

An Ordinary Meeting of Lismore City Council will be held at the Council Chambers on 13 February 2024, 6.00pm

Attachments Excluded From Agenda

Jon Gibbons
General Manager

7 February 2024



Attachments

Mayoral Minutes

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LGNSW Cost Shifting Report – How State Costs Eat Council Rates



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1 Executive Summary

Cost shifting remains one of the most significant challenges facing the NSW local government sector. As the peak organisation representing the interests of all 128 general purpose councils in NSW, as well as special purpose councils and related entities, Local Government NSW (LGNSW) regularly monitors the extent of cost shifting onto local government via its Cost Shifting Survey.

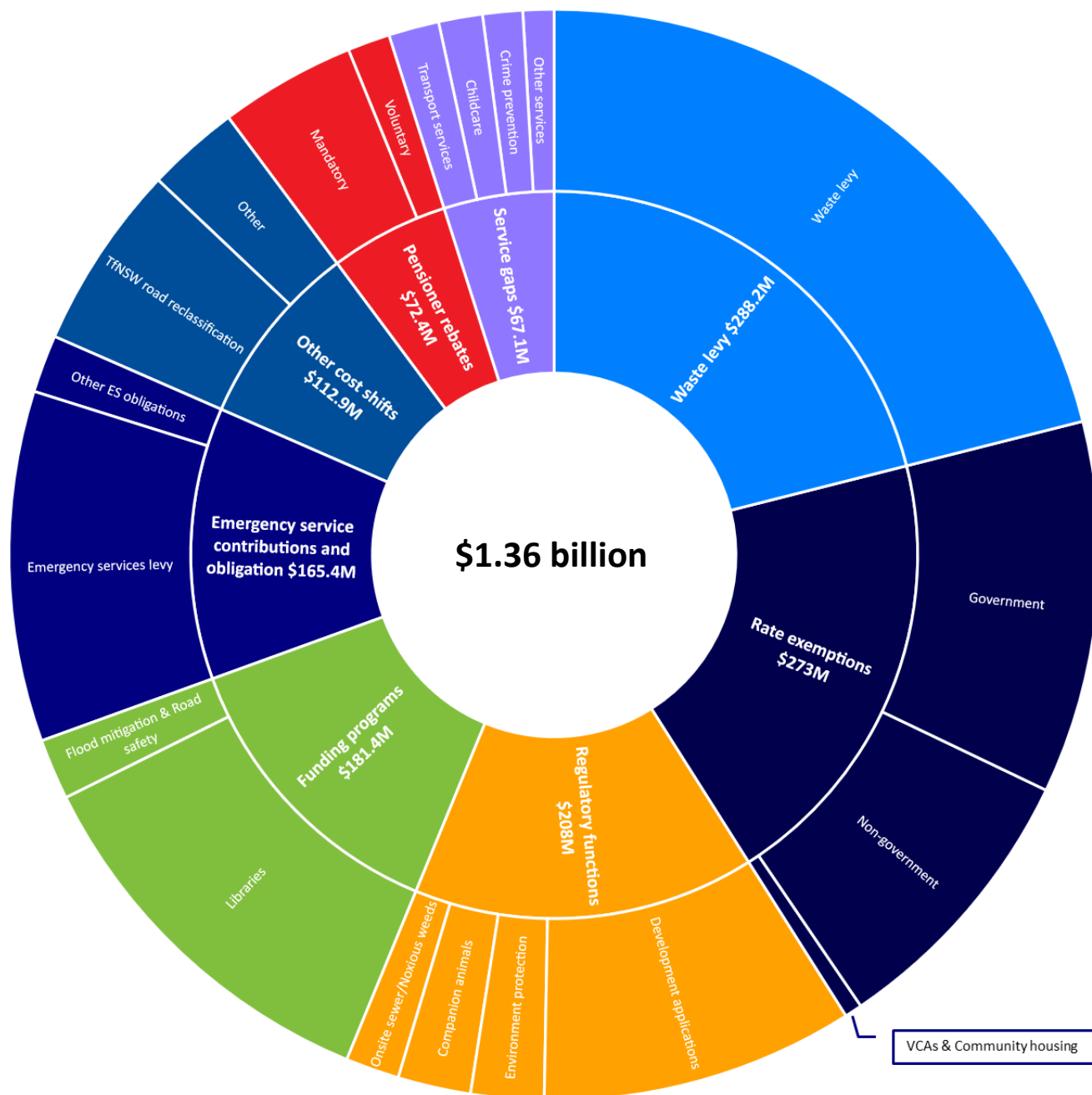
The 2021–22 Cost Shifting Survey has revealed that cost shifting totalled **\$1.36 billion** in 2021–22 (see figure on the next page), far exceeding historical records and representing an increase of \$540 million since the Cost Shifting Survey was last carried out in 2017–18. Alarmingly, the increase in cost shifting has been accelerated by various State Government policies, with the most significant examples of cost shifting in 2021–22 being:

- The **waste levy**, which remains the largest single contributor to cost shifting in NSW, totalling \$288.2 million, because the NSW Government did not fully reinvest the waste levy, paid by local councils, back into waste and circular economy infrastructure and programs.
- The **Emergency Services Levy** and associated **emergency service contributions**, which totalled \$165.4 million and represented the largest direct cost shift to local councils. In 2021–22, councils contributed \$142 million through the Emergency Services Levy, \$12.7 million through Rural Fire Service (RFS) obligations, and \$10.7 million in depreciation expenses on RFS assets.
- The NSW Government's failure to fully reimburse local councils for mandatory **pensioner rate rebates**, resulting in councils losing \$55.2 million.
- The NSW Government's failure to cover the originally committed 50 per cent of the cost of libraries operations, resulting in an additional \$156.7 million in costs to councils.

Local councils and their communities are facing unprecedented challenges. As they lead the recovery efforts from both the COVID pandemic and repeated natural disasters across much of NSW, local councils are also grappling with the same challenges affecting the State and Federal Governments, such as rising costs, increased economic uncertainty, and severe skills and labour shortages – all of which are impacting council budgets and affecting service and infrastructure delivery in local communities. The continual shifting of the obligations and costs for State and Federal functions and services onto local government coupled with a defective rate peg system, is only making the situation worse. In 2021-22, each ratepayer of NSW has approximately \$460.67 from councils' rates eaten by state government costs.



Figure 1 2021–22 cost shifting components





2 Background

2.1 What is cost shifting?

Cost shifting describes a situation where the responsibility for, or merely the costs of, providing a certain service, concession, asset, or regulatory function is imposed onto local government from a higher level of government (Commonwealth or State Government) without the provision of corresponding funding or the conferral of corresponding and adequate revenue raising capacity other than out of general rates.

As the council cannot raise or receive sufficient revenue to fund the imposed service concession asset or function, cost shifting forces councils to divert funding collected from ratepayers away from planned projects or services that the council has committed to the community to deliver in its Delivery Program.

In NSW, cost shifting has taken a number of forms including:

- **The Emergency Service contributions:** Councils are required to fund 11.7 per cent of the cost of Fire & Rescue NSW, Rural Fire Service (RFS) NSW and the NSW State Emergency Service (SES) through an Emergency Service Levy (ESL). 73.7 per cent of emergency services costs is funded through insurance premiums and the remaining 14.6 per cent from the NSW Government's treasuries. Councils provide additional financial contributions to emergency services agencies in addition to the ESL.
- **The waste levy:** The waste levy is not as much a cost shift to councils as an invisible tax levied on ratepayers through councils. The waste levy is a levy paid by all waste facilities to the NSW Government, the cost of this levy is recovered through the waste collection fees levied by councils, in effect shifting the burden of this tax on to ratepayers.
- **Forced rates exemptions:** Councils are required to exempt government and other organisations from paying rates in the local government area. These organisations utilise local government services and infrastructure. As they are exempt from paying rates, the burden of the costs they incur is shifted to the ratepayers to fund. Examples of exempt organisations include government departments, private schools, and non-government social housing providers.
- **Imposing additional regulatory functions:** State and Federal levels of government implement or increase regulatory requirements through legislation that is then administered by local government. The costs of this new or increased regulatory function is often not funded by the determining level of government and councils must fund this through their own revenue sources including rates.
- **Cutting or failing to adequately continue to fund programs for services that need to continue:** Many funding programs announced by State or Federal government are required to be delivered by local government but are either not fully funded from their initiation or, if an ongoing initiative, funding is reduced over time leaving councils with the decision to either continue the program and make up the burden of the cost or cease the program entirely. An example of this in Libraries, where the original commitment from State Government was to fund 50 per cent of libraries cost, it now covers approximately 8 per cent of the total costs, leaving councils to fund an additional \$156.7 million to make up the difference.



- **Pensioner rebates:** Councils are required to provide pensioner rebates on rates and other charges, for which the State government only subsidises 55 per cent of the cost, the remaining 45 per cent is funded by other ratepayers.
- **Councils absorbing the costs of service and market gaps that should have been provided by State or Federal governments:** This is particularly an issue in rural and regional NSW, where councils often must step in to provide or support a service that is traditionally delivered either directly or through subsidised private providers. This can be for a diverse range of services from aged, disability or childcare through to medical services, education, or public transport services.

2.2 Cost shifting and the rate peg

Cost shifting has been a term used for many years to describe the cost impact on local government of decisions made at the State and Federal level. It is particularly relevant in NSW where a rate pegging system is applied to restrict how local government can raise rates revenue.

The issue of State and Federal decisions having a direct financial impact on local government exists in all States and territories of Australia to some extent. In many cases, local government can be the best and most efficient partner for State and Federal government to deliver its programs or services.

Challenges arise with respect to how the State and Federal initiatives are, or continue to be, funded. In States where there is not a rate pegging system in place, local councils are able to better manage the financial impacts by adjusting rates or levying specific fees and charges to reflect the change in costs of providing the imposed service, concession, asset, or regulatory function.

The rate peg in NSW sets out the maximum amount that local councils can increase their rates by and is set by the Independent Pricing and Regulatory Tribunal (IPART) each year. In determining the rate peg, IPART does not adequately consider the cost shifting impacts on councils. As a result, increases in the costs shifted to councils identified here are not covered by a commensurate increase in rates revenue. This means that councils have to divert funding from other commitments agreed with their communities in their Community Strategic Plan and Delivery Program to fund the cost shift incurred. This has a direct impact on councils' ability to deliver services to the community and their overall financial sustainability.

2.3 This report

This report provides analysis and insights from the 2021–22 Cost Shifting Survey conducted in May 2023.

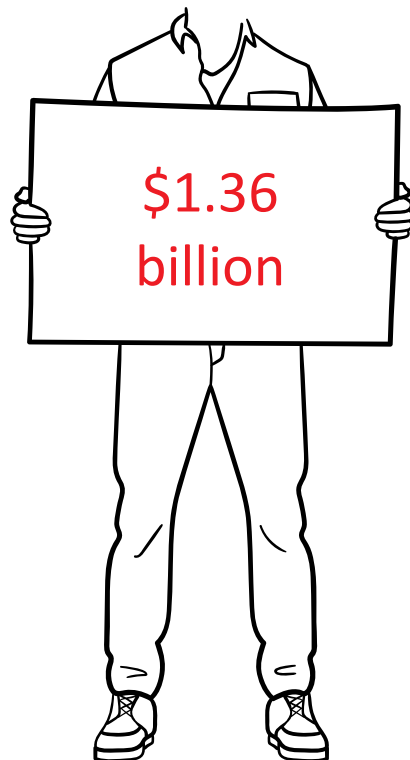
Section 3 of this report provides more detail on the findings from the survey, breaking down the findings into their key cost shifting areas, as identified in section 2.1 above, and Section 4 outlines the approach and methodology used in the survey and analysis..



3 Findings

Our survey found that cost shifting cost NSW councils \$1.36 billion in 2021–22, which represents \$460.67 for each ratepayer. In effect, this is the average amount of rates that councils must divert from the services and infrastructure that council has committed to provide the community in order to fund the unrecoverable cost services, programs and functions that are imposed from the State or Federal governments.

In 2021/22,
the cost to
NSW
Councils of
cost shifting
was:



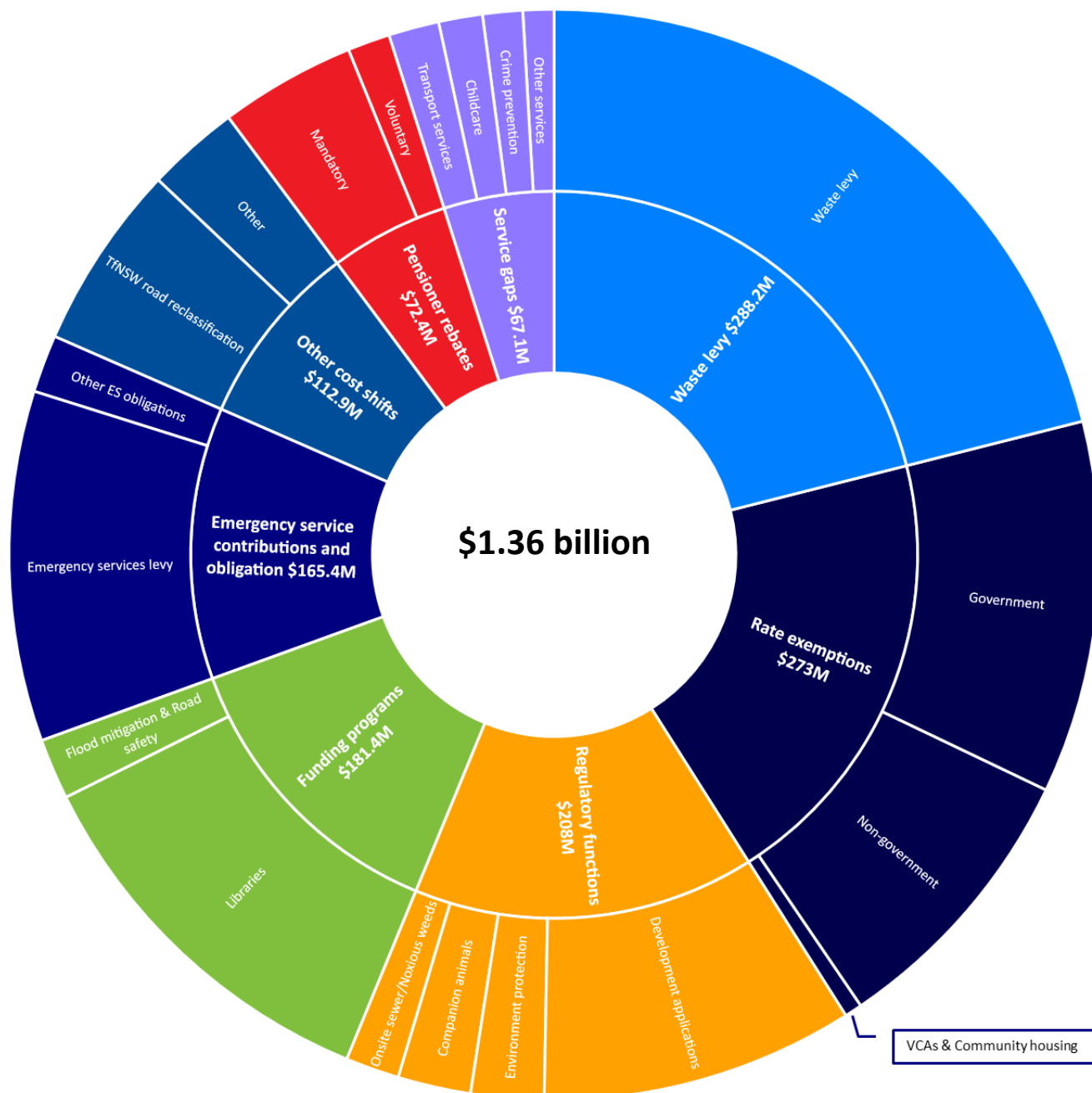
or



Many services, programs, and functions that the State and Federal governments require local councils to deliver, in turn provide benefits to the local communities they serve. This report does not provide an assessment on the merit of these costs, only to bring them to light. Due to the nature of how the services, programs and functions are provided and funded, cost-shifting can be hidden from view. This analysis helps to quantify and highlight these costs for all tiers of government and the community.



Figure 2 2021–22 cost shifting components



The largest direct cost shift to councils is from emergency service contributions and other emergency service obligations, totalling \$165.4 million.

However, the cost of rate exemptions are higher still, representing a total of \$273.1 million of potential rates that are exempted and redistributed to other ratepayers to pay. An additional \$288.2 million in waste levies are passed onto the ratepayers through the waste collection fees in their rates bill. A further \$156.7 million



in costs for libraries has been covered by councils to make up the difference between the committed funding for councils' libraries and the subsidies received.

While in nominal terms the largest total cost shifts have been seen metropolitan councils, was on a per ratepayer basis rural and large rural councils have seen a greater impact, as the graphs below indicate.

Figure 3 Total cost shift by council classification

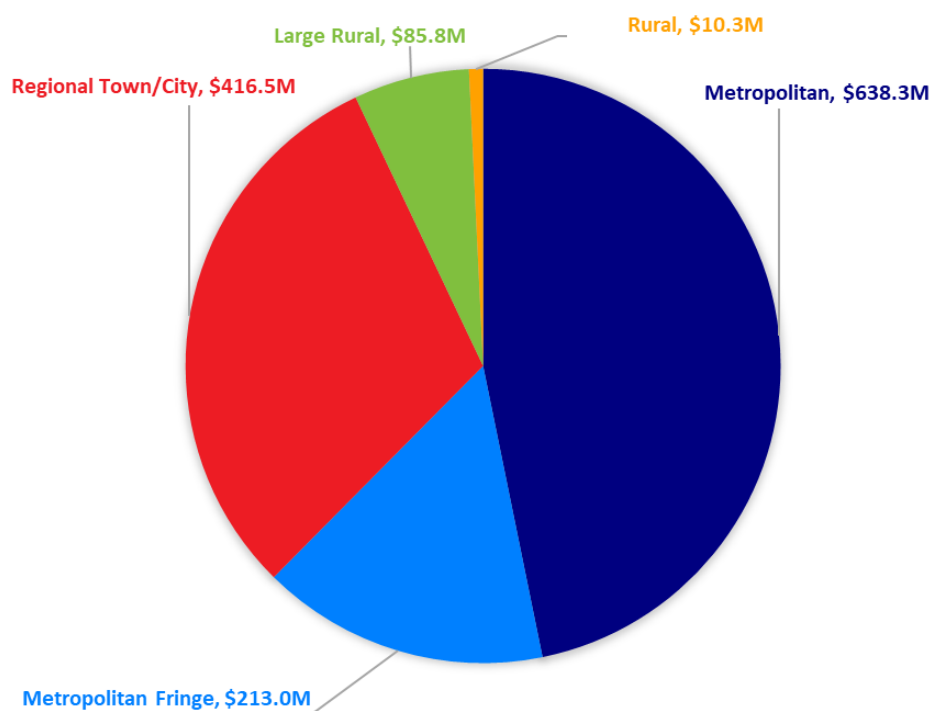
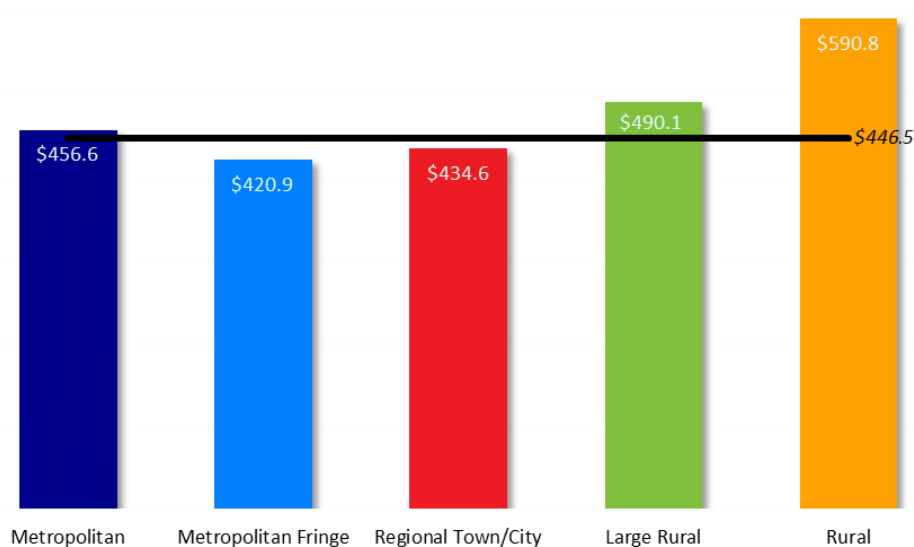


Figure 4 Cost shift per ratepayer by council classification





We will explore each component of rate shifting in the following sections.

3.1 Emergency service contributions and obligations

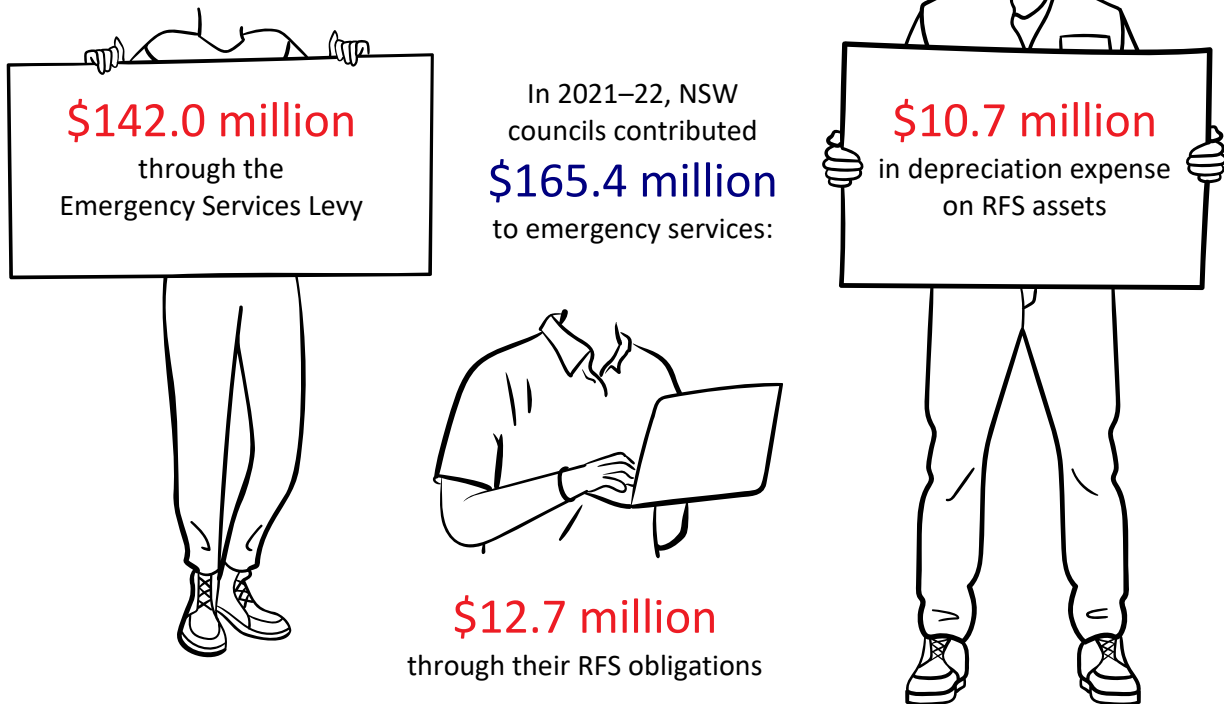




Figure 5 Emergency services contributions and obligations by council classification

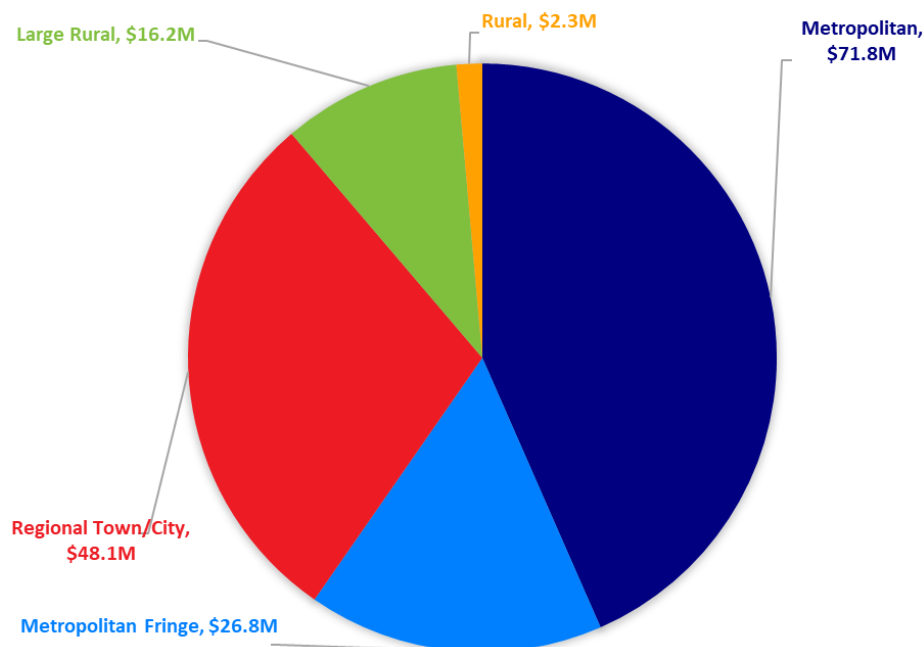


Figure 6 Respondent councils with the highest emergency services contributions and obligations burden

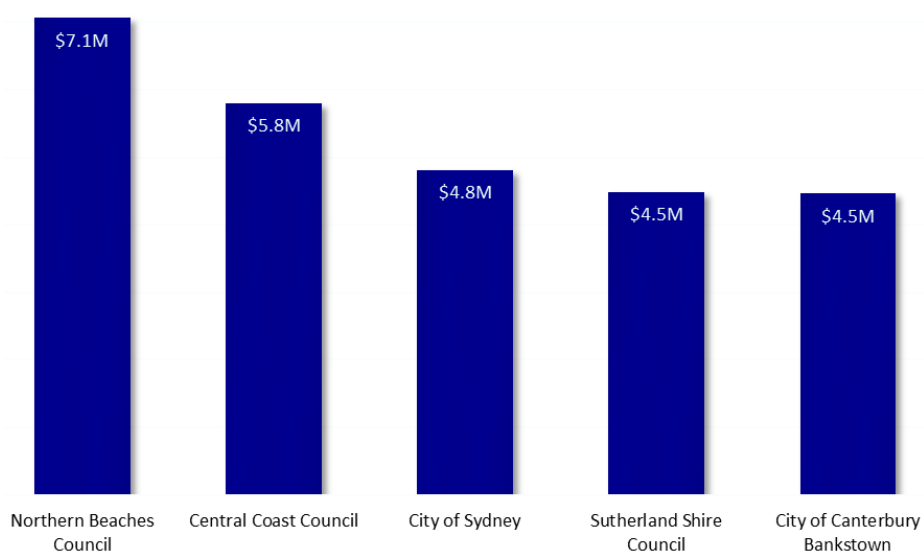
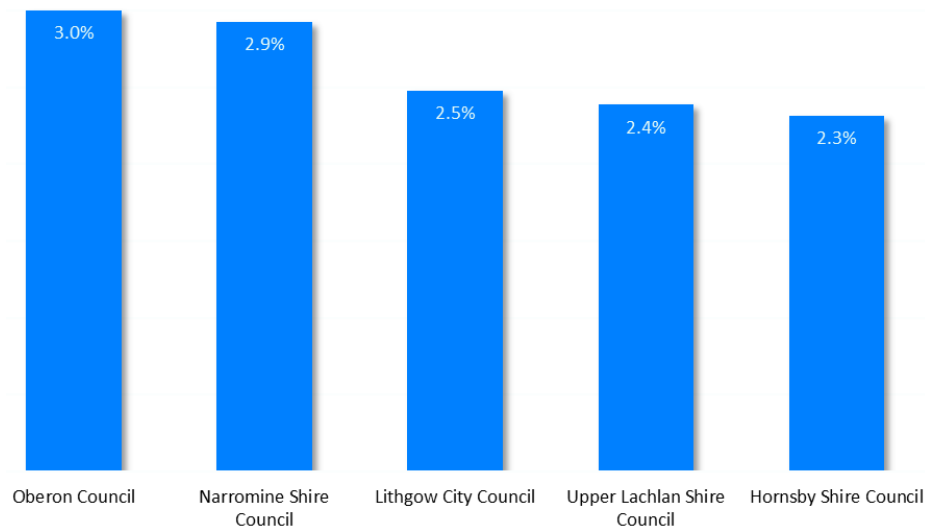




Figure 7 Respondent councils with the highest emergency services contributions and obligations burden as a proportion of total operating expenditure



NSW councils are required to fund 11.7 per cent of the NSW SES, NSW Fire and Rescue and NSW RFS budgets through a direct contribution levied each year by the State Revenue Office. This is funded directly from general revenue, primarily rates, as councils have no ability to raise revenue to fund this in any other way.

Councils also have no influence on the costs or budget setting of these organisations. This contribution of ratepayers' funds is in addition to the Emergency Services Insurance Contribution that is extracted through insurance companies, who cover 73.7 per cent of the agencies' budgets and results in higher insurance premiums for policy holders

The emergency service levy is estimated to have cost NSW councils overall \$142.0 million in 2021–22. That is a total of \$46.23 per ratepayer, which goes directly to the NSW Government as part of the emergency services contribution.



Figure 8 Respondent metropolitan and fringe councils with the largest ESL bill for 2021–22

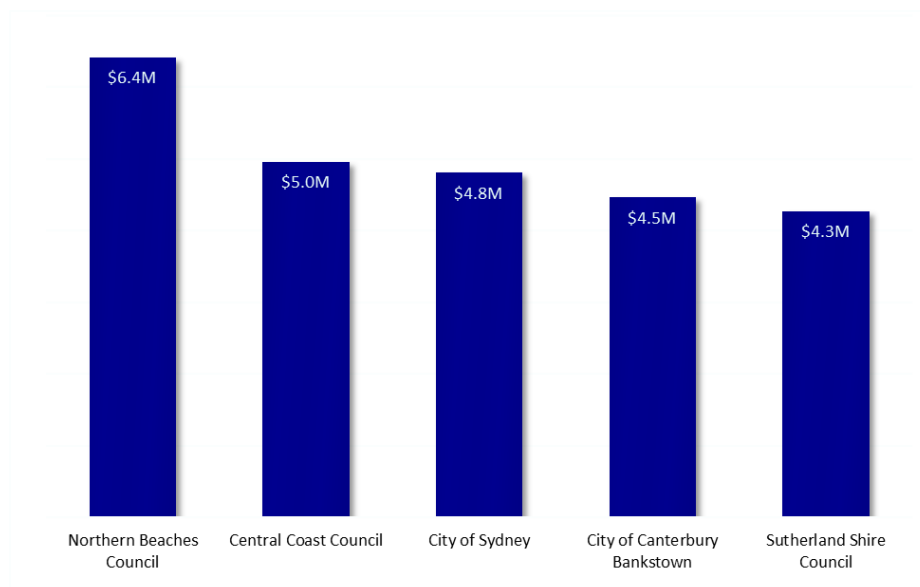


Figure 9 Respondent regional and rural councils with the largest ESL bill for 2021–22

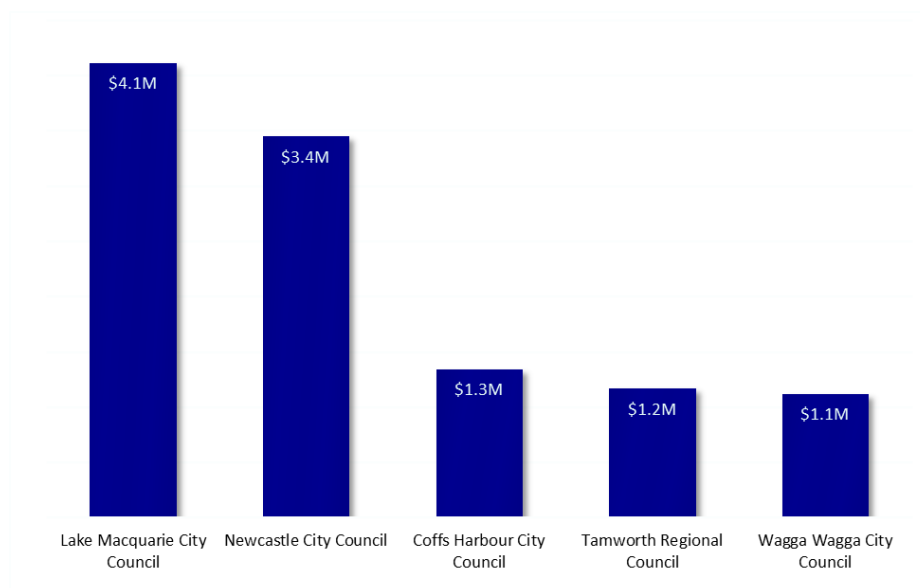
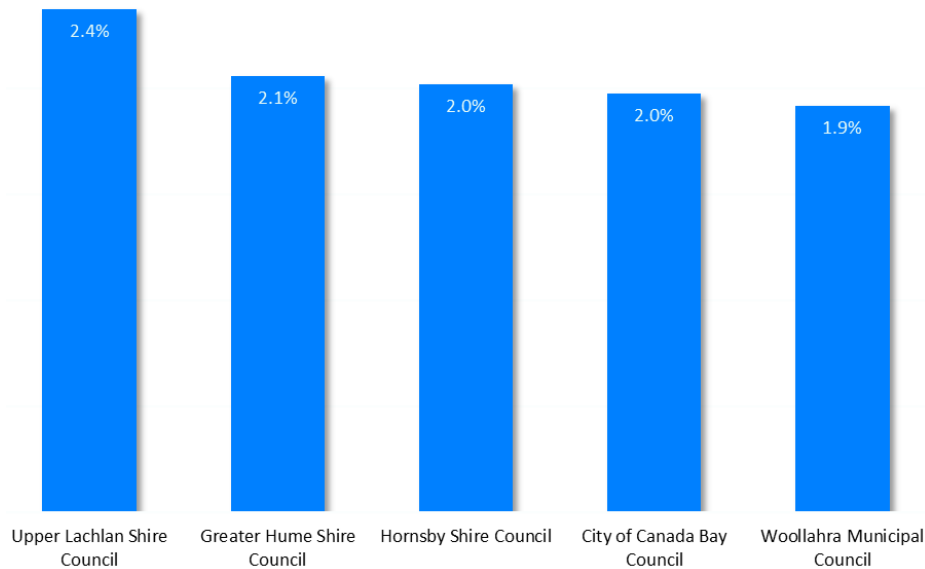




Figure 10 Respondent councils with the largest ESL bill as a proportion of total operating expenditure



In 2019, the NSW Government subsidised councils for the increase in Emergency Service Contribution costs, because of a large increase in the ESL resulting from large increase in workers compensation costs followed by the Black Summer Bushfires and the unfolding COVID pandemic. From the 2023–24 financial year, the NSW Government increased the budgets and therefore costs for the three relevant agencies and removed the subsidy at the same time. Councils were not advised of this change until after they had developed and put their 2023–24 budget on public exhibition as they are required to do. The increase represented a \$41.2 million cost increase from the prior 2022–23 financial year.

