access to the Dubbo Square and Poplars Caravan Park. Whilst access is still available via Bultje Street, there is concern with the movement of semitrailer deliveries to Dubbo Square and caravans potentially requiring access via alternate CBD streets. Consultation was undertaken last year with each of the Managers of Dubbo Square and Poplars Caravan Park with both supporting the event. No concerns were raised following the running of the season’s events. Further consultation has been undertaken with the Managers of Dubbo Square and Poplars Caravan Park. The Manager of Poplars Caravan Park has advised the Club that he forsees no issues with the proposed closures. The effect on the clientele would be minimal to non-existent. Last year extra signage was placed in Bligh and Wingewarra Streets to direct customers to Dubbo Square via the northern entry to the Council Car Park during the times that the road was blocked and has been implemented into the Road Closure Traffic Control Plan.

In the event that there is a clash with the Sunday Riverside markets the Club has advised that it will not run the event on that day and will re-schedule it to one of the two contingency dates.

**Comment**

The implementation of a temporary road closure of Bligh Street to facilitate the Junior Triathlon Bike Leg in 2015 on Sunday mornings (7.30 am to 9.00 am) had negligible impact on the road network and access to the lower CBD area and the adjoining developments of Dubbo Square and Poplars Caravan Park. There were no adverse comments received following the conclusion of the 2015/2016 season.

The on road competitive cycle leg is an educational step in introducing the juniors to a higher quality event experience under safe and controlled conditions before progressing to open road event cycling. The Traffic Management and Traffic Control Plan that was implemented last year to support the temporary road closure was successful.

Communication and feedback is an important component of the success of the road closure particular to the adjoining Dubbo Square and Poplars Caravan Park. As such the Club will be required to provide details of the Event dates and any changes that may occur prior to an individual event and regularly seek post event feedback from both Dubbo Square and Poplars Caravan Park.

The approval to Dubbo Triathlon Club will be for a 12 month period, covering 7 triathlon races between October 2016 to March 2017. The nominated race dates are 16 October 2016, 23 October 2016, 20 November 2016, 18 December 2016, 15 January 2017, 19 February 2017 and 12 March 2017. Conditions applicable to the Triathlon and Cycle leg of the event will be
prepared in consultation with the NSW Police Service, Roads and Maritime Services and Council as considered necessary.

It is therefore recommended that Council approval be granted for the Dubbo Triathlon Club to conduct its 2016/2017 Season Races and a temporary road closure of Bligh Street for the Junior Triathlon event and the open road use for the Senior Triathlon of Bligh Street, Macquarie Street and Old Dubbo Road for the cycle leg and conditioned by the NSW Police Force and Council.

Appendices:
1. Dubbo Triathlon Club 2016/2017 - Application and Event Traffic and Risk Management Plan
Attn: Dennis Valentine
Western Plains Regional Council
PO Box 81
DUBBO NSW 2830

24th August 2016

Dear Sir,

Re: Dubbo Triathlon Club – Approval for Club Race Calendar of Events 2016-2017 Season

We seek permission to submit an application to conduct our Dubbo Triathlon Club races as per our attached race calendar.

Please note the following:

- Our season is scheduled to run from Sunday 16th October 2016 to Sunday 12th March 2016
- All events will be held on a Sunday morning, starting from 7am and finishing at approx. 11am
- Events require the use of sections of Ollie Robins Oval, the Macquarie River and its foreshore, and Council roads as per the maps and traffic management plan attached

We further note that following the success of our junior races last year, we would again like to put an emphasis on family and junior participation to strengthen the Club community into the future. We thank the Council for their previous support of this approach and submit a request to close that section of the road along Bligh Street between Bulli Street and Macquarie Street for four junior races this season.

The following documents are attached to assist with the approval process:

- Certificate of Currency
- Race Calendar
- Course Maps
- Traffic Management Plans
- Risk Assessment
We agree to abide by your standard conditions.

Please let me know if you require any additional information.

Yours sincerely,

Susan Madden

Secretary, Dubbo Triathlon Club

P: 0422 033 049 | E: susanmadden@hotmail.com
2016/17 RACE SEASON

PROPOSAL FOR ROAD CLOSURE DURING JUNIOR RACES

As submitted to Dubbo City Council, 24th August 2016

Request:

The Dubbo Triathlon Club is seeking permission for a temporary road closure along a section of Bligh Street for the duration of our junior races for the 2016/17 season.

It is anticipated that the closure would need to be in place for up to 1 hour between 8am and 9am on the Sunday morning of the events scheduled in the attached race calendar.

Background:

Dubbo Triathlon Club’s overarching aim is to provide a fun, safe and supportive environment for people of all ages and abilities in Dubbo and the surrounding areas to take part in the sport of triathlon.

In line with our Strategic Plan, the Dubbo Triathlon Club seeks to place a greater emphasis on family and junior participation to strengthen the Club community into the future to allow us to meet the needs arising from a growing level of interest in triathlon.

With the support of Western Plains Regional Council and funding from the Titan Mud Run Committee, the Dubbo Triathlon Club has installed steps at points along the river to improve the safety of access and to allow for variations to the swim distance to better suit juniors.

To assist with safety on the bike course we are seeking permission from the Western Plains Regional Council for a temporary road closure on a section of Bligh Street for up to 1 hour on four occasions during the upcoming race season, which will run from Sunday, 16th October 2016 to Sunday, 12th March 2017.
Proposed Route:

The proposed bike route for the junior races is marked on the map below.

The proposed route would require closure of a section of Bligh Street.

The proposed route will require road closed and detour signage and structures at the Buitje St, Ian Drake Dr, Sandy Beach Rd, and Macquarie St intersections with Bligh Street.

The proposed route will not affect access to the Coles complex on Bligh, Wingewarra and Buitje streets. Access to the river, Sandy Beach and Lady Cutler parks will be maintained via Tamworth and South streets.

The Dubbo Triathlon Club will ensure an adequate number of road marshals in line with the Traffic Management Plan provided.
# 2016/17 Race Season

## Proposed Schedule of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Time</th>
<th># of Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday 16th October 2016</td>
<td>Charity Teams Day</td>
<td>6.30am – 11am</td>
<td>150</td>
</tr>
<tr>
<td>Sunday 23rd October 2016</td>
<td>Junior Teams Day(++)</td>
<td>6.30am – 11am</td>
<td>75</td>
</tr>
<tr>
<td>Sunday 20th November 2016</td>
<td>Club Race Day(*)</td>
<td>6.30am – 11am</td>
<td>75</td>
</tr>
<tr>
<td>Sunday 18th December 2016</td>
<td>interClub(*)</td>
<td>6.30am – 12pm</td>
<td>150</td>
</tr>
<tr>
<td>Sunday 15th January 2017</td>
<td>Club Olympic Race</td>
<td>6.30am – 11am</td>
<td>75</td>
</tr>
<tr>
<td>Sunday 19th February 2017</td>
<td>Club Race Day (*)</td>
<td>6.30am – 11am</td>
<td>75</td>
</tr>
<tr>
<td>Sunday 12th March 2017</td>
<td>Club Handicap Race</td>
<td>6.30am – 11am</td>
<td>75</td>
</tr>
</tbody>
</table>

### Additional Notes:

- It is proposed that there will be four junior events with full road closure(•), including junior teams event and the interClub.
- Event run sheet will generally include event set-up between 7am and 8am, junior race/s between 8am and 9am, senior race/s between 9am and 10.30am, presentation and pack-up between 10.30 and 11am.
- An Olympic distance event will be considered subject to forming an organising committee. The Olympic distance race is tentatively scheduled for Sunday, 15th January.
Certificate of Currency

This is to certify the insurance policy detailed below is current and in force.

Insured Companies
Triathlon Australia Ltd including all Affiliated Organisations including State and Territory Associations, Affiliated Clubs, Officials, Accredited Coaches, Voluntary Workers, Members (including professional license holders), executives, and Race Directors and Event Organisers and/or subsidiary and/or related Corporations as defined under Australian Corporations Law and/or financiers and all parties for whom the Insured undertakes to insure for their respective rights, interests and liabilities.

Affiliated Club
Dubbo Triathlon Club

Type of Policy
A) Public & Products Liability
B) Professional Liability

Policy Number
AU00005184LL116A

Period of Insurance
30 June 2016 to 30 June 2017 at 4:00 pm LDT

Territorial Limit
Worldwide

Limit of Liability
A) AUD $20,000,000 any one Occurrence and in the aggregate in respect of Products per Period of Insurance
B) AUD $7,500,000 each occurrence and in the aggregate per Period of Insurance

Interested Party
The specified entities below are hereby noted under this Policy for their respective rights and interest in Triathlon Australia and/or Triathlon AusA, organised or sanctioned events:
Western Plains Regional Council, NSW Police, NSW Waterways Authority

Nothing herein contained shall serve to alter, vary or waive the provisions of the above-mentioned policy. For full details regarding coverage refer to the policy documentation or contact V-Insurance Group on 1300 495 647 or email sports@vinsurancegroup.com.

Signed on behalf of XL Insurance Company SE

Craig Eichholtz
Senior Underwriter - Liability
XL Catlin
Date: 09/07/2016

For more information please contact your local XL Insurance Company SE office or visit our website at www.xl.com.au
2016/17 RACE SEASON

SWIM COURSE – MINI (150m), ENTICER (350m), SPRINT (500m)

Notes:
* Race director to conduct pre-race safety inspection of the course
* Competitors and marshals walk together to start line following race participant’s briefing
* Start at steps (500m or 130m), shore marshal to be present on either side of river
* Number of waves dependent on number of competitors and handicap if applicable
* Swim safety team to include minimum of 2 paddle craft and 1 on-shore spotter (right bank)
* Exit via boat ramp (sprint and mini) or stairs (enticer) to transition area at Ollie Robbins Oval
2016/17 RACE SEASON

BIKE COURSE – MINI (4km on closed roads), ENTICER (9km) and SPRINT (18km)

Notes:
* Race director to conduct pre-race safety inspection of the course and participant’s race briefing
* Signage on roads including “Cyclists ahead” and “Caution triathlon in process”
* Bike legs are out and back starting at Bligh St adjacent to transition area on Dillie Robbins oval
2016/17 RACE SEASON

RUN COURSE – MINI (1km), ENTICER (2km), and SPRINT (4km)

Notes:
* Race director to conduct pre-race safety inspection of the course and participant's briefing
* Mini course is out to LH Ford Bridge and back on mixture of bitumen and gravel surfaces
* Enticer course is out and back on mixture of bitumen and gravel surfaces
* Sprint course is 2 laps of short course on mixture of bitumen and gravel surfaces
* Run start and finish adjacent to transition area at Ollie Robbins Oval
* Drink and aid station is adjacent to start/finish line therefore at 2 km intervals (1km for mini)
2016/17 RACE SEASON

SWIM COURSE – OLYMPIC DISTANCE (approx. 1500m)

Notes:
* Race director to conduct pre-race safety inspection of the course
* Competitors and marshalls walk together to start line following race participant’s briefing
* Start at Sandy Beach, shore marshalls to be present at start and 500m intervals
* Number of waves dependent on number of competitors and handicap if applicable
* Swim safety team to include minimum of 2 paddle craft and 2 on-shore spotters (right bank)
* Exit via boat ramp to transition area at Ollie Robbins Oval
2016/17 RACE SEASON

BIKE COURSE – OLYMPIC DISTANCE (40km)

Notes:
* Race director to conduct pre-race safety inspection of the course and participant’s race briefing
* Signage on roads including “Cyclists ahead” and “Caution triathlon in process” ☀️
* Bike leg is out and back starting at Bligh St adjacent to transition area on Ollie Robbins oval
2016/17 RACE SEASON

