



NSW Government

DEPARTMENT OF NATURAL RESOURCES

Contact: Tim Baker
Phone: (02) 6841 7531
Fax: (02) 6884 0096
Email: Tim.Baker@dnr.nsw.gov.au

File: DUB109999-1

Paul Bennett
Forbes Shire Council
PO Box 333
FORBES NSW 2871

Attention: Michael Eagles

2 May 2007

Dear Michael

Subject: FORBES SHIRE DRAFT GROWTH MANAGEMENT STRATEGY

I refer to your email to the Department of Natural Resources (DNR) dated 21 March 2007 seeking comment on the Forbes Shire Draft Growth Management Strategy document. The Department would like to acknowledge the commitment of Forbes Shire Council in establishing a strategy document and the intent of providing improved planning outcomes for the shire. The following submission includes the Departments response for the Strategy document and highlights issues relating to natural resource management in the Shire.

Initially, Council is referred to an initial letter from DNR dated 3 February 2006 which reviewed the issues paper and identified key concerns and the statutory responsibilities of the Department. Council needs to recognise that the functions of DNR are currently being divided between the new departments of Water and Energy (DWE), Environment Conservation and Climate Change (DECC) and Primary Industries (DPI). Therefore although this submission is from the former DNR statutory and policy position, this will change in the future into the respective departments.

Natural Resource Management and Strategy Development

The DNR recognises that understanding natural resources is critical in ensuring successful strategic planning outcomes. Within the Forbes Shire, the key natural resource issues include salinity, flooding, riparian management, groundwater management and surface water supply. The draft Strategy document has utilised the existing Floodplain Management Plan as a key tool in strategic planning which is strongly supported by DNR. However the remaining natural resource issues have remained only as issues within the strategy with little or no use of strategic planning tools. The Issues paper had identified the need to carry out constraints mapping to identify particular natural resource issues which was supported by DNR. This would have provided an initial component to a strategic planning tool and given the strategy document an opportunity to justify how it is addressing natural resource issues. However this has not been completed, and therefore critical issues such as salinity and its implications for future and existing development are not adequately addressed.

The identification of proposed areas for rezoning or increased development density, rather than general concepts, has provided DNR with a clear understanding of Councils intention. This provides an opportunity for DNR to identify potential issues for each site which will be expected

to be collated and addressed as part of a more detailed Local Environmental Study prior to formal rezoning. The one proposed rezoning site which has considerable issues for DNR is the area along River Rd to the south of Forbes. This site is of significant concern to DNR due to issues associated with flooding, and groundwater and surface water which are discussed below.

The following provides more detailed comments on each key natural resource management issue.

Salinity

The Issues Paper provided a general outline to dryland salinity processes, and the state framework including the NSW Salinity Strategy and the Local Government Salinity Initiative which provides clear objectives and practical means of managing salinity processes. The significance of salinity within Forbes however needs to be further highlighted and clearly documented within the strategy in terms of its scale, key issues and a strategic approach for management. This approach will provide a clear foundation for developing an LEP objective for salinity.

Although not mentioned in the Issues Paper or the draft Strategy, Forbes was part of the pilot projects for investigating and developing ways of managing salinity in the Lachlan and Macquarie catchments. This work was further extended with a training program provided by DPI and DNR on salinity in Forbes for a particular group of councillors and council staff. There is therefore current information on salinity processes and potential management options for the Forbes urban area which can provide a starting point for developing a salinity strategy and management plan.

As part of the initial pilot project in 2003 a network of piezometers were installed within the Forbes township to monitor groundwater levels and water quality. Monitoring of this network will be critical in future salinity management as it is a dynamic issue, due to groundwater levels varying depending on factors such as climate, drainage management and landuse.

The draft Strategy did identify some areas requiring salinity investigation such as an industrial area in Section 4.2.3. This is supported by DNR and it is important to recognise that salinity needs to be managed from a strategic scale rather than a site scale due to the implications of development both on-site and off-site on salinity processes.