With the rate peg set at 3.7 per cent for the 2023–24 rating year, the increase in emergency services contributions has put substantial pressure on the financial sustainability of local government.

Figure 11 Top 10 councils with the highest ESL bill in 2023–24

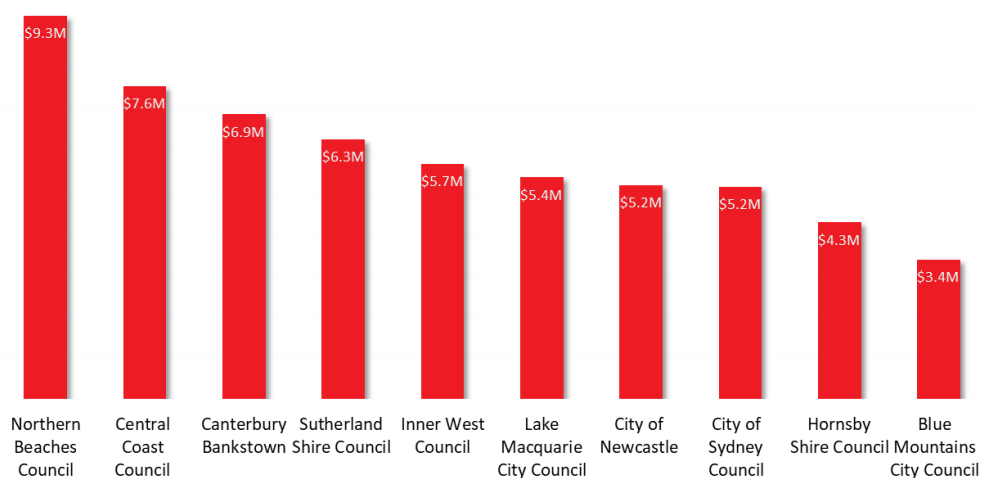
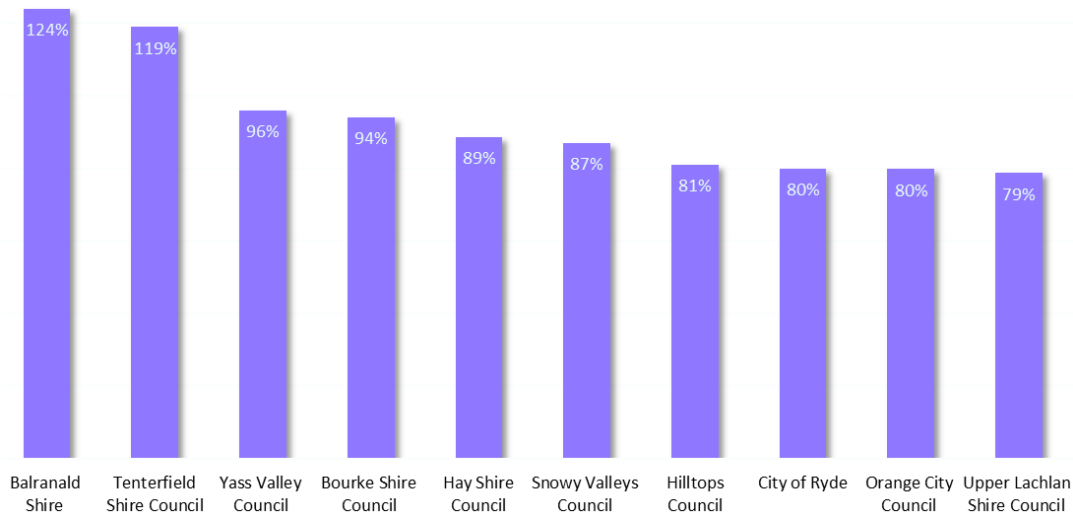




Figure 12 Top 10 councils with the highest 2023–24 ESL increase as a percentage of the rate revenue increase



The increases in emergency services contributions from councils have hit both the largest and smallest of councils.

“Two of the four biggest expense payments that Central Coast Council must make each year are for State government levies: the emergency services levy and the waste levy. They are in the millions each and are funded straight out of our rates and waste revenue.”

David Farmer, CEO, Central Coast Council

“Central Darling Shire is the largest shire in NSW covering an area of 53,000 square kilometres in Far Western NSW, but it has the smallest (and declining) population of less than 2000. CDS is not a typical shire as it consists of a series of isolated communities (Menindee, Ivanhoe, Wilcannia and White Cliffs) and large pastoral holdings. It borders the large unincorporated area of the Far West.

For Council, the Emergency Services Levy has increased by \$70,000 for 2023/24, bringing the total Council contribution to \$318,989. The increase is some \$70,000 which is more than double the increase in rates due to rate pegging.

For the 2023/2024 financial year the Council income from rates is budgeted to be \$913,000. This includes the rate peg increase of 3.7 per cent, which looks like being eaten up by the hike in the ESL.

For a Council like Central Darling this level of increase is simply unsustainable and will result in the further reduction of services to our residents.

There is a clear case for the NSW Government to fully fund this increase as part of its community service obligation as small rural councils with a limited rate base cannot afford to continue to pay.”

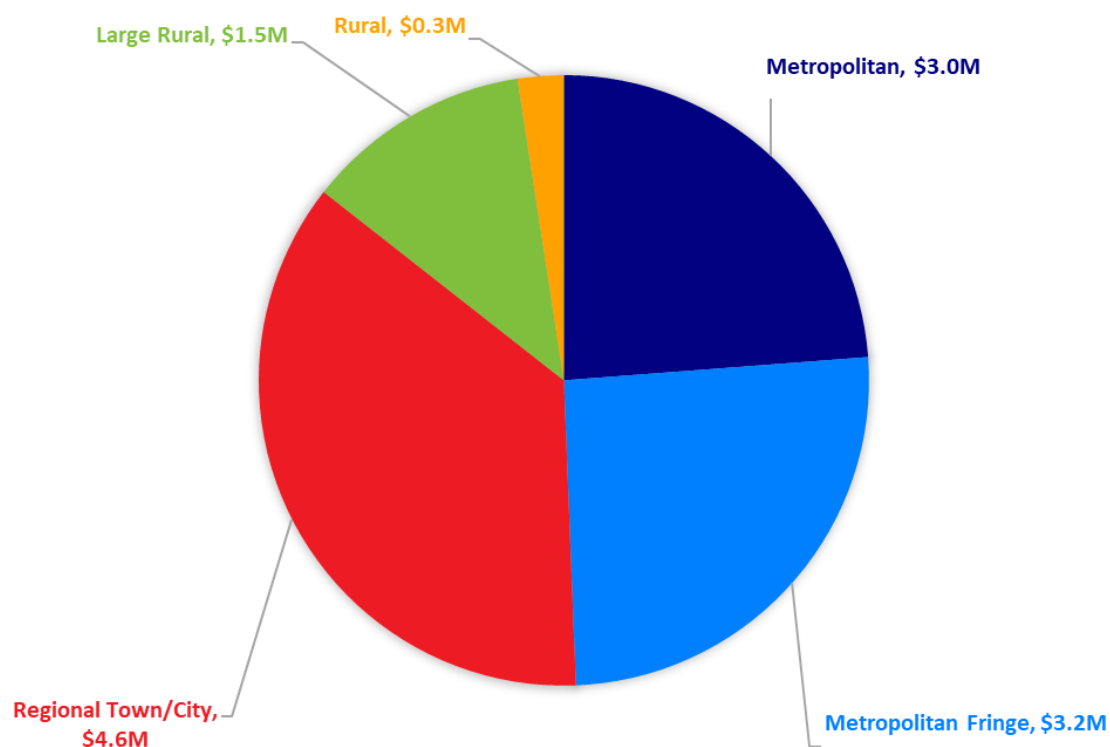
Bob Stewart, Administrator, Central Darling Council¹

¹ Figure 11 does not include Central Darling’s actual result as it was not provided to LGNSW.



In addition to the emergency service levy, local councils are required to support the RFS and SES in other ways. This commitment seems to be different for different Councils. For example, for some councils, when the RFS annual budget is allocated back to the districts, some of these funds are vested in councils through the Rural Fire Fighting Fund (RFFF). These funds are then administered by councils to deliver repairs and maintenance of buildings and a small amount of plant and equipment. In some cases, Councils also fund other functions such as training and provision of office supplies. If the RFFF is insufficient to provide these in any one year, some councils will then provide further financial support directly to the districts to meet the difference. In 2021–22, the cost of this additional support has been estimated at \$12.7 million.

Figure 13 Additional RFS contributions by council classification



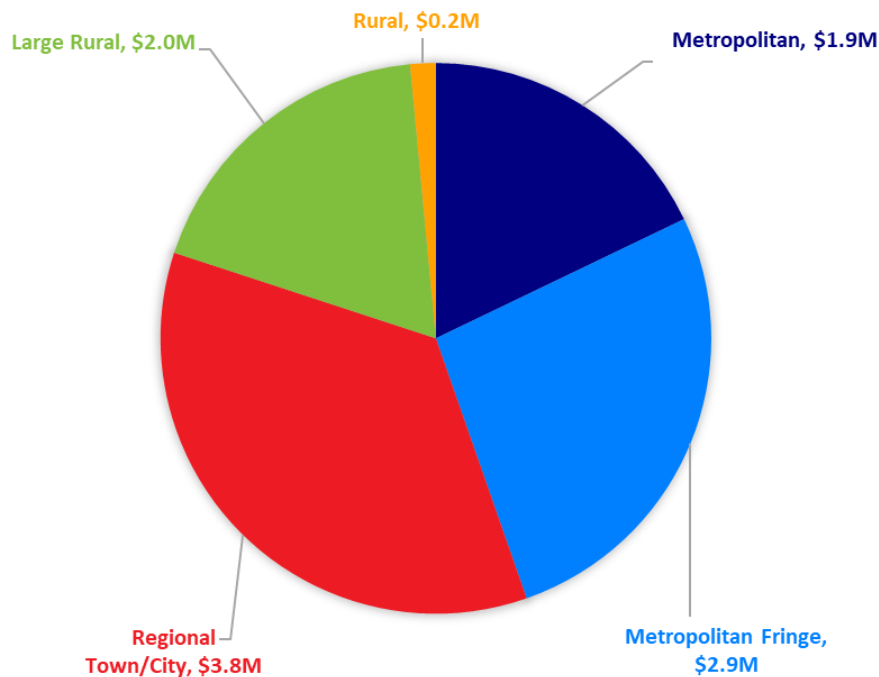
The RFS funding arrangements are the most complex of all the emergency services and creates challenges for both councils and the RFS. While councils are aware that their obligations to provide financial support to the RFS are generally over and above the RFFF, the costs at a district level are extremely volatile from one year to the next and dependent on whether there is a bushfire in the district (in which instance the district will fund some aspects of other districts' costs if they come to support the local bushfire response) or if the district comes to the aid of another district (in which instance they will receive additional funding which reduces the pressure on its own budget and therefore the financial support required from the local council).

What results is that councils have to bear the budget risk of the volatility of RFS costs and funding, while RFS districts don't have accountability for their own budgets and costs, and are not able to help to provide certainty because they don't know where the next emergency will be. Much of these volatility issues are resolved at a State level, when looking at the RFS services overall.



In addition to the direct repair and maintenance costs, councils are also required to recognise RFS red fleet assets and account for their depreciation expense in council financial reports. In 2021–22, this depreciation cost is estimated at \$10.7 million.

Figure 14 RFS Depreciation Expense by council classification



This has been a somewhat contentious issue in recent years and ultimately comes down to identifying where control of these assets lie. In summary, the NSW Government has concluded under the *Rural Fire Services Act 1997*, which states that these assets are vested to councils and therefore “on balance, councils control this equipment” under the Australian Accounting Standards². The NSW Audit Office has accepted this position in undertaking their audit function of local government.

Many councils, with the support of LGNSW, have refused to accept this position, which has resulted in 43 NSW councils receiving a qualified audit opinion of their 2021–22 financial reports. Their position is that control of these assets sits with the RFS, and therefore the NSW Government, based on the Australian Accounting Standards Board Conceptual Framework, which does not necessarily define control as a legal ownership right, but rather:

“... the present ability to direct the use of the economic resource and obtain the economic benefits that may flow from it. Control includes the present ability to prevent other parties from directing the use of the economic resource and from obtaining the economic benefits that may flow from it. It follows that, if one party controls an economic resource, no other party controls that resource.”³

² Audit Office of New South Wales (2023) *Regulation and monitoring of local government*, NSW Government, 23 May 2023.

³ Australian Accounting Standards Board (2022) *Conceptual Framework for Financial Reporting*, AASB, 7 April 2022.



This issue is ongoing, and while depreciation itself is not a cash expense, the accounting for depreciation in local government has two key financial implications. Firstly, the increase in depreciation expense will reduce a council's overall surplus or increase its deficit, which has implication for a council's measures of financial sustainability. Secondly, for most local government assets, depreciation is used as the estimate of required renewal expenditure for councils to maintain assets at their current condition. In other words, councils must fund depreciation with a similar level of capital cashflow to ensure assets are kept at required standards, this is not the case for firefighting equipment, which is funded through the State Government's budget allocation to the RFS. This remains an ongoing issue at the time of writing this report.

3.2 Waste levy

The waste levy is a tax on landfill facilities and only applies to 42 metropolitan and 19 regional levy areas shown in Figure 18. Although, not technically a "cost shift" – as the cost of the levy is recovered through waste charges – it represents a somewhat "invisible tax".

The purpose of the waste levy is to provide economic incentive to alternative waste management processes, such as recycling and resource recovery. The funds raised by the waste levy go directly to NSW Government general revenue. Some funds do come back to communities and councils through grants for a variety of projects, but this only represents 10 to 15 per cent of the funds raised through the tax.

The metropolitan levy at \$147.10 per tonne in 2021–22 is nearly twice the amount per tonne of the regional levy at \$84.70 per tonne in 2021–22. Some councils, such as Central Coast and Newcastle, operate their own landfill facilities and pay the levy directly to the NSW Government. Not all councils operate landfills directly, many councils have their waste managed through contracts with private providers. While these providers will incur the levy directly, councils in the levy areas will collect waste charges that include the waste levy as a component of the waste fees. Depending on how their waste management contracts are structured, some councils have been able to provide an estimate of this levy collected in the waste fees while others have not.

Of the 51 councils surveyed who are in the levy area, 36 provided an estimate of the amount paid, which totalled \$287.8 million in 2021–22. Based on this data, we have estimated the total amount of the waste levy paid through waste collection fees in 2021–22 at \$292.9 million.



Figure 15 Waste levy by council classification

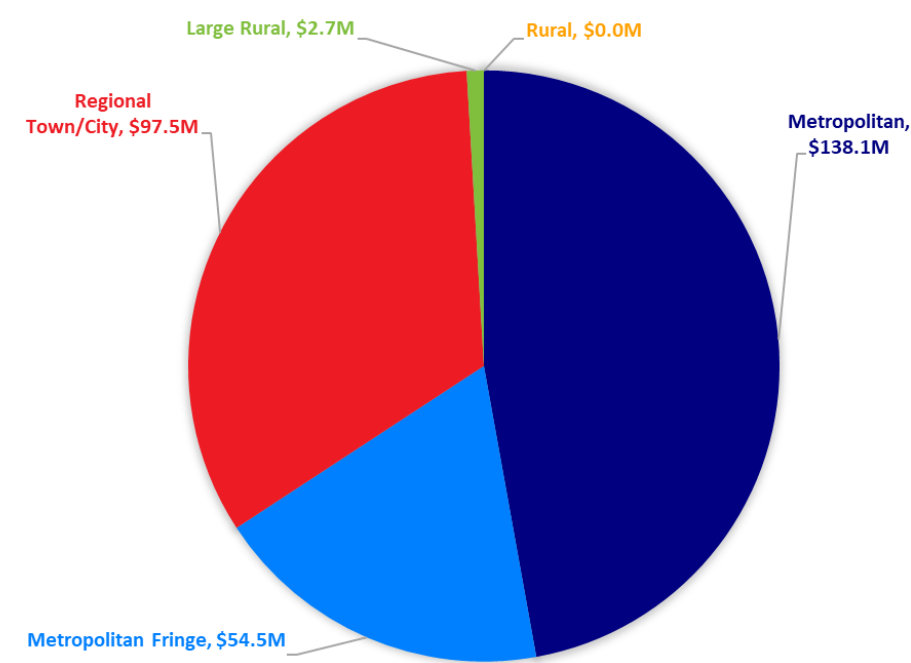


Figure 16 Respondent councils with the highest waste levy

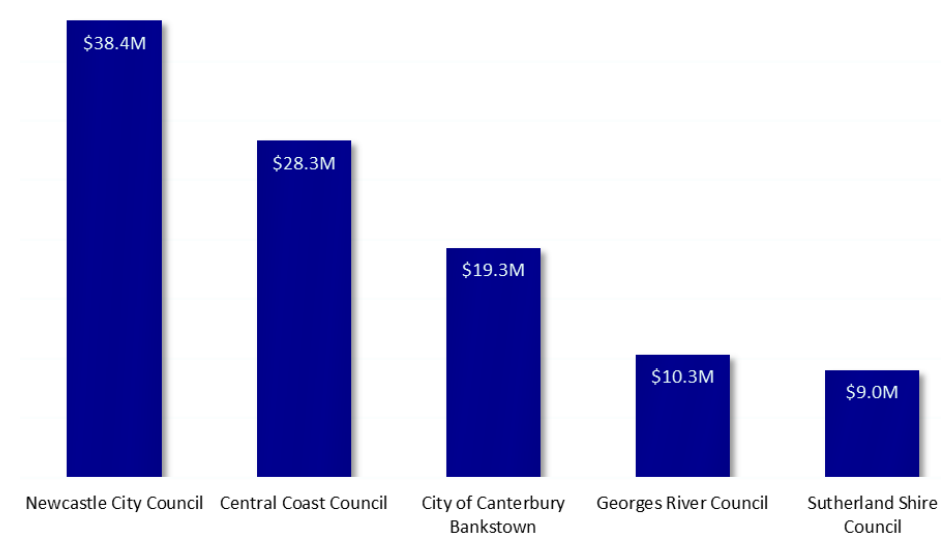
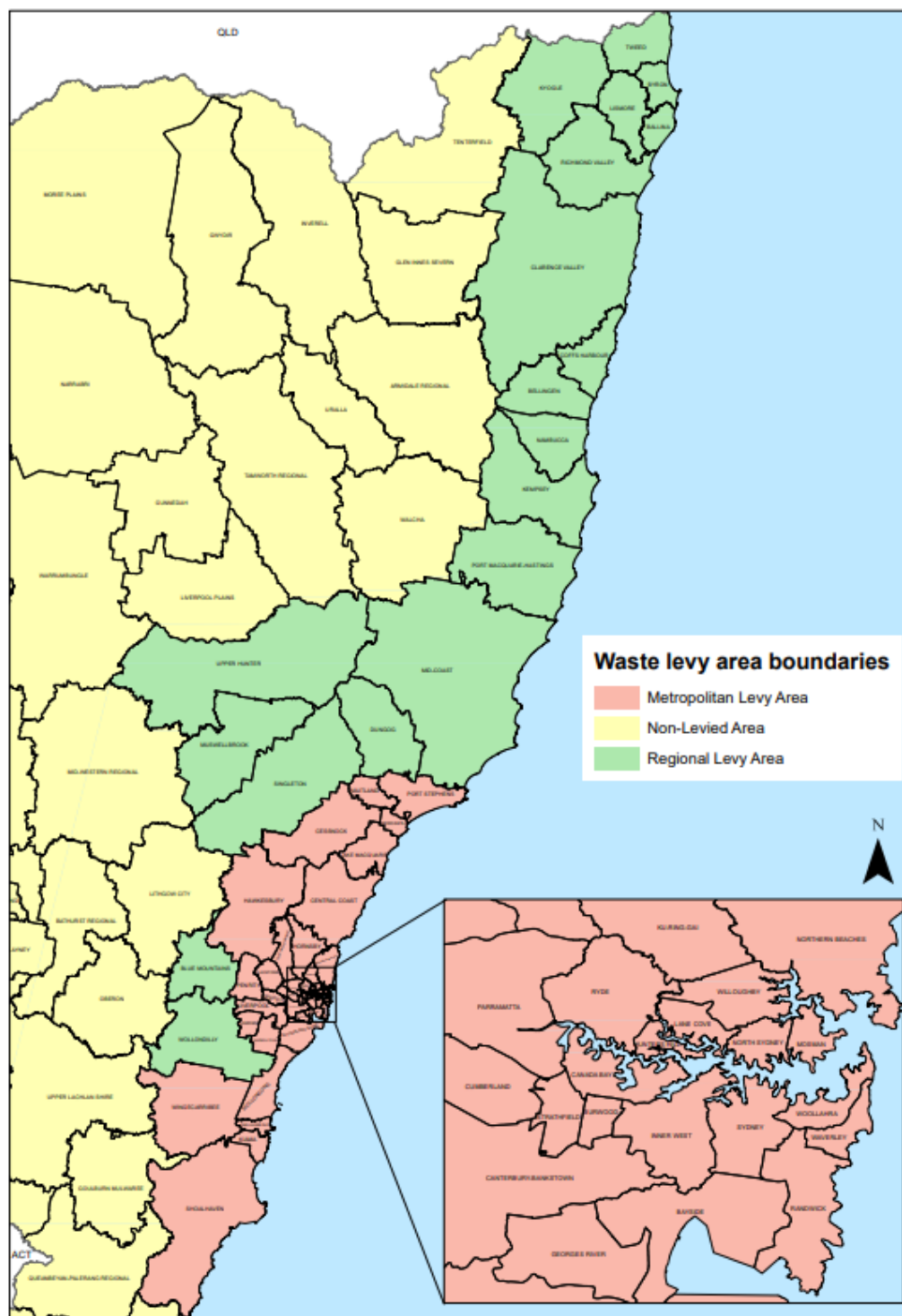


Figure 17 Waste levy area map⁴

⁴ <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wasteregulation/levy-area-map.pdf?la=en&hash=C00135E31055627BB8A41EAEB222864C2655B186>.



3.3 Rate exemptions

Many government and private property owners in a local government area are exempt from paying rates to councils. Due to the way rates are calculated, this doesn't usually affect the total amount of revenue that councils are able to raise through rates. It does mean that the distribution of the rates burden falls more heavily on the existing ratepayer base.

For government-owned properties, rate exemptions are a part of a complex set of arrangements for exemptions of some taxes between the different tiers of government. State Owned Corporations (SOCs and GTEs) pay tax on lands owned and used for commercial purposes. This is provided for under competitive neutrality policy/National Competition Policy (a notable exception to this arrangement is the Forestry Corporation). Councils are exempt from most State and Federal taxes (for example land tax, payroll tax, stamp duty, and income tax). Councils are also involved in delivering a wide range of services or regulatory functions under various State and Commonwealth Acts and they receive a large number of different grants from State and Federal governments, including the untied Financial Assistance Grants that the States administer and distribute to councils.

Additionally, there are many non-government organisations that are also exempt from paying rates, including private schools, hospitals and retirement villages, as well as not-for-profit organisations such as religious organisations. While these organisations are exempt from paying rates; all expect and receive services and infrastructure from councils, the cost of which is funded by ratepayers.

Community housing was an area that we asked councils about specifically as the NSW government has been in the process of transitioning the ownership and management of public and social housing to non-government Community Housing Providers. Under past practice, social and public housing provided by State Government agencies paid rate equivalents on all their properties. CHPs are exempt from rates and more and more social and public housing is moving into this category. As a result, the rates exempt status seems to be moving with the community housing property.

The total amount of rate exemptions represented \$273.1 million, shifting approximately \$89.04 to each NSW ratepayer.



Figure 18 Rate exemptions by category

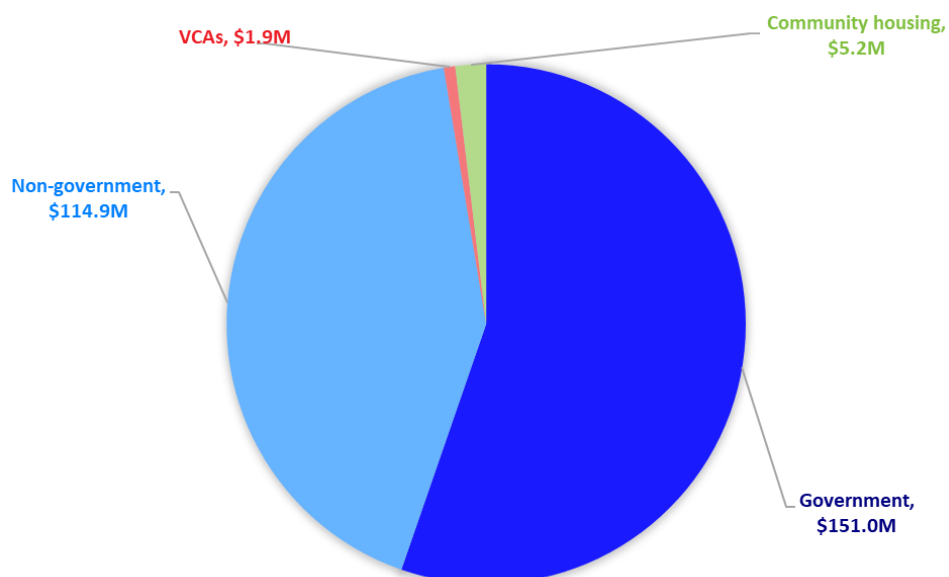


Figure 19 Rate exemptions by council classification

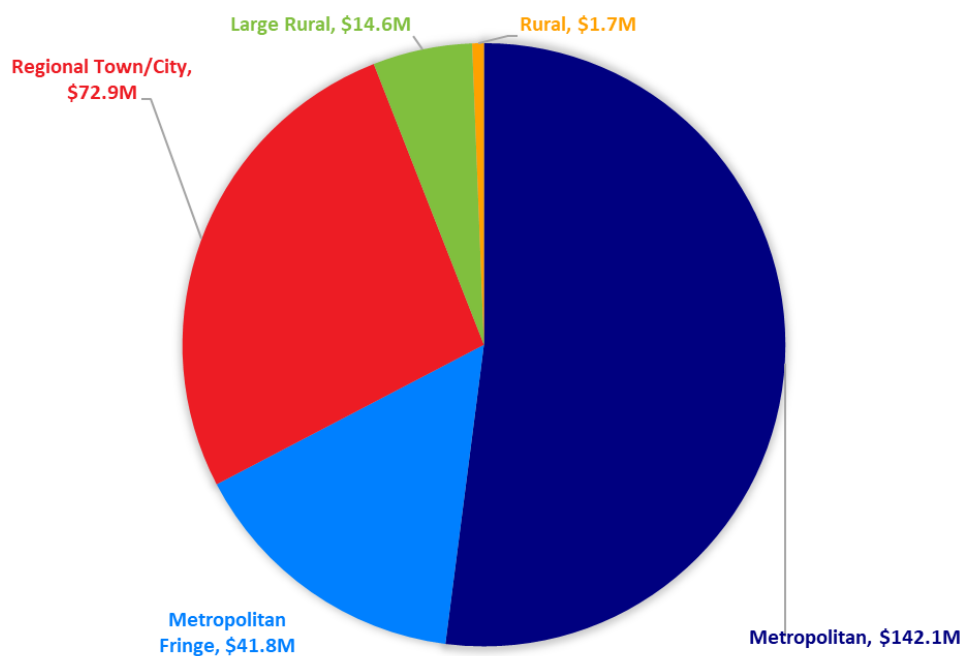




Figure 20 Average rate exemption for respondent councils as a proportion of rates revenue by council classification

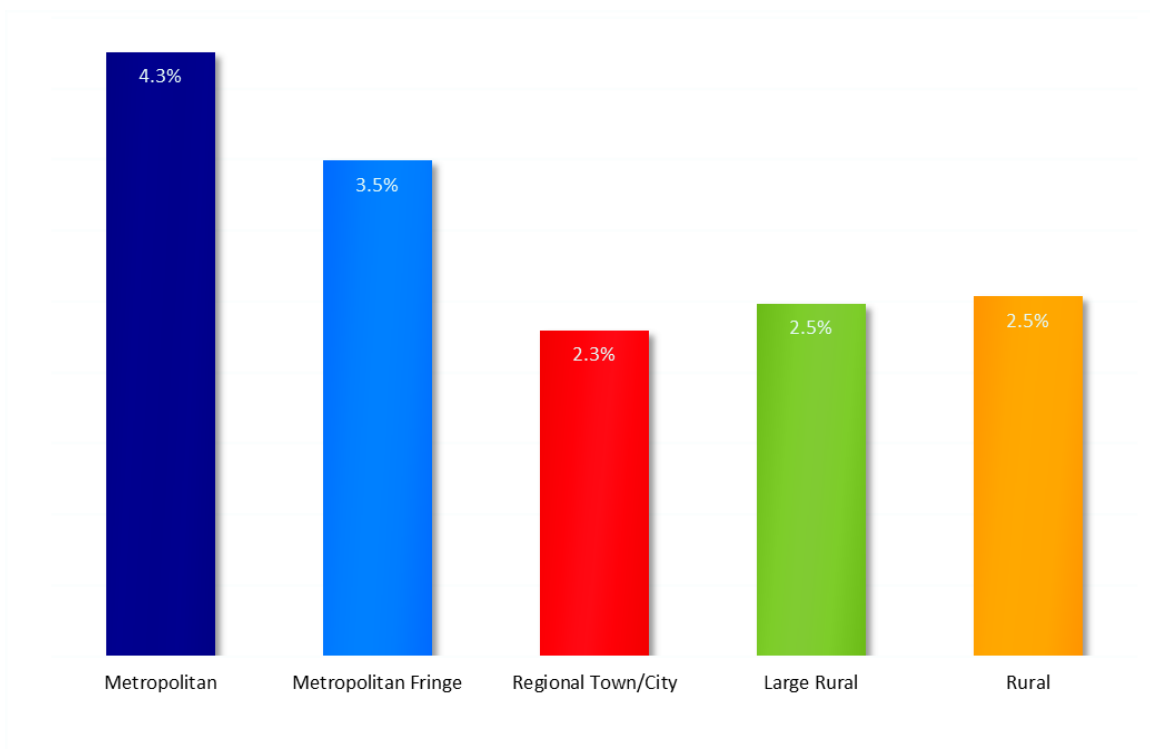


Figure 21 Respondent councils with the highest rate exemptions as a proportion of rates revenue

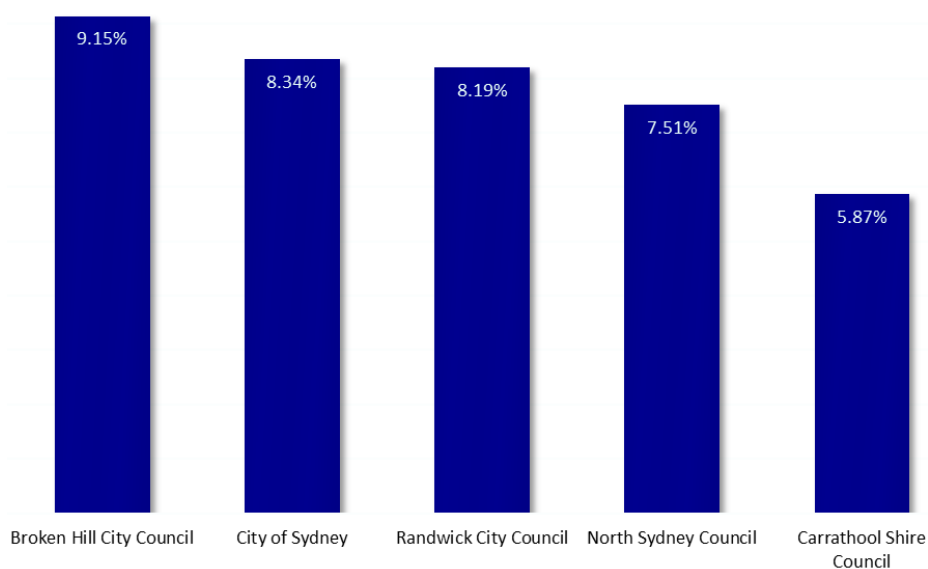




Table 1 Cost for rate exemptions

Rate exemption	Number of councils who responded to this question in the survey with a figure	Total amount of cost shift provided	Estimated total cost shift for all NSW Councils (based on population)
Government-owned property	62 (from which two councils put a figure of 0)	\$95.5M	\$151M
Non-government-owned property	61 (from which one council put a figure of 0)	\$72M	\$115M
Voluntary conservation agreements	47 (from which ten councils put a figure of 0)	\$1.2M	\$1.9M
Community housing	53 (from which 11 councils put a figure of 0)	\$3.3M	\$5.2M

3.4 Regulatory functions

In addition to the obligations under the *Rural Fire Services Act 1997*, *Fire and Rescue NSW Act 1989* and the *State Emergency Service Act 1989*, councils incur additional costs of increased regulatory responsibilities. These are additional functions or requirements that are not fully funded by increases in fees and charges.