RUN COURSE — OLYMPIC DISTANCE (approx. 10km)

Notes:
* Race director to conduct pre-race safety inspection of the course and participant’s briefing
* Run course is 2 x river loops on mixture of bitumen, gravel and cement walking track surfaces
* Run start and finish adjacent to transition area at Ollie Robbins Oval
* Drink and aid station is adjacent to start / finish line and the 2.5 km interval

COURSE MAP
2016/17 RACE SEASON

BIKE COURSE — OLYMPIC, SPRINT DISTANCE AND SHORT COURSE

TRAFFIC MANAGEMENT PLAN

Pre-Race

- An assessment of road conditions will be undertaken prior to any race and signage displayed
- If road conditions are deemed unsafe, the Race Director will redesign or cancel the bike leg
- The Race Director will conduct a pre-race participants briefing, including identification of bike start and finish point, identification of hazards e.g. road crossing and intersections
- Participants will be reminded that regular road rules will apply during the bike leg

Race Procedure

- During the triathlon races the only time road ways are used is during the bike leg
- At conclusion of the swim leg competitors will put on helmets and collect bicycles at transition
- They will then make their way from Ollie Robbins Oval across Bligh Street pushing their bikes
- They will get on bikes on the eastern side of Bligh Street and ride under NSW Police Guidelines
- They will move along Bligh Street, Macquarie Street and along the Old Dubbo Road
- They will turn at a distance of approximately 4.5 km (short course) or 9 km (sprint course) or 20km (Olympic course) from start and return to transition at Ollie Robins Oval
- They will then commence the run leg which is along the Macquarie River walking trail and at no time crosses on to roads
- Bike legs riders cannot ride in groups at any stage and will be riding singularly at all times — drafting is not permitted

Road Safety Team

- As part of conditions of road use the Dubbo Triathlon Club will provide three road marshals
- The Dubbo Triathlon Club at no stage during its events will stop or control motor vehicles
- The road marshals’ major job is to make motor vehicles aware that there are bicycles on the road and to make bicycle riders aware of motor vehicles on the road and traffic conditions
- Marshals will wear fluoro vests that are clearly visible to road users; they will also have flags to warn riders of coming motor vehicle traffic
- All marshals will carry mobile phones to make emergency calls if accidents/injuries occur
- Marshals will be located at the Bligh Street commencement of the bike ride, at the intersection of Bligh Street and Macquarie Street, and at the turn around point of the bike leg
- Dubbo Triathlon Club will make sure all races are conducted to set out guidelines as provided that enable safe and incident free races to all parties affected
- In the absence of a nominated Medical Director, the Race Director will be responsible for managing the first response to illness or injury
Road Signage

- Signage that meets Section 40 of Road Safety and Traffic Management guidelines will be displayed at the following points along the course:
  1. The first sign will be displayed at the corner of Bligh St and Church St on the eastern side
  2. The next sign will be displayed 100m before the Bligh St/Macquarie St intersection
  3. The next sign will be displayed 100m before the Tamworth St/Macquarie St intersection
  4. The next sign will be displayed 100m before the Boundary Rd/Macquarie St intersection
  5. The next sign will be displayed at the Fitzroy St/Macquarie St intersection
  6. Another sign will be displayed at the corner of Hannesy Lane/Old Dubbo Road
  7. Another sign will be displayed 200m before the Butlers Falls road turn off
  8. The last sign will be displayed 300m past the turn-around points on the Old Dubbo Road
- Signs will be on both sides of the road facing opposite directions.

Attachments:

- Bike course map 2016/16 race season
- Traffic management plan maps, Dubbo Traffic Control
### RISK ASSESSMENT

#### Club Race Risk Assessment

**Purpose:** To document risk assessment to manage health and safety hazards and risks at Club triathlon events

**Applicability:** Club race days held from October 2016 to March 2017

**Responsibility:** Race Director and Committee

**Related Information:** Risk assessment accompanies sanctioning documentation lodged to Waterways, Police, Dubbo City Council and Tri Australia

**Approved by:** Ian Crafer

**Date:** 24th August 2016

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### SWIM COURSE:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Risk</th>
<th>Control Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Competitor Numbers</td>
<td>Competitor injury</td>
<td>- Design wave starts at appropriate intervals to minimise congestion</td>
</tr>
<tr>
<td>Low Water Quality</td>
<td>Infections to competitors</td>
<td>- Assess water quality prior to race start and cancel swim leg if water quality is deemed unacceptable</td>
</tr>
<tr>
<td>Deterioration in Water Conditions</td>
<td>Competitor injury or drowning</td>
<td>- Ensure water safety is sufficient for current conditions</td>
</tr>
<tr>
<td>Deterioration in Atmospheric Conditions</td>
<td>Lightning strike to competitors</td>
<td>- Consider redesign of swim course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Assess atmospheric conditions prior to and during the swim leg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Consider delaying the race start or cancelling the swim leg</td>
</tr>
</tbody>
</table>

Dubbo Triathlon Club

Risk Assessment
## BIKE COURSE:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Risk</th>
<th>Control Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helmet and Bike Condition</td>
<td>Competitor injury due to unsafe bike</td>
<td>Remind competitors that they are responsible for the safety of their own equipment. Provide an opportunity for Technical Officials to inspect competitors' equipment and fastening of helmets.</td>
</tr>
<tr>
<td>Large Competitor Numbers</td>
<td>Competitor injury due to collision with another competitor</td>
<td>Design swim wave starts at appropriate intervals to minimise congestion. Design swim wave starts at appropriate intervals to minimise congestion.</td>
</tr>
<tr>
<td>Course layout</td>
<td>Competitor injury due to collisions with spectators</td>
<td>Install fencing and controlled crossings in areas of high spectator traffic, as described in the Traffic Management Plan.</td>
</tr>
<tr>
<td>Poor road conditions</td>
<td>Competitor injury due to collisions with other road users</td>
<td>Assess road conditions prior to race start. Consider redesign of bike course. Advise competitors of any hazards on the bike course. Marshals, signage, ambulances located at high risk locations as described in the Traffic Management Plan.</td>
</tr>
</tbody>
</table>

Conditions are unacceptable:
- If conditions deteriorate during the race, implement the Emergency Response Plan to evacuate the swim course.
- Assess water flow rate (use ML released from Burrendong Dam as guide) and if too fast cancel swim leg.
- Monitor weekly reports for water quality status.
- If red alert status at Dubbo cancel swim.
### Run Course:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Risk</th>
<th>Control Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infection</td>
<td>Competitor sickness due to infection from a volunteer</td>
<td>Ensure that all volunteers wear hygienic gloves when dealing with food and drinks</td>
</tr>
<tr>
<td>Competitor Fitness</td>
<td>Competitor injury due to dehydration, exhaustion</td>
<td>Ensure sufficient aid stations on the run course</td>
</tr>
<tr>
<td>Extreme weather conditions</td>
<td>Competitor injury due to high winds, lighting or extreme heat</td>
<td>Pre-race advice to competitors to ensure sufficient hydration throughout the race</td>
</tr>
<tr>
<td>Course layout</td>
<td>Competitor injury due to a collision with a competitor on the bike course</td>
<td>Access to medical assistance at the completion of the race</td>
</tr>
</tbody>
</table>

- Assess atmospheric conditions prior to and during the bike leg
- Consider delaying the race start or cancelling the bike leg if conditions are unacceptable
- If conditions deteriorate during the race, implement the Emergency Response Plan to evacuate the bike course

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**APPENDIX NO:** 1

**DUBBO TRIATHLON CLUB**

2016/2017

APPLICATION AND EVENT

TRAFFIC AND RISK MANAGEMENT PLAN

**WORKS AND SERVICES COMMITTEE**

Page 104
2015/16 RACE SEASON

SWIM COURSE – SPRINT DISTANCE (500m), SHORT COURSE (350m) AND ENTICER COURSE (150m)

Pre-race

- An assessment of water quality and flow conditions will be conducted prior to any race
- If water conditions are deemed unsafe, the Race Director will redesign or cancel the swim leg
- The Race Director will conduct a pre-race briefing with all marshals ahead of competitor briefing
- In the absence of a nominated Medical Officer, the Race Director will be the First Aid Officer
- Both vessel and shore marshals will be competent swimmers
- The Race Director will conduct a pre-race participants briefing, including identification of swim entry and exit points, identification of any hazards e.g. reeds on entry, any branches protruding near river banks, and cement on boat ramp exit, identify First Aid Station and outline emergency evacuation plan
- Participants will be reminded that vessels have right of way

Swim start

- All participants walk together to the race start under LH Ford Bridge
- Shoes must be worn to the race start and will be collected and returned to the transition area
- The Race Director will determine the appropriate number of waves depending on entry numbers
- Competitors will access the river by the stairs and exit at stairs or boat ramp depending on course
- All participants must wear a swim cap

Swim safety team

- Swim safety team to include a minimum of 2 paddle craft and 1 on-shore spotter (right bank)
- Vessel marshals must wear a life jacket and shore marshal will carry a floatation device
- Participants are to raise their arm if they are experiencing difficulty in the water
- If a swimmer needs to be removed from the water, injured or otherwise, the nearest paddle craft will be first to go their aid and notify the swim shore marshal who will in turn notify the Race Director
- The Race Director will manage communication between shore and vessel marshals
- If required, the Race Director will commence the emergency evacuation plan

Retrieval

- In the event that the swimmer is injured and needs to be retrieved, the swim shore marshal will enter the water toward the paddle craft
- When entering the water, the rescuer will enter feet first using a slide or safety step entry and keep their eyes on the injured swimmer and paddle craft at all times
- The rescuer will approach the swimmer in the defensive position (hand sculling and one foot out toward the swimmer) and carry the floatation device with them
- The rescuer will retrieve the swimmer using the contact towing method, and exit at the nearest point for shore where they will be met by the Race Director.
- In the absence of a nominated Medical Director, the Race Director will be responsible for managing the first response to illness or injury, including calling 000 if required.
- The First Aid Station, including First Aid kit, will be at the shelter adjacent to transition.

**Emergency evacuation plan**

- In the event of an emergency the Race Director will cause an emergency warning to be given to race participants and the swim safety team directing the participants to proceed immediately to the nearest point of shore alert to any potential obstacles or hazards.
- The paddle craft will assist guide participants to the shore.
- The emergency warning will be sounded via three shrill whistles.
- The Race Director will carry a whistle and mobile phone.
- In the absence of a nominated Medical Director, the Race Director will be responsible for managing the first response to illness or injury, including calling 000 if required.

**Attachments:**

- Swim course map 2016/17 race season
- {Aquatic Licence 2016/17 race season}
REPORT: Proposed Roundabout Improvements at the Intersection of St Andrews Drive and Cypress Point Drive, DUBBO

AUTHOR: Manager Technical Support
REPORT DATE: 10 October 2016
TRIM REFERENCE: ID16/1882

EXECUTIVE SUMMARY

This report deals with a review of the road safety environment at the roundabout intersection of St Andrews Drive and Cypress Point Drive, Dubbo following concerns with the speed of vehicles negotiating the intersection. Local residents have raised the safety concerns of potential vehicle conflict due to the excessive speeds. The Member for Dubbo, the Hon. Troy Grant MP, on behalf of the residents has requested Council’s consideration to the road safety issues identified.

The intersection is configured as a T-intersection and has variable road widths and offset alignment that is controlled by a mountable roundabout to enable the movement of large vehicles through the intersection. As a consequence the geometric design encourages unacceptable higher vehicle speeds on the St Andrews Drive north/south straight through travel alignment. There is also an excessive wide entry to the intersection from Cypress Point Drive. A typical roundabout requires a low speed curvilinear alignment on approach and departure to the intersection and is usually managed by restricted kerb alignment’s that require the driver to negotiate at a lower speed. Site inspections revealed anecdotal evidence of the high speeds and was supported with the traffic data that recorded 85th percentile speeds in St Andrews Drive greater than the 50 km/h urban speed limit.