Flooding

As indicated in the draft Strategy, a key issue in Forbes is the extent and hydraulic characteristics of flooding within the township as mapped by the Floodplain Risk Management Plan (FRMP). It is essential to clearly identify the floodway area and prescribe the objectives of management for future zoning requirements. In future zoning or overlay requirements, the method used needs to be dynamic as any future development or change of zoning has the potential to change the flooding characteristics and hence the validity of the layer or zone depicted in the draft Strategy or LEP.

Highlighted in the draft Strategy, any proposal to increase density of development within flood hazard categories will require appropriate assessment to determine the impact on the flooding characteristics on and adjacent to the site and hence the flood hazard categories. This is recognised by DNR particularly for the proposed intensification of development in the existing Rural 1(c) zoned land south of Forbes adjacent to River Rd. This will require revisiting the Floodplain Risk Management Plan in accordance with the Floodplain Development Manual (2005) and go through a public consultation process to determine community satisfaction. Further to this, any consideration of how development on the floodplain may have already modified the flood hazard categories in the FRMP would need to be addressed within a review of the FRMP as detailed above.

Surrounding townships which may also be impacted by flooding will require consideration in future rezoning proposals as part of a formal Local Environmental Study.

Groundwater

The groundwater resource is a critical part of the landscape in terms of maintaining dependent ecosystems and providing a source of water for domestic, agriculture and industry needs. It is therefore essential to consider the location, use and quality of this resource and the potential impact due to the draft strategy. DNR has recognised the need to further examine this issue due to the following key reasons:

- The current groundwater vulnerability mapping conducted by DNR has identified areas to the south of Forbes and along the river to be highly and moderately highly vulnerable to groundwater contamination as shown in Attachment A and B. This has implications in terms of considering the potential impact of activities in these areas.
- The upper Lachlan Alluvium groundwater management area (Attachment C and D) covers an extensive area in the Forbes shire and is currently embargoed for issuing additional groundwater entitlements for irrigation or industry use. It is therefore essential to consider any future proposed development in this area and the requirement for water.
- One component of the town water supply is sourced from groundwater. DNR recommends examining the surrounding landuses and implications of the strategy in terms of the availability and quality of this supply in the future. Landuse conflict between groundwater users is a common issue raised with DNR which can be managed through appropriate consideration of adjacent users and planning of buffers.
- Existing groundwater users need to be considered when proposing increased development density or alternative use of resources. This can be examined in a simple manner by plotting existing bore locations and considering the existing uses.

DNR considers the use of the groundwater vulnerability mapping as a key tool in considering the potential groundwater issues in the shire and is recommended for inclusion. The categories of mapping examine the associated issues and identify appropriate mitigating measures which can clearly identify the suitability of sites for particular activities.

The proposed rural small holding zone adjacent to the river along River Rd with the associated increased lot density has the significant potential to reduce the quality and quantity of groundwater. This is due to the use of on-site septic systems which impact on the quality and the impact on the availability of groundwater for irrigation and industry through each properties "basic right" under the *Water Act 1912* to install a bore for stock and domestic use. DNR therefore recommends consideration of alternative sites due to these potential impacts.

Surface Water

Proposed development intensity and its implications on surface water supply either from unregulated sources away from the Lachlan River on minor creeks or from regulated sources on the Lachlan River itself is of concern to DNR. DNR is not supportive of increasing development intensity along riparian zones due to the associated increase in "basic rights" allocation and this has essentially been achieved in the draft Strategy. There is one component of the River Rd development intensification located on the eastern boundary which fronts the Lachlan River that DNR is not supportive of. DNR recognises the riparian zones as critical areas in terms of ecological functioning and maintaining water quality hence the use of strategic planning to enhance these qualities is strongly supported.

Future development not connected to reticulated water supply requires special consideration in terms of availability and access to this supply. Limited water supply can have significant

implications on limiting surface water to downstream users including the environment and agriculture and also increase pressure on other water resources such as groundwater. Therefore any such development will need to address these issues.

The recognition of how the strategy considers and manages riparian zones needs to be clearly stated in the draft Strategy which DNR considers requires further attention. They are critical aspects of the social, economic and environmental qualities of the shire hence need to be recognised in the strategy to ensure consideration in the LEP.