In 2021–22, the unfunded costs for regulatory functions represented \$208.0 million.

Figure 22 Unfunded regulatory costs by category

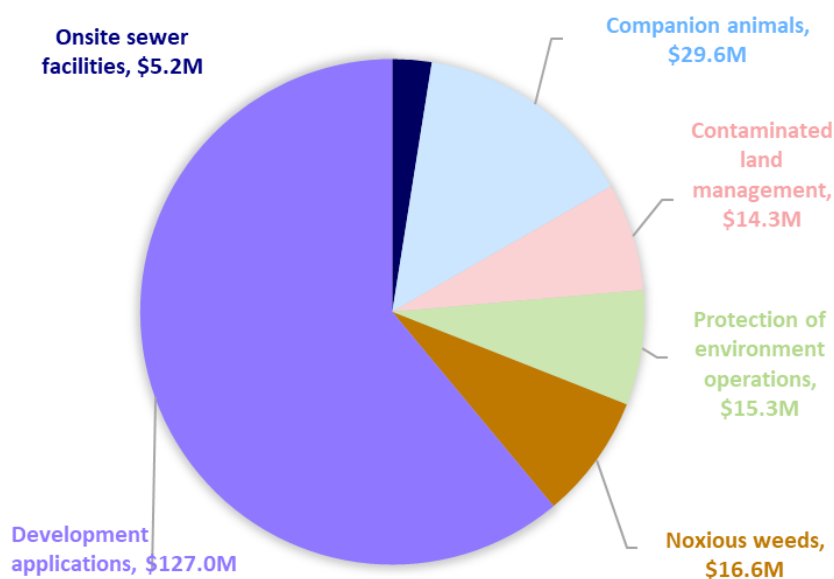




Figure 23 Unfunded regulatory costs by council classification

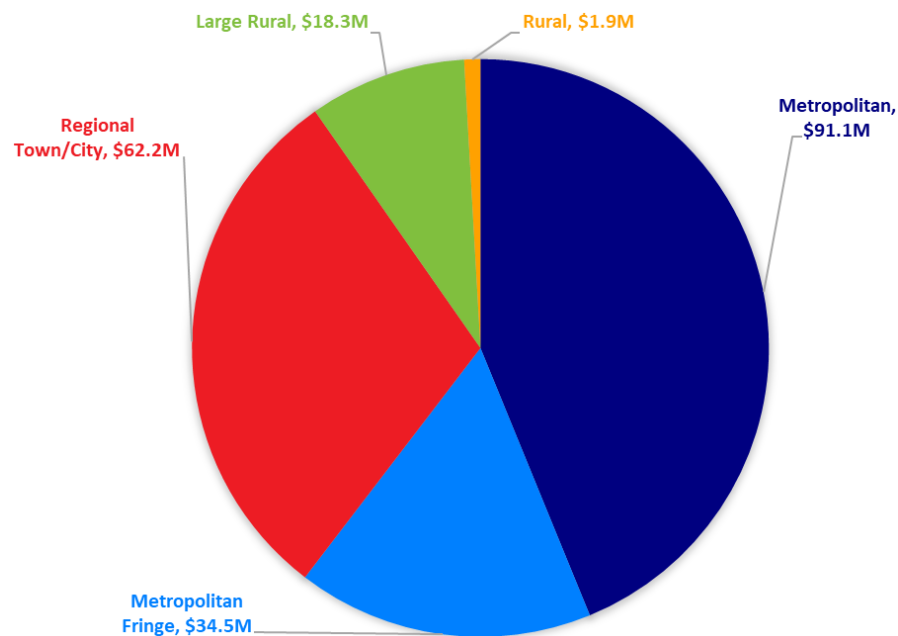
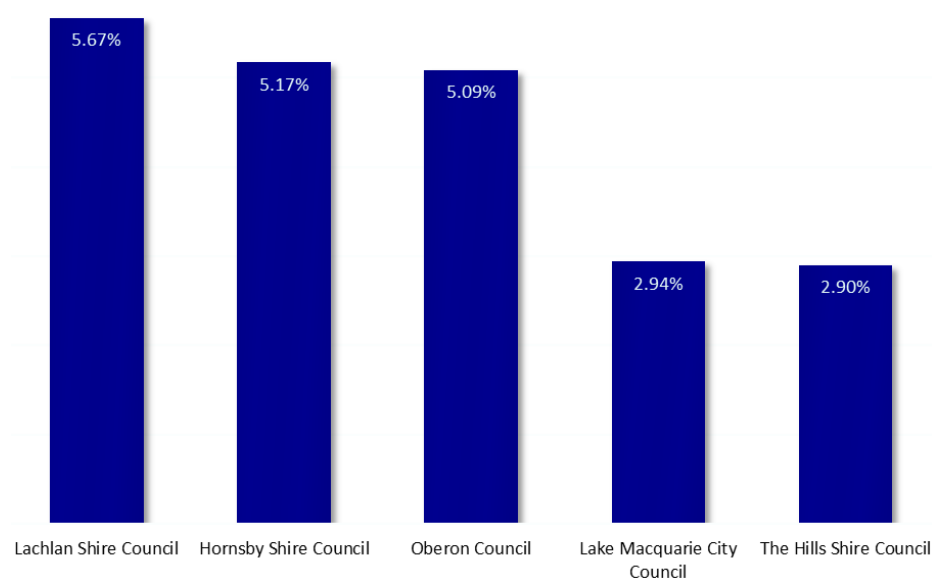


Figure 24 Respondent councils with the largest regulatory cost as a proportion of total operating expenditure



The function and total estimated costs from councils are outlined in the table below.



Table 2 Cost for increased regulatory functions that cannot be recovered through fees and charges

Regulatory function	Number of councils who responded to this question in the survey with a figure	Total amount of cost shift provided	Estimated total cost shift for all NSW Councils (based on population)
Onsite sewer facilities	35 (from which 15 councils put a figure of 0)	\$3.4M	\$5.2M
Companion animals	69 (from which four councils put a figure of 0)	\$19.6M	\$29.6M
Contaminated land management	45 (from which nine councils put a figure of 0)	\$7.2M	\$14.3M
Protection of environment operations	48 (from which four councils put a figure of 0 and one a negative amount)	\$9.9M	\$15.3M
Noxious weeds	64 (from which eight councils put a figure of 0)	\$11.1M	\$16.6M
Development applications	64 (from which five councils put a figure of 0 and one a negative amount)	\$86.7M	\$127.0M

3.5 Funding programs

Councils are occasionally required to fund the continuation of several funding programs that were instigated by the NSW Government, but for which funding commitments have, over time, either been reduced or removed entirely. The three main funding programs councils currently continue to fund are:

- Library subsidies: the original library funding subsidy was 50 per cent of the library services costs, however this has reduced over time. In 2021–22, councils paid an estimated \$156.7 million on library services that would have been covered by the originally committed 50 per cent State government subsidy.
- Flood mitigation: the program was originally established with the State and Federal governments providing 80 per cent of the costs and councils funding 20 per cent, the shortfall of this funding is estimated to be costing councils \$18.2 million in 2021–22.
- Road safety program: funding for programs and ongoing staff for education, however councils were not able to reduce the costs with the removal of the funding program. In 2021–22, councils have an estimated cost burden of \$6.4 million as result.

The total cost to council to continue to meet the funding shortfall of these programs was \$181.3 million, the vast majority which was the shortfall in the library subsidy of \$156.7 million.



Figure 25 Funding program costs shifted by category

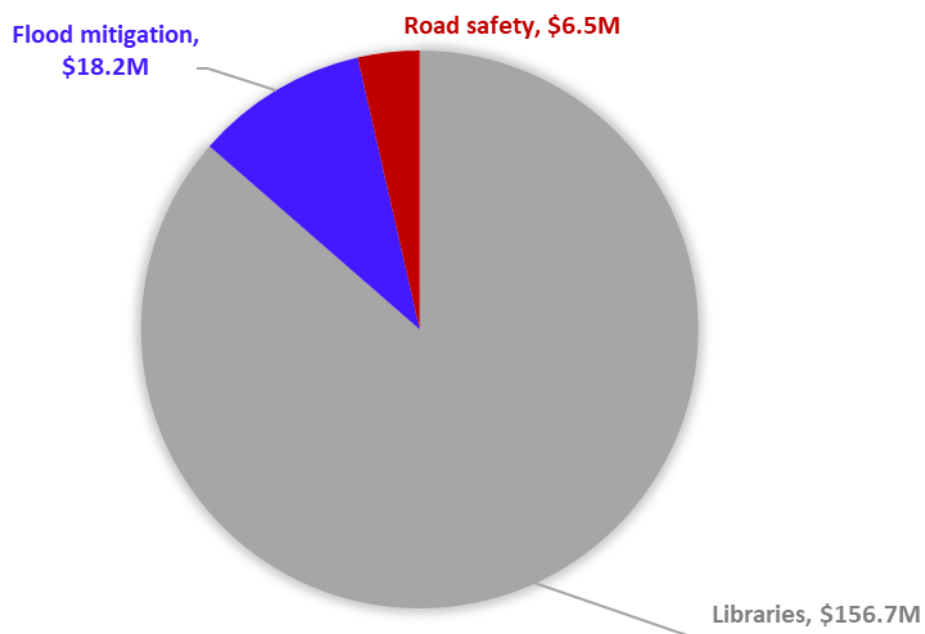


Figure 26 Funding program costs shifted by council classification

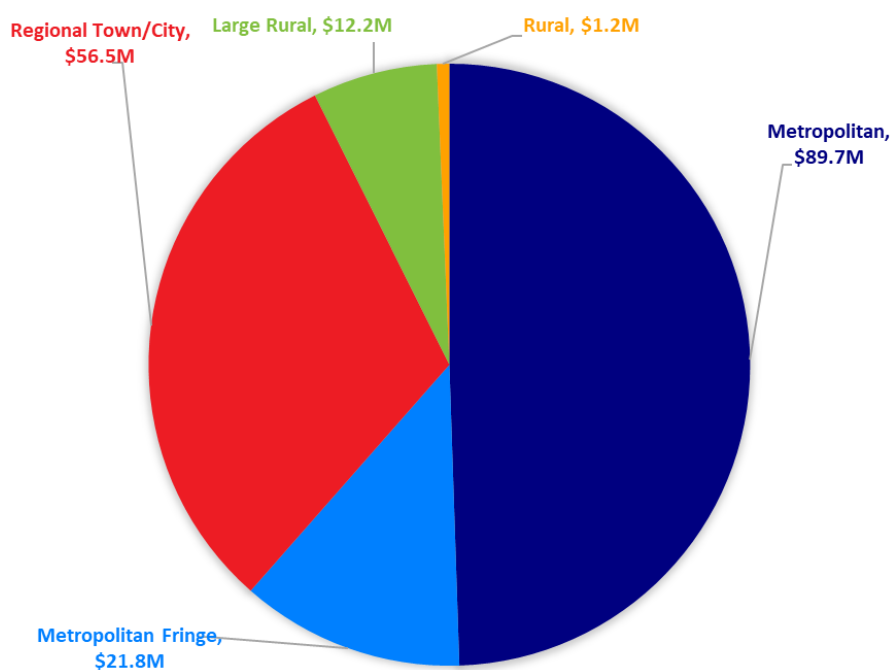
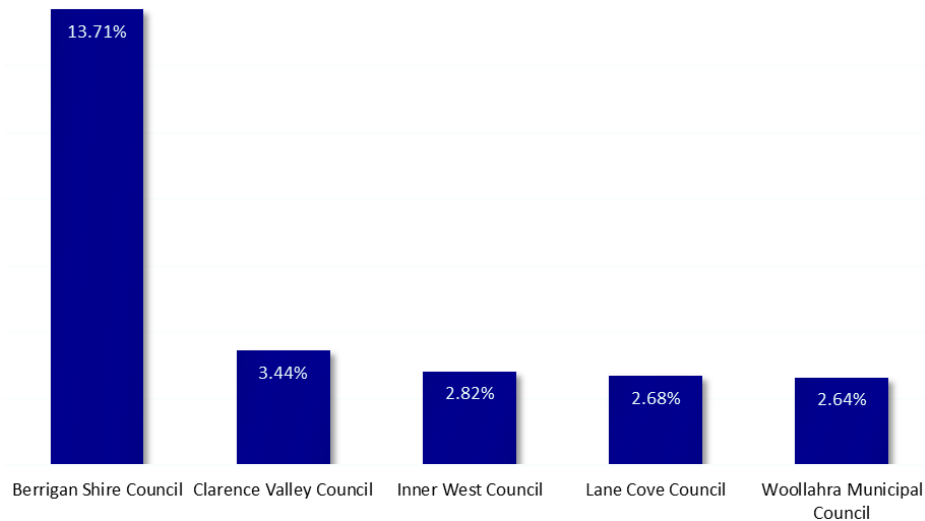




Figure 27 Respondent councils with the largest funding program costs shifted as a proportion of total operating expenditure



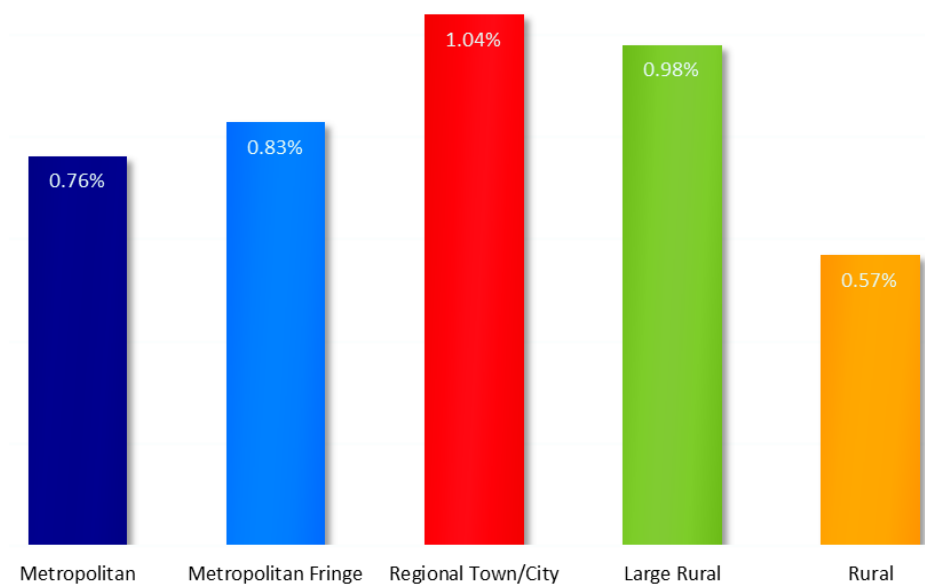
3.6 Pensioner rebates

Councils are required to provide rates rebates to pensioners, which are partially subsidised by the NSW Government. This mandatory pensioner rebate is an estimated net cost to councils of \$55.2 million. This does not include the cost of administering the mandatory pensioner rebates, as each pensioner claim needs to be registered and their details checked by the council.

The level of mandatory rebate has not risen substantially over many years, and therefore has not kept pace with inflation. As a result, many councils have elected to apply further voluntary rebates to ease the financial burden on pensioners. NSW councils incur an additional \$17.2 million in voluntary pensioner rebates. The total cost of pensioner rebates is estimated to be \$72.4 million.



Figure 28 Average total pensioner rebates as a proportion of total rates revenue by council classification





3.7 Service gaps

This section captures costs incurred by councils in providing services as a result of insufficient service provision by another level of government or a market failure of a subsidised or privatised public service. In 2021–22, it is estimated that councils spent \$66.6 million on filling these gaps.

Figure 29 Service gap costs by council classification

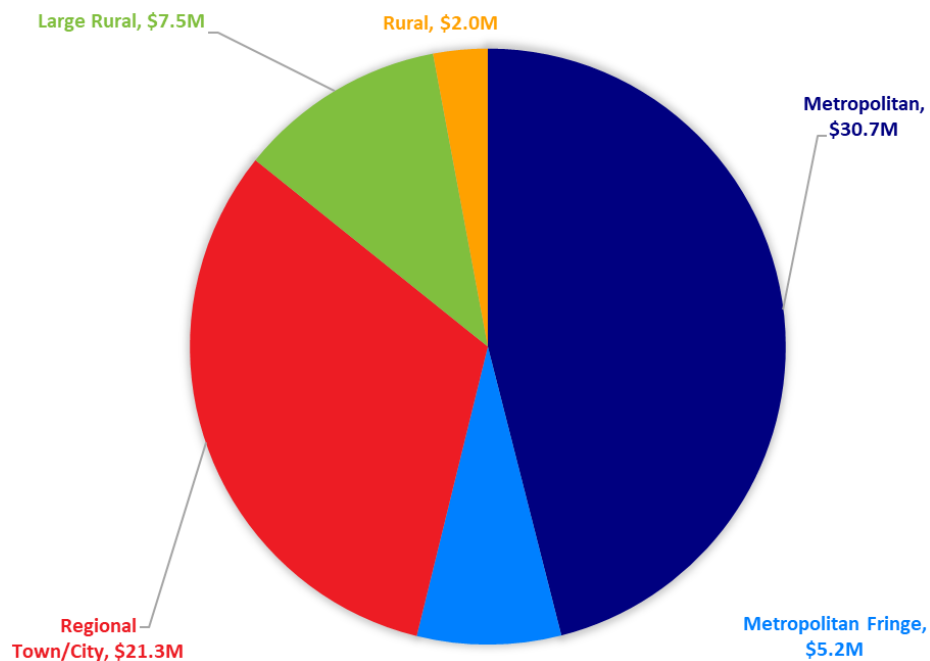
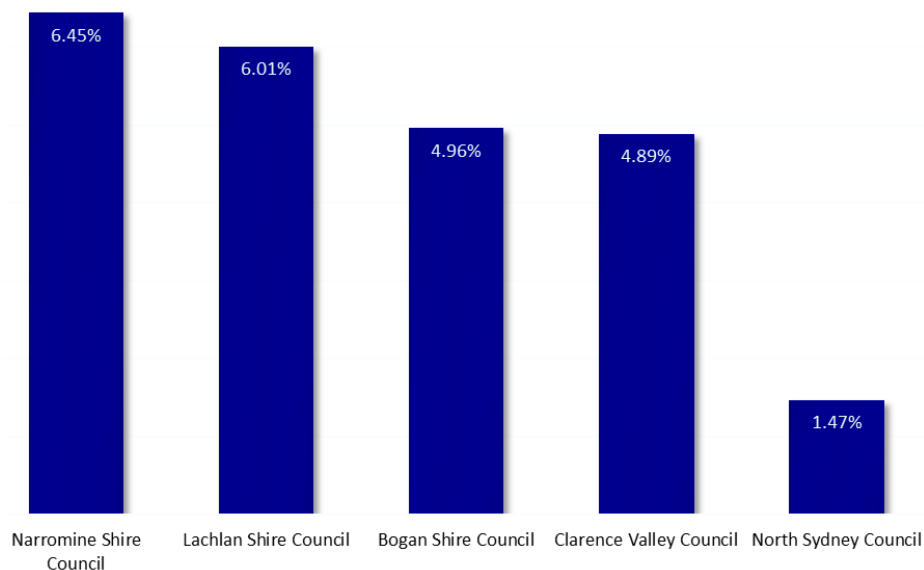


Figure 30 Respondent councils with the highest service gap cost as a proportion of total operating expenditure





The estimated costs are set out in Table 3, below.

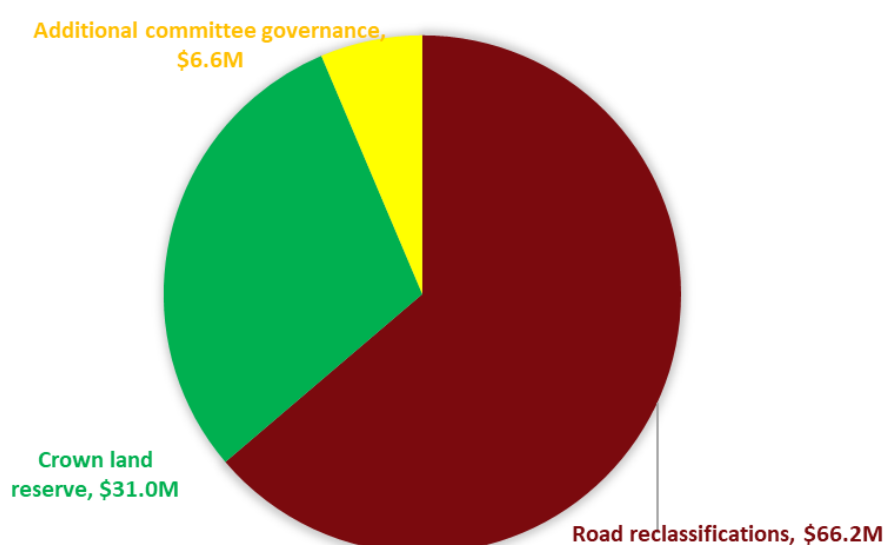
Table 3 Cost for services provided by Council as a result of a State or Federal service gap or market failure

Regulatory function	Number of councils who responded to this question in the survey with a figure	Total amount of cost shift provided	Estimated total cost shift for all NSW Councils (based on population)
Immigration and citizenship ceremonies	60 (from which ten councils put a figure of 0)	\$1.1M	\$1.6M
Crime prevention and policing	51 (from which 11 councils put a figure of 0)	\$10.2M	\$16.2M
Medical services	33 (from which 15 councils put a figure of 0)	\$2.2M	\$3.2M
Aged care services	36 (from which 19 councils put a figure of 0)	\$3.9M	\$5.6M
Disability care services	28 (from which 17 councils put a figure of 0)	\$1.4M	\$2.2M
Childcare services	49 (from which 19 councils put a figure of 0 and two councils a negative figure)	\$12.0M	\$17.8M
Transport services	37 (from which 20 councils put a figure of 0)	\$14.1M	\$20.5M

3.8 Other cost shifts

A number of other areas for cost shifting were identified and gathered in the survey and are outlined here.

Figure 31 Other cost shifts by category





Under the Transport for NSW (formerly RMS) road reclassification program in the 1990s, many roads were reclassified as local or regional road for councils to own and maintain. Of the 68 councils that responded to the survey, 32 were able to estimate the cost of this reclassification, 12 were not able to reliably estimate, and 24 stated that it was not applicable. The total estimate of costs provided by councils was \$26.7 million in 2021–22.

Under the Crown Lands Act 1989, councils have full responsibility to maintain crown reserves under council management and are expected to subsidise shortfalls in maintenance cost from general revenue. This is considered appropriate as the benefits from crown reserves under council management generally accrue to the local community. However, as a result, councils should also be entitled to any current or potential revenue from crown reserves that is required to cover maintenance and improvement cost (e.g., revenue from refreshment facilities, telecommunication facilities). The NSW Government will on occasion take over allowable revenue raising activities on council managed crown reserve land (not including national parks) or will require councils to transfer revenue from council managed crown reserve land to the State Government.

Of the 68 councils surveyed, 22 estimated the lost revenue at \$14.8 million in 2021–22. A further 27 councils were not able to reliably estimate the costs and 19 councils advised that this item didn't apply to them. This estimate does not represent the total net cost of managing (maintaining) crown lands. Nor does it include in transfers associated with the caravan park levy. Only any action by the State Government to limit revenue raising capacity or require the transfer revenue to the State Government has been considered cost shifting.

3.9 Future survey considerations

We asked councils what other areas that should be considered for future surveys. The key areas that respondents identified as costs to be captured in future surveys included:

- Monopoly services costs:
 - NSW Audit Office being the monopoly on local government external audits.
 - NSW Electoral Commission holding a near monopoly on council election administration.
- Cost of Joint Regional Planning Panels (JRPPs) requirement to access councils DAs as per mandated policy.
- Costs of mandatory On-Line Planning Portal – Implementation and ongoing operational costs.
- The Sydney Regional Development Fund Levy.
- Costs associated with Forestry NSW and impact of logging on council owned infrastructure. Rates foregone on State Forest land.
- Capturing the additional cost of Emergency Services administration staff.
- Heritage advisor costs, whilst there is some grant funding towards this it still needs to be administered by council who hand out the grant funds and do general administration.
- Cost involved in Special Variations applications given that councils have to undertake this process to recover costs shifted. This is a lengthy and resource intensive process, which is particularly challenging for smaller councils.
- Net cost of Street Lighting (Less subsidy from Transport for NSW).



- Cost of ongoing maintenance associated with the Community Water Bore program from early 2000s (the program was in conjunction with NSW Office of Water).
- Cost of management of overabundant native species doing damage to infrastructure. This is a NSW government function which is not being undertaken by the State and therefore some councils are doing it.
- Crown Land right to native title compensation (falling to Councils instead of the State).
- Any costs imposed by Service NSW (e.g., disability parking).
- Costs of sharing of facilities especially with Department of Education (schools, parks, playgrounds etc).
- Costs of maintaining State facilities that are located on Crown land.
- Provision of stormwater trunk drainage.

These additional items will need to be validated in terms of the details of what is entailed and whether they are indeed cost shifts before inclusion in any future survey.

We also recommend that some items in the current survey be considered for exclusion in future survey on the basis that they are onerous for councils to quantify and do not materially contribute to the total estimated cost shift for councils, nor are they expected to increase over time. The following items should be reviewed for exclusion:

- Road safety program (Q7) – (0.5% of total cost shift estimate).
- Onsite sewer facilities (Q10) – (0.4% of total cost shift estimate).
- Immigration and citizenship services (Q16) – (0.1% of total cost shift estimate).
- Waste management license fee (Q29) – (0.03% of total cost shift estimate).



4 About the survey

This section outlines the methodology employed to develop and administer the 2021–22 cost shifting survey.

4.1 Development of the survey

The last cost shifting survey of NSW councils was undertaken with 2015–16 financial data. We have used this last survey as the starting point for the 2021–22 Cost Shifting Survey questions. We undertook a review of the previous questionnaire guided by the following guiding principles:

- Ensure that questions are still relevant.
- Where possible maintain questions so that there can be direct year on year comparisons if required.
- Ensure that interpretation of questions is understood and consistent across all councils.
- Identify new areas of cost shifting where required.

An initial review of questions was undertaken by the project team, consisting of Morrison Low and LG NSW staff. We also established a working group that included representatives of senior leaders and financial staff of a cross section of rural, regional, and metropolitan councils. The working group undertook a review of the questions and provided their feedback through a facilitated workshop and feedback gathering tool. We also asked two leading local government academics to provide their feedback through email and one on one meetings on the questionnaire and our approach to understanding cost shifting in local government.

4.2 Conducting the survey

The final survey was provided in a Microsoft Excel format to councils on 17 April 2023 along with a request of councils' 2021–22 Financial Data Return (FDR), which contained council's audited financial Statement information. The FDR was used to gather a small amount of cost shifting information, but predominantly for data validation purposes.

4.3 Responses to the survey

Councils were asked to return their survey responses and FDRs by 8 May 2023. Some councils requested extensions to this date, which were granted up to 19 May 2023. A total of 75 out of 128 councils provided completed surveys (a 58.6% response rate), although not all answers were completed by all responding councils. Only 72 councils provided their FDRs, as three councils were still finalising their 2021–22 financial Statements at the time of survey completion date.

4.4 Data validation and analysis

Data validation included review of outliers both in total terms as well as a proportion of the council's proportion of total operating expenditure. Where possible, we also compared survey responses with councils FDR data returns to understand if there may have been discrepancies or misinterpretations of questions. This



required us to seek further information and validation with some councils on their responses to some questions.

We also utilised State Government financial reports for the Emergency Services agencies to validate to estimate of the ESL against the contributions that these agencies reported in their financial Statements.

For most questions, we have used population as the basis for estimating the total cost shift to all NSW councils for the survey data received. For some we were able to directly estimate through published reports. For example, we used the State Library's 2021–22 report on local council libraries with included operating costs and subsidies received. For other questions, such as the waste levy, where it is not relevant to all councils and there are different levels of the levy between metropolitan and regional councils, we used populations within the relevant and group councils as a basis for estimating the total cost of the waste levy.



QUARTERLY BUDGET
REVIEW STATEMENT

FOR THE QUARTER
ENDED 31 **DECEMBER** 2023

Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

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Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23**Responsible Accounting Officer's Statement**

The following statement is made in accordance with Clause 203(2) of the Local Government (General) Regulation 2021: 31 December 2023.

The Quarterly Budget Review Statement for Lismore City Council for the quarter ended 31/12/2023 indicates that Council's underlying projected financial position at 30/06/2024 will be satisfactory at year end, having regard to the projected estimates of income and expenditure as contained in the original adopted budget forecast.

Council's net operating result before capital grants and contributions indicates that Council is using more resources than it is generating in income. The operating deficit before capital grants & contributions has improved to a projected loss of \$12,416,484. This was mainly due to the recognition of grant funds treated as operating income under Australian Accounting Standards, whereas the expenditure is capital in nature and is likely to be spent over a number of years. Ongoing losses before capital grants and contributions is not considered to be sustainable in the long term and action is being taken to address this as part of the ongoing development of Council's Long Term Financial Plan.

Recovery from the catastrophic floods events of February and March 2022 remains a significant focus. Further delays in funding timelines has resulted in a significant decrease in natural disaster budgets, with a decrease of \$43.5 million in roads capital works to a projected natural disaster program of \$39 million for roads. There was also a decrease of \$29.4 million in sewer natural disaster works to a projected total of \$2.68 million. The capital works program shows an overall projected decrease of \$69.9 million to a projected total of \$151,194,166.

The unrestricted cash result of \$569,816 remains unchanged. Whilst the cash position at 31 December 2023 appears favourable, budgets will need to be monitored closely to ensure Council's financial position remains satisfactory.

Long-Term Financial Plan


Consistent with the requirements of the Integrated Planning and Reporting Framework, Council has been working to finalise a Long Term Financial Plan setting out Council's projected income and expenditure across a 10 year time horizon.

Flood recovery works are expected to take several years to complete and will need to be included in the Long Term Financial Plan. State and Federal Government organisations have pledged to support large portions of the recovery work and insurance will cover some of the damage to property however rebuilding is expected to take several years and will be hampered by lack of access to contractors and materials.

In regards to the statement on Contracts and Consultancy, the content is based on information provided at the time of preparing the December 2023 Quarterly Budget Review Statement. No assessment of the accuracy of this information was undertaken.

Council is working towards a corporate approach to this reporting and this will be incorporated into future QBRS reporting.