Whilst there is no recorded crash history there is potential for vehicle conflict and the need for a reduction in speed at the intersection. Consideration has been given to implementing traffic management on approaches to all legs of the intersection to reduce vehicle speeds with a constrained curvilinear alignment on entry and departure to the roundabout incorporating kerb extensions, rumble bars and line marking. The additional facilities will provide a physical deterrence to speed, enhance and raise greater awareness of the road safety environment.

It is recommended that Council approval be granted for the proposed Traffic Management improvements to the roundabout at the intersection of St Andrews Drive and Cypress Point Drive.
Drive in accordance with Council’s Plan TM 7073 (Appendix 1).

FINANCIAL IMPLICATIONS

The allocation of funds will be made available from the Traffic Improvements Budget – Minor Traffic Improvements within the Traffic Management Function.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION TO THE LOCAL TRAFFIC COMMITTEE

That Council approval be granted for the proposed traffic management improvements to the roundabout at the intersection of St Andrews Drive and Cypress Point Drive, Dubbo in accordance with Council’s Plan TM 7073, with the inclusion of an additional kerb side island on the north western corner exit of the roundabout (Attached as Appendix 1).

LOCAL TRAFFIC COMMITTEE CONSIDERATION

This matter was considered by the Local Traffic Committee at its meeting held on Friday 7 October 2016. The Committee had unanimous support in the adoption of the recommendation shown below.

RECOMMENDATION

That Council approval be granted for the proposed traffic management improvements to the roundabout at the intersection of St Andrews Drive and Cypress Point Drive, Dubbo in accordance with Council’s Plan TM 7073, with the inclusion of an additional kerb side island on the north western corner exit of the roundabout (Attached as Appendix 1).

Mark Stacey
Manager Technical Support
Local residents within the St Andrews Drive and Cypress Point Drive, Dubbo locality have raised intersection road safety concerns with the current speed environment and potential vehicle conflict. It has been reported that vehicles are travelling at excessive speeds on approach to, through and departing the intersection. The Member for Dubbo, The Hon Troy Grant MP, on behalf of the residents has requested Council’s consideration to addressing the road safety concerns. A 50km/h urban speed limit applies in this residential area.

The intersection is a T-intersection facilitating a mountable roundabout to support the variable road widths and offset road alignment of St Andrews Drive and Cypress Point Drive. The mountable roundabout accommodates the swept turning paths of oversized vehicles such as buses or large heavy vehicles up to semi-trailers. The entry and exit thresholds to the roundabout are unconstrained and effectively provides a straight through north/south travel alignment through the roundabout rather than negotiating a low speed curvilinear travel path. The road geometry therefore encourages higher vehicle approach speeds. Motorist travelling northbound on approach to the roundabout are required to negotiate a low speed “dip “ just north of the Willow Bend Way intersection. However there is sufficient distance for motorist to accelerate towards Cypress Point Drive. The Cypress Point Drive intersection leg of the roundabout also has a wide entry that permits a speed entry into St Andrews Drive.

An investigation has been undertaken incorporating speed data collection and several on-site inspections. The site inspections revealed anecdotal evidence of unacceptable north/south vehicle approach and through speeds with numerous vehicles mounting the roundabout centre island.

TRAFFIC DATA

The traffic data revealed that the 85th percentile speed on the northern side of the roundabout for entry and departure is greater than the 50km/h speed limit. The southern side of the roundabout reveals an 85th percentile speed just below the speed limit.

St Andrews Drive – southbound entry, north of the roundabout.
85th percentile 53.6km/h
34% of vehicles exceeding the 50km/h speed limit.
Maximum speed 99.5km/h.

St Andrews Drive - northbound entry, south of the roundabout.
85th percentile speed 47.5km/h.
8.5% of vehicles exceeding the 50km/h speed limit.
Maximum speed 91.8km/h.

St Andrews Drive - northbound departure, north of the roundabout
85th percentile speed 54.7km/h.
40.24% of vehicles exceeding the 50km/h speed limit.
Maximum speed 92.3km/h.
COMMENT

The recorded speed statistics by the hour does not reveal any significant peak speed periods with the overall general variation of the 85th percentile speeds in the order of 1-2 kmh. The speed environment is generally consistent at all times. There has been no recorded crash history at the site however with the revelation of higher than acceptable vehicle speeds particularly along St Andrews Drive there is some concern of potential vehicle conflict at the intersection which should be addressed.

The investigation has revealed the need to modify the geometric design of the roundabout to physically constrain the approach entries to the roundabout. By effectively reducing vehicle speeds on entry to the roundabout there will be a lower speed through and on departure of the intersection. However due to the intersection configuration there is still the need to accommodate the turning paths of large vehicles. Geometric modifications will tighten up the curvilinear alignment through the intersection with the introduction of kerb side islands to enforce a lower speed entry approach to the roundabout. An additional kerb side island in Cypress Point Drive will be reduce the entry width and promote a tighter radius travel path into St Andrews Drive. The introduction of rumble bars around the edge of the roundabout will reduce the opportunity for passenger vehicles to drive across the roundabout but permit large vehicles to negotiate the intersection. Delineation will be improved with line marking and raised pavement markers on all legs.

Consultation has been undertaken with the 3 adjoining landowners where kerb side island will be located adjacent the properties with the proposed traffic management improvements to the intersection. However contact has only been made with one resident on the north eastern side of the intersection. Plans and contact details were left at the remaining two residences. The resident was supportive of the proposed modifications.

It has been demonstrated that there are geometric deficiencies at the existing roundabout that has encouraged motorist to negotiate the intersection at a higher than acceptable speed. The concerns have noted the potential traffic conflict at this location with the investigation and traffic data confirming a concerning speed environment. The introduction of additional traffic facilities to improve the overall management of the intersection will be considered beneficial to the road environment by reducing overall vehicle speeds and lowering the risk of vehicle conflict.

It is therefore recommended that approval be granted for the traffic management improvements to the roundabout at the intersection of St Andrews Drive and Cypress Point Drive, Dubbo in accordance with Council’s Plan TM 7073 (Appendix 1).

Appendices:
1. TM 7073 - St Andrews Drive Roundabout Modifications
NOTES:

1. Modifications proposed to improve traffic conditions at intersection of St Andrews, Grange Wood and Cypress Point Drive.
2. Three additional, high side islands proposed, additional green and yellow directional road markers to be installed on the additional islands and two existing islands.
3. Additional line marking proposed on entry legs of St Andrews Drive and Grange Wood Drive to reduce lane width to 3.3m.
4. Additional line marking and painted chevrons proposed along Cypress Point Drive to decrease curve radius and guide traffic onto roundabout.
5. Yellow painted pavement markings (PPMs) to be placed along Cypress Point Drive, St Andrews Drive and Grange Wood Drive at 5m intervals.
6. Rumble bars to be installed along outside edge of existing roundabout.
7. Existing roundabout and street sign on corner of Grange Wood Drive and Cypress Point Drive, to be removed and an extended combined sign be installed complying with AS 1743.2006.

LOCALITY MAP

FOR CONSTRUCTION
APPENDIX NO: 1 - TM 7073 - ST ANDREWS DRIVE ROUNDBO Pulse MODIFICATIONS

ITEM NO: WSC16/14

ROUNDBO Pulse CONCEPT DESIGN DIMENSIONS

NOTES:
1. MODIFICATIONS PROPOSED TO IMPROVE TRAFFIC CONDITIONS AT INTERSECTION OF ST ANDREWS, GRANGEWOOD AND CYPRUS POINT DRIVE.
2. THREE ADDITIONAL KERBSIDE ISLANDS PROPOSED, ADDITIONAL GREEN AND YELLOW DIRECTIONAL HAZARD MARKERS TO BE INSTALLED ON THE ADDITIONAL ISLANDS AND TWO EXISTING ISLANDS.
3. ADDITIONAL LINEWORKING PROPOSED ON ENTRY LEADS OF ST ANDREWS DRIVE AND GRANGEWOOD DRIVE TO REDUCE LANE RESTRICTION TO 3m.
4. ADDITIONAL LINEWORKING AND PAINTED CHEVRONS PROPOSED ALONG CYPRUS POINT DRIVE TO DECREASE CURVES, HUMUS AND SLIDE TRAFFIC INTO ISLANDS.
5. YELLOW RAISED PAVEMENT MARKERS PROPOSED TO BE PLACED ALONG CYPRUS POINT DRIVE SE OF GRANGEWOOD DRIVE AND ST ANDREWS DRIVE AT 5m INTERVALS.
6. RUMBLE BARS TO BE INSTALLED ALONG OUTER EDGE OF EXISTING ROUNDBO Pulse.
7. EXISTING ROUNDBO Pulse AND STREET SIGN ON CORNER OF GRANGEWOOD DRIVE AND CYPRUS POINT DRIVE TO BE REMOVED AND AN EXTENDED COMBINED SIGN TO BE INSTALLED ACCORDING TO THIS PLAN AND COMPILYING WITH AS 1742 2008.

TYPICAL ISLAND DESIGN

FOR CONSTRUCTION
VEHICLE TURNING TEMPLATES

SEMI-TRAILER (19.0m) & PASSENGER VEHICLE (5.2m)

SINGLE UNIT TRUCK/BUS (12.5m)

WESTERN PLAINS REGIONAL COUNCIL
ROUNDABOUT MODIFICATIONS
ST ANDREWS DRIVE & CYPRESS POINT DRIVE
REPORT: North Street Dubbo Pedestrian Refuge Island

AUTHOR: Manager Technical Support
REPORT DATE: 10 October 2016
TRIM REFERENCE: ID16/1883

EXECUTIVE SUMMARY

This report deals with the consideration of a pedestrian refuge island in North Street, Dubbo to support the extension of the footpath network along the northern side of Minore Road, Dubbo to connect with the existing pedestrian refuge in Whylandra Street, Dubbo.

The extension of the footpath network will follow the existing pedestrian desire line between Minore Road and the destination of Sir Roden Cutler Park, Macquarie River corridor and adjacent Club Dubbo. Pedestrians will be required to cross North Street that currently has no pedestrian facilities. In order to facilitate pedestrian access across North Street along the desired pedestrian line it is proposed to implement a pedestrian refuge approximately 35 metres north of the North Street and Minore Road intersection. The implementation of the pedestrian refuge will also provide the opportunity to improve the traffic management at the intersection and safer pedestrian road crossing activity.

It is recommended that a pedestrian refuge island with associated traffic management at the intersection of North Street and Minore Road be implemented in accordance with Council’s Plan TM 7005 (Appendix 1).

FINANCIAL IMPLICATIONS

The allocation of funds will be made available from the Minore Road Footpath Reconstruction Project.

POLICY IMPLICATIONS

There are no policy implications arising from this report.
RECOMMENDATION TO THE LOCAL TRAFFIC COMMITTEE

That a pedestrian refuge island with associated traffic management at the intersection of North Street and Minore Road, Dubbo be implemented in accordance with Council’s Plan TM 7005 (Appendix 1).

LOCAL TRAFFIC COMMITTEE CONSIDERATION

This matter was considered by the Local Traffic Committee at its meeting held on Friday 7 October 2016. The Committee had unanimous support in the adoption of the recommendation shown below.

RECOMMENDATION

That a pedestrian refuge island with associated traffic management at the intersection of North Street and Minore Road, Dubbo be implemented in accordance with Council’s Plan TM 7005 (Appendix 1).