DNR is available to provide further datasets as discussed above and provide interpretation of the significance of these datasets in strategic planning. For further general enquires or clarification please do not hesitate to contact myself on telephone (02) 6841 7531.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Tim Baker', with a stylized flourish at the end.

Tim Baker
Natural Resource Project Officer, NR Planning
Landscapes and CMA Support

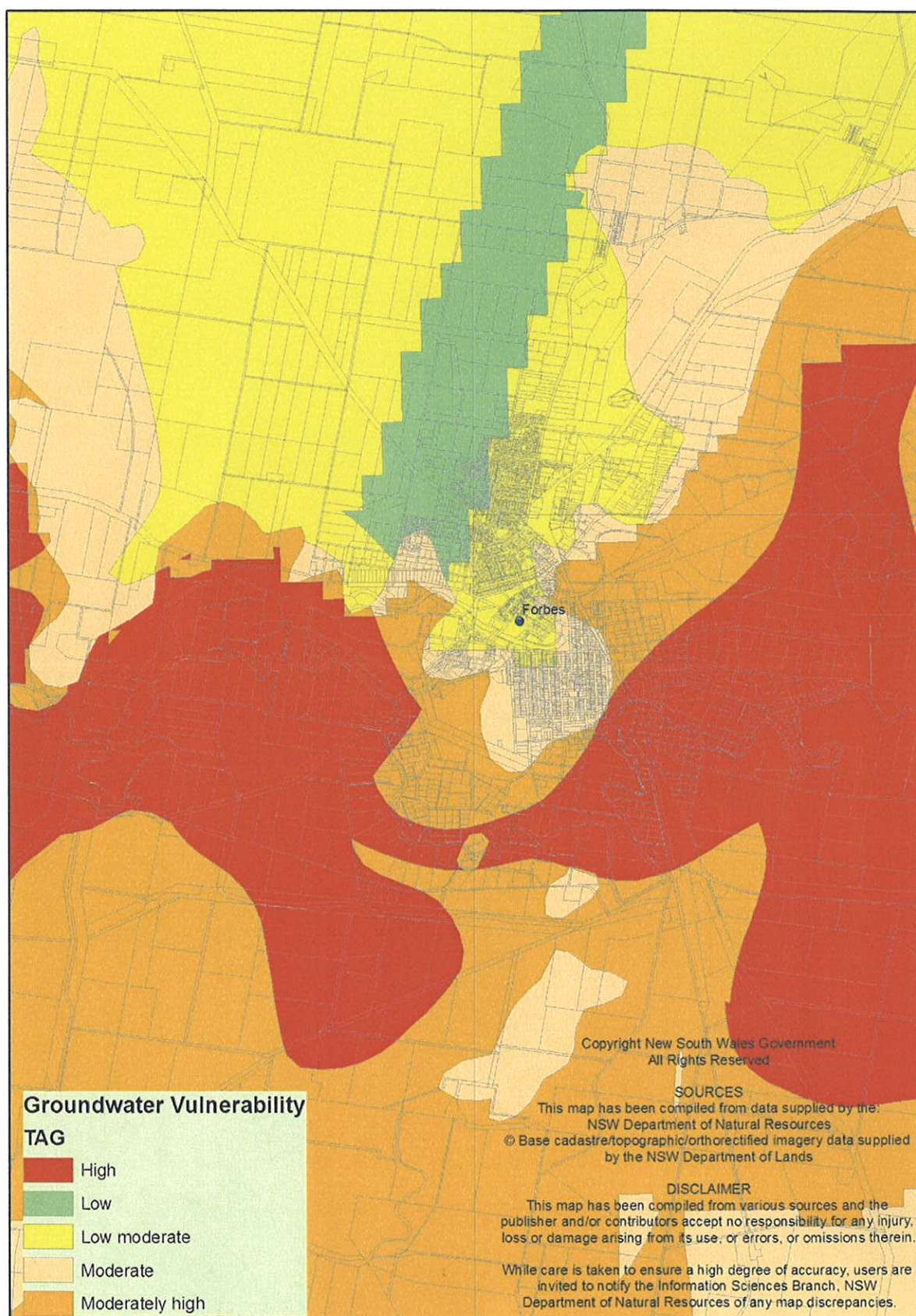


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ATTACHMENT A

Forbes - Groundwater Vulnerability



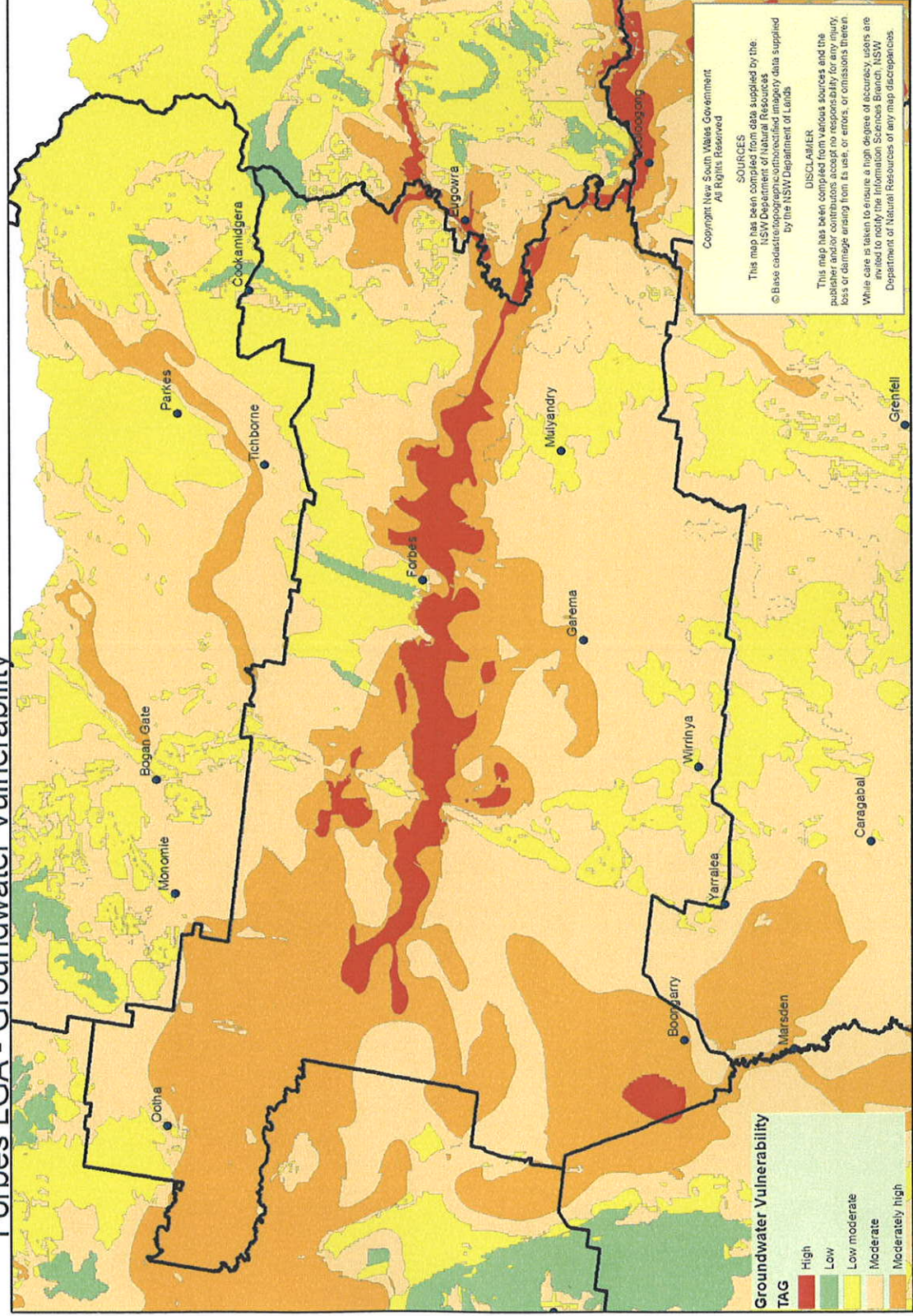