Signed: _____



Date:

01/02/2024

Kristian Enevoldson
Responsible Accounting Officer

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & expenses budget review statement

Budget review for the quarter ended 31 December 2023

Income & expenses - Council Consolidated

(\$000's)	Original budget 2023/24	Approved Changes		Revised budget 2023/24	Variations for this Dec QTR	Notes	Projected year end result	Actual YTD figures
		Carry forwards	Sep QBRS					
Income								
Rates and annual charges	61,008,500	0	0	61,008,500	0	1	61,008,500	57,512,727
User charges and fees	24,359,200	0	(80,000)	24,279,200	0	2	24,279,200	6,529,337
Other revenues	4,395,080	0	450,300	4,845,380	752,100	3	5,597,480	4,091,473
Grants and contributions - operating	22,574,061	(1,485,700)	1,575,111	22,663,472	3,105,426	4	25,768,898	5,013,447
Grants and contributions - capital	206,564,041	(12,457,885)	(26,064,918)	168,041,238	(71,671,830)	5	96,369,408	85,271,789
Interest and investment revenue	3,306,300	0	0	3,306,300	0	6	3,306,300	2,693,314
Net gain from disposal of assets	0	0	0	0	0		0	0
Share of interests in joint ventures	0	0	0	0			0	
Total income from continuing operations	322,207,182	(13,943,585)	(24,119,507)	284,144,090	(67,814,304)		216,329,786	161,112,087
Expenses								
Employee benefits and on-costs	36,846,440	0	(37,000)	36,809,440	0	7	36,809,440	21,156,457
Borrowing costs	1,946,500	0	0	1,946,500	(85,000)	8	1,861,500	635,878
Materials and services	47,713,488	1,441,173	1,689,311	50,843,972	781,100	9	51,625,072	29,505,531
Depreciation and amortisation	34,665,700	0	0	34,665,700	0	10	34,665,700	17,332,850
Other expenses	3,924,700	0	0	3,924,700	0	11	3,924,700	1,809,955
Net Loss from disposal of assets	3,409,300	0	0	3,409,300	0	12	3,409,300	0
Share of interests in joint ventures	29,400		51,750	81,150	0	13	81,150	0
Total expenses from continuing operations	128,535,528	1,441,173	1,704,061	131,680,762	696,100		132,376,862	70,440,672
Net operating result from continuing operations	193,671,654	(15,384,758)	(25,823,568)	152,463,328	(68,510,404)		83,952,924	90,671,415
Discontinued operations - surplus/(deficit)	0	0	0	0	0		0	0
Net operating result from all operations	193,671,654	(15,384,758)	(25,823,568)	152,463,328	(68,510,404)		83,952,924	90,671,415
Net Operating Result before Capital Items	(12,892,387)	(2,926,873)	241,350	(15,577,910)	3,161,426		(12,416,484)	5,399,626

More commentary on variations has been included in the QBRS.

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & expenses budget review statement

Budget review for the quarter ended 31 December 2023

Income & expenses - Council Consolidated

(\$000's)	Original	Approved Changes		Revised	Variations	Notes	Projected	Actual	
	budget	Carry	Sep	budget	for this		year end	YTD	
	2023/24	forwards	QBRS	2023/24	Dec QTR		result	figures	
Funding Sources (Consolidated)									
Subtract Funds Deployed for Non-operating Purposes									
Acquisition of Assets	(235,790,817)	(5,122,664)	20,507,343	(220,406,138)	69,911,972		(150,494,166)		
Investment in Associates	29,400	0	51,750	81,150	0	14	81,150		
Acquisition of Assets Net Loss (Non-cash)	3,409,300	0	0	3,409,300	0		3,409,300		
Repayment of Principal on Loans	(5,941,400)	0	0	(5,941,400)	50,400	15	(5,891,000)		
Non-Cash Dedications	(700,000)	0	0	(700,000)	0		(700,000)		
Add Funds received from Non-operating Purposes									
Proceeds from Sale of Assets	1,124,500	0	0	1,124,500	0	16	1,124,500		
Subtract Unexpended Grants and Contributions Received During Year									
Developer Contributions (Section 7.11) Net Movement	(1,165,100)	0	0	(1,165,100)	0	17	(1,165,100)		
Reverse Expenses Not Involving a Flow of Funds									
Depreciation	34,665,700	0	0	34,665,700	0		34,665,700		
WDV Assets disposed	0	0	0	0	0		0		
Total funding required from other than operations									
	(10,696,763)	(20,507,422)	(5,264,475)	(36,468,660)	1,451,968		(35,016,692)		
Non-operating Funds Employed									
Loan Funds New	4,900,000	0	0	4,900,000	(3,400,000)	18	1,500,000		
Loan Funds Unexpended	0	0	0	0	0	18	0		
Unexpended Grants Used	0	18,436,215	0	18,436,215	(2,233,926)	19	16,202,289		
Developer Contributions Used	303,200	23,607	75,000	401,807	0	20	401,807		
Repayments / (Advances to) by Deferred Debtors	0		0	0	0		0		
Reserve Funds Utilised - Transfer From	5,674,354	2,047,600	13,810,500	21,532,454	4,317,358	21	25,849,812		
Reserve Funds Future Use - Transfer To	0		(8,232,000)	(8,232,000)	(135,400)	22	(8,367,400)		
Increase/(Decrease) in Unfunded Operations*	180,791	0	389,025	569,816	0	23	569,816		

*Unfunded refers to variations that have an impact on the Net Cash Position.

More commentary on variations has been included in the QBRS.

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & Expenses (Consolidated)**Detailed changes recommended**

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Note: Positive numbers represent favourable variances, negative unfavourable.

Notes	Program	Description	Changes
1	Rates & Annual Charges		
Revenues		There have been no reportable changes to budget during the period	
2	User Fees & Charges		
Revenues		There have been no reportable changes to budget during the period	
3	Other revenues		
Revenues		Waste Disposal - increase in other revenue budgets in-line with actual income received to December 2023. Major increases include \$372,700 in weighbridge fees, \$250,000 in CDS collection and handling charges and \$129,400 in metal sales	752,100
4	Grants and contributions - operating		
Revenues		Roads - Council has received \$3,105,426 from Round 2 of the Regional Emergency Road Repair Fund (RERRF) grant and has to 31 October 2027 to expend these funds. Projects to be completed in 2023/2024 include \$200,000 for pavement rehabilitation works in Phillip Street, \$371,000 allocated towards pavement rehabilitation works in Union Street and \$80,000 for gravel resheeting on William Road, Rosebank. In accordance with revenue recognition accounting standards, the full grant revenue is recognised upon receipt in November 2023 and treated as an operating grant. Unexpended grant funds will be held in reserves for expenditure in future years.	3,105,426

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & Expenses (Consolidated)**Detailed changes recommended**

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Note: Positive numbers represent favourable variances, negative unfavourable.

Notes	Program	Description	Changes
5	Grants and contributions - capital		
Revenues			
		Bridges - Cabbage Tree Bridge replacement, funded from Local Roads and Community Infrastructure grant	678,170
		Bridges - Local Roads and Community Infrastructure grant funding of \$550,000 will now be allocated to O'Flynn Street, previously revenue funded.	550,000
		Roads Natural Disaster Works - the original budget was predicated on an assumption that funding for landslip projects would be secured by December 2023, with a Request for Proposal (RFP) for the Managing Contractor to be issued in January 2024, leading to increased expenditure from the end of the third fiscal quarter. It further anticipated a gradual approval of additional funding requests. However, to date, only one funding request has been approved since the fiscal year began, with the Roads team securing approval for 22 out of 55 submissions. Since March 2023, just two requests have been approved and NSW Reconstruction Authority is yet to confirm when the major funding request for the landslip projects will be approved. Moreover, Infrastructure NSW conducted an Assurance Review on the procurement process for the Managing Contractor, concluding that further investment in design was necessary before proceeding with the selection of the Managing Contractor. These developments have delayed the initiation of significant elements of the restoration program, limiting expenditure for the remainder of the fiscal year to the CMC contract, including variations and to 'non-complex' works, for which an advance payment of approximately \$32 million has been received. The revised estimate for works in 2023/2024 is \$39,000,000, decreasing the capital works and capital grants budget by \$43,500,000.	(43,500,000)
		Wastewater - the natural disaster restoration budget was initially estimated on the basis that all projects would be progressing through design and commencing construction, with some project delivery by Council. However, the majority of projects are still proceeding through scoping and design procurements, which is managed by Public Works. The budget revision forecasts expenditure against projects that Council is actively delivering and provision for ongoing support during the design phase and initiation of construction for some projects in the program. This has led to a decrease in capital works and capital grants of \$29,400,000.	(29,400,000)
6	Interest and investment revenue		
Revenues		There have been no reportable changes to budget during the period	

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & Expenses (Consolidated)**Detailed changes recommended**

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Note: Positive numbers represent favourable variances, negative unfavourable.

Notes	Program	Description	Changes
7	Employee benefits and on-costs		
Expenses		There have been no reportable changes to budget during the period	
8	Borrowing costs		
Expenses		Waste Disposal - savings in borrowing costs due to no loan borrowings being required for 2023/2024.	(85,000)
9	Materials and services		
Expenses		Sewer - reduction in operating budget to fund the purchase of a remote mower needed due to work, health and safety requirements	(80,000)
		CBD Activation - funds allocated from unexpended SRV funds, for various CBD activation projects, promotions, sponsorships and business welcome packs	109,000
		Waste Disposal - increase in operating expenditure budgets mainly due to increased costs of transportation of waste to SE QLD of \$823,400, offset by savings in other budgets. The net increase in expenditure of \$752,100 has been funded by increases in operating income budgets.	752,100
10	Depreciation, amortisation and impairment		
Expenses		There have been no reportable changes to budget during the period	
11	Other expenses		
Expenses		There have been no reportable changes to budget during the period	
12	Net Loss from disposal of assets		
Expenses		There have been no reportable changes to budget during the period	
13	Share of interests in joint ventures		
Expenses		There have been no reportable changes to budget during the period	

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & Expenses (Consolidated)**Detailed changes recommended**

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Note: Positive numbers represent favourable variances, negative unfavourable.

Notes	Program	Description	Changes
14	Investment in Associates		
Funding		There have been no reportable changes to budget during the period	
15	Repayment of Principal on Loans		
Funding		Waste - savings in loan principal repayments due to no loan borrowings being required for 2023/2024.	(50,400)
16	Proceeds from Sale of Assets		
Funding		There have been no reportable changes to budget during the period	
17	Developer Contributions (Section 7.11) Net Movement		
Funding		There have been no reportable changes to budget during the period	
18	Loan Funds New		
Funding		Waste - due to the deferral of major works on the Leachate Dam, no loan borrowings are forecast to be required for 2023/2024.	(3,400,000)
18	Loan Funds Unexpended		
Funding		There have been no reportable changes to budget during the period	
19	Unexpended Grants Used		
Funding		Roads - Council has received \$3,105,426 under the Regional Emergency Road Repair Fund. These grant funds are recognised upon receipt and this represents the current unexpended component of the grant at 30 June 2024. Council has until 2027 to expend these funds.	(2,233,926)
20	Developer Contributions Used		
Funding		There have been no reportable changes to budget during the period	

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Income & Expenses (Consolidated)**Detailed changes recommended**

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRs.

Note: Positive numbers represent favourable variances, negative unfavourable.

Notes	Program	Description	Changes
21	Reserve Funds Utilised - Transfer From		
Funding		Roads - transfer from carry forward and revote works internal reserve for various projects including 3 bridge designs \$150,000, \$650,000 for extension of works on Richmond Hill Road and \$200,000 towards works at O'Flynn Street.	1,000,000
		CBD Activation - funds allocated from unexpended SRV funds, for various CBD activation projects, promotions, sponsorships and business welcome packs	109,000
		Waste Disposal - funding from Public Infrastructure and Building Assets internal reserve for Leachate Dam and other works due to removal of loan borrowings for 2023/2024.	847,006
		Sewer - transfer from reserve funds of \$250,000 for replacement of Nimbin STP switchboard and \$30,610 towards building works at the Lismore Depot.	280,610
		Water - at its December Meeting, Council resolved to allocate additional funds from reserves to fund contract water main replacements. It was originally determined \$2,300,000 would be required, however only \$2,080,742 is now required to be drawn from reserves	2,080,742
22	Reserve Funds Future Use - Transfer To		
Funding		Waste - due to the removal of proposed loan borrowings for 2023/2024, there were savings of \$85,000 in interest and \$50,400 in principal repayments. These savings have been transferred to reserve to contribute to funding these works when they progress.	(135,400)
23	Increase/(Decrease) in Unfunded Operations*		
Funding	NOTE	There have been no reportable changes to budget during the period	

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Capital budget review statement

Budget review for the quarter ended 31 December 2023

Capital budget - Council Consolidated

(\$000's)	Original budget 2023/24	Approved changes		Revised budget 2023/24	Variations for this Dec QTR	Notes	Projected year end result	Actual YTD figures
		Carry forwards	Sep QBRs					
Capital expenditure								
New assets								
- Plant & equipment	166,989	-	50,000	216,989	80,000	1	296,989	73,000
- Roads, Bridges, Footpath, Cycleways	1,747,828	-	692,073	2,439,901	-	2	2,439,901	910,897
- Stormwater Drainage	394,400	-	-	394,400	-	3	394,400	13,382
- Land & buildings & Other Structures	7,549,744	1,077,536	5,459,900	14,087,180	(2,457,994)	4	11,629,186	754,045
- Water	5,767,240	-	-	5,767,240	-	5	5,767,240	48,440
- Wastewater	2,561,100	-	4,578,600	7,139,700	-	6	7,139,700	1,397,963
- Remediation and Restoration	-	-	-	-	-	7	-	-
- Other Assets	-	-	2,700	2,700	-	8	2,700	-
Renewal assets (replacement)								
- Plant & equipment	5,838,350	-	-	5,838,350	-	1	5,838,350	1,380,018
- Roads, Bridges, Footpath, Cycleways	134,407,454	3,048,694	(31,507,400)	105,948,748	(40,400,330)	2	65,548,418	24,780,191
- Stormwater Drainage	657,400	325,427	-	982,827	-	3	982,827	104,909
- Land, Buildings & Other Structures	33,040,252	671,007	204,784	33,916,043	30,610	4	33,946,653	16,453,761
- Water	9,022,560	-	-	9,022,560	2,080,742	5	11,103,302	2,382,871
- Wastewater	35,187,500	-	12,000	35,199,500	(29,150,000)	6	6,049,500	2,408,524
- Remediation/ Restoration	150,000	-	-	150,000	(95,000)	7	55,000	29,267
- Other Assets	-	-	-	-	-	8	-	-
Total capital expenditure	236,490,817	5,122,664	(20,507,343)	221,106,138	(69,911,972)		151,194,166	50,737,269
Capital funding								
Rates & other untied funding	6,255,576	-	186,075	6,441,651	-		6,441,651	
Capital grants & contributions	206,564,041	(12,457,885)	(26,064,918)	168,041,238	(70,800,330)		97,240,908	
Reserves:								
- External restrictions/reserves	13,207,500	-	4,632,800	17,840,300	2,441,352		20,281,652	
- Internal restrictions/reserves	2,309,400	1,648,400	663,700	4,621,500	1,847,006		6,468,506	
New loans	4,900,000	-	-	4,900,000	(3,400,000)		1,500,000	
New Loans - Unexpended	-	-	-	-	-		-	
Receipts from sale of assets								
- Plant & equipment	1,124,500	-	-	1,124,500	-		1,124,500	
- Land & buildings	-	-	-	-	-		-	
Unexpended Grants	-	15,914,042	-	15,914,042	-		15,914,042	
Section 64/S7.11 Contributions	1,429,800	18,107	75,000	1,522,907	-		1,522,907	
Developer Dedications	700,000	-	-	700,000	-		700,000	
Other Funding	-	-	-	-	-		-	
Total capital funding	236,490,817	5,122,664	(20,507,343)	221,106,138	(69,911,972)		151,194,166	-
Net capital funding - surplus/(deficit)	-	-	-	-	-		-	

This statement should be read in conjunction with the attachment : Capital Budget Review Statement - Detailed changes recommended

Lismore City Council

Capital Budget Review Statement Detailed changes recommended

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRS.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRS.

No impact on Council's Delivery Program is anticipated as a result of these variations.

Notes Details	Variation
1 - Plant & equipment	New Assets
Sewer - funds needed to purchase a remote mower due to work, health and safety requirements	80,000
	Renewal
There have been no changes to budget during the period.	
2 - Roads, Bridges, Footpath, Cycleways	New Assets
There have been no changes to budget during the period.	
	Renewal
Roads Natural Disaster Works - the original budget was predicated on an assumption that funding for landslip projects would be secured by December 2023, with a Request for Proposal (RFP) for the Managing Contractor to be issued in January 2024, leading to increased expenditure from the end of the third fiscal quarter. It further anticipated a gradual approval of additional funding requests. However, to date, only one funding request has been approved since the fiscal year began, with the Roads team securing approval for 22 out of 55 submissions. Since March 2023, just two requests have been approved and NSW Reconstruction Authority is yet to confirm when the major funding request for the landslip projects will be approved.	(43,500,000)
Moreover, Infrastructure NSW conducted an Assurance Review on the procurement process for the Managing Contractor, concluding that further investment in design was necessary before proceeding with the selection of the Managing Contractor.	
These developments have delayed the initiation of significant elements of the restoration program, limiting expenditure for the remainder of the fiscal year to the CMC contract, including variations and to 'non-complex' works, for which an advance payment of approximately \$32 million has been received. The revised estimate for works in 2023/2024 is \$39,000,000, decreasing the capital works budget by \$43,500,000.	
Bridges - survey, geotech and concept design works to be undertaken for Eaton, Chelmsford and Sims Bridge. These works are being funded from internal reserves as an investment towards being ready for bridge renewal program grant applications.	150,000
Bridges - Cabbage Tree Bridge replacement, funded from Local Roads and Community Infrastructure grant	678,170
Bridges - Waddington Bridge Jiggi, funded from revenue. Local Roads and Community Infrastructure grant funding of \$550,000 will now be allocated to O'Flynn Street, previously revenue funded.	550,000
Roads - Council has received \$3,105,426, from Round 2 of the Regional Emergency Road Repair Fund (RERRF) grant and has to 31 October 2027 to expend these funds. Projects to be completed in 2023/2024 include \$200,000 for pavement rehabilitation works in Phillip Street, \$371,000 allocated towards pavement rehabilitation works in Union Street, \$220,500 towards pavement rehabilitation works on Richmond Hill Road and \$80,000 for gravel resheeting on William Road, Rosebank.	871,500

Lismore City Council

Capital Budget Review Statement Detailed changes recommended

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRS.

Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRS.

No impact on Council's Delivery Program is anticipated as a result of these variations.

Notes	Details	Variation
	Roads - the scope of works has been extended for pavement rehabilitation works on Richmond Hill Road, with an additional \$650,000 funded from internal reserves and \$220,500 from the RERRF grant detailed above.	650,000
	Roads - the scope of works has been extended for pavement rehabilitation works in O'Flynn Street, with an additional \$200,000 funded from internal reserves.	200,000
3	- Stormwater Drainage	New Assets
	There have been no changes to budget during the period.	
		Renewal
	There have been no changes to budget during the period.	
4	- Land & buildings & Other Structures	New Assets
	Waste Disposal - Leachate Dam budget adjusted for projected spend in 2023/2024.	(2,457,994)
		Renewal
	Wastewater - Transfer from reserve to setup a new Tradewaste Office	30,610
5	- Water	New Assets
	There have been no changes to budget during the period.	
		Renewal
	Water - at its December Meeting, Council resolved to allocate additional funds from reserves to fund contract water main replacements. It was originally determined \$2,300,000 would be required, however only \$2,080,742 is now required to be drawn from reserves	2,080,742
6	- Wastewater	New Assets
	There have been no changes to budget during the period.	
		Renewal
	Wastewater - Tthe Nimbin STP Switchboard project was deferred in previous years and funds placed into reserves. \$250K is requested from reserves to realise this project.	250,000
	Wastewater - the natural disaster restoration budget was initially estimated on the basis that all projects would be progressing through design and commencing construction, with some project delivery by Council. However, the majority of projects are still proceeding through scoping and design procurements, which is managed by Public Works. The budget revision forecasts expenditure against projects that Council is actively delivering and provision for ongoing support during the design phase and initiation of construction for some projects in the program. This has led to a decrease in capital works of \$29,400,000.	(29,400,000)

Lismore City Council

Capital Budget Review Statement
Detailed changes recommended

Budget Variations being recommended include the following material items:

Funded Variations - variations of \$10,000 or greater have been commented on in the QBRS.
Unfunded Variations - variations of \$10,000 or greater have been commented on in the QBRS.
No impact on Council's Delivery Program is anticipated as a result of these variations.

Notes	Details	Variation
7	- Remediation and Restoration There have been no changes to budget during the period. Waste Disposal - reduction in phytocapping budget based on projected spend for 2023/2024.	New Assets Renewal (95,000)
8	- Other Assets There have been no changes to budget during the period. There have been no changes to budget during the period.	New Assets Renewal

Lismore City Council

Quarterly Budget Review Statement

for the period 01/10/23 to 31/12/23

Cash & investments budget review statement

Budget review for the quarter ended 31 December 2023

Cash & investments - Council Consolidated

(\$000's)	Opening Balance 2023/24	Working Capital 2023/24	Approved 2023/24	Original budget 2023/24	Approved changes		Revised budget 2023/24	Variations for this Dec QTR	Projected year end result
					Carry forwards	Sep QBRS			
Externally restricted									
Developer Contributions - General	9,109,000	-	861,900	9,970,900	(23,607)	(75,000)	9,872,293	-	9,872,293
Unexpended GF Grants Used	29,787,000	-	-	29,787,000	(18,427,476)	-	11,359,524	2,233,926	13,593,450
Water Supplies*	16,663,000	-	(5,193,921)	11,469,079	-	-	11,469,079	(2,080,742)	9,388,337
Wastewater Supplies*	48,002,000	-	2,373,149	50,375,149	-	(4,632,800)	45,742,349	(280,610)	45,461,739
Stormwater Management	2,623,000	-	(189,900)	2,433,100	(8,739)	-	2,424,361	-	2,424,361
Domestic Waste Management	-	-	51,508	51,508	-	-	51,508	-	51,508
Waste Minimisation	2,113,000	-	(819,553)	1,293,447	-	-	1,293,447	-	1,293,447
Trust fund	1,885,000	-	-	1,885,000	-	-	1,885,000	-	1,885,000
Art gallery gift account	184,000	-	-	184,000	-	-	184,000	-	184,000
Flood Appeal	-	-	-	-	-	-	-	-	-
Total externally restricted	110,366,000		(2,916,817)	107,449,183	(18,459,822)	(4,707,800)	84,281,561	(127,426)	84,154,135
(1) Funds that must be spent for a specific purpose									
Internally restricted									
Special Rate Variation	1,504,700	-	(97,600)	1,407,100	-	-	1,407,100	(109,000)	1,298,100
Carry forward revote works	5,233,700	3,567,300	(28,437)	8,772,563	(1,380,400)	568,600	7,960,763	(1,000,000)	6,960,763
Financial Assistance Grant paid in advance	6,546,600	-	-	6,546,600	-	-	6,546,600	-	6,546,600
Emergencies	-	1,100,000	-	1,100,000	-	-	1,100,000	-	1,100,000
Economic Development & Growth	-	1,000,000	-	1,000,000	-	-	1,000,000	-	1,000,000
Public Infrastructure and Building Assets	9,548,000	7,760,500	(2,499,100)	14,809,400	(667,200)	(1,514,300)	12,627,900	(711,606)	11,916,294
Total internally restricted	22,833,000	13,427,800	(2,625,137)	33,635,663	(2,047,600)	(945,700)	30,642,363	(1,820,606)	28,821,757
(2) Funds that Council has earmarked for a specific purpose									
Unrestricted (ie. available after the above Restrictions)	-	-	180,791	180,791	-	389,025	569,816	-	569,816
Total Cash & investments	133,199,000	13,427,800	(5,361,163)	141,265,637	(20,507,422)	(5,264,475)	115,493,740	(1,948,032)	113,545,708

Note:

Council accurately determines its investments portfolio on a externally/internally restricted basis annually.
Estimates are provided as part of the monthly Investments Report.

As such the breakdown provided for YTD are estimates only and are based on the ratios reported in the 2022/23 Financial Reports.

Investments with various financial institutions have been made in accordance with the Local Government Act 1993, Local Government (General) Regulation 2021 and Council's Investment Policy.

Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

Cash & investments budget review statement

Comment on Cash & Investments position

A detailed commentary is provided as part of the monthly report to Council on Investments. The latest report is for 31 December 2023.

Cash

This Cash at Bank amount has been reconciled to Council's physical Bank Statements.

The date of completion of this bank reconciliation is 31/12/2023.

Investments

Investments have been invested in accordance with Council's Investment Policy.

The face value of Cash and Investments is \$132,284,490 as at 31/12/2023.

Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

Key Performance Indicators (KPI) Budget Review Statement

Budget review for the quarter ended 31 December 2023

(\$000's)	Current Projection Indicator 2023/24	Original Indicator 2023/24	Prior Period Indicator 2022/23
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The Council monitors the following Key Performance Indicators:

1. Operating Performance Ratio

Total continuing Operating revenue (exc Capital Grants & Contributions) - Operating Exp (excluding loss on sale of assets)

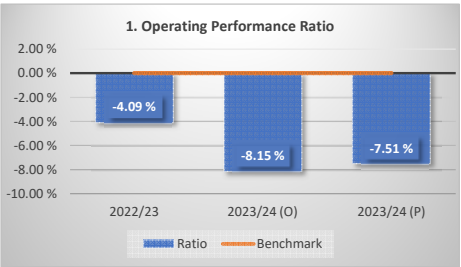
Total continuing Operating revenues

-7.51 %
-8.15 %
-4.09 %

This ratio measures a Council's achievement of containing operating expenditure within operating revenue.

Benchmark is greater than 0%
December 2023 - Unfavourable

Note: Council is addressing the Operating Performance Ratio as part of its Long Term Financial Plan.



2. Own Source Operating Revenue Ratio

Total continuing operating revenue (excl all Grants & Cont.)

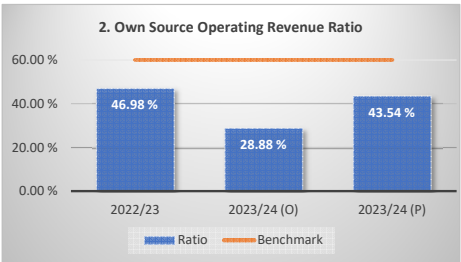
Total continuing operating revenue

43.54 %
28.88 %
46.98 %

This ratio measures Council's fiscal flexibility. It measures a council's reliance on external funding sources such as operating grants and contributions. Council's financial flexibility improves the higher the level of its own source of revenue.

Benchmark is greater than 60%
December 2023 - Unfavourable

Note: this indicator is currently being impacted by significant natural disaster funding outside the scope of business as usual operations and previous natural disaster events. This is likely to continue over the next 2 to 3 years as restoration works are completed.



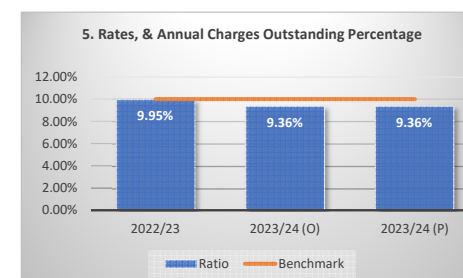
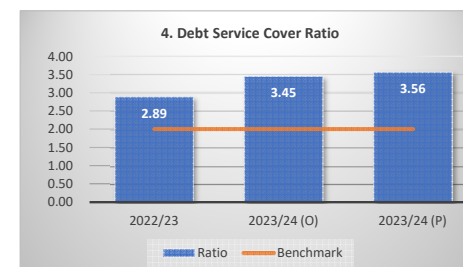
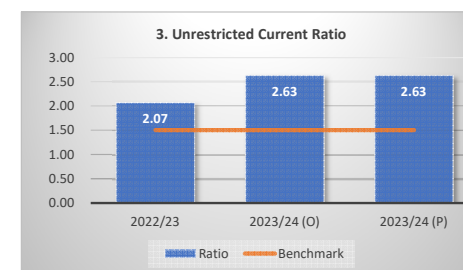
Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

Key Performance Indicators (KPI) Budget Review Statement

Budget review for the quarter ended 31 December 2023

(\$000's)	Current Projection Indicator 2023/24	Original Indicator 2023/24	Prior Period Indicator 2022/23
3. Unrestricted current ratio <i>Estimated</i>			
Current assets less all external restrictions	2.63	2.63	2.07
Current liabilities less specific purpose liabilities			
<p>The 'unrestricted current ratio' represents a council's ability to meet short-term obligations as they fall due. Restrictions placed on various funding sources (e.g. Section 7.11 developer contributions) exclude these funds from being used in day to day operations.</p> <p>Benchmark is greater than 1.5x December 2023 - Favourable</p>			
4. Debt Service Cover Ratio			
Operating Result before capital excluding int & depn	3.56	3.45	2.89
Principal Repayments and Borrowing Costs			
<p>This ratio measures the availability of operating cash to service debt including interest, principal and lease payments.</p> <p>Benchmark is greater than 2. December 2023 - Favourable</p> <p>Note: this ratio is well above the benchmark of greater than 2. was received in 2021/2022 and the expenditure is being incurred in 2022/2023.</p>			
5. Rates, Annual Charges, Interest & Extra Charges Outstanding Percentage			
Rates, Annual and Extra Charges Outstanding	9.36 %	9.36 %	9.95 %
Rates, Annual and Extra Charges Collectible			
<p>Note: this ratio is to assess the impact of uncollected rates and annual charges on liquidity and the adequacy of recovery efforts. This percentage is based on the amount outstanding as a percentage of the amount to be collected for rates and annual charges for the current year and outstanding from previous years. The ratio will decline as Council moves towards the financial year end and rates instalments are due and paid.</p> <p>Benchmark is less than 10%. December 2023 - Favourable</p>			



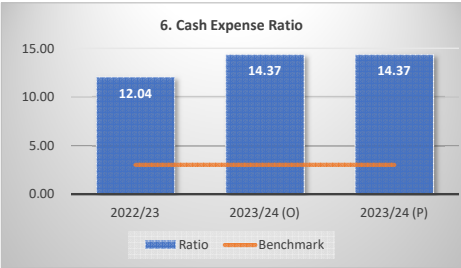
Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

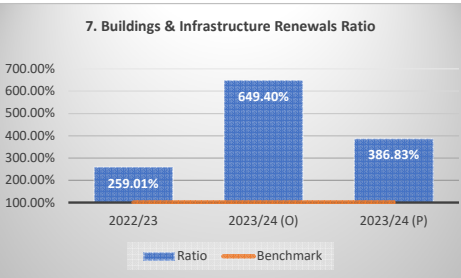
Key Performance Indicators (KPI) Budget Review Statement

Budget review for the quarter ended 31 December 2023

(\$000's)	Current Projection Indicator 2023/24	Original Indicator 2023/24	Prior Period Indicator 2022/23
6. Cash Expense Ratio			
Current year's cash and cash equivalent plus all term deposits	14.37	14.37	12.04
Payments form cashflow of operating and financing activities			
The liquidity ratio indicates the number of months a council can continue paying for its immediate expenses without additional cash inflow.			
The ratio is reported on a consolidated basis and does not separate between restricted and unrestricted funds.			
Benchmark is greater than 3 months.	December 2023 - Favourable		



7. Building & Infrastructure Renewals Ratio			
Asset Renewals (Building and Infrastructure)	386.83 %	649.40 %	259.01 %
Depreciation, Amortisation & Impairment			
Benchmark is greater than 100%.			
December 2023 - Favourable			
The ratio is a snap shot of what is expected to be spent on renewals for the 2023/2024 year only. The final ratio may be impacted due to delays in completion of budgeted works as a result of weather or realignment of priorities as a result of additional grant funding received throughout the year. Adjustments to natural disaster estimates have been the cause of the reduction in this ration in the December quarter.			
* Note: the 2022/23 indicator of 259.01% was favourably impacted by the inclusion of natural disaster works. Adjusted for these works and the impact of impairment reversals, this ratio would have been 124.62% for 2022/23.			



Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

Contracts Budget Review Statement

Budget review for the quarter ended 31 December 2023

Part A - Contracts Listing - contracts entered into during the quarter

Contractor	Contract detail & purpose	Contract Value	Start Date	Duration of Contract	Budgeted (Y/N)	Notes
No contracts have been advised						

Information contained in the reports is based on the information supplied by Program Managers.

Notes:

1. Minimum reporting level is 1% of estimated income from continuing operations of Council or \$50,000 - whatever is the lesser.
2. Contracts listed are those entered into during the quarter being reported and exclude contractors on Council's Preferred Supplier list.
3. Contracts for employment are not required to be included.

Lismore City Council

Quarterly Budget Review Statement
for the period 01/10/23 to 31/12/23

Consultancy & Legal Expenses Budget Review Statement

Consultancy & Legal Expenses Overview

Expense	YTD Expenditure	Budgeted (Y/N)
Consultancy	502,161	Y*
Legal Expenses	362,717	Y*

Consultants*

A consultant is a person or organisation engaged under contract on a temporary basis to provide recommendations or high level specialist or professional advice to assist decision making by management. Generally it is the advisory nature of the work that differentiates a consultant from other contractors. Amounts previously categorised and reported as consultancy expenses have been reviewed and expenditure that does not fit within the definition of a consultant removed from the report.