Mark Stacey
Manager Technical Support
Council as part of its expansion of the footpath network in West Dubbo is currently constructing a concrete footpath along the northern side of Minore Road east towards the North Street intersection. The proposal is to extend the footpath further east across North Street and adjacent to the public reserve to connect with the existing pedestrian refuge crossing in Whylandra Street (Newell Highway).

The existing pedestrian desire line from Minore Road diagonally cuts across North Street and the adjacent public reserve. In order to improve accessibility and provide a safer crossing of North Street consideration has been given to extending the proposed footpath northwards on the western side of North Street with a 90° road crossing to the public reserve. The provision of a pedestrian refuge will provide the opportunity to enhance the traffic management at the intersection of Minore Road and North Street. North Street facilitates a wide carriageway within which Council is currently developing a centre median turn lane concept between Minore Road and Victoria Street (Mitchell Highway). The concept southbound provides for a specific left and right turn lane to Minore Road. The provision of the two lanes will require a set distance of storage north from the intersection. Consideration was therefore given to the provision of a pedestrian refuge at the transitional point from the conceptual centre turn lane facility and the turning lanes to Minore Road, this then places the proposed pedestrian refuge approximately 35 m from the intersection.

The pedestrian refuge will encompass two centre road islands, kerbside island extensions and associated accessibility ramps. At the time of the pedestrian refuge island construction, there will be the need to incorporate the turning lane traffic management at Minore Road and transition northbound to the current road centreline.

The provision of this refuge and associated Minore Road traffic management will enhance the pedestrian road safety environment in North Street and provide the pedestrian connection between the Minore Road footpath network expansion to the Newell Highway and river corridor.

It is recommended that a pedestrian refuge island with associated traffic management at the intersection of North Street and Minore Road be implemented in accordance with Council’s Plan TM 7005 (Appendix 1).

Appendices:
1 TM 7005 - North Street Pedestrian Refuge
**EXECUTIVE SUMMARY**

The Dubbo Regional Council’s “Rural Reserves Biodiversity Report” seeks to define how biodiversity applies to the Dubbo landscape and more specifically to the former Dubbo City Council Rural Reserves estate.

This report is seen as the first of two (2) such reports with another report to be developed for the former Wellington Council area.

The report identifies four (4) priority corridors that enable a more strategic approach to be taken to vegetation assessment above the minimum legal requirements. The corridors aim to provide connectivity through the rural landscape by utilising existing linear reserves (e.g., road reserve corridors) to ensure the ongoing viability of larger parcels of natural areas in the Local Government Area. Such an approach seeks to increase the resilience of the ecology of the Local Government Area.

**FINANCIAL IMPLICATIONS**

There are no immediate financial implications arising from this report. However, Council may be approached in the future to provide a financial contribution as part of grant applications.

The financial cost of vegetation surveys will only be known after Council goes to the market for prices. There is a potential financial benefit to undertaking detailed vegetation mapping as it will enable more efficient planning of infrastructure works particularly in rural areas. Costs currently associated with off-setting vegetation loss are not expected to be changed should this report be adopted by Council.

**POLICY IMPLICATIONS**

There are no policy implications arising from this report.
RECOMMENDATION

1. That the draft Dubbo Regional Council’s Rural Reserves Biodiversity Report be noted.
2. That the draft Dubbo Regional Council’s Rural Reserves Biodiversity Report be placed on public exhibition for a minimum 28 days to seek submissions from the public regarding the proposed adoption of the plan.
3. That following consideration of submissions received during the Public Exhibition period, a further report be prepared for Council.

Lynton Auld
Manager Landcare Services
BACKGROUND

The report examines the biodiversity of Council’s Dubbo area Rural Reserves with particular emphasis placed on linkages across the landscape, linkages provided by roads and other remnant corridors and by parcels of remnant bushland under non-Council management.

REPORT

A simple definition of Biodiversity is the complex and interconnected web of all living organisms.

The NSW Biodiversity statement from the Office of Environment and Heritage (OEH) 2015, goes on to say that “Biodiversity is vital in supporting human life on Earth. It provides many benefits, including food, medicines and industrial products. It supplies clean air and water, and fertile soils.

*Australia is home to more than one million species of plants and animals, many of which are unique. About 82 per cent of our mammals and 93 per cent of our frogs are found nowhere else in the world. Over the last 200 years, the Australian environment has been modified dramatically. Australia has lost 75 per cent of its rainforests and has the world's worst record of mammal extinctions.*

That statement from OEH defines some of the importance of natural areas but does not embrace the social and community benefits nor does it describe the unaccountable benefits of retaining native animals birds and insects in the landscape, some of those benefits are listed below;

- Providing stock shelter/Increased agricultural production
- Prevention of salinity and soil acidification
- Direct forest products such as timber, honey and medicine
- Visual amenity
- Tourism
- Preservation of the natural world
- Support for living things including humans
- Pest control
- Competition prevents weed invasion
- Provision of habitat for native species
- Filtering of pollution.
- Resilience of the ecosystem in the face of climate change and other pressures
- Maintenance of natural processes
- Agriculture is totally dependent on ecosystem processes and functions provided by biodiversity, soil formation, nutrient cycling, pollination of crops maintaining water cycles
- Protection from soil water loss and erosion
- Bacteria and fungi in a healthy understorey cause the constant breaking down and recycling of nutrients
- Improved land value

The biodiversity of Dubbo both in the context of the pre-1770 vegetation and what remains currently is compared, the following maps demonstrate very clearly the reduction in vegetated areas across the Dubbo landscape, thereby clearly demonstrating the importance and value of the remnant vegetation.
Wildlife corridors are described and their importance in a dissected landscape context explained. Wildlife corridors are vegetated linkages which cross a landscape linking otherwise isolated pockets of remnant bushland. Corridors are important as they allow for the movement of populations and genetic material between areas of remnant bushland. Localised extinction is a natural occurrence but in connected landscapes flora and fauna are able to repopulate vacant areas.

A number of priority wildlife corridors are then identified across the Dubbo landscape for future re-vegetation and regeneration works. The four (4) priority corridors are identified below and each could be implemented in whole or in part through the use of grant funding.

The four (4) corridors are:

1. **Northern Link**  
   Mogriguy Road, Golden Highway, Goonoo and woodlands east of the Newell Highway

2. **Eastern Link**  
   Wongarbon Tank, Wongarbon Nature Reserve, Beni Nature Reserve, Railway Lane, Railway Lane Quarry, Firgrove, Barbigal Road

3. **Southern Link**  
   Obley Road, Dilladerry, Tanners Creek, crown reserves at junction of creeks, link with Toongi Alkane offsets, Eulandool Road
4. Western Link
Western Railway corridor, Minore Road, Sappa Bulga Nature Reserve to the Macquarie River, Peak Hill Road Travelling Stock Reserves, Ten Mile Lane to Gibraltar Rock, expand Gibraltar Rock protected area.

Figure 1: This map illustrates the four (4) priority rural road corridor networks for future investment and management as biodiversity corridors.

The Biodiversity Report also raises the management issue of increasingly dense Cypress Pine (Callistris spp.) stands in relation to their impact on biodiversity. While they are native plants which are endemic to the Dubbo landscape, modern landscape management practices results in the creation of dense thickets via the absence of effective grazing or fire management. The impact of Callistris species on biodiversity is recognised by the Central West Local Land Services that lists the species as an “Invasive Native Species.” Control and management of this biodiversity threatening process is discussed. There is a lot of science generated through the Lachlan Catchment Management Authority and the Central Tablelands Local Land Services that the effective use of cool and appropriately timed fires increases the biodiversity at a site as well as reducing maintenance costs for weed management.

Weeds and feral animals are discussed with particular emphasis being placed on bird pest species, particularly Starlings and Indian Mynas, and the impact these feral species have on biodiversity.

A strategic approach for the future management and enhancement of Dubbo’s biodiversity is then outlined which includes the following recommendations:

Rural Reserves
- Council should actively manage dense Callitris stands with a view to enhancing habitat values. Recent partnerships between Local Land Services, Local Government and Local
Aboriginal Land Councils shows spring and autumn fires are a low cost and effective methodology.
- Council should seek to add scale to its smaller reserves wherever possible.
- Human recreational use must be managed effectively so that ecological function is not compromised.

**Rural Road Reserves**
- Seek external funding and utilise internal offsetting resources to revegetate prioritised Linkage networks.
- Target the “Eastern” link (Wongarbon Tank, Wongarbon Nature Reserve, Beni Nature Reserve, Railway Lane, Railway Lane Quarry, Firgrove, Barbigal Road) as a trial site for priority investment of funding and grant applications.
- If large scale funding opportunities arise, such as the Save Our Species grants, seek to implement all four priority linkages.
- Initial works will involve detailed corridor mapping and identification of areas of missing vegetation, plant identification, revegetation plans and maintenance plans.

**Undertake whole of LGA vegetation mapping**
- Council should undertake a whole of vegetation mapping exercise across the former Dubbo LGA area. Achieving this goal would see;
  - The acquisition of detailed vegetation data which will benefit Parks and Landcare Services Division in terms of flora assessments and the development of appropriate Rural Reserve management regimes.
  - More effective assessment of subdivision and development applications by Council’s Environmental Services Division. Analysis of consultant’s vegetation claims would be both faster and more accurate leading to more effective environmental protections and more effective approval of development applications.
  - Technical Services Division developing a greater understanding of roadside vegetation communities and Council’s obligations under the Threatened Species Act and association legislation.
  - Council use vegetation mapping data to nominate high biodiversity areas of leased Crown Land to enable conservation to be a consideration in lease and licence agreements.
  - Council able to use vegetation mapping data to nominate high biodiversity areas for purchase by Council for use with the adopted “bio banking” policy.
  - Council develop greater understanding of those parcels of crown land and travelling stock reserves nominated as valuable to the community for biodiversity and recreation purposes using a developed matrix to determine community value.

**Feral Animals**
Continue pursuing the outcomes of Council’s Feral Animal Management Strategy, with a particular focus on feral birds, specifically the continued exclusion of Indian Myna birds and managing existing Starling populations.
CONSULTATION

The attached report has been discussed with NSW Office of Environment and Heritage, Central West Local Land Services and Council’s Technical Services Division. Vegetation Mapping has been discussed with staff from Environmental Services and Technical Services Divisions.

This report does not change or increase Council’s environmental management requirements. Where infrastructure projects impact negatively on the natural environment Council currently undertakes best practise environmental mitigation through offsetting. The developing bio banking policy may well refine this practice. This report will neither increase nor decrease the offsetting required by Council on any specific project so will have a neutral impact on current project costings.

Where Council currently carries a responsibility to carry out environmental offsets Council will continue to do so following adoption of this report. Projects which bear no such responsibility now will not have an additional financial burden placed upon them through an adoption of the four (4) priority corridors.

The adoption of four (4) priority corridors creates the opportunity for Council to develop a structured and targeted offsetting and/or bio banking strategy. It was pointed out by Technical Services staff that by identifying the four (4) priority linkages we now have targeted areas for priority plantings, some of which may be internally generated through required offset plantings. This enables Council to have a more productive outcome.

SUMMARY

Biodiversity is a term which has been coined to describe the complex and interconnected web of living organisms in a landscape.

For the purposes of the attached report vegetation complexity or defined scarcity has been used as an analogue for biodiversity. Cleared areas have been shown to be less diverse than areas of remnant bushland.

The attached report focuses on the biodiversity in the rural (non-urban) areas of the former Dubbo City Council Local Government Area. The report identifies areas of public and private biodiversity value and the linkages across the landscape which wildlife in these landscapes depend upon. This report will highlight areas where gaps in the vegetated landscape can be identified and prioritised for future revegetation.