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ATTACHMENT B

Forbes LGA - Groundwater Vulnerability



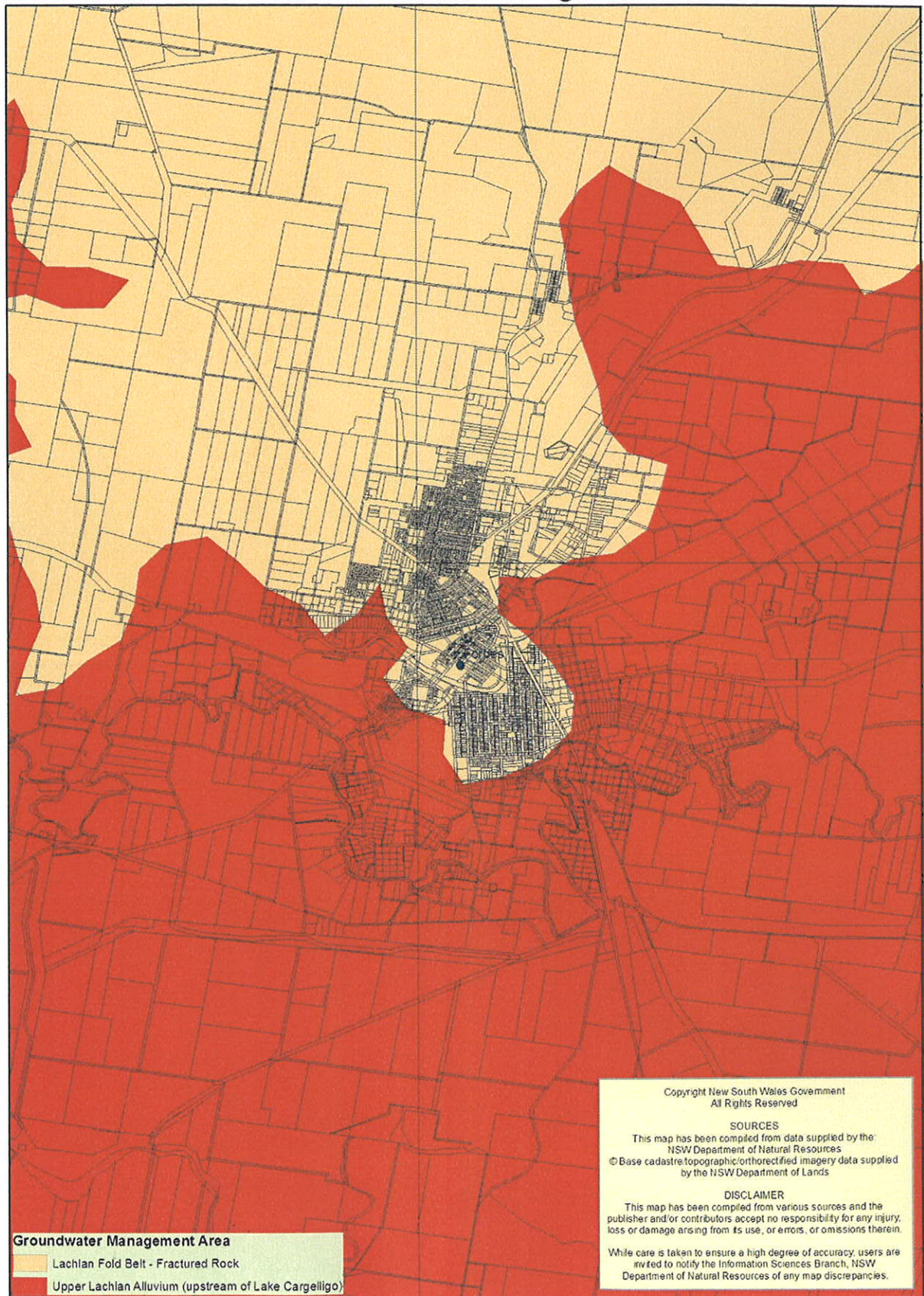


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ATTACHMENT C

Forbes - Groundwater Management Zones





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ATTACHMENT D

Forbes LGA - Groundwater Management Zones