This amount represents the net costs incurred as at 31 December 2023

Legal Expenses**

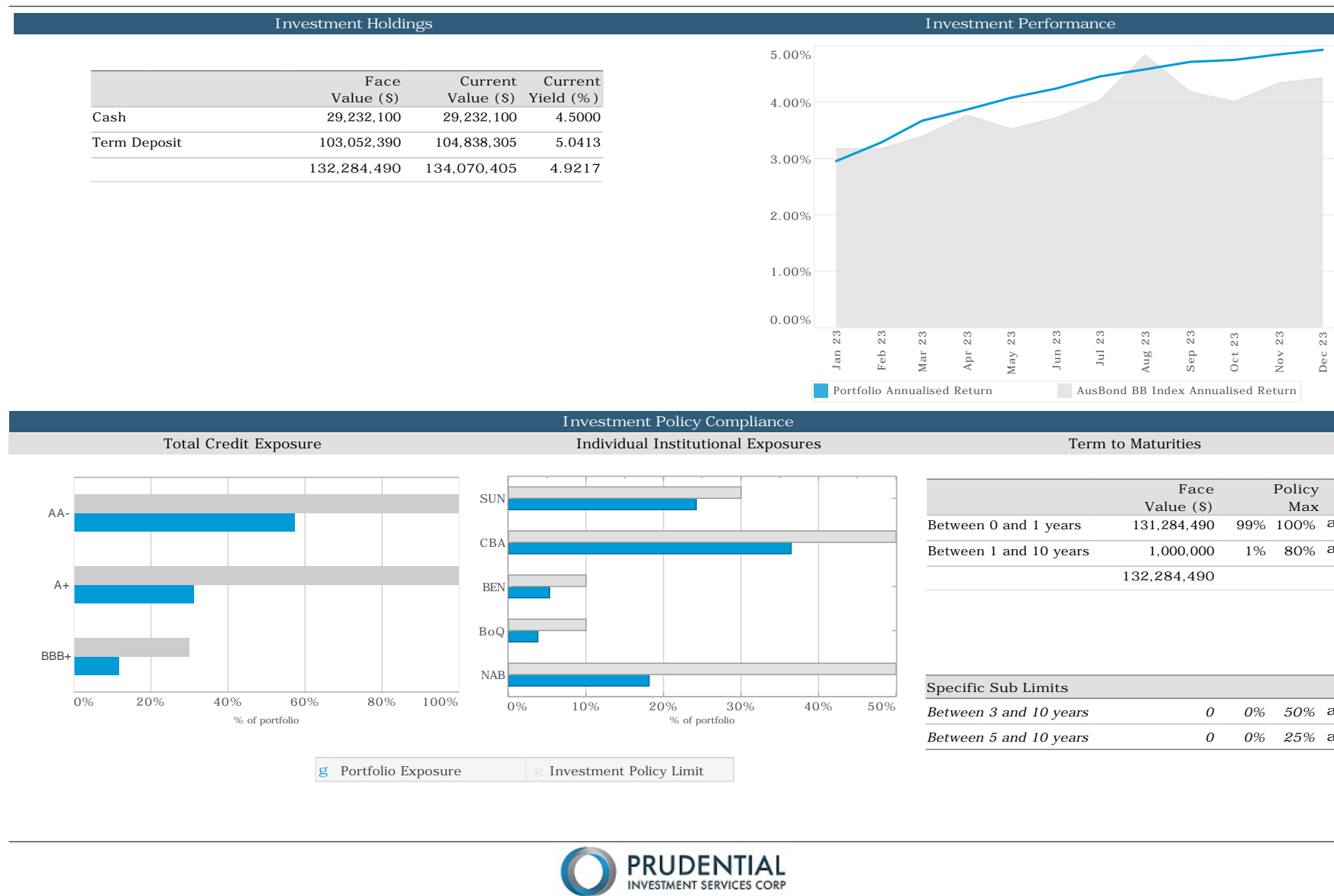
This amount represents the net costs incurred as at 31 December 2023



Investment Summary Report
December 2023



Lismore City Council Executive Summary - December 2023



Lismore City Council Investment Holdings Report - December 2023



Cash Accounts

Face Value (\$)	Current Rate (%)	Institution	Credit Rating	Current Value (\$)	Deal No.	Reference
29,232,100.00	4.5000%	Commonwealth Bank of Australia	AA-	29,232,100.00	543330	64
29,232,100.00	4.5000%			29,232,100.00		

Term Deposits

Maturity Date	Face Value (\$)	Current Rate (%)	Institution	Credit Rating	Purchase Price (\$)	Purchase Date	Current Value (\$)	Deal No.	Accrued Interest (\$)	Next Interest Date	Reference
9-Jan-24	1,017,600.55	4.9000%	Bendigo and Adelaide Bank	BBB+	1,017,600.55	5-Apr-23	1,054,621.69	543994	37,021.14	At Maturity	
9-Jan-24	2,000,000.00	4.6500%	Commonwealth Bank of Australia	AA-	2,000,000.00	25-Oct-23	2,017,326.03	544592	17,326.03	At Maturity	
17-Jan-24	1,011,500.00	4.6000%	Suncorp Bank	A+	1,011,500.00	17-Mar-23	1,048,468.25	543938	36,968.25	At Maturity	109
17-Jan-24	1,023,289.86	3.6900%	Suncorp Bank	A+	1,023,289.86	10-Mar-23	1,054,014.63	543925	30,724.77	At Maturity	114
6-Feb-24	2,000,000.00	4.7000%	Bendigo and Adelaide Bank	BBB+	2,000,000.00	28-Apr-23	2,063,868.49	544044	63,868.49	At Maturity	121
13-Feb-24	3,000,000.00	5.0500%	National Australia Bank	AA-	3,000,000.00	1-Nov-23	3,025,319.18	544609	25,319.18	At Maturity	
27-Feb-24	2,000,000.00	5.0400%	National Australia Bank	AA-	2,000,000.00	27-Feb-23	2,085,058.63	543864	85,058.63	At Maturity	101
27-Feb-24	3,000,000.00	4.9100%	Suncorp Bank	A+	3,000,000.00	28-Sep-23	3,038,338.36	544544	38,338.36	At Maturity	
28-Feb-24	2,000,000.00	5.0000%	National Australia Bank	AA-	2,000,000.00	28-Feb-23	2,084,109.59	543869	84,109.59	At Maturity	108
12-Mar-24	2,000,000.00	5.1000%	Bank of Queensland	BBB+	2,000,000.00	28-Sep-23	2,026,547.95	544545	26,547.95	At Maturity	
13-Mar-24	2,000,000.00	5.4000%	Commonwealth Bank of Australia	AA-	2,000,000.00	14-Jun-23	2,059,473.97	544201	59,473.97	At Maturity	
20-Mar-24	4,000,000.00	4.4000%	Bendigo and Adelaide Bank	BBB+	4,000,000.00	21-Mar-23	4,137,906.85	543945	137,906.85	At Maturity	110
26-Mar-24	3,000,000.00	5.1500%	Bank of Queensland	BBB+	3,000,000.00	28-Sep-23	3,040,212.33	544546	40,212.33	At Maturity	
26-Mar-24	5,000,000.00	5.1400%	Suncorp Bank	A+	5,000,000.00	25-Aug-23	5,090,830.14	544428	90,830.14	At Maturity	
3-Apr-24	2,000,000.00	5.1500%	National Australia Bank	AA-	2,000,000.00	30-Aug-23	2,034,991.78	544441	34,991.78	At Maturity	
10-Apr-24	2,000,000.00	4.5500%	Suncorp Bank	A+	2,000,000.00	12-Apr-23	2,065,819.18	544019	65,819.18	At Maturity	117
16-Apr-24	2,000,000.00	5.2000%	Suncorp Bank	A+	2,000,000.00	16-Aug-23	2,039,320.55	544395	39,320.55	At Maturity	
22-Apr-24	4,000,000.00	4.5200%	Westpac Group	AA-	4,000,000.00	21-Apr-23	4,126,312.33	544032	126,312.33	At Maturity	119 Green
1-May-24	5,000,000.00	4.1600%	Westpac Group	AA-	5,000,000.00	28-Apr-23	5,141,326.03	544046	141,326.03	At Maturity	122 Green
14-May-24	1,000,000.00	5.1200%	Suncorp Bank	A+	1,000,000.00	11-Oct-23	1,011,502.47	544574	11,502.47	At Maturity	
22-May-24	5,000,000.00	5.4700%	Commonwealth Bank of Australia	AA-	5,000,000.00	23-Aug-23	5,098,160.27	544410	98,160.27	At Maturity	
4-Jun-24	1,000,000.00	5.3200%	Suncorp Bank	A+	1,000,000.00	1-Nov-23	1,008,890.96	544611	8,890.96	At Maturity	



Lismore City Council Investment Holdings Report - December 2023



Maturity Date	Face Value (\$)	Current Rate (%)	Institution	Credit Rating	Purchase Price (\$)	Purchase Date	Current Value (\$)	Deal No.	Accrued Interest (\$)	Next Interest Date	Reference
19-Jun-24	2,000,000.00	5.5800%	Commonwealth Bank of Australia	AA-	2,000,000.00	20-Jun-23	2,059,621.92	544214	59,621.92	At Maturity	
24-Jun-24	5,000,000.00	5.4200%	Commonwealth Bank of Australia	AA-	5,000,000.00	25-Aug-23	5,095,778.08	544427	95,778.08	At Maturity	
2-Jul-24	1,000,000.00	5.1900%	Commonwealth Bank of Australia	AA-	1,000,000.00	6-Sep-23	1,016,636.44	544472	16,636.44	At Maturity	
16-Jul-24	3,000,000.00	5.1500%	National Australia Bank	AA-	3,000,000.00	20-Dec-23	3,005,079.45	544754	5,079.45	At Maturity	
30-Jul-24	3,000,000.00	5.2500%	National Australia Bank	AA-	3,000,000.00	28-Sep-23	3,040,993.15	544547	40,993.15	At Maturity	
23-Aug-24	2,000,000.00	5.1500%	National Australia Bank	AA-	2,000,000.00	27-Dec-23	2,001,410.96	544759	1,410.96	At Maturity	
28-Aug-24	5,000,000.00	5.0700%	Westpac Group	AA-	5,000,000.00	25-Aug-23	5,024,308.22	544426	24,308.22	Quarterly	Green
3-Sep-24	2,000,000.00	5.2500%	National Australia Bank	AA-	2,000,000.00	5-Sep-23	2,033,945.21	544466	33,945.21	At Maturity	
4-Sep-24	1,000,000.00	5.2500%	National Australia Bank	AA-	1,000,000.00	6-Sep-23	1,016,828.77	544473	16,828.77	At Maturity	
25-Sep-24	1,000,000.00	5.3100%	National Australia Bank	AA-	1,000,000.00	26-Sep-23	1,014,111.51	544526	14,111.51	At Maturity	
1-Oct-24	2,000,000.00	5.2100%	Westpac Group	AA-	2,000,000.00	28-Sep-23	2,027,120.55	544548	27,120.55	At Maturity	Green
16-Oct-24	2,000,000.00	5.2900%	National Australia Bank	AA-	2,000,000.00	18-Oct-23	2,021,739.73	544584	21,739.73	At Maturity	
22-Oct-24	2,000,000.00	5.2800%	Commonwealth Bank of Australia	AA-	2,000,000.00	25-Oct-23	2,019,673.42	544593	19,673.42	At Maturity	99
6-Nov-24	5,000,000.00	5.4700%	Suncorp Bank	A+	5,000,000.00	1-Nov-23	5,045,708.22	544610	45,708.22	At Maturity	
20-Nov-24	6,000,000.00	5.4000%	Suncorp Bank	A+	6,000,000.00	23-Nov-23	6,034,619.18	544660	34,619.18	At Maturity	
26-Nov-24	5,000,000.00	5.5200%	Suncorp Bank	A+	5,000,000.00	29-Nov-23	5,024,953.42	544672	24,953.42	At Maturity	
25-Aug-25	1,000,000.00	0.9500%	National Australia Bank	AA-	1,000,000.00	25-Aug-21	1,003,357.53	543414	3,357.53	Annually	12
103,052,390.41		5.0413%			103,052,390.41		104,838,305.42		1,785,915.01		



Lismore City Council
Accrued Interest Report - December 2023



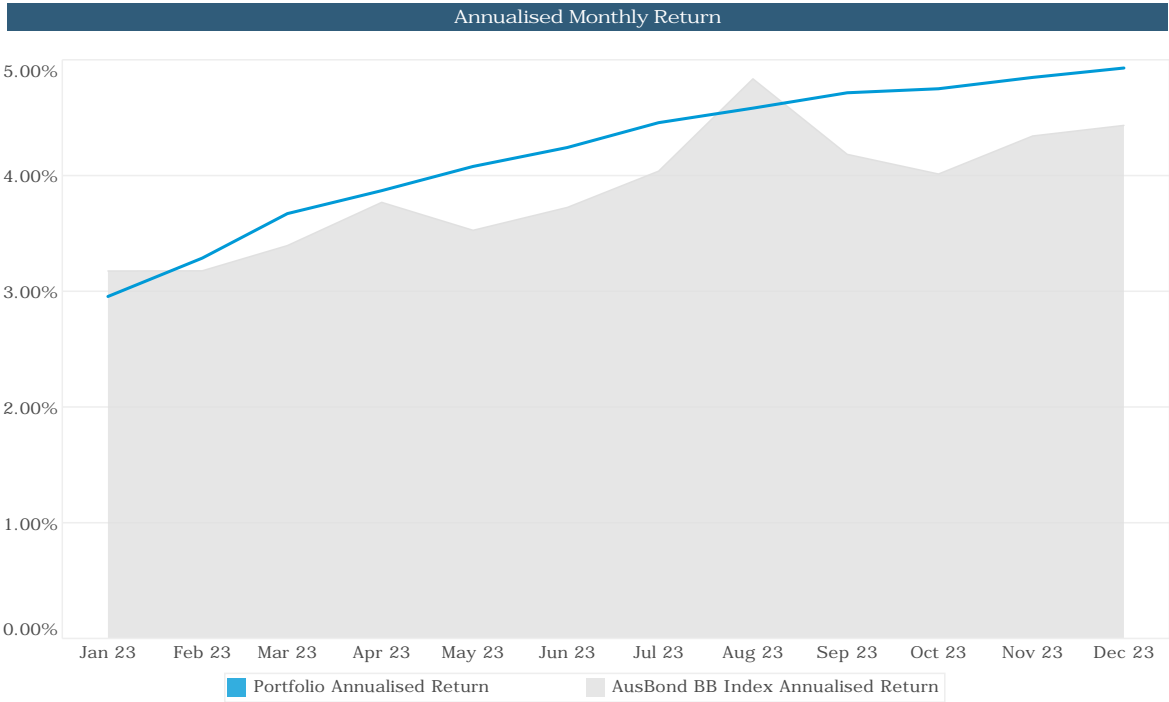
Investment	Deal No.	Comments	Face Value (\$)	Settlement Date	Maturity Date	Interest Received (\$)	Days	Interest Accrued (\$)	Yield (% pa)
Cash									
Commonwealth Bank of Australia	543330					59,464.36	0	79,660.00	4.50%
						59,464.36		79,660.00	4.50%
Term Deposits									
Westpac Group	543388		4,000,000.00	7-Jun-22	7-Dec-23	65,178.08	6	2,136.98	3.25%
Rabobank Australia	543413		1,000,000.00	13-Dec-18	13-Dec-23	33,500.00	12	1,101.37	3.35%
Commonwealth Bank of Australia	544164		5,000,000.00	6-Jun-23	13-Dec-23	130,397.26	12	8,235.62	5.01%
National Australia Bank	544539		3,000,000.00	27-Sep-23	20-Dec-23	33,208.77	19	7,511.51	4.81%
National Australia Bank	544429		2,000,000.00	28-Aug-23	27-Dec-23	33,169.51	26	7,127.33	5.00%
Bendigo and Adelaide Bank	543994		1,017,600.55	5-Apr-23	9-Jan-24	0.00	31	4,234.89	4.90%
Commonwealth Bank of Australia	544592		2,000,000.00	25-Oct-23	9-Jan-24	0.00	31	7,898.63	4.65%
Suncorp Bank	543925		1,023,289.86	10-Mar-23	17-Jan-24	0.00	31	3,206.96	3.69%
Suncorp Bank	543938		1,011,500.00	17-Mar-23	17-Jan-24	0.00	31	3,951.78	4.60%
Bendigo and Adelaide Bank	544044		2,000,000.00	28-Apr-23	6-Feb-24	0.00	31	7,983.56	4.70%
National Australia Bank	544609		3,000,000.00	1-Nov-23	13-Feb-24	0.00	31	12,867.13	5.05%
National Australia Bank	543864		2,000,000.00	27-Feb-23	27-Feb-24	0.00	31	8,561.10	5.04%
Suncorp Bank	544544		3,000,000.00	28-Sep-23	27-Feb-24	0.00	31	12,510.41	4.91%
National Australia Bank	543869		2,000,000.00	28-Feb-23	28-Feb-24	0.00	31	8,493.15	5.00%
Bank of Queensland	544545		2,000,000.00	28-Sep-23	12-Mar-24	0.00	31	8,663.02	5.10%
Commonwealth Bank of Australia	544201		2,000,000.00	14-Jun-23	13-Mar-24	0.00	31	9,172.60	5.40%
Bendigo and Adelaide Bank	543945		4,000,000.00	21-Mar-23	20-Mar-24	0.00	31	14,947.95	4.40%
Suncorp Bank	544428		5,000,000.00	25-Aug-23	26-Mar-24	0.00	31	21,827.40	5.14%
Bank of Queensland	544546		3,000,000.00	28-Sep-23	26-Mar-24	0.00	31	13,121.92	5.15%
National Australia Bank	544441		2,000,000.00	30-Aug-23	3-Apr-24	0.00	31	8,747.94	5.15%
Suncorp Bank	544019		2,000,000.00	12-Apr-23	10-Apr-24	0.00	31	7,728.77	4.55%
Suncorp Bank	544395		2,000,000.00	16-Aug-23	16-Apr-24	0.00	31	8,832.88	5.20%
Westpac Group	544032		4,000,000.00	21-Apr-23	22-Apr-24	0.00	31	15,355.62	4.52%

Lismore City Council
Accrued Interest Report - December 2023



Investment	Deal No.	Comments	Face Value (\$)	Settlement Date	Maturity Date	Interest Received (\$)	Days	Interest Accrued (\$)	Yield (% pa)
Westpac Group	544046		5,000,000.00	28-Apr-23	1-May-24	0.00	31	17,665.76	4.16%
Suncorp Bank	544574		1,000,000.00	11-Oct-23	14-May-24	0.00	31	4,348.50	5.12%
Commonwealth Bank of Australia	544410		5,000,000.00	23-Aug-23	22-May-24	0.00	31	23,228.76	5.47%
Suncorp Bank	544611		1,000,000.00	1-Nov-23	4-Jun-24	0.00	31	4,518.36	5.32%
Commonwealth Bank of Australia	544214		2,000,000.00	20-Jun-23	19-Jun-24	0.00	31	9,478.36	5.58%
Commonwealth Bank of Australia	544427		5,000,000.00	25-Aug-23	24-Jun-24	0.00	31	23,016.44	5.42%
Commonwealth Bank of Australia	544472		1,000,000.00	6-Sep-23	2-Jul-24	0.00	31	4,407.95	5.19%
National Australia Bank	544754		3,000,000.00	20-Dec-23	16-Jul-24	0.00	12	5,079.45	5.15%
National Australia Bank	544547		3,000,000.00	28-Sep-23	30-Jul-24	0.00	31	13,376.71	5.25%
National Australia Bank	544759		2,000,000.00	27-Dec-23	23-Aug-24	0.00	5	1,410.96	5.15%
Westpac Group	544426		5,000,000.00	25-Aug-23	28-Aug-24	0.00	31	21,530.14	5.07%
National Australia Bank	544466		2,000,000.00	5-Sep-23	3-Sep-24	0.00	31	8,917.81	5.25%
National Australia Bank	544473		1,000,000.00	6-Sep-23	4-Sep-24	0.00	31	4,458.91	5.25%
National Australia Bank	544526		1,000,000.00	26-Sep-23	25-Sep-24	0.00	31	4,509.87	5.31%
Westpac Group	544548		2,000,000.00	28-Sep-23	1-Oct-24	0.00	31	8,849.87	5.21%
National Australia Bank	544584		2,000,000.00	18-Oct-23	16-Oct-24	0.00	31	8,985.76	5.29%
Commonwealth Bank of Australia	544593		2,000,000.00	25-Oct-23	22-Oct-24	0.00	31	8,968.76	5.28%
Suncorp Bank	544610		5,000,000.00	1-Nov-23	6-Nov-24	0.00	31	23,228.77	5.47%
Suncorp Bank	544660		6,000,000.00	23-Nov-23	20-Nov-24	0.00	31	27,517.81	5.40%
Suncorp Bank	544672		5,000,000.00	29-Nov-23	26-Nov-24	0.00	31	23,441.09	5.52%
National Australia Bank	543414		1,000,000.00	25-Aug-21	25-Aug-25	0.00	31	806.85	0.95%
						295,453.62		451,965.41	5.01%
<u>Grand Totals</u>						<u>354,917.98</u>		<u>531,625.41</u>	<u>4.93%</u>

Lismore City Council
Investment Performance Report - December 2023



Historical Performance Summary (% pa)			
	Portfolio	Annualised BB Index	Outperformance
Dec 2023	4.93%	4.43%	0.50%
Last 3 months	4.84%	4.26%	0.58%
Last 6 months	4.71%	4.31%	0.40%
Financial Year to Date	4.71%	4.31%	0.40%
Last 12 months	4.20%	3.89%	0.31%



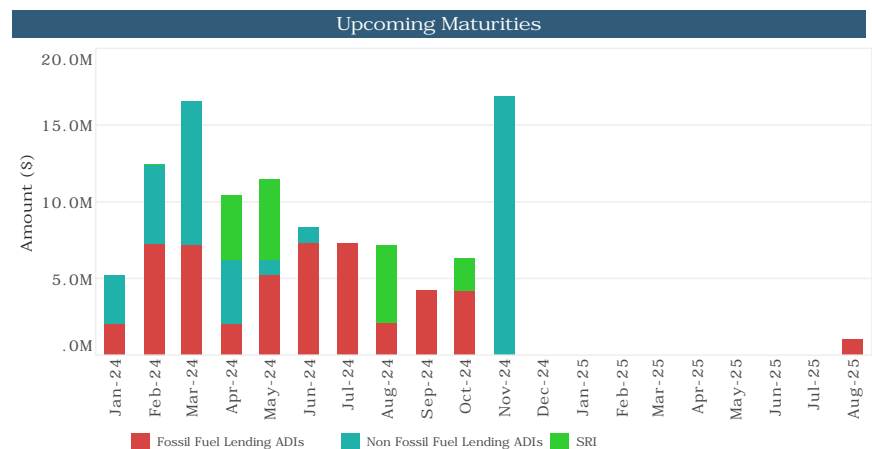
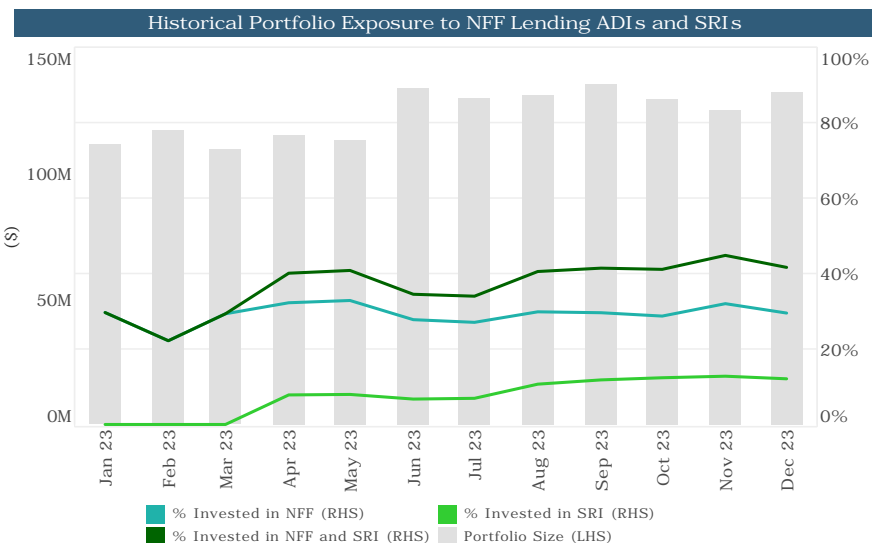
Lismore City Council Environmental Commitments Report - December 2023



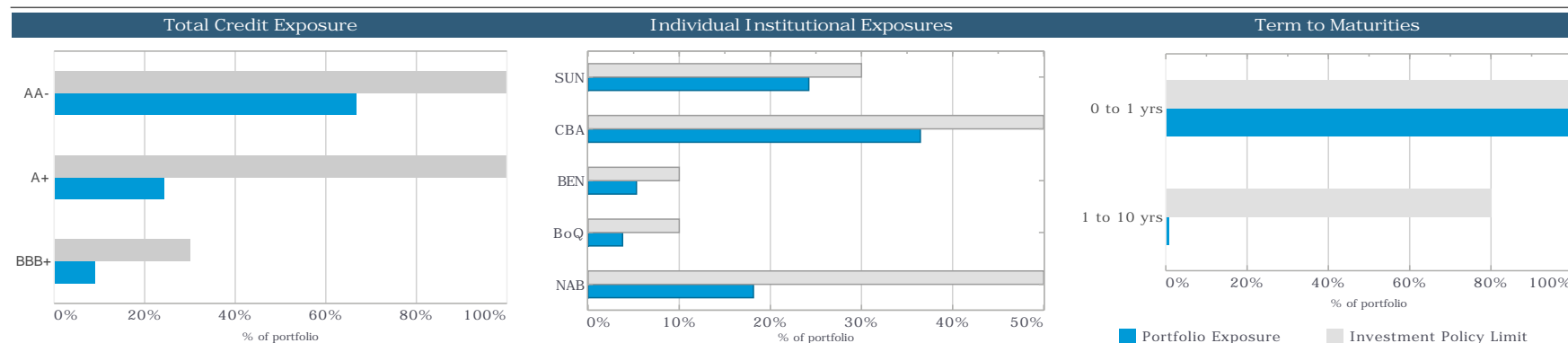
Current Breakdown				
ADI Lending Status *	Current Month (\$)		Previous Month (\$)	
Fossil Fuel Lending ADIs				
Bank of Queensland	5,000,000		5,000,000	
Commonwealth Bank of Australia	48,232,100		36,076,135	
National Australia Bank	24,000,000		24,000,000	
Westpac Group	0		4,000,000	
	77,232,100	58%	69,076,135	55%
Non Fossil Fuel Lending ADIs				
Bendigo and Adelaide Bank	7,017,601		7,017,601	
Rabobank Australia	0		1,000,000	
Suncorp Bank	32,034,790		32,034,790	
	39,052,390	30%	40,052,390	32%
Socially Responsible Investment				
Westpac Group (Green TD)	16,000,000		16,000,000	
	16,000,000	12%	16,000,000	13%
	132,284,490		125,128,525	

* source: Marketforces

Percentages may not add up to 100% due to rounding



Lismore City Council Investment Policy Compliance Report - December 2023



Credit Rating Group	Face Value (\$)		Policy Max	
AA-	88,232,100	67%	100%	a
A+	32,034,790	24%	100%	a
BBB+	12,017,601	9%	30%	a
	132,284,490			

Institution	% of portfolio	Investment Policy Limit	
Suncorp Bank (A+)	24%	30%	a
Commonwealth Bank of Australia (AA-)	36%	50%	a
Bendigo and Adelaide Bank (BBB+)	5%	10%	a
Bank of Queensland (BBB+)	4%	10%	a
National Australia Bank (AA-)	18%	50%	a
Westpac Group (AA-)	12%	50%	a

	Face Value (\$)		Policy Max	
Between 0 and 1 years	131,284,490	99%	100%	a
Between 1 and 10 years	1,000,000	1%	80%	a
	132,284,490			

Specific Sub Limits				
BBB+	12,017,601	9%	30%	a

Specific Sub Limits				
Between 3 and 10 years	0	0%	50%	a
Between 5 and 10 years	0	0%	25%	a

a = compliant
r = non-compliant

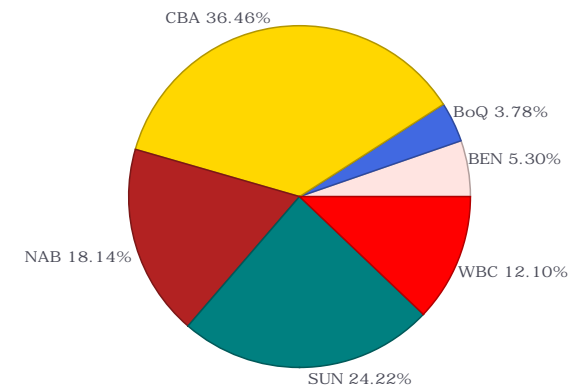
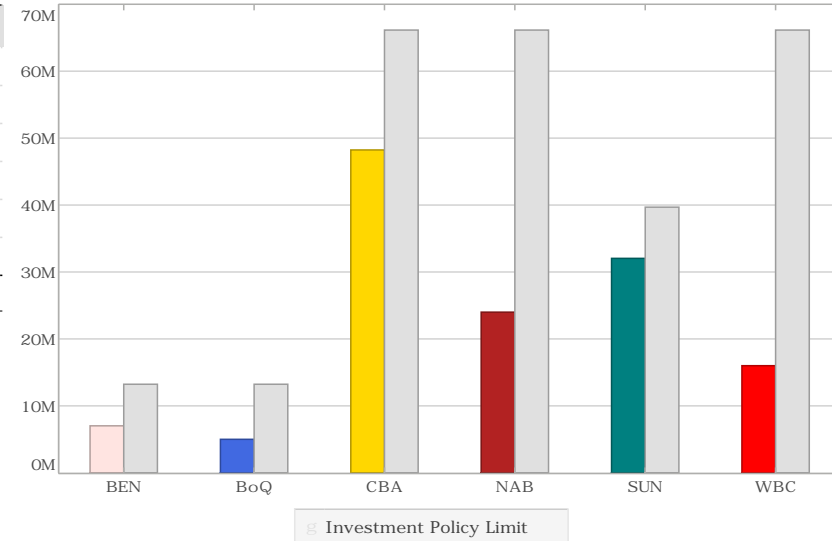
Lismore City Council Individual Institutional Exposures Report - December 2023



Individual Institutional Exposures

	Current Exposures		Policy Limit		Capacity
Bank of Queensland (BBB+)	5,000,000	4%	13,228,449	10%	8,228,449
Bendigo and Adelaide Bank (BBB+)	7,017,601	5%	13,228,449	10%	6,210,848
Commonwealth Bank of Australia (AA-)	48,232,100	36%	66,142,245	50%	17,910,145
National Australia Bank (AA-)	24,000,000	18%	66,142,245	50%	42,142,245
Suncorp Bank (A+)	32,034,790	24%	39,685,347	30%	7,650,557
Westpac Group (AA-)	16,000,000	12%	66,142,245	50%	50,142,245
	132,284,490				

Individual Institutional Exposure Charts



Lismore City Council Cashflows Report - December 2023



Actual Cashflows for December 2023

Date	Deal No.	Cashflow Counterparty	Asset Type	Cashflow Description	Amount
7-Dec-23	543388	Westpac Group	Term Deposit	Maturity: Face Value	4,000,000.00
		Westpac Group	Term Deposit	Maturity: Interest Received/Paid	65,178.08
				<u>Deal Total</u>	<u>4,065,178.08</u>
				Day Total	4,065,178.08
13-Dec-23	543413	Rabobank Australia	Term Deposit	Maturity: Face Value	1,000,000.00
		Rabobank Australia	Term Deposit	Maturity: Interest Received/Paid	33,500.00
				<u>Deal Total</u>	<u>1,033,500.00</u>
				Day Total	1,033,500.00
13-Dec-23	544164	Commonwealth Bank of Australia	Term Deposit	Maturity: Face Value	5,000,000.00
		Commonwealth Bank of Australia	Term Deposit	Maturity: Interest Received/Paid	130,397.26
				<u>Deal Total</u>	<u>5,130,397.26</u>
				Day Total	5,130,397.26
20-Dec-23	544539	National Australia Bank	Term Deposit	Maturity: Face Value	3,000,000.00
		National Australia Bank	Term Deposit	Maturity: Interest Received/Paid	33,208.77
				<u>Deal Total</u>	<u>3,033,208.77</u>
				Day Total	3,033,208.77
20-Dec-23	544754	National Australia Bank	Term Deposit	Settlement: Face Value	-3,000,000.00
				<u>Deal Total</u>	<u>-3,000,000.00</u>
27-Dec-23	544429	National Australia Bank	Term Deposit	Maturity: Face Value	2,000,000.00
		National Australia Bank	Term Deposit	Maturity: Interest Received/Paid	33,169.51
				<u>Deal Total</u>	<u>2,033,169.51</u>
				Day Total	2,033,169.51
27-Dec-23	544759	National Australia Bank	Term Deposit	Settlement: Face Value	-2,000,000.00
				<u>Deal Total</u>	<u>-2,000,000.00</u>
				Day Total	33,169.51
				Total for Month	10,295,453.61