Given the nature of the Dubbo landscape, its gentle topography, rich soils and relatively easily cleared woodlands, very little of the 1770 vegetation cover of the region still remains. Connecting the isolated fragments of bushland which remain in the landscape is a key component in protecting the region’s Biodiversity moving forward into the future.
Appendices:

1  Dubbo Regional Council Rural Biodiversity Report - 2016
RURAL RESERVES BIODIVERSITY REPORT
ACKNOWLEDGEMENTS

Figure 1; Cover Page (from top) – Grey Crowned Babbler, Pine Donkey Orchid, Glossy Black Cockatoo.
Figure 2; This Page – The Macquarie River in Dubbo.
CONTENTS

Figure 1: Cover Page – Grey Crowned Babbler’s, Pine Donkey Orchid, Glossy Black Cockatoo. ................................................................. 2
Figure 2: This Page – The Macquarie River in Dubbo .......................................................................................................................... 4
Figure 3; Grassy Box Gum Woodland .................................................................................................................................................. 5

What is Biodiversity and why is it important? ................................................................................................................................. 6
Figure 4; Estimated pre-1770 vegetation cover and Current vegetation (DEH) .................................................................................. 7

Biodiversity of the Dubbo Landscape ............................................................................................................................................... 8
Figure 5; Grassy Box Woodland within the pre-amalgamation Dubbo Local Government Area ................................................................. 9
Figure 6; Major Mitchell’s Cockatoo .................................................................................................................................................. 11

What are Wildlife Corridors? ....................................................................................................................................................... 12
Figure 7; Council and NPWS reserves across the Dubbo landscape ................................................................................................. 14
Figure 8; Biodiversity Hotspots across the Dubbo landscape ......................................................................................................... 14

Priority Corridors ............................................................................................................................................................................. 16
Figure 9; Priority Wildlife Corridors for future DCC investment ...................................................................................................... 16
Figure 10; Painted Snipe ................................................................................................................................................................. 17
Figure 11; Superb Parrot, Koala, Regent Honeyeater ....................................................................................................................... 17

Callitris (Cypress Pine) domination ............................................................................................................................................. 18

Weeds and Feral Animal Management ........................................................................................................................................ 20
Figure 12; Indian Myna at a nesting hollow .................................................................................................................................... 21

Strategic approach for future management of Dubbo’s biodiversity moving forward ................................................................. 22
Figure 13; Fuzzy Box Woodland .................................................................................................................................................. 23

Appendix 1 ...................................................................................................................................................................................... 26
Appendix 2 ...................................................................................................................................................................................... 30
Bibliography .................................................................................................................................................................................. 34
INTRODUCTION

The purpose of this report is to examine the biodiversity of Council’s Rural Reserves within the previous Dubbo City Council area with particular emphasis placed on linkages across the landscape, linkages provided by roads and other remnant corridors and by parcels of remnant bushland under non-Council management.

Biodiversity is a term which has been coined to describe the complex and interconnected web of living organisms in a landscape. For the purposes of this report vegetation complexity or defined scarcity will be used as an analogue for biodiversity. Cleared areas have been shown to be less diverse than areas of remnant bushland (Stevens, 2001).

This report will focus on the biodiversity in the rural (non-urban) areas of the previous Dubbo Local Government Area (hereafter Dubbo), an approximately 3,900 km² area within the Central West of NSW, effectively a plains landscape to the west of the western edge of the Great Dividing Range. The report does not address Biodiversity across the previous Wellington Council area of the new Dubbo Regional Council.

This report will identify areas of public and private biodiversity value and the linkages across the landscape which wildlife in these landscapes depends upon. This report will highlight areas where gaps in the vegetated landscape can be identified and prioritised for future revegetation and areas of high quality biodiversity which should be considered prior to development.

Given the nature of the Dubbo landscape, its gentle topography, rich soils and relatively easily cleared woodlands very little of the 1770 vegetation cover of the region still remains. Connecting the isolated fragments of bushland which remain in the landscape is a key component in protecting the regions Biodiversity moving forward into the future.
Figure 3; Grassy Box Gum Woodland
WHAT IS BIODIVERSITY AND WHY IS IT IMPORTANT?

A simple definition of Biodiversity is the complex and interconnected web of all living organisms.

The NSW Biodiversity statement (OEH, 2015) goes on to say that “Biodiversity is vital in supporting human life on Earth. It provides many benefits, including food, medicines and industrial products. It supplies clean air and water, and fertile soils.

Australia is home to more than one million species of plants and animals, many of which are unique. About 82 per cent of our mammals and 93 per cent of our frogs are found nowhere else in the world. Over the last 200 years, the Australian environment has been modified dramatically. Australia has lost 75 per cent of its rainforests and has the world’s worst record of mammal extinctions.”

That statement from OEH defines some of the importance of natural areas but does not embrace the social and community benefits nor does it describe the unaccountable benefits of retaining native animals, birds and insects in the landscape, some of those benefits are listed below:

- Provision of stock shelter/increased agricultural production
- Prevention of salinity and soil acidification
- Direct forest products such as timber, honey and medicine
- Visual amenity
- Tourism
- Preservation of the natural world
- Support for living things including humans
- Pest control
- Competition prevents weed invasion
- Provision of habitat for native species
- Filtering of pollution
- Resilience of the ecosystem in the face of climate change and other pressures
- Maintenance of natural processes
- Agriculture is totally dependent on ecosystem processes and functions provided by biodiversity
- Soil formation, nutrient cycling, pollination of crops maintaining water cycles
- Protection from soil water loss and erosion
- Bacteria and fungi in a healthy understorey cause the constant breaking down and recycling of nutrients
- Improved land value

Figure 4 (overleaf) shows two maps developed from OEH data which show the estimated 1770 and current vegetation cover across the previous Dubbo LGA, defined by plant community. This map clearly demonstrates vegetation loss across the landscape with time. Vegetation cover is a clearly accepted analogue for biodiversity. These maps clearly demonstrate what has been lost and the importance of the vegetation which remains.
Figure 4: Estimated pre-1770 vegetation cover (top), and Current vegetation cover (bottom) - (OEH)
BIODIVERSITY OF THE DUBBO LANDSCAPE

The Biodiversity of the Dubbo landscape is composed of publicly managed bushland, privately managed bushland and the linkages which join those areas and the animals, birds, fish and insects which utilise those environments across the landscape. Vegetated linkages across this largely cleared landscape predominantly include rural roads, unmade Crown roads and rivers and creekline (riparian) areas.

Publicly managed bushland is clearly the most highly protected bushland in the Dubbo landscape, as such its biodiversity value is very high. Privately managed bushland is susceptible to loss through development and negative impact through human recreation or commercial activity, such as grazing or cropping.

Of the publicly managed bushland it is beyond the scope of this report to discuss lands managed by the NSW National Parks and Wildlife Service, Crown Lands or the Central West Local Land Services. This report is focused on Councils rural reserves, their biodiversity and means which can effectively increase the biodiversity value of these land parcels, principally enhancing and protecting linkages or corridors with other remnant parcels.

Within the Dubbo environment our geographic location between the slopes and plains places us firmly in the zone of Grassy Box Gum Woodlands, some of the most agriculturally attractive landscapes in NSW, and in turn some of the most highly cleared landscapes in the state.

The areas of open grassy woodland present when Dubbo was settled in 1828 (see Figure 5, comparing pre 1770 Grassy Box Woodland coverage with current extent) made for easy grazing of stock, and the fertile Box-Gum woodland country made for excellent cropping country as the broadly spaced trees were easily cleared.

Since Dubbo was first settled in 1828 the majority of NSW and Dubbo’s Grassy Box Gum woodlands have been cleared. Grassy Box Gum Woodland is a generic description of a combination of plant communities dominated by box family Eucalypts. Within Dubbo these include, Fuzzy Box Woodlands, Inland Grey Box Woodlands, White Box, Yellow Box, Blakely’s Red Gum Woodlands and Poplar Box Woodlands.

Currently NSW has less than 2% of the pre-1770 Fuzzy Box Woodland area, less than 3% of the previous area of Inland Grey Box Woodland and less than 1% of the previous area of White Box, Yellow Box, Blakely’s Red Gum Woodland (all estimates OEH, 2015).

These three plant communities are all identified by the NSW Scientific Committee as Endangered Ecological Communities (EEC). They comprise a significant component of the Dubbo landscape, particularly east of the Newell Highway and south of the Mitchell Highway beyond that.

EEC’s are effectively protected landscape sub-ssets, while named for the dominant or co-dominant plant species the named species are not the only protected elements within that landscape. It is a common misconception that a named EEC offers protection to the named species only. A scientific Committee formed by the State Government has defined the protected plant communities and they are listed in Appendix 1.

As well as these three protected Grassy Box Gum Woodlands Dubbo contains the non-protected Poplar Box Woodlands, predominantly in the LGAs west.

The maps below dramatically demonstrate the landscape scale loss of Grassy Box Woodlands from the Dubbo environment. These maps are derived from the previous maps shown in Figure 4.
As well as the dramatically reduced protected ecological communities (as demonstrated above) the Dubbo area also contains significant areas of Mugga Ironbark forest which is not currently regarded as an EEC, but which offers increasingly important refuge areas for the animals and birds which have been lost or displaced from Woodland environments which have been cleared or extensively grazed.

The Mugga Ironbark forests largely survive for purely economic reasons. They generally grow on poor sandy and gravelly soils which do not support verdant grasslands and the Ironbark timber itself is economically valuable leading to its conservation through forestry.

The following table list Councils Rural Reserves their scale, habitat types and current vegetation quality. For the purpose of this report Rural is assumed to mean beyond the speed restriction zones of Dubbo city.

Figure 5: Grassy Box Woodland within the pre-amalgamation Dubbo Local Government Area
## BIODIVERSITY OF THE DUBBO LANDSCAPE

### TABLE 1; DUBBO REGIONAL COUNCIL'S RURAL RESERVES

<table>
<thead>
<tr>
<th>RESERVE NAME</th>
<th>SIZE (HA)</th>
<th>HABITAT TYPES</th>
<th>BIODIVERSITY QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butlers Falls</td>
<td>4</td>
<td>Riparian Woodland</td>
<td>Moderate – lacking recruitment</td>
</tr>
<tr>
<td>Caroline Park</td>
<td>5</td>
<td>Riparian Woodland</td>
<td>Moderate – lacking recruitment</td>
</tr>
<tr>
<td>Terramungamine</td>
<td>15</td>
<td>Riparian Woodland Grassy Box Gum Woodland (EEC)</td>
<td>Moderate – lacking recruitment</td>
</tr>
<tr>
<td>Wongarbon School Park</td>
<td>5</td>
<td>Ornamental</td>
<td>Moderate</td>
</tr>
<tr>
<td>Baldimore Oval</td>
<td>10</td>
<td>Fuzzy Box Woodland (EEC)</td>
<td>Good</td>
</tr>
<tr>
<td>Thelma Pelosi Park</td>
<td>2</td>
<td>Ornamental</td>
<td>Moderate</td>
</tr>
<tr>
<td>Dickigundi</td>
<td>20</td>
<td>Riparian Woodland</td>
<td>Good</td>
</tr>
<tr>
<td>Pilchers</td>
<td>5</td>
<td>Riparian Woodland</td>
<td>Good</td>
</tr>
<tr>
<td>Wongarbon Tank</td>
<td>20</td>
<td>Grassy Box Gum Woodland (EEC)</td>
<td>Good</td>
</tr>
<tr>
<td>Mugga Hill</td>
<td>20</td>
<td>Grassy Box Gum Woodland (EEC), Mugga Ironbark Forest</td>
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<td>Cumboogle Flora Reserve</td>
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<td>Grassy Box Gum Woodland (EEC)</td>
<td>Good</td>
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<tr>
<td>North Burrendine</td>
<td>4</td>
<td>Riparian Woodland</td>
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</tr>
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<td>Beni Creek</td>
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<td>Riparian Woodland</td>
<td>Good</td>
</tr>
<tr>
<td>Brillal Falls</td>
<td>8</td>
<td>Riparian Woodland</td>
<td>Moderate – lacking recruitment</td>
</tr>
<tr>
<td>Brumagen</td>
<td>2</td>
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<td>Good</td>
</tr>
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<td>Coolbaggie Creek</td>
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<td>Riparian Woodland</td>
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<td>Cullen Park</td>
<td>14</td>
<td>Grassy Box Gum Woodland (EEC)</td>
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<tr>
<td>Eumungerie Creek</td>
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<td>Riparian Woodland</td>
<td>Good</td>
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<td>Gibraltar Rock</td>
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<td>Moogiriya/Goonoo</td>
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<td>Angle Road</td>
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<td>Grassy Box Gum Woodland (EEC)</td>
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<td>Benelong</td>
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<td>Burrabadine Park</td>
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<td>Caledonia Park</td>
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<td>Cumboogle Creek</td>
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<td>Pinedale</td>
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<td>Grassy Box Gum Woodland (EEC)</td>
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<tr>
<td>Wrights Crossing</td>
<td>4</td>
<td>Riparian Woodland</td>
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</tr>
</tbody>
</table>
This table clearly demonstrates that while Council controls a large number of individual Reserves they are generally small, frequently smaller than the threshold scale required by many woodland birds. Birds, particularly woodland birds require a relatively large area of healthy woodland in a block or parcel to remain viable. This “threshold” of viability has been defined as 20 hectares or above by Ford and Howe (1980). Small areas of Council managed natural bushland are dependent on linkages to adjoining public or privately managed bushland to ensure appropriate scale required for effective biological functioning.

The animals and plants of the Dubbo landscape include a significant number of threatened species. Dubbo is largely covered by the Tularagai Valley sub-region definition of the DEH state classifications. The full list of threatened animals and plants is found in Appendix 2.

Specific important threatened species within the Dubbo landscape include Grey Crowned Babbler, Bardling and Powerful Owls, Glossy Black Cockatoos, Mallee Fowl, Regent Honeyeaters, Painted Snipe, Diamond Firetail, Superb Parrot, Koala, Squirrel Glider, Gilberts Whistler, Flame Scarlet and Hooded Robins, Major Mitchell Cockatoo, Speckled Warbler and Bush Stone Curlew.

It should be noted that the bulk of these threatened species are Woodland specific bird species. Habitat loss and loss of landscape connectivity have dramatically reduced these species numbers and range. Again scale or remnant size, as mentioned above, is critical in ensuring the future survival of these species.

The north-eastern corner of the pre-amalgamation LGA contains the extremely large remnant Ironbark forests of Coonoomin National Park. In addition Dubbo contains Nature Reserves at Berr, Coolabigge, Wongarbin and Sappa Bulga. While these sites protect large areas of remnant natural vegetation they do not cover the majority of the Dubbo landscapes natural remnants.

The majority of the uncleared land is privately owned and subject to the threat of future development as a result. Development of these areas for agriculture is beyond the control of Council, development of bushland for subdivision and infrastructure is however within the purview of Council and an effective, formal, policy managing such development is required.

The Dubbo environment contains three major rivers, the Macquarie, the Little and the Tularagai and a number of creeks which act as very important corridors of remnant vegetation through the largely cleared landscape. These river and creek lines link areas of public and private bushland and offer wildlife an opportunity to migrate through the landscape in search of food and habitat resources.

These rivers and creeks also offer important drought refugia sites (Lake, 2003, Rayner, 2009). In an era of long term climate variability such remnant areas will become increasingly important and it has also been predicted that these areas will see increased competition for resources from human residents of the landscape (Unite Nations Development Program, 2006).

In the event that current climate change predictions prove correct animals will attempt to seek more amenable climatic conditions by migrating across the landscape to higher elevations (Iliev, 2003). In the Dubbo environment such sites are rare and will rapidly become congested.

Importantly as well, past development practices have retained significant linear corridors across the landscape which also act to link remnant bushland areas. These linear corridors are road corridors (both built and undeveloped) and Trailing Stock Routes (TSRs) which have retained sufficient food resources, habitat and protection for animals moving across a landscape.

Linear corridors and vegetated waterways are also known as Wildlife corridors because they offer wildlife an opportunity to move through the cleared surrounding landscape from one “island” of remnant vegetation to the next.

These linear corridors also provide habitat and protection for biodiversity in themselves, with or without linking larger remnant bushland parcels. This is particularly the case with wider corridors which have had minimal development impacts.

Figure 6; Major Mitchell’s Cockatoo
WHAT ARE WILDLIFE CORRIDORS?

A wildlife corridor is a link of wildlife habitat, generally native vegetation, which joins two or more larger areas of similar wildlife habitat. Corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations of native animals and plants.

By providing landscape connections between larger areas of habitat, corridors enable migration, colonisation and interbreeding of plants and animals. Corridors can consist of a sequence of stepping stones across the landscape (discontinuous areas of habitat such as paddock trees, wetlands, and roadside vegetation) or continuous linear strips of vegetation and habitat (such as riparian strips, road sides and travelling stock routes (TSRs) etc.).

In the cleared western plains landscape the corridors themselves are vital areas of habitat, largely consisting of mature remnant trees although a linear corridor is insufficient habitat for a large range of endemic woodland bird and animal species which require woodlands with a patch size of at least 20 hectares for long term sustainability.

Animals such as echidnas and the macropod family (kangaroos and wallabies) and bird families such as the Tree Creepers, Whistlers, Robins and more all require woodland patch sizes exceeding 20 hectares to be viable (Rossmann and Field, 2000).

WHY ARE CORRIDORS IMPORTANT?

Habitat loss and fragmentation are the two main contributors to continuing biodiversity decline across the landscape. A holistic approach is required across both public and private lands to protect and manage natural ecosystems and ensure connectivity between remaining habitats. When native vegetation is cleared, fragmented patches or islands are created.

These patches may become increasingly cut-off from other areas of habitat resulting in many plant and animal species becoming isolated, especially when land between the patches is permanently altered for human activities. As these vegetation patches are reduced in size and become increasingly isolated, the on-going viability of ecosystems and individual populations of species within them is severely affected.

This ultimately leads to a break down in ecological processes such as species migration, dispersal, recycling of nutrients, pollination of plants and other natural functions required for ecosystem health.

The likely result is severe biodiversity decline and local extinction of sensitive species.

Corridors play an extremely important role in the maintenance of biodiversity but they can only partly compensate for the overall habitat loss produced by the fragmentation of the natural landscape. Not all species are capable of movement through a landscape using unconnected vegetation remnants.

It is important, therefore, that vegetation remnants and vegetated corridors are maintained and enhanced as a network across all lands both private and public. In this way private landscapes can contribute to wider landscape conservation efforts by enhancing and linking existing reserves and conservation networks.

Wider and less developed contiguous corridors offer the greatest opportunities for flora and fauna survival and movement across the landscape. Those corridors with reduced grazing pressures offer the greatest opportunities for flora survival, contiguous corridors offer unbroken movement opportunities for wildlife and corridors which link large areas of remnant bushland offer the greatest biodiversity values across the landscape. As well of course the ecological communities which comprise the corridor will influence a corridor's value. Endangered Ecological Community corridors will have a significantly higher value than non-EEC corridors.

The map (pictured right) clearly demonstrates the scattered nature of currently protected lands within the Dubbo environment and the acute need for linkages and extensions to the protected lands estate.
Figure 7: Council (Green Diamonds) and NPWS reserves (green polygons) across the Dubbo landscape. (The map scale does not allow all Crown Lands to be shown).
Figure 8: Biodiversity Hotspots across the Dubbo landscape
This complicated map (pictured left) shows substantial areas of remnant bushland (labeled in green and including the NPWS estate), Council’s reserve estate as green diamonds, crown lands and TSRs which are involved with the Crown Land Review as blue squares and red dots and major rivers and creeks as interconnected blue lines.

The map shows clearly the scattered nature of remnant vegetation in the Dubbo landscape, and also the broad spread of the remaining “Islands” of biodiversity. The linking corridors formed by creeks and rivers (which are generally vegetated) and by the road corridors (which may or may not be vegetated) offer a strategic platform from which to expand and develop rural biodiversity across the previous Dubbo LGA.

Crucially within that context private landholders are clearly the largest stakeholder in the ongoing protection of Dubbo’s residual biodiversity. Comparing Figures 8 and 9 shows very clearly the crucial role non-public land managers have played, and will continue to play in the protection of Dubbo’s biodiversity.

Council may also become the recipient of a large amount of remnant vegetation through the Crown Land Review and the ongoing rationalisation of the TSR estate.

Strategically the roads offer the best opportunities for Council enhancement of biodiversity as these are largely Council managed. The creeks and rivers are largely privately held making strategic investment more problematic. These biodiversity assets are also legislatively protected.

Council controls the road network which opens up possibilities for targeted revegetation in order to enhance or reinforce the wildlife corridors identified above. It is in this context that the following priority corridors have been identified. These links are seen as the highest priority corridors for investment into biodiversity protection across the LGAs because they are the easiest to impact positively and will provide the most effective return on investment by revegetating short strips between existing biodiversity hot spots.
Figure 9: Priority Wildlife Corridors for future DCC investment

1. Northern Link – Magrigi Rd, Golden Highway, Goonoo and woodlands east of the Neolvei
2. Eastern Link – Wongarbon Tank, Wongarbon NR, Bessi NR, Railway Lane, Railway Lane Quarry, Firkrove, Barbigal Road
3. Southern Link – Obley Rd, Dillioderry, Tonners Creek, crown reserves at junction of creeks, link w Toongi offsets, Euandool road
4. Western Link – Western Railway corridor, Minore Rd, Sappa Bulga NR to the Macquarie River, Peak Hill Rd TSRs, Ten Mile lane to Gibraltar Rock, expand Gibraltar Rock protected area,
These priorities provide wildlife corridor links across the Dubbo landscape and specifically offer connectivity between publicly and privately managed remnant bushland and the rivers and creeks which form critical additional linkages.

It is recommended that Council seek and apply resources as they become available into these four networks as a priority. The numbering is purely accidental and should not be seen to prioritize the northern link over the southern. It could be determined for instance that network 2, the Eastern link is the first priority due to its short length and proximity to both the City of Dubbo and large numbers of peri-urban residents. Linkage 2 could well be targeted as a demonstration link, one in which funding investments are used to leverage community support and additional future funding.

It should be noted that funding is expected to be from external sources, or from internal project offsetting funds.

Figure 10; Painted Snipe

Figure 11; Superb Parrot, Koala, Regent Honeyeater
CALLITRIS (CYRESS PINE) DOMINATION

Both Callitris species found in Dubbo have the capacity to regenerate en-masse, although Black Cypress is more likely to achieve this outcome (Banks and Pulsford, 2001). The last mass regeneration event in the Central West is anecdotally reported to have occurred in the mid 1950's in a particularly wet summer season.

Such regeneration events lead to what is described as "wheat field regeneration". This is where a mass germination has occurred and a large area of single age juveniles results. In Eucalypts this process also occurs, following flooding or fire, however the significant difference is the Eucalypts rapidly undergo self thinning through selection of the fittest. Callitris by contrast do not significantly self thin, rather they reach a point rather like an arm wrestle at stalemate where the majority of plants are surviving, but just, and by doing so are consuming so much of the available nutrient and moisture that little else will grow around them (Thompson and Eldridge, 2005).