Forecast Cashflows for January 2024

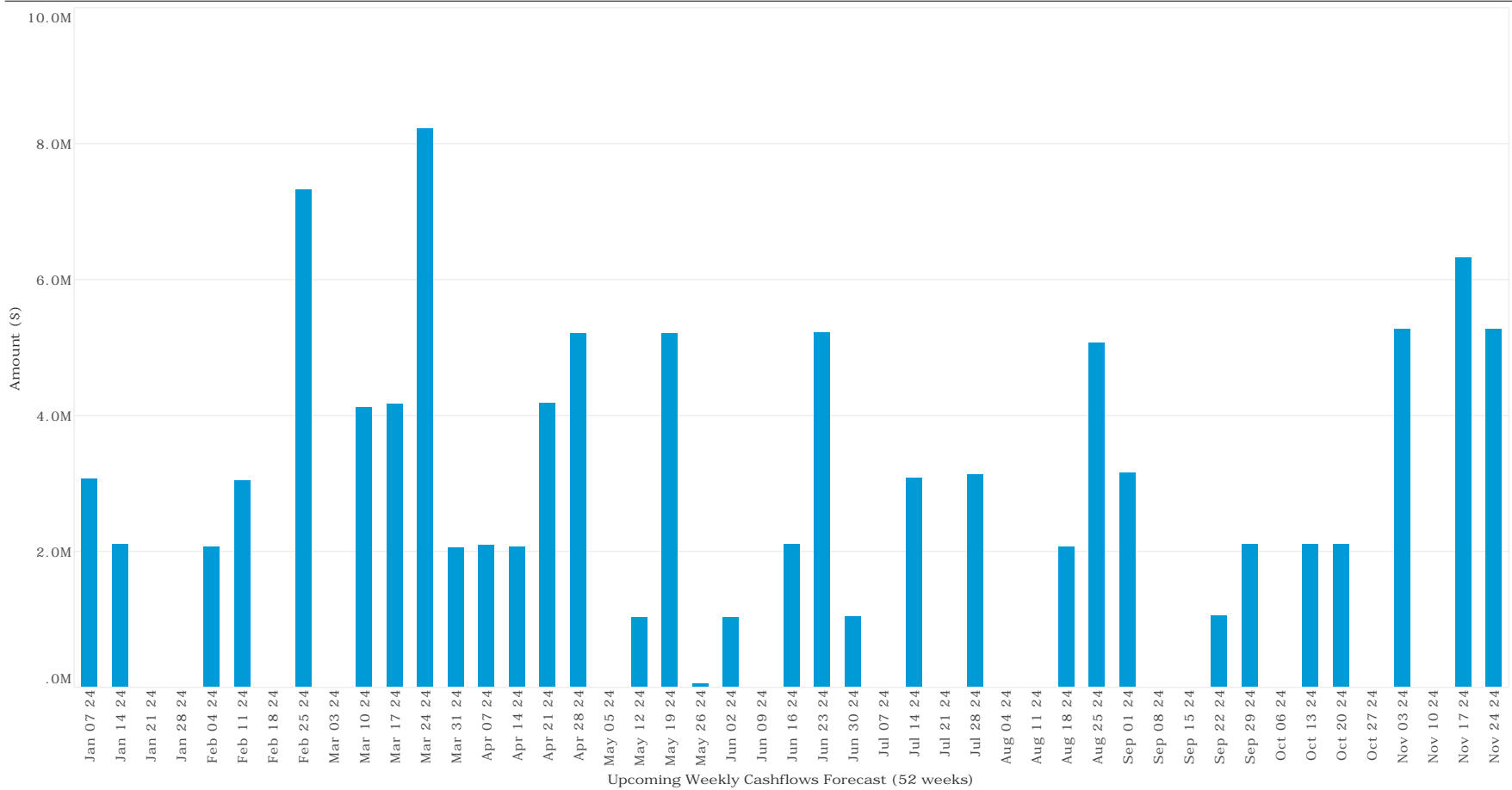


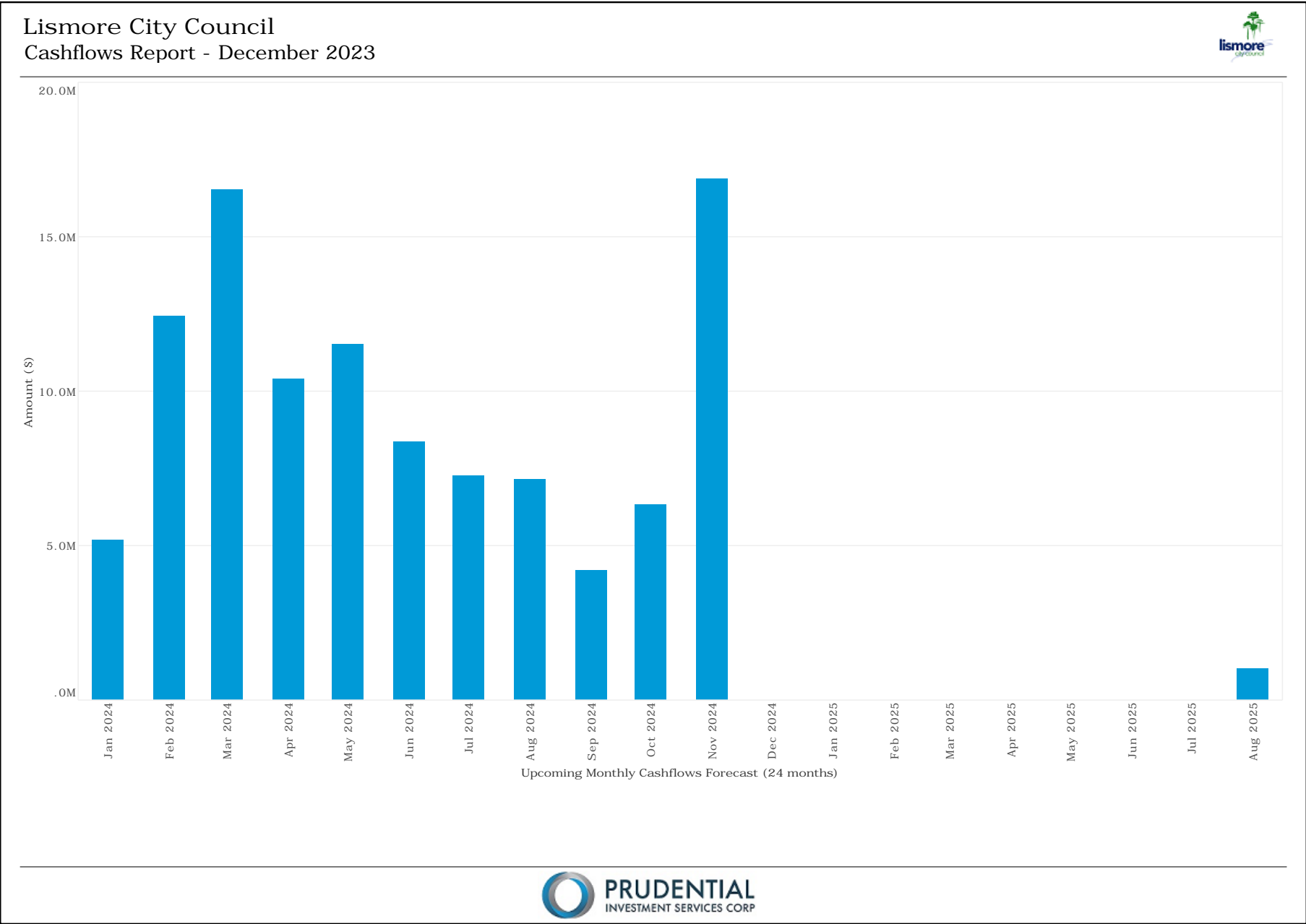
Lismore City Council
Cashflows Report - December 2023



Date	Deal No.	Cashflow Counterparty	Asset Type	Cashflow Description	Amount
9-Jan-24	543994	Bendigo and Adelaide Bank	Term Deposit	Maturity: Face Value	1,017,600.56
		Bendigo and Adelaide Bank	Term Deposit	Maturity: Interest Received/Paid	38,114.02
				<u>Deal Total</u>	<u>1,055,714.58</u>
9-Jan-24	544592	Commonwealth Bank of Australia	Term Deposit	Maturity: Face Value	2,000,000.00
		Commonwealth Bank of Australia	Term Deposit	Maturity: Interest Received/Paid	19,364.38
				<u>Deal Total</u>	<u>2,019,364.38</u>
Day Total					3,075,078.96
17-Jan-24	543925	Suncorp Bank	Term Deposit	Maturity: Face Value	1,023,289.88
		Suncorp Bank	Term Deposit	Maturity: Interest Received/Paid	32,379.97
				<u>Deal Total</u>	<u>1,055,669.85</u>
17-Jan-24	543938	Suncorp Bank	Term Deposit	Maturity: Face Value	1,011,500.00
		Suncorp Bank	Term Deposit	Maturity: Interest Received/Paid	39,007.88
				<u>Deal Total</u>	<u>1,050,507.88</u>
Day Total					2,106,177.72
<u>Total for Month</u>					<u>5,181,256.69</u>

Lismore City Council
Cashflows Report - December 2023







Investment Summary Report
January 2024



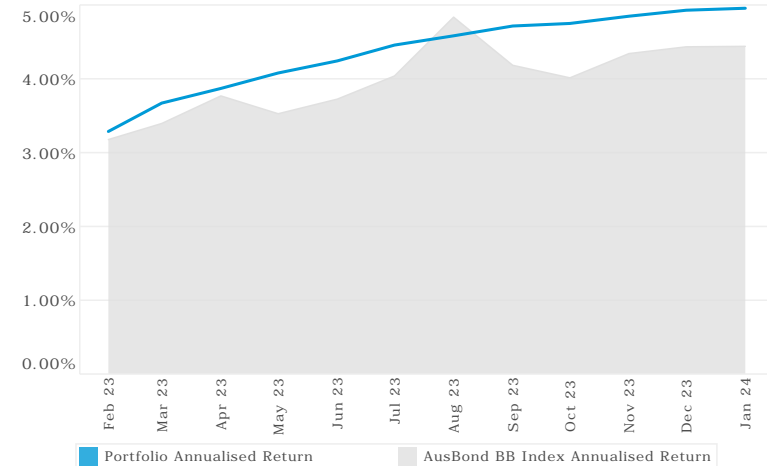
Lismore City Council Executive Summary - January 2024



Investment Holdings

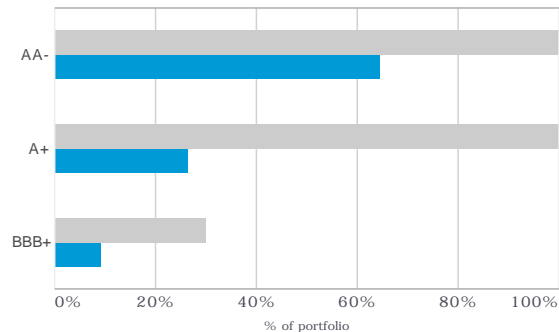
	Face Value (\$)	Current Value (\$)	Current Yield (%)
Cash	18,002,000	18,002,000	4.5000
Term Deposit	103,000,000	105,099,851	5.0748
	121,002,000	123,101,851	4.9892

Investment Performance

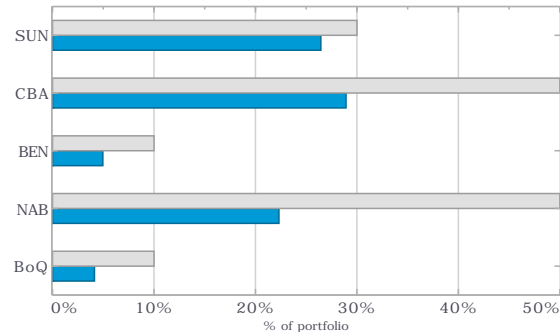


Investment Policy Compliance

Total Credit Exposure



Individual Institutional Exposures



Term to Maturities

	Face Value (\$)	Policy Max
Between 0 and 1 years	120,002,000	99% 100% a
Between 1 and 10 years	1,000,000	1% 80% a
	121,002,000	

Specific Sub Limits

Between 3 and 10 years	0	0%	50%	a
Between 5 and 10 years	0	0%	25%	a

Portfolio Exposure

Investment Policy Limit



Lismore City Council Investment Holdings Report - January 2024



Cash Accounts

Face Value (\$)	Current Rate (%)	Institution	Credit Rating	Current Value (\$)	Deal No.	Reference
18,002,000.00	4.5000%	Commonwealth Bank of Australia	AA-	18,002,000.00	543330	64
18,002,000.00	4.5000%			18,002,000.00		

Term Deposits

Maturity Date	Face Value (\$)	Current Rate (%)	Institution	Credit Rating	Purchase Price (\$)	Purchase Date	Current Value (\$)	Deal No.	Accrued Interest (\$)	Next Interest Date	Reference
6-Feb-24	2,000,000.00	4.7000%	Bendigo and Adelaide Bank	BBB+	2,000,000.00	28-Apr-23	2,071,852.05	544044	71,852.05	At Maturity	121
13-Feb-24	3,000,000.00	5.0500%	National Australia Bank	AA-	3,000,000.00	1-Nov-23	3,038,186.30	544609	38,186.30	At Maturity	
27-Feb-24	2,000,000.00	5.0400%	National Australia Bank	AA-	2,000,000.00	27-Feb-23	2,093,619.73	543864	93,619.73	At Maturity	101
27-Feb-24	3,000,000.00	4.9100%	Suncorp Bank	A+	3,000,000.00	28-Sep-23	3,050,848.77	544544	50,848.77	At Maturity	
28-Feb-24	2,000,000.00	5.0000%	National Australia Bank	AA-	2,000,000.00	28-Feb-23	2,092,602.74	543869	92,602.74	At Maturity	108
12-Mar-24	2,000,000.00	5.1000%	Bank of Queensland	BBB+	2,000,000.00	28-Sep-23	2,035,210.96	544545	35,210.96	At Maturity	
13-Mar-24	2,000,000.00	5.4000%	Commonwealth Bank of Australia	AA-	2,000,000.00	14-Jun-23	2,068,646.58	544201	68,646.58	At Maturity	
20-Mar-24	4,000,000.00	4.4000%	Bendigo and Adelaide Bank	BBB+	4,000,000.00	21-Mar-23	4,152,854.79	543945	152,854.79	At Maturity	110
26-Mar-24	3,000,000.00	5.1500%	Bank of Queensland	BBB+	3,000,000.00	28-Sep-23	3,053,334.25	544546	53,334.25	At Maturity	
26-Mar-24	5,000,000.00	5.1400%	Suncorp Bank	A+	5,000,000.00	25-Aug-23	5,112,657.53	544428	112,657.53	At Maturity	
3-Apr-24	2,000,000.00	5.1500%	National Australia Bank	AA-	2,000,000.00	30-Aug-23	2,043,739.73	544441	43,739.73	At Maturity	
10-Apr-24	2,000,000.00	4.5500%	Suncorp Bank	A+	2,000,000.00	12-Apr-23	2,073,547.95	544019	73,547.95	At Maturity	117
16-Apr-24	2,000,000.00	5.2000%	Suncorp Bank	A+	2,000,000.00	16-Aug-23	2,048,153.42	544395	48,153.42	At Maturity	
22-Apr-24	4,000,000.00	4.5200%	Westpac Group	AA-	4,000,000.00	21-Apr-23	4,141,667.95	544032	141,667.95	At Maturity	119 Green
1-May-24	5,000,000.00	4.1600%	Westpac Group	AA-	5,000,000.00	28-Apr-23	5,158,991.78	544046	158,991.78	At Maturity	122 Green
14-May-24	1,000,000.00	5.1200%	Suncorp Bank	A+	1,000,000.00	11-Oct-23	1,015,850.96	544574	15,850.96	At Maturity	
22-May-24	5,000,000.00	5.4700%	Commonwealth Bank of Australia	AA-	5,000,000.00	23-Aug-23	5,121,389.04	544410	121,389.04	At Maturity	
4-Jun-24	1,000,000.00	5.3200%	Suncorp Bank	A+	1,000,000.00	1-Nov-23	1,013,409.32	544611	13,409.32	At Maturity	
19-Jun-24	2,000,000.00	5.5800%	Commonwealth Bank of Australia	AA-	2,000,000.00	20-Jun-23	2,069,100.27	544214	69,100.27	At Maturity	
24-Jun-24	5,000,000.00	5.4200%	Commonwealth Bank of Australia	AA-	5,000,000.00	25-Aug-23	5,118,794.52	544427	118,794.52	At Maturity	
2-Jul-24	1,000,000.00	5.1900%	Commonwealth Bank of Australia	AA-	1,000,000.00	6-Sep-23	1,021,044.38	544472	21,044.38	At Maturity	
16-Jul-24	3,000,000.00	5.1500%	National Australia Bank	AA-	3,000,000.00	20-Dec-23	3,018,201.37	544754	18,201.37	At Maturity	



Lismore City Council
Investment Holdings Report - January 2024



Maturity Date	Face Value (\$)	Current Rate (%)	Institution	Credit Rating	Purchase Price (\$)	Purchase Date	Current Value (\$)	Deal No.	Accrued Interest (\$)	Next Interest Date	Reference
30-Jul-24	3,000,000.00	5.2500%	National Australia Bank	AA-	3,000,000.00	28-Sep-23	3,054,369.86	544547	54,369.86	At Maturity	
6-Aug-24	3,000,000.00	5.1600%	National Australia Bank	AA-	3,000,000.00	9-Jan-24	3,009,754.52	544775	9,754.52	At Maturity	
23-Aug-24	2,000,000.00	5.1500%	National Australia Bank	AA-	2,000,000.00	27-Dec-23	2,010,158.90	544759	10,158.90	At Maturity	
28-Aug-24	5,000,000.00	5.0700%	Westpac Group	AA-	5,000,000.00	25-Aug-23	5,045,838.36	544426	45,838.36	Quarterly	Green
3-Sep-24	2,000,000.00	5.2500%	National Australia Bank	AA-	2,000,000.00	5-Sep-23	2,042,863.01	544466	42,863.01	At Maturity	
4-Sep-24	1,000,000.00	5.2500%	National Australia Bank	AA-	1,000,000.00	6-Sep-23	1,021,287.67	544473	21,287.67	At Maturity	
25-Sep-24	1,000,000.00	5.3100%	National Australia Bank	AA-	1,000,000.00	26-Sep-23	1,018,621.37	544526	18,621.37	At Maturity	
1-Oct-24	2,000,000.00	5.2100%	Westpac Group	AA-	2,000,000.00	28-Sep-23	2,035,970.41	544548	35,970.41	At Maturity	Green
16-Oct-24	2,000,000.00	5.2900%	National Australia Bank	AA-	2,000,000.00	18-Oct-23	2,030,725.48	544584	30,725.48	At Maturity	
22-Oct-24	2,000,000.00	5.2800%	Commonwealth Bank of Australia	AA-	2,000,000.00	25-Oct-23	2,028,642.19	544593	28,642.19	At Maturity	99
6-Nov-24	5,000,000.00	5.4700%	Suncorp Bank	A+	5,000,000.00	1-Nov-23	5,068,936.99	544610	68,936.99	At Maturity	
20-Nov-24	6,000,000.00	5.4000%	Suncorp Bank	A+	6,000,000.00	23-Nov-23	6,062,136.99	544660	62,136.99	At Maturity	
26-Nov-24	5,000,000.00	5.5200%	Suncorp Bank	A+	5,000,000.00	29-Nov-23	5,048,394.52	544672	48,394.52	At Maturity	
15-Jan-25	2,000,000.00	5.2100%	Suncorp Bank	A+	2,000,000.00	17-Jan-24	2,004,282.19	544795	4,282.19	At Maturity	
25-Aug-25	1,000,000.00	0.9500%	National Australia Bank	AA-	1,000,000.00	25-Aug-21	1,004,164.38	543414	4,164.38	Annually	12
103,000,000.00		5.0748%			103,000,000.00			105,099,851.23	2,099,851.23		

Lismore City Council
Accrued Interest Report - January 2024



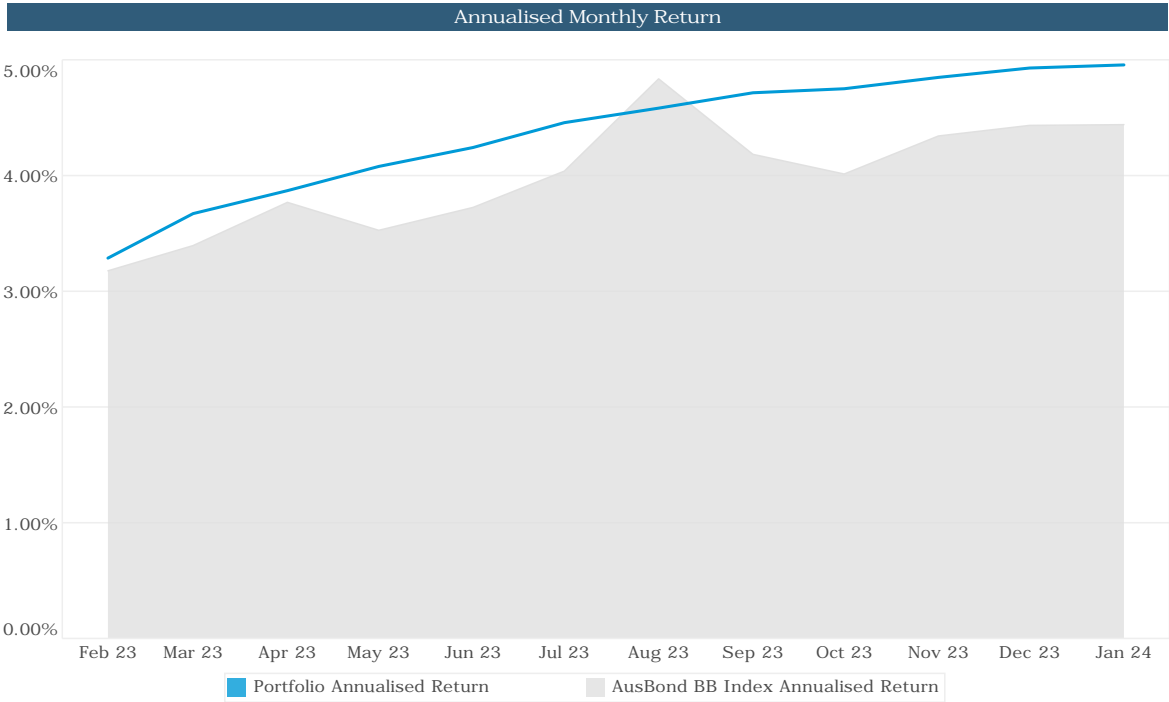
Investment	Deal No.	Comments	Face Value (\$)	Settlement Date	Maturity Date	Interest Received (\$)	Days	Interest Accrued (\$)	Yield (% pa)
Cash									
Commonwealth Bank of Australia	543330					79,660.00	0	90,538.00	4.50%
						79,660.00		90,538.00	4.50%
Term Deposits									
Bendigo and Adelaide Bank	543994		1,017,600.55	5-Apr-23	9-Jan-24	38,114.02	8	1,092.88	4.90%
Commonwealth Bank of Australia	544592		2,000,000.00	25-Oct-23	9-Jan-24	19,364.38	8	2,038.35	4.65%
Suncorp Bank	543925		1,023,289.86	10-Mar-23	17-Jan-24	32,379.98	16	1,655.21	3.69%
Suncorp Bank	543938		1,011,500.00	17-Mar-23	17-Jan-24	39,007.87	16	2,039.62	4.60%
Bendigo and Adelaide Bank	544044		2,000,000.00	28-Apr-23	6-Feb-24	0.00	31	7,983.56	4.70%
National Australia Bank	544609		3,000,000.00	1-Nov-23	13-Feb-24	0.00	31	12,867.12	5.05%
National Australia Bank	543864		2,000,000.00	27-Feb-23	27-Feb-24	0.00	31	8,561.10	5.04%
Suncorp Bank	544544		3,000,000.00	28-Sep-23	27-Feb-24	0.00	31	12,510.41	4.91%
National Australia Bank	543869		2,000,000.00	28-Feb-23	28-Feb-24	0.00	31	8,493.15	5.00%
Bank of Queensland	544545		2,000,000.00	28-Sep-23	12-Mar-24	0.00	31	8,663.01	5.10%
Commonwealth Bank of Australia	544201		2,000,000.00	14-Jun-23	13-Mar-24	0.00	31	9,172.61	5.40%
Bendigo and Adelaide Bank	543945		4,000,000.00	21-Mar-23	20-Mar-24	0.00	31	14,947.94	4.40%
Suncorp Bank	544428		5,000,000.00	25-Aug-23	26-Mar-24	0.00	31	21,827.39	5.14%
Bank of Queensland	544546		3,000,000.00	28-Sep-23	26-Mar-24	0.00	31	13,121.92	5.15%
National Australia Bank	544441		2,000,000.00	30-Aug-23	3-Apr-24	0.00	31	8,747.95	5.15%
Suncorp Bank	544019		2,000,000.00	12-Apr-23	10-Apr-24	0.00	31	7,728.77	4.55%
Suncorp Bank	544395		2,000,000.00	16-Aug-23	16-Apr-24	0.00	31	8,832.87	5.20%
Westpac Group	544032		4,000,000.00	21-Apr-23	22-Apr-24	0.00	31	15,355.62	4.52%
Westpac Group	544046		5,000,000.00	28-Apr-23	1-May-24	0.00	31	17,665.75	4.16%
Suncorp Bank	544574		1,000,000.00	11-Oct-23	14-May-24	0.00	31	4,348.49	5.12%
Commonwealth Bank of Australia	544410		5,000,000.00	23-Aug-23	22-May-24	0.00	31	23,228.77	5.47%
Suncorp Bank	544611		1,000,000.00	1-Nov-23	4-Jun-24	0.00	31	4,518.36	5.32%
Commonwealth Bank of Australia	544214		2,000,000.00	20-Jun-23	19-Jun-24	0.00	31	9,478.35	5.58%

Lismore City Council
Accrued Interest Report - January 2024



Investment	Deal No.	Comments	Face Value (\$)	Settlement Date	Maturity Date	Interest Received (\$)	Days	Interest Accrued (\$)	Yield (% pa)
Commonwealth Bank of Australia	544427		5,000,000.00	25-Aug-23	24-Jun-24	0.00	31	23,016.44	5.42%
Commonwealth Bank of Australia	544472		1,000,000.00	6-Sep-23	2-Jul-24	0.00	31	4,407.94	5.19%
National Australia Bank	544754		3,000,000.00	20-Dec-23	16-Jul-24	0.00	31	13,121.92	5.15%
National Australia Bank	544547		3,000,000.00	28-Sep-23	30-Jul-24	0.00	31	13,376.71	5.25%
National Australia Bank	544775		3,000,000.00	9-Jan-24	6-Aug-24	0.00	23	9,754.52	5.16%
National Australia Bank	544759		2,000,000.00	27-Dec-23	23-Aug-24	0.00	31	8,747.94	5.15%
Westpac Group	544426		5,000,000.00	25-Aug-23	28-Aug-24	0.00	31	21,530.14	5.07%
National Australia Bank	544466		2,000,000.00	5-Sep-23	3-Sep-24	0.00	31	8,917.80	5.25%
National Australia Bank	544473		1,000,000.00	6-Sep-23	4-Sep-24	0.00	31	4,458.90	5.25%
National Australia Bank	544526		1,000,000.00	26-Sep-23	25-Sep-24	0.00	31	4,509.86	5.31%
Westpac Group	544548		2,000,000.00	28-Sep-23	1-Oct-24	0.00	31	8,849.86	5.21%
National Australia Bank	544584		2,000,000.00	18-Oct-23	16-Oct-24	0.00	31	8,985.75	5.29%
Commonwealth Bank of Australia	544593		2,000,000.00	25-Oct-23	22-Oct-24	0.00	31	8,968.77	5.28%
Suncorp Bank	544610		5,000,000.00	1-Nov-23	6-Nov-24	0.00	31	23,228.77	5.47%
Suncorp Bank	544660		6,000,000.00	23-Nov-23	20-Nov-24	0.00	31	27,517.81	5.40%
Suncorp Bank	544672		5,000,000.00	29-Nov-23	26-Nov-24	0.00	31	23,441.10	5.52%
Suncorp Bank	544795		2,000,000.00	17-Jan-24	15-Jan-25	0.00	15	4,282.19	5.21%
National Australia Bank	543414		1,000,000.00	25-Aug-21	25-Aug-25	0.00	31	806.85	0.95%
						128,866.25		442,802.47	5.06%
<u>Grand Totals</u>						<u>208,526.25</u>		<u>533,340.47</u>	<u>4.96%</u>

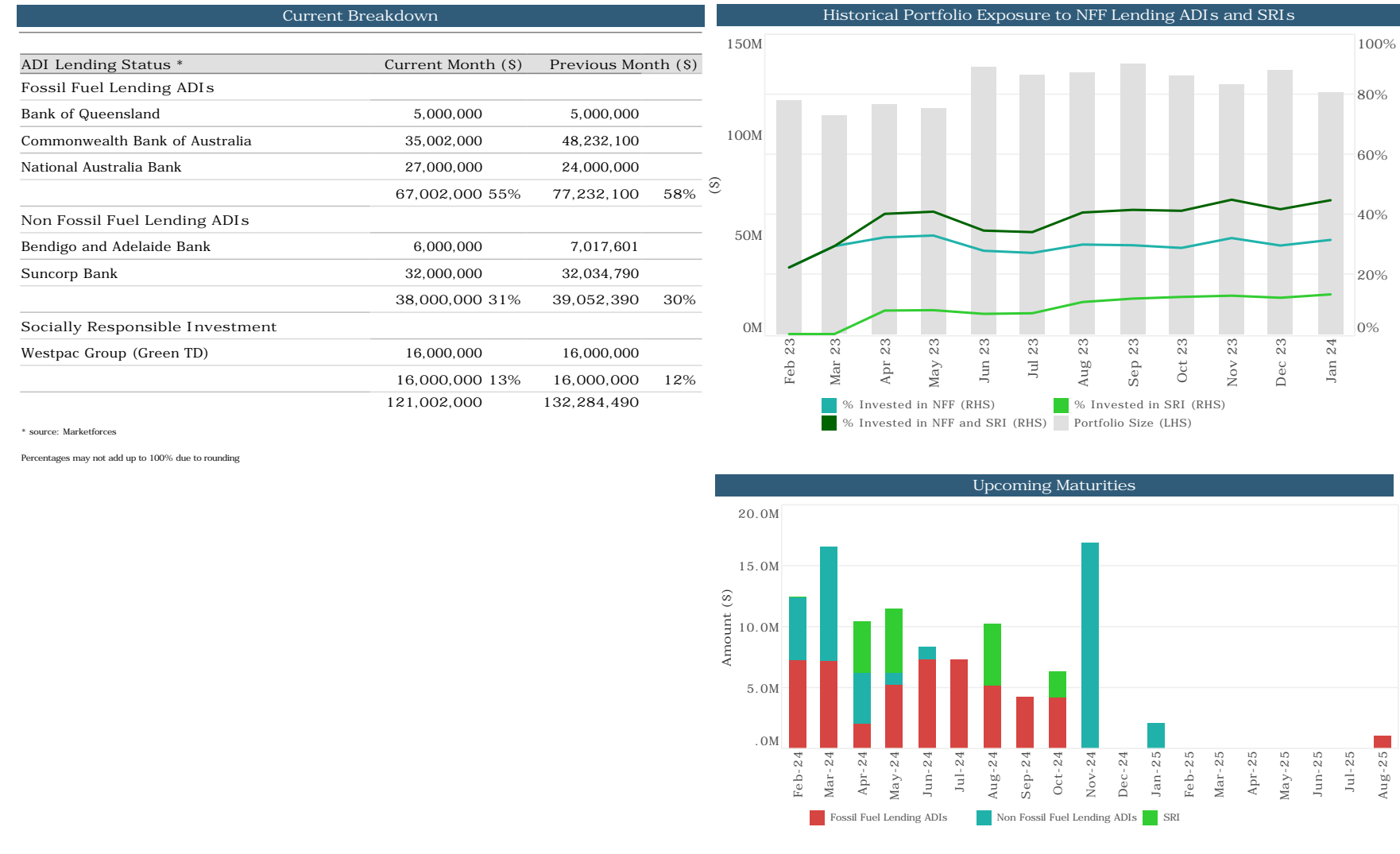
Lismore City Council
Investment Performance Report - January 2024