Trees which germinated in the mid 1950's event are widely seen across the Central West as 1-4 meter tall trees. These trees are seen in dense stands which are growing very slowly; these stands also typically have little understory or ground cover growth.

Other common scenes across the Central West and beyond are dense stands of Black Cypress along road sides where construction and maintenance grading has offered disturbed sites in which germination can occur readily. Again these dense germinations have reached "lock up", as discussed below.

Mass regeneration events such as these are only possible in areas in which grazing pressure is low. As has previously been described, Callitris seedlings are palatable to stock and easily killed as seedlings by grazing. Once established however Callitris is immune to grazing as a control.

Where grazing pressure has been removed, or is naturally low (such as Councils Reserves) Callitris can germinate en-masse, literally side by side, which can lead to the following issue if not addressed through management.

There is significant controversy regarding whether or not such dense germinations are natural or artifacts of European settlement. According to Banks and Pulsford (2001) for such dense stands to develop into open woodland and open forests as described by early explorers and settlers (Rolls, 1981) dominant trees would need to emerge (as they do with Eucalypts). In a genus in which dominance is so weakly expressed this is highly unlikely, nor is drought or fire likely to be selective, rather, either would destroy the entire stand. The alternative advocated by Banks and Pulsford is that such dense stands are caused by European land management practices and that without manipulation these stands will be unable to develop beyond their "locked up" stage into Woodlands or Open Forests.

Whipp (et al, 2012) concur with Banks and Pulsford. They have found that over a sixty year study period Callitris dense woodlands have become significantly denser with both greater stem density and basal areas. This is regarded by the team as evidence of woodland environments being transformed into the more closed forest environment and is predicted to continue if intervention does not occur.

Anne Kerle (pers. comm.), a consulting ecologist and past member of the Central West Catchment Management Authority Board, and others believe the following scenario is more likely and believe the dense stands will develop into woodlands over approximately 200 or more years. Clearly if this is the natural cycle it is beyond human perception and politics/aesthetics/biodiversity considerations may require intervention at an earlier point in that prolonged process.
Cypress forests are naturally successional forests, they progress through five recognisable growth phases. These phases are:

1. A lack of any regular or annual seedling recruitment. Natural recruitment is characterised by major recruitment events that can be years or decades apart and can be very localised in area from only a few hectares to several hundred hectares. The trigger for these recruitment events tends to be major rainfall events that can be a single storm or more general rain over an extended period.

2. The seedling recruitment is characteristically very dense and leads to a condition referred to as "lock-up" in which the seedlings do not grow and remain at a static height and density. This "lock-up" can be found in trees less than 2m high. The density is such that the ground underneath these seedlings has very little ground cover species resulting in very low biological diversity in these areas. Seedling "lock-up" is broken by mechanical disturbance such as from fire and wind storms. Seedlings not damaged or broken grow above the broken individuals in a more open canopy.

3. This stage is a repeat of the "lock-up" but at a larger size. Likewise individuals stop growing and the closed canopy prevents grasses and other ground cover species from establishing a diverse ground cover. This stage can be repeated several times in the life of the forest and in each successive event the tree density is slightly less and the individual trees are larger.

4. Fire. Fire in a cypress forest typically causes very high mortality and only a low proportion of trees survive at low densities.

5. This is a forest with regrowth after devastation by fire or less frequently by severe wind storms and with dispersed "old grey" trees that are the survivors from the earlier recruitment.

It is recommended that Council adopt a pro-active management philosophy in relation to dense stands of Callitris in its reserves with a view to enhancing biodiversity within a human lifespan. Such management would aim to reduce "locked up" stands of Callitris thereby allowing germination and growth of alternative species and offering increased food and habitat resources to native animals and birds.
WEEDS AND FERAL ANIMAL MANAGEMENT

Feral animals and weeds are alike in that both are organisms out of place. The NSW Biosecurity Act (2015) defines both as “pest”. A “pest” is defined by the Act as a plant or animal (other than human) that has an adverse effect on, or is suspected of having an adverse effect on, the environment, the economy or the community.

Pests are animals or plants which are not wanted, can do damage and in the case of biodiversity can displace desirable endemic (local) native species. For the purpose of clarity the specific phrases “weeds” and “feral animals” will be used in this document.

Both weeds and feral animals can be native organisms; an example is the Coolah wattle which is a significant weed of coastal areas in NSW.

More commonly however weeds and feral animals will be introduced to Australia where they have found a niche in which they have thrived, often to the point of displacing native flora and fauna.

Naturally controlling these damaging organisms is a high priority for land managers and should continue to be so.

Council weeds staff will continue to inspect and treat Council bushland for weeds which have been found. This is predominantly to protect the native bushland but is also a protection for neighbouring private landholders into whose land weeds can escape thereby potentially imposing economic hardship.

Feral animal management is significantly more difficult than weed management as the target animals are very mobile and programmed control must be flexible and multi-tenure. Several significant feral animals are well established in the Dubbo landscape and control efforts would likely be misplaced for foxes, cats, rabbits and pigs. Effectively the horse has bolted with regard these species.

Feral birds are an ongoing issue, and similar to the above terrestrial species control to the point of eradication is now impossible for starlings and blackbirds across the landscape. Controlling their behaviour is however an achievable target, particularly with regard bird impact in specific high profile areas. The management of starlings in Macquarie Street is one example where Council is committed to reducing the noxious impact of feral animals.

Of great concern to Dubbo’s environment is the potential arrival of Indian Myna birds. This feral species is particularly aggressive and is known to drive native animals and birds away from nesting habitat and food sources. Not yet in Dubbo Indian Mynas are known to be within the region. They are already in Dunedoo and Wellington Council and their continued exclusion from Dubbo is an extremely high priority for Council’s Feral Animal Management Strategy.

In cities where Indian Mynas have become established they have become a greater issue than Starlings, Blackbirds or any other feral bird (Canberra Indian Myna Action Group, 2014) and would pose not just a threat to biodiversity, but also an economic challenge for the City (Canberra Indian Myna Action Group, 2013).

Continued support from Council for its weed management programs, particularly on Council reserves, and for the Feral Animal Management Strategy (specifically the feral bird control program) are seen as crucial to the future protection and enhancement of Dubbo’s biodiversity.
This bird is Dubbo's number one feral animal management priority. Preventing its establishment in the City is the most cost effective management approach for this species. An extremely aggressive bird known to displace native animals and birds from nesting hollows and to dominate food sources, this animal would severely impact Dubbo's biodiversity if allowed to establish as demonstrated in Canberra (Canberra Indian Myna Action Group, 2013 and 2014). Currently excluded from the LGA continued exclusion will also allow scarce resources to be dedicated to Starling management.

Figure 12: Indian Myna at a nesting hollow.
STRATEGIC APPROACH FOR FUTURE MANAGEMENT OF DUBBO'S BIODIVERSITY MOVING FORWARD.

As discussed above the review of Crown Lands has the potential to impact Council's future management of its rural bushland estate through transfers of unwanted Crown lands to Council management.

While the Crown and TSR managers have been undertaking their reviews Council’s Landcare Services Manager developed a set of criteria against which to assess Crown Reserves or TSRs. The criteria included scale, location in the landscape, proximity to existing Council reserves, presence of Endangered Ecological Communities and other criteria.

Without Council involvement in managing areas which are potentially unwanted by the Crown the large area which has been identified (1,800 ha) through this process for potential transfer to Council because of its biodiversity or recreational virtues would be lost to the community and potentially set stockaded.

Set stocking involves heavy grazing pressures over a sustained period which significantly impacts species composition. In remnant areas (more palatable species are grazed out preferentially) and therefore the capacity of bushland to sustain the variety of animal and bird species previously found in these areas.

As well as these transferred lands Council could strategically identify and invest in the return of currently leased crown bushland, such as areas of land north of the Old Mendooran Road. This large area of diverse bushland is currently leased for grazing purposes but contains significant landscapes and, presumably, diverse vegetation communities.

Additionally there are areas of privately owned bushland which are unique within the Dubbo landscapes and which are currently unprotected, such as the bulk of Gibraltar rock and the Granite Tor landscapes of the Dilligarr Road area. These unique landscapes offer unique habitat opportunities, and with them unique biodiversity and human recreation opportunities.

Protection of these environments from potential future development, or overgrazing by Council may be the most effective means of ensuring that representative examples of the entire biological environment of the Dubbo landscape are protected. Council is a highly cost effective land manager with capacity to manage smaller land parcels than NSW NPWS for example.

Other alternative means of protecting these landscapes is through the use of Binding Voluntary Conservation Agreements (VCAs - which can be tied to the property) entered into by sympathetic landholders. These VCAs can be linked with the NSW Biobanking Program approvals and could potentially be used by Developers in Dubbo (or elsewhere) to offset the impacts of development while also earning revenue from protected bushland for the landholder.

Council could take a role as an active promoter of VCAs and biobanking agreements. Potentially Council could become a participant in biobanking programs, either as a developer requiring environmental offsets to mitigate the impact of works, or as a provider of biobanking offsets through its existing or future land estate, or could play both roles.

Biodiversity rich land which is purchased by Council can be used to offset Council developments or infrastructure projects which impact native vegetation thereby requiring vegetation offsets. Alternatively such areas could be used to offset the environmental impact mitigation needs of private developers. Such a process could potentially compensate for both the purchase price of the land and its ongoing management and maintenance.

Identifying biodiversity rich areas which would be suitable for such either purchase or by Council or return of leased crown lands using vegetation as a key defining element reflecting biodiversity is a well recognised means of prioritising such areas.

Vegetation mapping for the entire Dubbo LGA (excluding NPWS managed lands) has been proposed as a valuable means of assisting with more accurate biodiversity planning, a means of minimising the importance of consultant reports when assessing development applications, a means of informing enquires into development opportunities and understanding the potential implications of planned Council works.

Accurate vegetation mapping of the Dubbo LGA using the Benson plant classification systems and accurate Aerial Photographic Interpretation is available to Council at reasonable cost and should be pursued.
Figure 13: Fuzzy Box Woodland
STRATEGICALLY THE FOLLOWING IS RECOMMENDED:

1. Continue to manage DRC’s Rural Reserves with biodiversity enhancement as a priority;
   – Council should actively manage dense Callitris stands with a view to enhancing habitat values
   – Council should seek to add scale to its smaller reserves whenever possible
   – Council should encourage, wherever possible, natural processes to flourish undisturbed
   – Human recreational use must be managed and impact minimised
2. Seek external funding and utilise internal offsetting resources to revegetate prioritised Linkage networks;
   – Use the priority wildlife corridors identified in Figure 10
   – Target the “Eastern” link (Wongarbon Tank, Wongarbon Nature Reserve, Been Nature Reserve, Railway Lane, Railway Lane Quarry, Figrove, Barbigal Road) as a trial site for priority investment of funding and grant application.
   – If large scale funding opportunities arise (ie Save Our Species grants) seek to implement all four priority linkages as shown in Figure 10
   – Works in each instance will involve detailed corridor mapping and identification of areas of missing vegetation, plant identification, revegetation and ongoing maintenance of planted plants.
3. Undertake whole of the pre-amalgamation LGA vegetation mapping;
   – The acquisition of detailed vegetation data will benefit Parks and Landcare Division (it would achieve the final cut point in the above action for instance)
   – Environmental Services Division (making assessment of subdivision applications and analysis of consultants vegetation claims both faster and more accurate) and Technical Services Division (through developing greater understanding of roadside vegetation communities better management of these corridors will be achieved thereby meeting Council’s legal obligations).
   – Note that it is not possible to extend this level of mapping to the whole of the DRC LGA due to the lack of complete coverage of the previous Wellington LGA by vegetation classifications.
4. Use vegetation mapping data to nominate high biodiversity areas of leased crown land for return to public management.
5. It be noted that a “biobanking” policy is under development for DRC.
6. Using vegetation mapping data nominate high biodiversity areas for purchase by Council for use with the adopted “biobanking” policy. This may well link to the prioritised Linkages.
7. If available consider accepting management responsibility for those parcels of crown land and travelling stock reserves nominated as valuable to the community for biodiversity and recreation purposes using a developed matrix to determine community value.
8. Continue pursuing the outcomes of Council’s Feral Animal Management Strategy, with a particular focus on feral birds, specifically the continued exclusion of Indian Myna birds and managing existing Starling populations.
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APPENDIX 1

SPECIES PROFILES FOR ENDANGERED ECOLOGICAL COMMUNITIES OF THE DUBBO LANDSCAPE.
FUZZY BOX WOODLAND ON ALLUVIAL SOILS OF THE SOUTHWESTERN SLOPES, DARLING RIVERINE PLAINS AND BRIGALOW BELT SOUTH BIO-REGIONS

Source, Office of Environment and Heritage, 2015

DESCRIPTION
Tall woodland or open forest dominated by Fuzzy Box Eucalyptus conica, often with Grey Box Eucalyptus microcarpa, Yellow Box Eucalyptus melliodora, or Kurrajong Brachychiton populneus. Buloke Allocasuarina luehmannii is common in places. Shrubs are generally sparse, and the groundcover moderately dense, although this will vary with season.

DISTRIBUTION
Alluvial soils of the South West Slopes, Brigalow Belt South and Darling Riverine Plains Bioregions. Mainly in the Dubbo-Narromine-Parkes-Forbes area.

HABITAT AND ECOLOGY
- Community occurs on brown loam or clay, alluvial or colluvial soils on prior streams and abandoned channels or slight depressions on undulating plains or flats of the western slopes.
- Community often occurs upslope from River Red Gum communities above frequently inundated areas of the floodplain. It also occurs on colluvium soils on lower slopes and valley flats.
- Less than 5% of the original extent is estimated to remain.
- Shrubs include Wilga, Deane's Wattle, Hop Bush, Cassia, Water Bush and Sifton Bush.
WHITE BOX, YELLOW BOX, BLAKELY’S RED GUM WOODLAND

DESCRIPTION

White Box, Yellow Box, Blakely’s Red Gum Woodland (commonly referred to as Box Gum Woodland) is an open woodland community (sometimes occurring as a forest formation), in which the most obvious species are one or more of the following: White Box (Eucalyptus albens), Yellow Box (E. melliodora) and Blakely’s Red Gum (E. blakelyi). Intact sites contain a high diversity of plant species, including the main tree species, additional tree species, some shrub species, several climbing plant species, many grasses and a very high diversity of herbs. The community also includes a range of mammal, bird, reptile, frog and invertebrate fauna species. Intact stands that contain diverse upper and mid-stories and ground layers are rare. Modified sites include the following:

- Areas where the main tree species are present ranging from an open woodland formation to a forest structure, and the ground layer is predominantly composed of eucalypt species; and
- Sites where the trees have been removed and only the grassy groundlayer and some herbs remain.

The Australian Government listing of White Box-Yellow Box-Blakely’s Red Gum Grassy Woodland and Derived Native Grassland is slightly different to the NSW listing. Areas that are part of the Australian Government listed ecological community must have either:

- An intact tree layer and predominately native ground layer; or
- An intact native ground layer with a high diversity of native plant species, but no remaining tree layer.

DISTRIBUTION

- Box-Gum Woodland is found from the Queensland border in the north, to the Victorian border in the south. It occurs in the tablelands and western slopes of NSW.

HABITAT AND ECOLOGY

- Characterised by the presence or prior occurrence of White Box, Yellow Box and/or Blakely’s Red Gum.
- The trees may occur as pure stands, mixtures of the three species or in mixtures with other trees, including wattles.
- Commonly co-occurring eucalypts include Apple Box (E. bridgesiana), Red Box (E. polyanthemos), Candlebark (E. rubida), Snow Gum (E. pauciflora), Angyle Apple (E. cinerea), Bitter Gum (E. munnifera), Red Stringybark (E. macrorrhyncha), Grey Box (E. microcarpa), Cabbage Gum (E. amplifolia) and others.
- The understorey in intact sites is characterised by native grasses and a high diversity of herbs; the most commonly encountered include Kangaroo Grass (Themeda australis), Poa Turfgrass (Poa sieberiana), willow grasses (Austrodanthonia spp.), spear-grasses (Austrostipa spp.), Common Everlasting (Chrysocephalum apiculatum), Scrambled Eggs (Goodenia pinnatifida), Small St John’s Wort (Hypericum gramineum), Narrow-leaved Narrow Holland Daisy (Vittadina Muelleri) and blue-bells (Wahlenbergia spp.).
- Shrubs are generally sparse or absent, though they may be locally common.
- Remnants generally occur on fertile lower parts of the landscape where resources such as water and nutrients are abundant.
- Sites with particular characteristics, including varying age classes in the trees, patches of regrowth, old trees with hollows and fallen timber on the ground are very important as wildlife habitat.
- Sites in the lowest parts of the landscape often support very large trees which have leafy crowns and reliable nectar flows – sites important for Insectivorous and nectar feeding birds.
- Sites that retain only a grassy groundlayer and with few or no trees remaining are important for rehabilitation, and to rebuild connections between sites of better quality.
- Remnants support many species of threatened fauna and flora.
- Retention of remnants is important as they contribute to productive farming systems (stock shelter, seed sources, sustainable grazing and water-table and salinity control).
- The fauna of remnants (Insectivorous birds, bats, etc.) can contribute to insect control on grazing properties.
- Some of the component species (e.g. wattles, she-oaks, native legumes) fix nitrogen that is made available to other species in the community while fallen timber and leaves recycle their nutrients.
- Disturbed remnants are considered to form part of the community, including where the vegetation would respond to assisted natural regeneration.
INLAND GREY BOX WOODLAND IN THE RIVERINA, NSW SOUTH WESTERN SLOPES, COBAR PENEPLAIN NANDEWAR AND BRIGALOW BELT BIOREGIONS

DESCRIPTION
Inland Grey Box Woodland includes those woodlands in which the most characteristic tree species, *Eucalyptus microcarpa* (Inland Grey Box), is often found in association with *E. populnea* subsp. *bimbil* (Bimbie or Poplar Box), *Callitris glaucophylla* (White Cypress Pine), *Brachychiton populneus* (Kurrajong), *Allocasuarina huehnermannii* (Bullock) or *E. melliodora* (Yellow Box), and sometimes with *E. albens* (White Box). Shrubs are typically sparse or absent, although this component can be diverse and may be locally common, especially in drier western portions of the community. A variable ground layer of grass and herbaceous species is present at most sites. At severely disturbed sites the ground layer may be absent. The community generally occurs as an open woodland 15–25 m tall but in some locations the overstorey may be absent as a result of past clearing or thinning, leaving only an understory.

DISTRIBUTION
Inland Grey Box Woodland occurs predominately within the Riverina and South West Slopes regions of NSW down to the Victorian border. It includes Albury to the east and may extend out west towards Hay. This community also extends across the slopes and plains in Central and Northern NSW up to the Queensland Border. This includes Yetman and Inverell in the North, Molong to the east of the Central Slopes and plains and out towards Nymagee to the west.

HABITAT AND ECOLOGY
- Inland Grey Box Woodland occurs on fertile soils of the western slopes and plains of NSW. The community generally occurs where average rainfall is 375–800 mm pa and the mean maximum annual temperature is 22–26°C.
- There is a correlation between the distribution of *Eucalyptus microcarpa* communities and soils of Tertiary and Quaternary alluvial origin, largely corresponding with the Red Brown Earths.
- The majority of remnant patches of Inland Grey Box Woodland survive with trees largely intact but with the shrub or ground layers degraded to varying degrees through grazing or pasture modification. Some species that are part of the community appear intolerant to heavy grazing by domestic stock and are confined to the least disturbed remnants.
APPENDIX 2

THREATENED ANIMALS AND PLANTS OF THE TALBRAGAR VALLEY SUB-REGION
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Life Form</th>
<th>IUCN Status</th>
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</thead>
<tbody>
<tr>
<td>Acacia ausfeldii</td>
<td>Ausfield's Wattle</td>
<td>Plants/ Shrubs</td>
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<tr>
<td>Anseranas semipalmata</td>
<td>Magpie Goose</td>
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<td>Anthochaera phrygia</td>
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<td>Botaurus poicoiloplos</td>
<td>Australasian Bittern</td>
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<td>Burhinus grallarius</td>
<td>Bush Stone-curlew</td>
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<td>Calothrix glandulosa</td>
<td>Mauve Burn-daisy</td>
<td>Plants/ Herbs and Forbs</td>
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<tr>
<td>Calyptrorhynchus lathami</td>
<td>Glossy Black-Cockatoo</td>
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<td>Cercartetus nanus</td>
<td>Eastern Pygmy-possum</td>
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<td>Chalinolobus dwayeri</td>
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<tr>
<td>Chalinolobus pictus</td>
<td>Little Pied Bat</td>
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<td>Chthonicola sagittata</td>
<td>Speckled Warbler</td>
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<td>Circus assimilis</td>
<td>Spotted Harrier</td>
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<td>Climacteris plicatus victorinae</td>
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<td>Commersonia procumbens</td>
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<td>Crinia sloanei</td>
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<td>Daphoenositta chrysophora</td>
<td>Varied Sittella</td>
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<td>Dasyurus maculatus</td>
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<td>Animals/ Marsupials</td>
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<td>Dianthus setosum</td>
<td>Bluegrass</td>
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<td>Diuris tricolor</td>
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<td>Epithiana albinina</td>
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<td>Falco hypoleucus</td>
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<td>Falco subniger</td>
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<td>Glossopittsa pusilla</td>
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<td>Grus rubicunda</td>
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<td>Hamirostra melanosternon</td>
<td>Black-breasted Buzzard</td>
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<td>Hieraaetus morphnoides</td>
<td>Little Eagle</td>
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<td>Homoranthus darwinioides</td>
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<td>Pale-headed Snake</td>
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<td>Inland Grey Box Woodland</td>
<td>Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Penrith, Nanango, and Brigalow Belt South Bioregions</td>
<td>Community/ Threatened Ecological Communities</td>
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## THREATENED ANIMALS AND PLANTS OF THE TALBRAGAR VALLEY SUB-REGION (CONTINUED)

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<thead>
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<td>Black-tailed Godwit</td>
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<td>Lopholictinia isura</td>
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<td>Black-chinned Honeyeater</td>
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<td>Turquoise Parrot</td>
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<td>Barking Owl</td>
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<td>Scarlet Robin</td>
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<td>Phascolarctos cinereus</td>
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<td>Plant&gt;Epiphytes and Climbers</td>
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</table>
THREATENED ANIMALS AND PLANTS OF THE TALBRAGAR VALLEY SUB-REGION (CONTINUED)

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<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>COMMON NAME</th>
<th>TYPE OF SPECIES</th>
<th>IUCN STATUS</th>
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<td>Endangered Ecological Community</td>
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<td>Zleria Ingramii</td>
<td>Keith’s Zleria</td>
<td>Plant-Shrubs</td>
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</table>
BIBLIOGRAPHY

Reid, J. (2003), “What’s the link, if any, between recent changes in the distribution of Australian birds and greenhouse climate change?”, in Climate Change Impacts on biodiversity in Australia, CSIRO