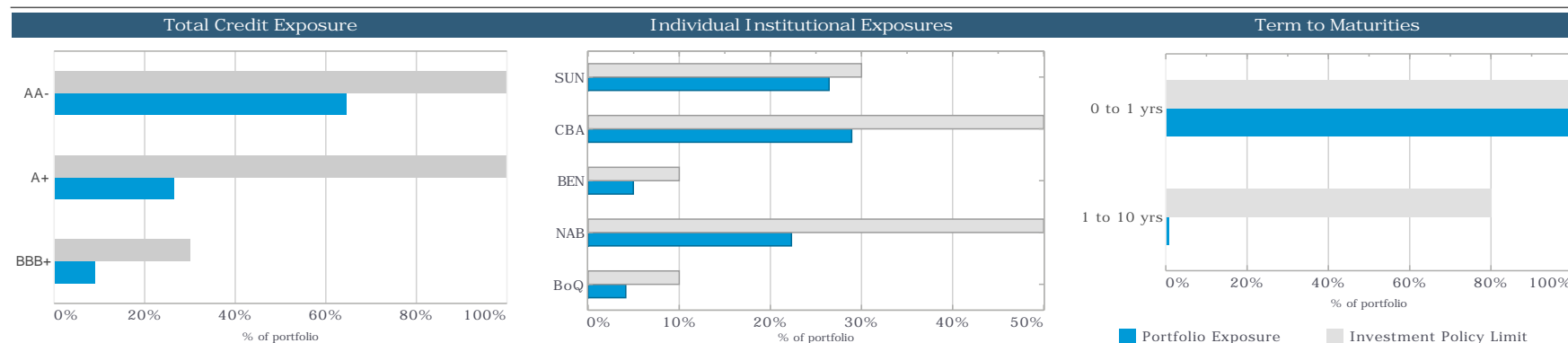
Historical Performance Summary (% pa)			
	Portfolio	Annualised BB Index	Outperformance
Jan 2024	4.96%	4.44%	0.52%
Last 3 months	4.91%	4.41%	0.50%
Last 6 months	4.80%	4.38%	0.42%
Financial Year to Date	4.75%	4.33%	0.42%
Last 12 months	4.37%	4.00%	0.37%



Lismore City Council Environmental Commitments Report - January 2024



Lismore City Council Investment Policy Compliance Report - January 2024



Credit Rating Group	Face Value (\$)	Policy Max
AA-	78,002,000	64% 100% a
A+	32,000,000	26% 100% a
BBB+	11,000,000	9% 30% a
	121,002,000	

Institution	% of portfolio	Investment Policy Limit
Suncorp Bank (A+)	26%	30% a
Commonwealth Bank of Australia (AA-)	29%	50% a
Bendigo and Adelaide Bank (BBB+)	5%	10% a
National Australia Bank (AA-)	22%	50% a
Bank of Queensland (BBB+)	4%	10% a
Westpac Group (AA-)	13%	50% a

	Face Value (\$)	Policy Max
Between 0 and 1 years	120,002,000	99% 100% a
Between 1 and 10 years	1,000,000	1% 80% a
	121,002,000	

Specific Sub Limits				
BBB+	11,000,000	9%	30%	a

Specific Sub Limits				
Between 3 and 10 years	0	0%	50%	a
Between 5 and 10 years	0	0%	25%	a

a = compliant
r = non-compliant

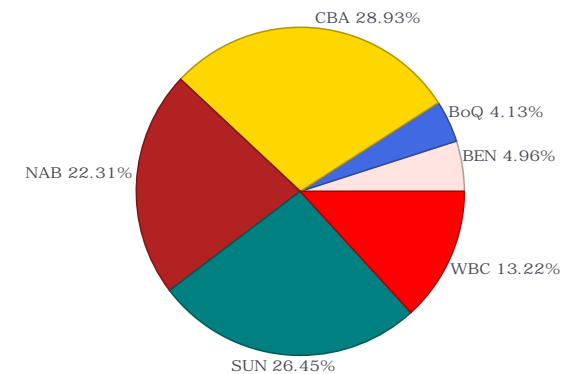
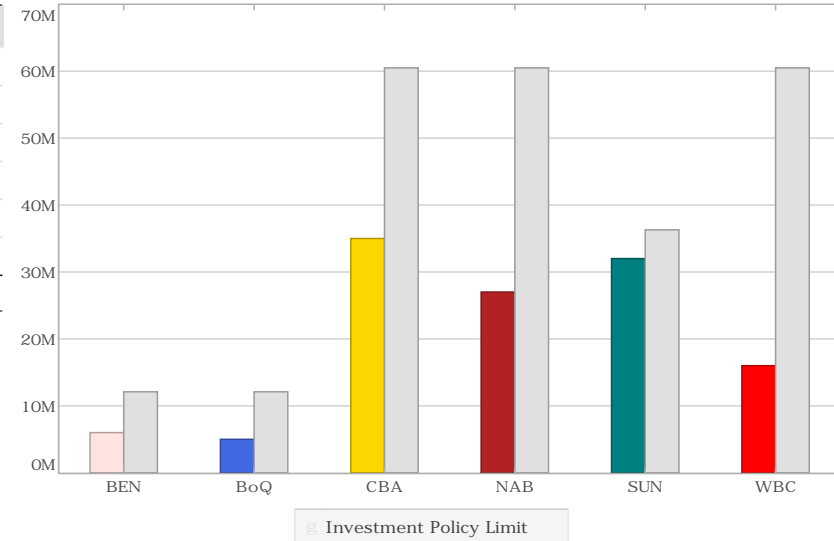
Lismore City Council Individual Institutional Exposures Report - January 2024



Individual Institutional Exposures

	Current Exposures		Policy Limit		Capacity
Bank of Queensland (BBB+)	5,000,000	4%	12,100,200	10%	7,100,200
Bendigo and Adelaide Bank (BBB+)	6,000,000	5%	12,100,200	10%	6,100,200
Commonwealth Bank of Australia (AA-)	35,002,000	29%	60,501,000	50%	25,499,000
National Australia Bank (AA-)	27,000,000	22%	60,501,000	50%	33,501,000
Suncorp Bank (A+)	32,000,000	26%	36,300,600	30%	4,300,600
Westpac Group (AA-)	16,000,000	13%	60,501,000	50%	44,501,000
	121,002,000				

Individual Institutional Exposure Charts



Lismore City Council Cashflows Report - January 2024



Actual Cashflows for January 2024

Date	Deal No.	Cashflow Counterparty	Asset Type	Cashflow Description	Amount
9-Jan-24	543994	Bendigo and Adelaide Bank	Term Deposit	Maturity: Face Value	1,017,600.56
		Bendigo and Adelaide Bank	Term Deposit	Maturity: Interest Received/Paid	38,114.02
			<u>Deal Total</u>	<u>1,055,714.58</u>	
9-Jan-24	544592	Commonwealth Bank of Australia	Term Deposit	Maturity: Face Value	2,000,000.00
		Commonwealth Bank of Australia	Term Deposit	Maturity: Interest Received/Paid	19,364.38
			<u>Deal Total</u>	<u>2,019,364.38</u>	
9-Jan-24	544775	National Australia Bank	Term Deposit	Settlement: Face Value	-3,000,000.00
				<u>Deal Total</u>	<u>-3,000,000.00</u>
Day Total					75,078.96
17-Jan-24	543925	Suncorp Bank	Term Deposit	Maturity: Face Value	1,023,289.88
		Suncorp Bank	Term Deposit	Maturity: Interest Received/Paid	32,379.97
			<u>Deal Total</u>	<u>1,055,669.85</u>	
17-Jan-24	543938	Suncorp Bank	Term Deposit	Maturity: Face Value	1,011,500.00
		Suncorp Bank	Term Deposit	Maturity: Interest Received/Paid	39,007.88
			<u>Deal Total</u>	<u>1,050,507.88</u>	
17-Jan-24	544795	Suncorp Bank	Term Deposit	Settlement: Face Value	-2,000,000.00
				<u>Deal Total</u>	<u>-2,000,000.00</u>
Day Total					106,177.72
<u>Total for Month</u>					<u>181,256.69</u>

Forecast Cashflows for February 2024

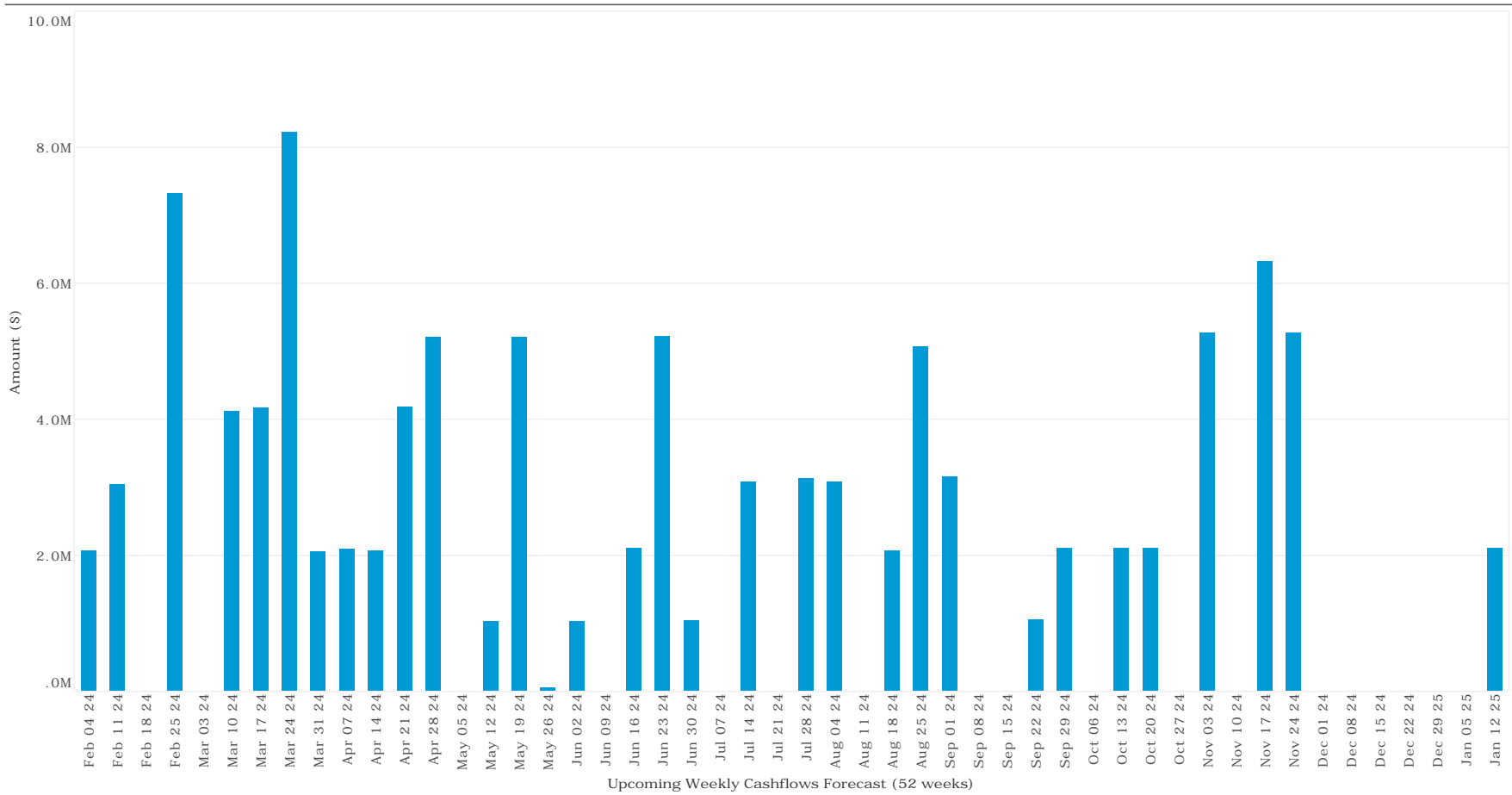
Date	Deal No.	Cashflow Counterparty	Asset Type	Cashflow Description	Amount
6-Feb-24	544044	Bendigo and Adelaide Bank	Term Deposit	Maturity: Face Value	2,000,000.00
		Bendigo and Adelaide Bank	Term Deposit	Maturity: Interest Received/Paid	73,139.73
				Deal Total	2,073,139.73
				Day Total	2,073,139.73

Lismore City Council
Cashflows Report - January 2024

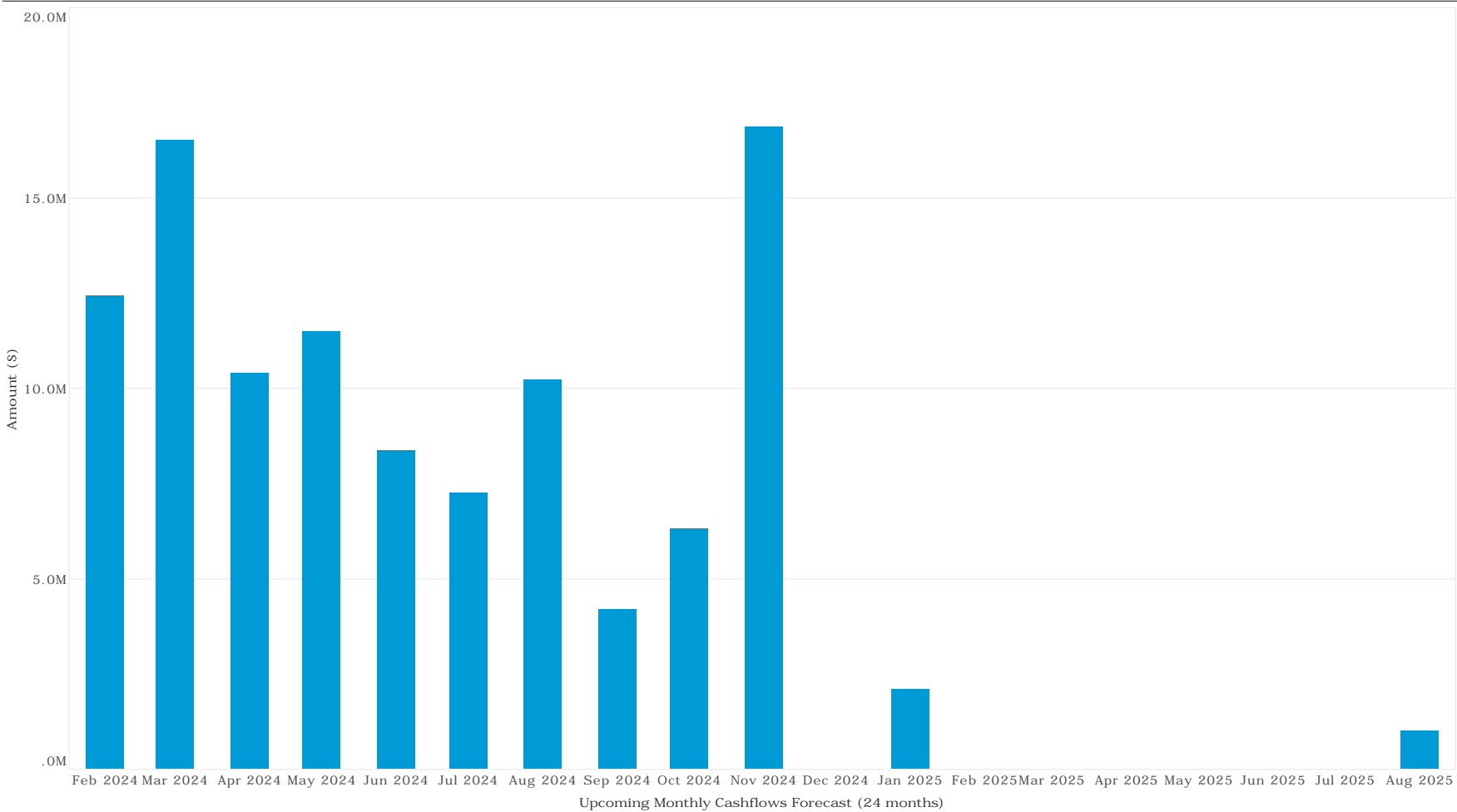


Date	Deal No.	Cashflow Counterparty	Asset Type	Cashflow Description	Amount
13-Feb-24	544609	National Australia Bank	Term Deposit	Maturity: Face Value	3,000,000.00
		National Australia Bank	Term Deposit	Maturity: Interest Received/Paid	43,167.13
				<u>Deal Total</u>	<u>3,043,167.13</u>
				<u>Day Total</u>	<u>3,043,167.13</u>
26-Feb-24	544426	Westpac Group	Term Deposit	During: Interest Received/Paid Dates	63,201.37
				<u>Deal Total</u>	<u>63,201.37</u>
				<u>Day Total</u>	<u>63,201.37</u>
27-Feb-24	543864	National Australia Bank	Term Deposit	Maturity: Face Value	2,000,000.00
		National Australia Bank	Term Deposit	Maturity: Interest Received/Paid	100,800.00
				<u>Deal Total</u>	<u>2,100,800.00</u>
27-Feb-24	544544	Suncorp Bank	Term Deposit	Maturity: Face Value	3,000,000.00
		Suncorp Bank	Term Deposit	Maturity: Interest Received/Paid	61,341.37
				<u>Deal Total</u>	<u>3,061,341.37</u>
				<u>Day Total</u>	<u>5,162,141.37</u>
28-Feb-24	543869	National Australia Bank	Term Deposit	Maturity: Face Value	2,000,000.00
		National Australia Bank	Term Deposit	Maturity: Interest Received/Paid	100,000.00
				<u>Deal Total</u>	<u>2,100,000.00</u>
				<u>Day Total</u>	<u>2,100,000.00</u>
				<u>Total for Month</u>	<u>12,441,649.59</u>

Lismore City Council
Cashflows Report - January 2024



Lismore City Council
Cashflows Report - January 2024





Lismore City Council

Lismore Floodplain Risk Management Plan - Land Use Planning and Development Control





Interim Report

DRAFT

4 May 2023

M92000_007-REP-701-4

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3	6/04/2023	Draft Report for Community Engagement	KM	MP	MP	DN
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Signatures						

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Abbreviations

AEP -	Annual Exceedance Probability	
AHD -	Australian Height Datum	
AIDR -	Australian Institute of Disaster Resilience	
ARR -	Australian Rainfall and Runoff	
CBD -	Central Business District	
DFE -	Defined Flood Event	
DPE -	Department of Planning and Environment	
FLA -	Flood Liable Area	<i>Area with the Probable Maximum Flood (PMF) extent.</i>
FPA -	Flood Planning Area	<i>The area of land below the Flood Planning Level (FPL).</i>
FPL -	Flood Planning Level	<i>The combination of the flood level per the Defined Flood Event (DFE) and suitable freeboard.</i>
FRMP -	Floodplain Risk Management Plan	
FRMS -	Floodplain Risk Management Study	
GIS -	Geographic Information System	
IPPC -	Intergovernmental Panel on Climate Change	
LCC -	Lismore City Council	
LEP -	Local Environmental Plan	
NRRC -	Northern Rivers Reconstruction Corporation	
NSW -	New South Wales	
PMF -	Probable Maximum Flood	
RCP -	Representative Concentration Pathway	
VHR -	Voluntary House Raising	
VHP -	Voluntary House Purchase	

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1 INTRODUCTION

Engeny was engaged by Lismore City Council (LCC or Council) in late 2021 to update the Lismore Floodplain Risk Management Plan (FRMP). However, due to the February and March 2022 flood events, components of the scope have been placed temporarily on hold, however the land use planning and development control elements of the FRMP proceeded. Therefore, this document acts as an interim report to summarise recommendations regarding these elements as a separable portion of work.

This report provides flood risk advice to facilitate further land use planning and development control determinations by LCC with input from relevant stakeholder including the community. This report will be revised as feedback is provided and further planning is undertaken.

1.1 SCOPE OF WORKS

This document outlines the outcomes from the following scope of works:

- Hydrologic and hydraulic analysis of additional extreme design flood events (1:1,000, 1:2,000, 1:10,000 and 1:100,000 Annual Exceedance Probability (AEP) utilising the models developed for the Lismore *Floodplain Risk Management Study* (FRMS) (Engeny, 2021).
- Preparation of flood planning mapping in accordance with the latest available New South Wales (NSW) Department of Planning and Environment (DPE) guidelines and Australian Institute of Disaster Resilience (AIDR) recommendations, inclusive of:
 - Flood hazard.
 - Flood function.
 - Flood Liable Area (FLA).
 - Flood risk precincts.
 - Flood emergency response classifications.
 - Climate change impacts.
- Provision of flood risk related advice on land use planning and development controls in light of the latest design event and flood planning mapping.
- Review of the current Voluntary House Raising (VHR) and Voluntary House Purchase (VHP) schemes.

2 ADDITIONAL DESIGN EVENT ANALYSIS

The URBS hydrologic model and TUFLOW hydraulic model previously developed for the Lismore FRMS have been utilised to simulate the 1:1,000, 1:2,000, 1:10,000 and 1:100,000 AEP extreme flood events. These events were not previously simulated, nor reported on in the Lismore FRMS. These additional events have been utilised to inform the determination of the flood planning mapping discussed in the following sections. Further details on the modelling and results are provided in Appendix C, and full model development details are outlined in the Lismore FRMS report (Engeny, 2021).

3 FLOOD PLANNING MAPPING

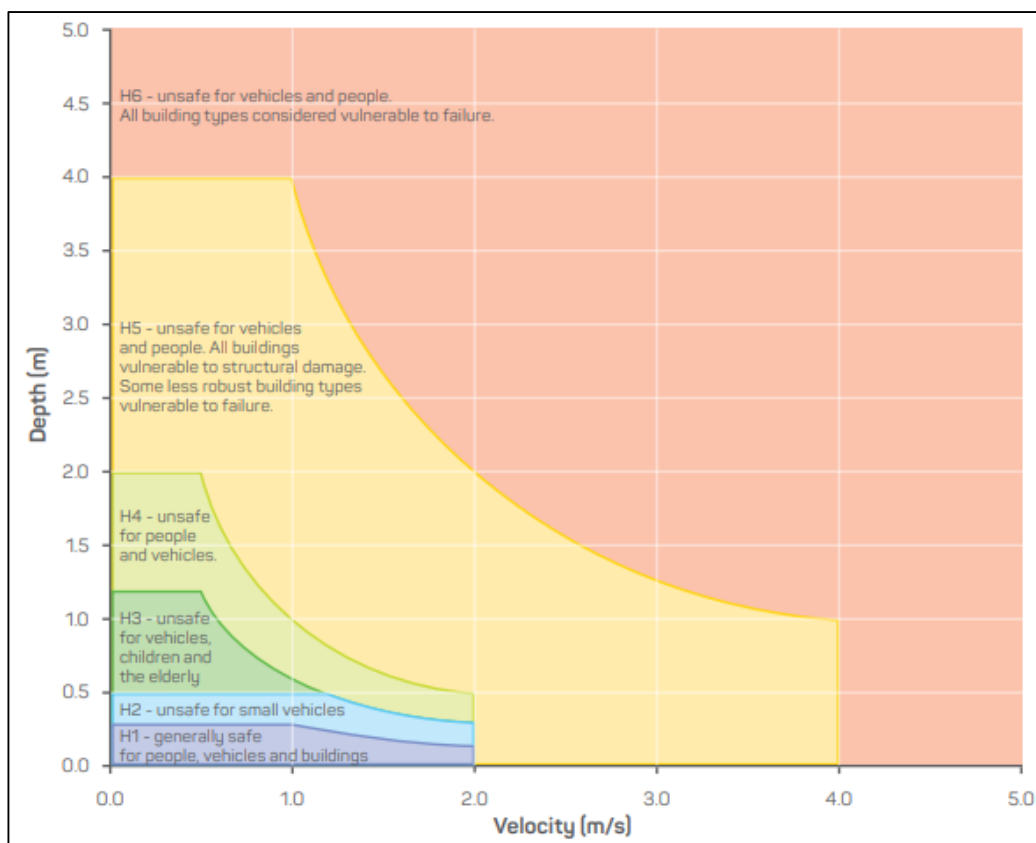
A full set of flood planning maps for Lismore have been developed using the latest flood results, to support Council in determining potential future land use planning and development controls. Description of the approaches to the mapping and the subsequent delineations are discussed in the following sections.

3.1 FLOOD HAZARD

Flood hazard maps for Lismore have been produced for all design events from the 5% AEP to the Probable Maximum Flood (PMF) event, and are provided in Appendix B. The 1% AEP flood hazard map is also provided in Figure 3.2. The hazard scheme applied is the Australian Institute for Disaster Resilience (AIDR) flood hazard classification. This classification scheme is discussed in Guideline 7-3 of the *Australian Disaster Resilience Handbook 7 Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia* (AIDR, 2017).

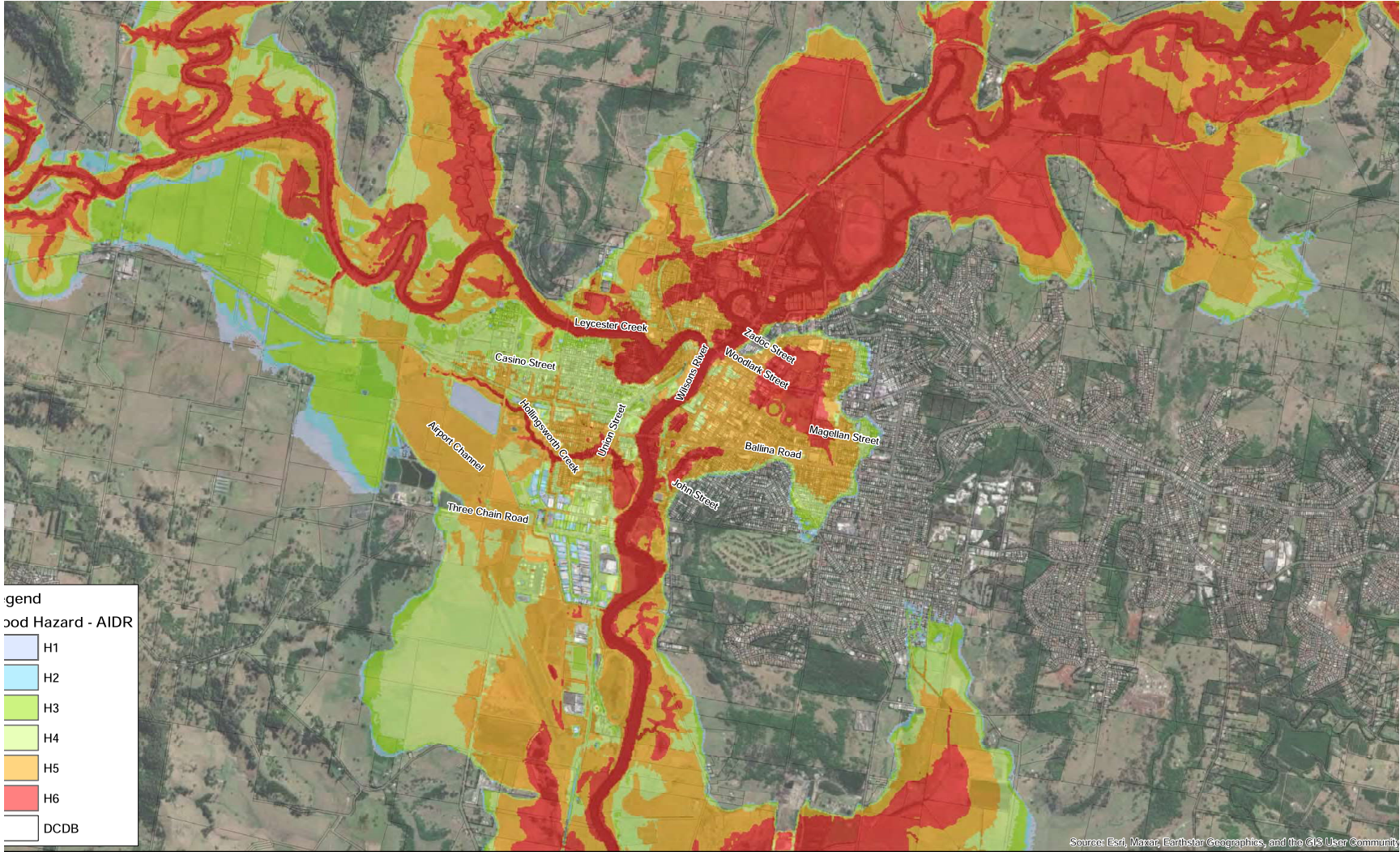
The AIDR flood hazard vulnerability curves associated with this classification are provided in Figure 3.1.

Figure 3.1: AIDR Flood Hazard Vulnerability Curves

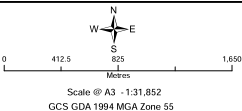


The following was observed regarding the 1% AEP flood hazard in Lismore:

- The main floodways of Leycester Creek and Wilsons River, along with the Central Business District (CBD) basin have the highest hazard rating of H6.
- The majority of the inundated area behind the CBD levee has a hazard classification of H5, meaning that less robust building types are vulnerable to failure.
- South Lismore generally has a hazard rating of H3 and H4, which is considered unsafe for vehicles.
- North Lismore generally has a hazard rating of H5 and H6, which is considered unsafe for vehicles and people and buildings are vulnerable to failure.



Details	Date	©COPYRIGHT Engeny Water Management			
Client Issue	16/12/22	This drawing is confidential and shall only be used for the purpose of this project.			
		DESIGNED	TS	CHECKED	KM
		DRAWN	TS	CHECKED	KM
		APPROVED	MP	DATE	16/12/22



DISCLAIMER
Engenyh has endeavoured to ensure accuracy and completeness of the data. Engeny assumes no legal liability or responsibility for any decisions or actions resulting from the information contained within this map.

DATA SOURCE
QLD Government Open Source Data

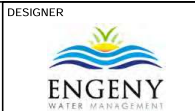


Figure 3.2
Lismore Floodplain Risk Management Plan
Flood Hazard - AIDR
1% AEP

3.2 FLOOD PLANNING AREA AND FLOOD LIABLE AREA

Council currently places controls on development in flood prone areas as identified on the Local Environment Plan (LEP) 2012 Flood Planning Area (FPA) Map. The following definitions specified in the *Flood Risk Management Manual* (NSW DPE, 2022) apply:

- Flood Planning Area: the area of land below the Flood Planning Level (FPL). It is possible for different types of development to have differing FPLs applied within the FPA.
- Flood Planning Level: the combination of the flood level per the Defined Flood Event (DFE) and suitable freeboard. The typically adopted DFE is the 1% AEP at a minimum.

Lismore's current FPA mapping extent was developed based on the 1% AEP flood extent available at the time of the development of the 2012 LEP. The current Lismore FPL is the 1% AEP flood event level plus a freeboard of 500 mm.

Until suitable consultation has been completed with Council and relevant stakeholders on consideration of the implications of the determination of the FPA and FPL, an alternative Flood Liable Area (FLA) has been mapped, defining the floodplain where potential development controls could apply. The proposed Flood Liable Area (FLA) is based on the PMF extent and is shown in Figure 3.3.

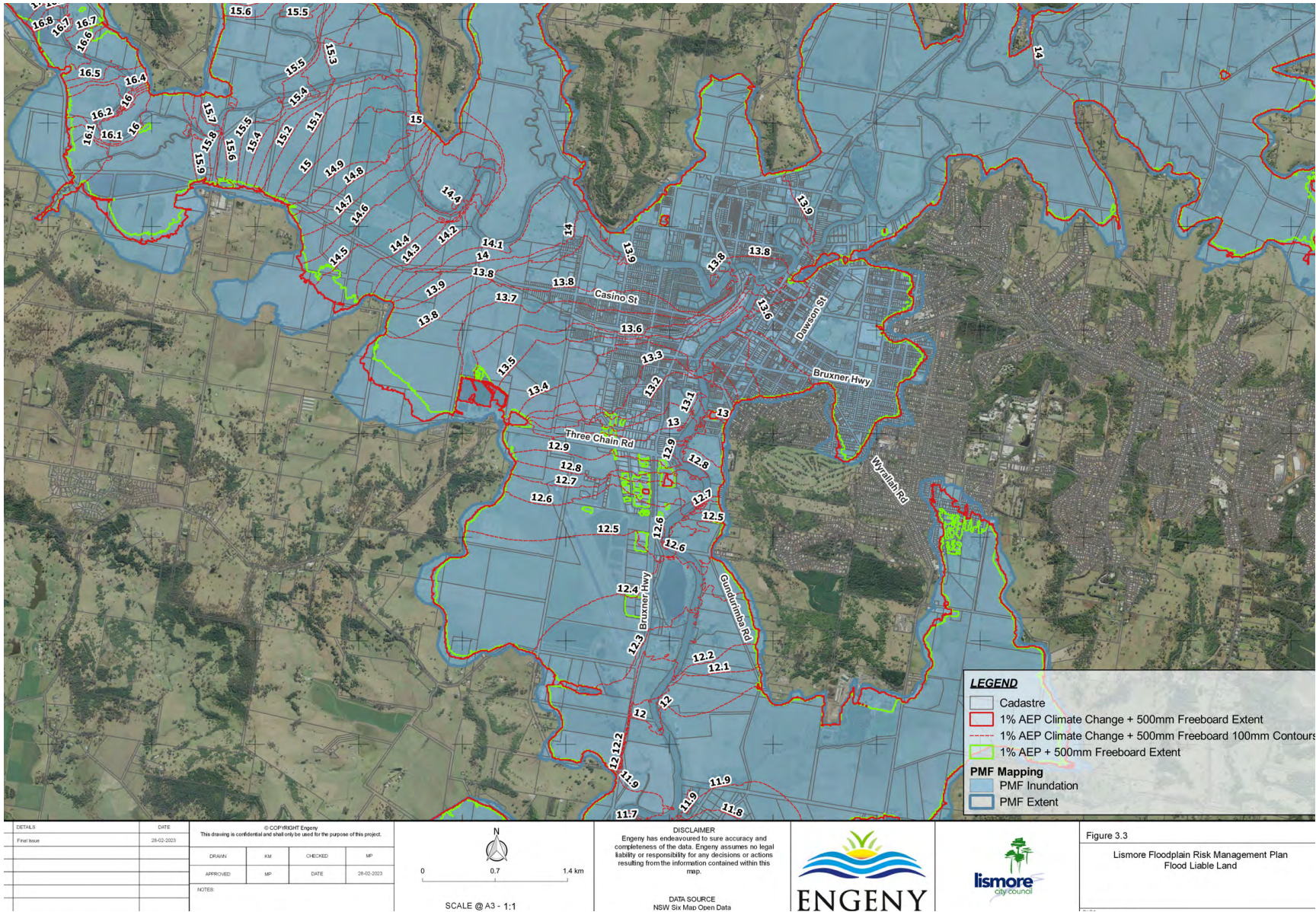
Consideration of any amendments to the FPA and FPL within the FLA are at the discretion of Council, with potential options including, but not limited to;

1. Retainment of the 1% AEP plus 500 mm freeboard for the FPL (shown on Figure 3.3).
2. Adoption of the 1% AEP 2090 Climate Change level plus 500 mm freeboard for the FPL. It is noted that the 1% AEP 2090 Climate Change levels are generally 500-600 mm above the current scenario 1% AEP flood levels in Lismore. (shown on Figure 3.3).
3. Adoption of a flood event between the 1% AEP and the 1:2,000 AEP flood event as the FPL.
4. Adoption of the February 2022 peak flood height as the FPL, estimated as sitting between the 1:2,000 AEP and 1:10,000 AEP design flood levels.
5. Consideration of different FPLs for different land uses, such as residential versus commercial, could be also be incorporated.

3.2.1 Rationale for Updating Flood Planning Level

The following considerations support revision of the FPL for Lismore to a more stringent level beyond the 1% AEP flood event level plus 500 mm freeboard:

- Flood Hazard:
 - During a 1% AEP flood event, a large proportion of Lismore's urban area that is flood prone has a hazard classification of H5 or H6. This means that due to depth and/or velocity of flood water, the area is unsafe for both humans and vehicles and buildings are considered vulnerable to failure.
- Evacuation:
 - A number of localities in Lismore have evacuation constraints potentially resulting in people becoming trapped by roads being cut off early in a flood event. A higher flood planning level would provide greater safety due to increased potential for shelter in place until extraction in the worst-case scenario where the evacuation window is missed.
- Climate Change:
 - The Intergovernmental Panel on Climate Change (IPCC) research indicates that long-term weather projections point to increased intensity of rainfall events, and resultant increased risk of flooding. This could lead to flood depths increasing by up to 600 mm by 2090 (as per Section 3.6). A higher FPL could help to protect against possible increases in flood water depths as a result of climate change. Flood planning controls in the Lismore Local Environmental Plan require Council to take into account projected changes as a result of climate change.
- Risk Appetite:
 - Following devastating historical floods that overtopped Lismore's levee system, including in 2017 and two floods in 2022, and the amount of damage and trauma caused, there is likely to be a desire within the community to reduce, as much as practicable, Lismore's future flood risk. Raising the flood planning level is one way Lismore can decrease flood risk for new development, however it should be noted that this does not eliminate the risk.



3.3 FLOOD FUNCTION

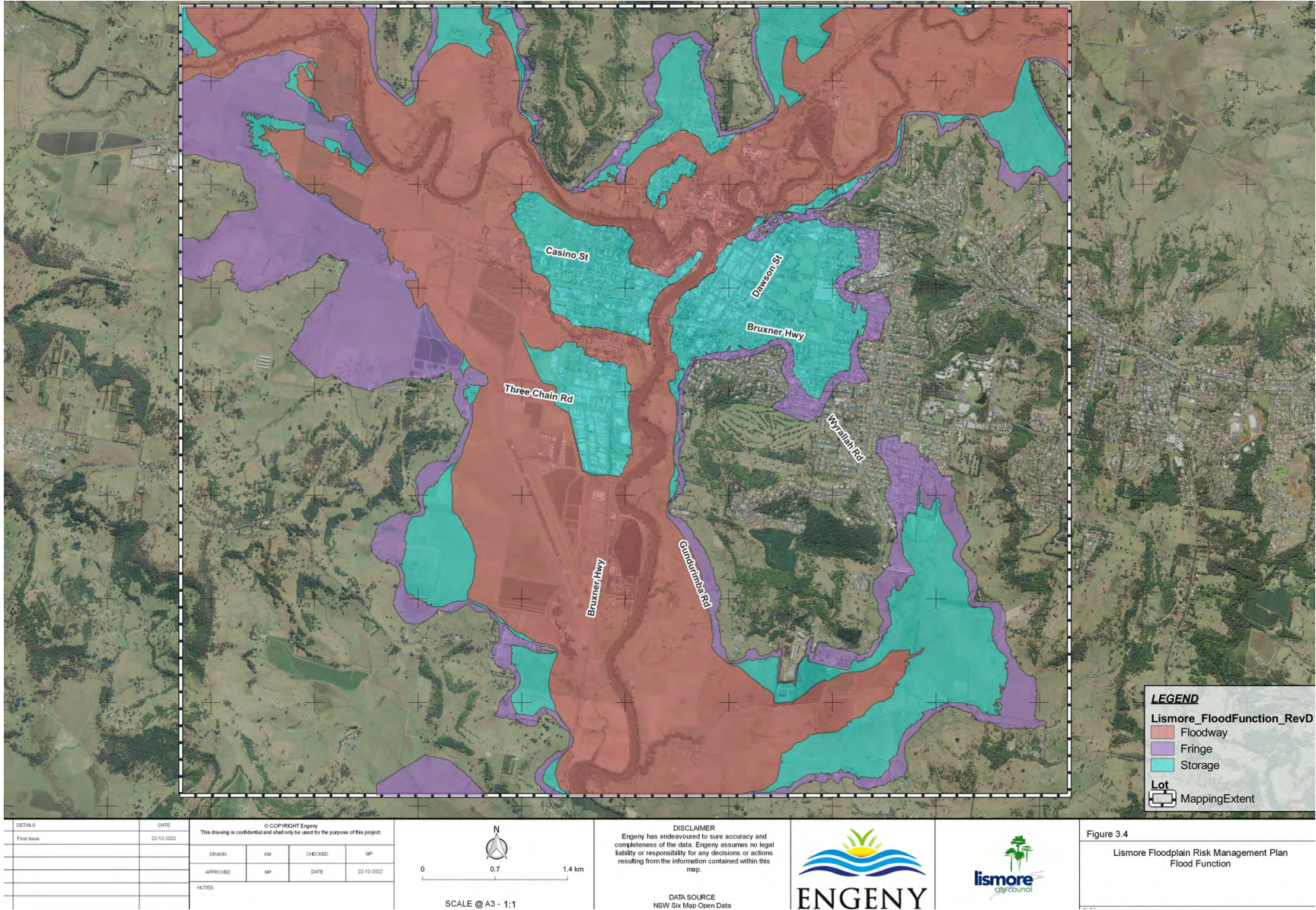
Flood function mapping identifies various areas within the floodplain extent (defined by the PMF) in accordance with the following definitions provided by the *Flood Risk Management Manual* (NSW DPE, 2022):

- Floodways: also known as flood conveyance areas, floodways generally convey a significant discharge of water during floods and generally align with naturally defined channels.
- Flood storage areas: areas of the floodplain that are outside of floodways that generally provide for temporary storage of floodwaters during a flood event.
- Flood fringe areas: the remaining areas within the floodplain that have not been defined as floodways or flood storage areas.

Flood function mapping for Lismore has been defined as shown in Figure 3.4.

The following general area classifications have resulted from the flood function mapping activities:

- Floodway areas generally align with locations where the 1% AEP depth x velocity (DxV) results exceed 0.45 m²/s in the latest hydraulic modelling results. The flood extents of Leycester Creek, Leycester Creek breakout, Wilsons River, and Hollingworth Creek all fall within this classification.
- Flood storage areas generally align with locations where low velocity (less than 0.5 m/s) water is stored at depth greater than 1 m in the 1% AEP event. Flood storage areas were largely identified in South Lismore and much of the CBD flood extent.
- Flood fringe classifications has been applied to all remaining areas within the PMF flood extent and include areas west of the Leycester Creek breakout floodway and in localised areas on the edge of the PMF flood extent not included under the floodway or flood storage classifications.



3.4 FLOOD RISK PRECINCT MAPPING

Determination of flood risk is recommended to be undertaken through consideration of the likelihood of the flood event, and the severity of its consequence as outlined in the *Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia* (AIDR, 2017). A flood risk classification matrix was developed for Lismore that utilises the flood hazard (in accordance with the AIDR flood hazard vulnerability curves as discussed in Section 3.1), and the frequency (the design flood event Annual Exceedance Probability). The adopted flood risk matrix is provided in Figure 3.5.

Figure 3.5: Flood Risk Precinct Matrix

Flood Likelihood	Flood Hazard (AIDR)					
	H1	H2	H3	H4	H5	H6
10% AEP	Low	Medium	Medium	High	Extreme	Extreme
5% AEP, 1% AEP	Low	Low	Medium	High	High	Extreme
0.2% AEP	Low	Low	Medium	Medium	High	High
1:1,000 AEP, 1:2,000 AEP	Low	Low	Low	Low	Medium	High
1:10,000 AEP, 1:100,000 AEP, PMF	Low	Low	Low	Low	Low	Medium

The matrix has been applied to the design event flood results to classify the entirety of the Lismore floodplain contained within the PMF flood extent. The resultant map is the maximum risk classification observed in any one grid cell within the hydraulic model from application of a risk rating to the individual flood hazard results for each AEP. For example, extreme risk classification can only occur where a H5 or H6 hazard occurs in a 10% AEP event or a H6 hazard in a 5% AEP or 1% AEP event.

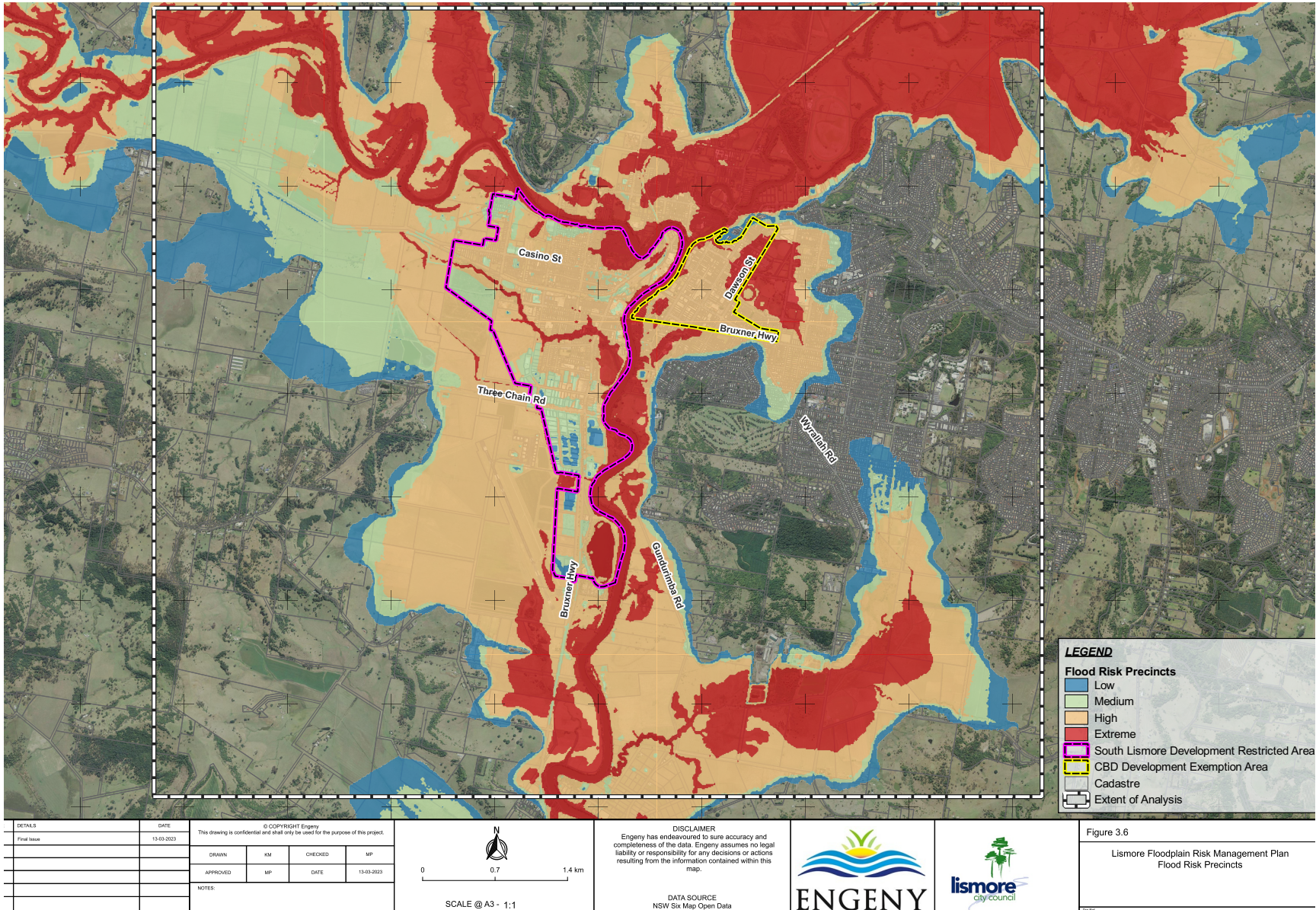
The resultant Flood Risk Precincts map is provided in Figure 3.6. A summary of the flood risk precincts as they pertain to Lismore is:

- The “Extreme” risk precinct classification applies to the deepest areas within the CBD basin, along with the creek areas of Leycester Creek, Wilsons River and Hollingworth Creek, where the highest flow velocities exist.
- “High” risk precincts apply to the majority of the remaining CBD basin area, South Lismore, the airport and through to Gundurimba.
- “Medium” and “Low” risk precincts include the remaining areas not mentioned above, within the PMF extent.
- An additional “South Lismore Development Restricted Area” precinct has been applied to South Lismore due to the limitations associated with evacuation from this area and potential for property damage.
- An additional “CDB Development Exemption Area” precinct has been applied to areas in the CBD that are noted as high risk, due to the protection the levee provides and the extended time and potential for evacuation to the east via rising roads.

The number of buildings broadly estimated to be located within each precinct is summarised in Table 3.1. These have been calculated using a Geographic Information System (GIS) layer containing all buildings (residential houses and commercial/industrial buildings) observed in the aerial imagery available at the time of writing this report and has been quality checked to ensure sheds and other non-habitable or non-business use buildings are removed from the dataset.

Table 3.1: Building Estimates within Each Flood Risk Precinct

Flood Risk Precinct	Estimated Number of Buildings
Low	567
Medium	433
High	1,831
Extreme	223



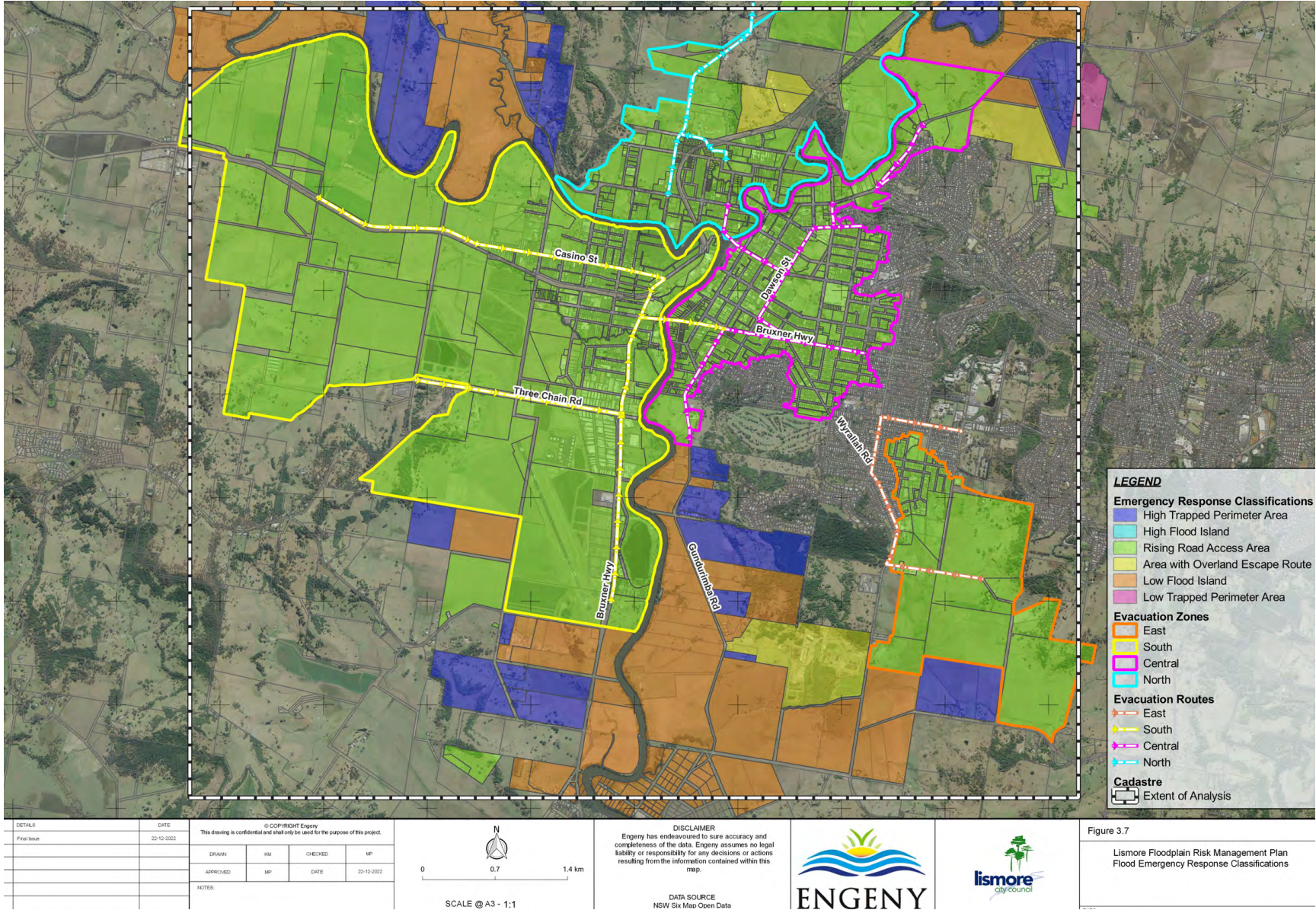
3.5 FLOOD EMERGENCY RESPONSE CLASSIFICATION

The Lismore floodplain, defined up to the PMF flood extent, has been assessed against the *Support for Emergency Management Planning – Flood Risk Management Guide EM01* (NSW DPE, 2022) guidelines. The guideline takes into consideration whether dwellings are flood affected and the availability of evacuation routes both leading to, and after, the flood peak.

Flood emergency response classifications for Lismore is presented in Figure 3.7, and a summary of the definitions are summarised in Table 3.2. Not all classifications have been deemed relevant to Lismore.

Table 3.2: Flood Emergency Response Classifications

Flood Emergency Response Classification	Description
High Flood Island	Areas suitable for refuge remain flood free in the PMF. Evacuation is not practical prior to flooding and resupply by boat or air will be required until access is reinstated.
High Trapped Perimeter Area	Areas suitable for refuge remain flood free in the PMF. Evacuation is not practical prior to flooding, however, the area is not completely surrounded by floodwater.
Low Flood Island	The area is flooded in a PMF event. Evacuation is not practical prior to flooding.
Low Trapped Perimeter Area	The area is flooded in a PMF event. Evacuation is not practical prior to flooding, however, the area is not completely surrounded by floodwater.
Areas with Rising Road Access	The area is flooded in a PMF event. Evacuation is practical prior to flooding, with access to a road that rises continually out of the PMF.
Areas with Overland Escape Route	The area is flooded in a PMF event. Evacuation is practical prior to flooding, via overland means on foot.



3.6 ROAD EVACUATION ANALYSIS

3.6.1 Overview

For the purpose of the road evacuation analysis, Lismore has been designated into four precincts; South Lismore, North Lismore, CBD and East Lismore. The residential building and population numbers for each evacuation precinct are summarised in Table 3.3. For this analysis, it has been assumed that commercial and industrial buildings do not have a permanent population and therefore have been excluded from the estimated population required to evacuate during a flood event. The key roads utilised for evacuation are shown on Figure 3.8.

Table 3.3: Evacuation Precincts

Evacuation Precinct	Number of Residential Buildings*	Estimated Population**
South Lismore	766	1,840
North Lismore	227	540
CBD	1215	2,800
East Lismore	257	590

*Building polygons as supplied by Lismore City Council, manually gap-filled to capture buildings assumed to be habitable.

** Utilising Australian Bureau of Statistics Census 2021 'Average Number of People per Household' data.

3.6.2 Flood Risk for Evacuation Routes

In order to provide context on trafficability, flood risk, and availability of the key evacuation routes in Lismore, extraction of flood behaviour information for the 10% AEP, 1% AEP, March 2017, and February 2022 flood events has been undertaken. Peak depths and flood hazard (Depth x Velocity products) for each event at key locations (refer to Figure 3.8) along the evacuation routes have been extracted and are provided in Table 3.4. The depth and hazard values provided for the 10% AEP and 1% AEP flood events correspond to the critical duration for these events. The 10% AEP flood event has a critical duration of 48 hours, and the 1% AEP has a critical duration of 24 hours. These locations are indicated on Figure 3.8.

Depth x Velocity product has been utilised as an informative indicator of trafficability for the road. The maximum limits for vehicle trafficability and stability recommended in Australian Rainfall and Runoff 2019 (ARR 2019) (Ball, et. al., 2019) have been applied and are:

- Small passenger vehicle: $DxV \leq 0.30 \text{ m}^2/\text{s}$
- Large passenger vehicle: $DxV \leq 0.45 \text{ m}^2/\text{s}$
- Large 4WD: $DxV \leq 0.60 \text{ m}^2/\text{s}$.

The limits for pedestrian stability are:

- Children: $DxV \leq 0.40 \text{ m}^2/\text{s}$ (providing depth <0.5 m and velocity <3 m/s)
- Adults: $DxV \leq 0.60 \text{ m}^2/\text{s}$ (providing depth <1.2 m and velocity <3 m/s).

Flood mapping of the depth x velocity result for the analysed events is provided in Appendix D.

Table 3.4: Peak Depth and Flood Hazard for Evacuation Routes

Location	Route	10% AEP Flood Event		1% AEP Flood Event		March 2017		February 2022	
		Peak Depth (m)	Flood Hazard (m ² /s)	Peak Depth (m)	Flood Hazard (m ² /s)	Peak Depth (m)	Flood Hazard (m ² /s)	Peak Depth (m)	Flood Hazard (m ² /s)
1	South 1	0.11	0.1	1.60	0.5	0.86	0.3	3.36	1.5
2	South 1	0.00	0.0	1.01	0.5	0.36	0.1	2.71	1.8
3	South 1	0.04	0.0	0.57	1.0	0.00	0.3	2.49	1.7
4	South 2	0.00	0.0	1.36	0.7	0.70	0.2	3.32	1.0
5	South 2	0.00	0.0	2.75	1.0	2.04	0.5	4.84	2.7
6	South 3	2.14	0.6	3.42	0.9	2.89	1.0	5.20	1.6
7	CBD 1	0.00	0.0	0.38	0.0	0.00	0.0	2.07	0.7
8	CBD 1	0.98	0.1	3.49	1.6	2.68	0.8	5.32	2.9
9	CBD 1	0.00	0.0	1.70	0.4	0.58	0.2	3.42	1.0
10	CBD 1	0.80	0.1	3.12	0.6	2.21	0.3	4.99	0.7
11	CBD 1	0.00	0.0	0.00	0.0	0.00	0.0	1.25	0.0
12	CBD 2	0.23	0.0	2.53	0.7	1.59	0.5	4.34	1.1
13	CBD 2	1.53	0.1	3.84	0.6	2.84	0.9	5.67	0.8
14	CBD 3	0.39	0.0	2.71	0.1	1.76	0.1	4.54	1.2
15	CBD 3	1.79	0.1	3.20	0.3	2.48	0.1	4.92	0.7
16	North 1	1.16	0.5	2.57	1.4	1.67	0.8	4.35	2.3
17	North 1	0.00	0.0	1.02	0.6	0.29	0.2	2.80	1.8
18	North 1	0.40	0.2	1.88	1.0	0.88	0.5	3.53	1.2
19	North 2	0.12	0.0	1.53	0.3	0.60	0.1	3.24	0.9
20	North 2	0.88	0.0	2.29	0.3	1.53	0.2	4.03	0.7
21	North 2	1.22	0.0	2.63	0.1	1.76	0.1	4.30	0.1
22	North 3	2.98	0.0	4.39	0.3	3.70	0.1	6.20	1.1
23	East	0.73	0.0	2.37	0.1	1.83	0.3	4.24	0.2

3.6.3 Bridge Crossing Immunities

Bridge crossings of Leycester Creek and Wilsons River are key to the evacuation routes. Commentary on the immunity of the various crossings and use for evacuation are listed in Table 3.5.

Table 3.5: Bridge Crossings

Bridge Name	Precincts Served	Estimated Immunity	Use in Evacuation
Fawcett Bridge	North Lismore (east of Pine Street, and south of Exton Street)	Deck level at 14.24 m AHD. 1:2,000 AEP flood event estimated immunity.	Southern approach trafficable up to levee overtopping. Northern approach must be utilised early in a flood event, before trafficability is lost.
Ballina Street Bridge	South Lismore (primary)	Deck level at 14.65 m AHD. 1:10,000 AEP flood event estimated immunity.	Preferred evacuation route for South Lismore. Eastern approach trafficable up to levee overtopping. Western approach trafficable in events up to a 1:20 AEP flood event, otherwise must be utilised early in a flood event.
Robert White Bridge	South Lismore (secondary)	Deck level at approximately 15.7 m AHD. 1:10,000 AEP flood event estimated immunity.	Feasible evacuation route for flood events up to an expected 1:20 AEP flood event. Both northern and southern approaches become inundated in events larger than 1:20 AEP, route to only be used early in events of this magnitude.
Union Street Bridge	Not a recommended evacuation route.	Deck level at 12.92 m AHD. 1:100 AEP flood event estimated immunity	Access from the south along Union Street is limited due to early inundation, in events as frequent as the 1:10 AEP flood event. Not recommended as an evacuation route.
Hollingsworth Creek Bridge	South Lismore internal	Deck at approximately 8.8 m AHD. Less than 1:10 AEP immunity.	Evacuation from South of Hollingsworth Creek must occur early in a flood event, as both crossing locations are inundated quickly.
Wilson Street Causeway	South Lismore internal	Deck at approximately 9 m AHD. Less than 1:10 AEP immunity.	Evacuation from South of Hollingsworth Creek must occur early in a flood event, as both crossing locations are inundated quickly.

3.6.4 Rate of Rise

Rate of rise indicates how quickly from the start of an event floodwaters are expected to increase. Typically, the rate of rise varies during the event and is influenced by rainfall, physical structures (i.e. levees, etc.) and floodplain characteristics. Commentary of the observed rate of rise for the critical storm duration for the 10% AEP and 1% AEP design events, and for the modelled March 2017 and February 2022 flood events, is provided in Table 3.6. It is noted that the reported numbers are extracts from the flood model and not actual flood event records.

Table 3.6: Typical Rate of Rise in Evacuation Precincts

Evacuation Precinct	10% AEP Flood Event	1% AEP Flood Event	March 2017	February 2022
South Lismore	<i>Flood depths too minor to provide commentary due to protection from South Lismore levee.</i>	Flood depths reach 1.6 m in 10 hours.	Flood depths reach 0.9 m in almost 6 hours.	An average rate of rise of 1 m per 5.3 hours to the peak of the modelled event is observed. Total depth at analysed location is 3.4 m.
North Lismore	Flood depths reach 0.5 m in almost 8 hours.	Flood depths reach 1.9 m in almost 12 hours.	Flood depths reach 1.1 m in almost 9 hours.	An average rate of rise of 1 m per 5.1 hours to the peak of the modelled event is observed. Total depth at analysed location is 3.7 m.

Evacuation Precinct	10% AEP Flood Event	1% AEP Flood Event	March 2017	February 2022
CBD	Local flow initially inundates some localities in Lismore (not captured in modelling). Following overtopping of the levee, an average rate of rise of 1 m per 3.5 hours to the peak of the modelled event is observed. Total depth at analysed location is 3.5 m .	An average rate of rise of 1 m per 1.9 hours to the peak of the modelled event post levee overtopping is observed. Total depth at analysed location is 6 m .	An average rate of rise of 1 m per 1.8 hours to the peak of the modelled event post levee overtopping is observed. Total depth at analysed location is 4.9 m .	An average rate of rise of 1 m per 2.4 hours to the peak of the modelled event post levee overtopping is observed. Total depth at analysed location is 7.7 m .

3.6.5 Duration of Closure and Time to Closure

Duration of closure in this analysis is an indicator of how long the evacuation routes are unable to be used in the flood events (based on flood depths exceeding 300 mm). Extraction of this data at various location (as shown on Figure 3.8) is provided in Table 3.7.

Time to closure is the time it takes for flood depths to reach 300 mm. To provide context for road closure to flood warnings in Lismore, the time from which the Lismore Rowing Club gauge reaches the closest corresponding flood warning level to road closure has been provided. Extraction of this data at various location (as shown on Figure 3.8) is provided in Table 3.8.

Note that the data extracted for the 10% AEP and 1% AEP flood events correspond to the critical duration for these events. The 10% AEP flood event has a critical duration of 48 hours, and the 1% AEP has a critical duration of 24 hours.

Table 3.7: Duration of Closure for Evacuation Routes

Location	Route	10% AEP Flood Event Duration of Closure (hours)	1% AEP Flood Event Duration of Closure (hours)	March 2017 Duration of Closure (hours)	February 2022 Duration of Closure (hours)
1	South 1	0	23	15	43
2	South 1	0	19	6	40
3	South 1	0	23	15	43
4	South 2	0	37	42	66
5	South 2	0	36	32	57
6	South 3	158	79	103	147
7	CBD 1	0	0	0	29
8	CBD 1	134	71	98	143
9	CBD 1	0	22	10	43
10	CBD 1	20	41	30	61
11	CBD 1	0	0	0	18
12	CBD 2	0	33	22	53
13	CBD 2	27	46	38	66
14	CBD 3	0	38	27	58

Location	Route	10% AEP Flood Event Duration of Closure (hours)	1% AEP Flood Event Duration of Closure (hours)	March 2017 Duration of Closure (hours)	February 2022 Duration of Closure (hours)
15	CBD 3	36	46	44	67
16	North 1	23	35	27	56
17	North 1	0	17	9	39
18	North 1	0	26	17	46
19	North 2	0	23	12	44
20	North 2	18	32	24	53
21	North 2	22	34	26	55
22	North 3	49	69	48	80
23	East	23	45	40	62

Table 3.8: Time to Closure for Evacuation Routes

Location	Route	10% AEP Flood Event Time to Closure	1% AEP Flood Event Time to Closure	March 2017 Time to Closure	February 2022 Time to Closure
1	South 1	-	20.5 hours from minor flood warning	13 hours from minor flood warning	84 hours from minor flood warning
		-	18.5 hours from moderate flood warning	8.5 hours from moderate flood warning	17 hours from moderate flood warning
		-	5.5 hours from major flood warning	3 hours from major flood warning	5 hours from major flood warning
2	South 1	-	22 hours from minor flood warning	17.5 hours from minor flood warning	85 hours from minor flood warning
		-	20 hours from moderate flood warning	13 hours from moderate flood warning	17.5 hours from moderate flood warning
		-	7 hours from major flood warning	7.5 hours from major flood warning	5.5 hours from major flood warning
3	South 1	-	21.5 hours from minor flood warning	15 hours from minor flood warning	85 hours from minor flood warning
		-	19.5 hours from moderate flood warning	10.5 hours from moderate flood warning	17.5 hours from moderate flood warning
		-	6.5 hours from major flood warning	4.5 hours from major flood warning	5.5 hours from major flood warning
4	South 2	-	23 hours from minor flood warning	13.5 hours from minor flood warning	85.5 hours from minor flood warning

Location	Route	10% AEP Flood Event Time to Closure	1% AEP Flood Event Time to Closure	March 2017 Time to Closure	February 2022 Time to Closure
5	South 2	-	20.5 hours from moderate flood warning	9 hours from moderate flood warning	18.5 hours from moderate flood warning
		-	8 hours from major flood warning	3 hours from major flood warning	6.5 hours from major flood warning
		-	22 hours from minor flood warning	13.5 hours from minor flood warning	85 hours from minor flood warning
		-	19.5 hours from moderate flood warning	9 hours from moderate flood warning	18 hours from moderate flood warning
		-	7 hours from major flood warning	3 hours from major flood warning	6 hours from major flood warning
6	South 3	33.5 hours from minor flood warning	16.5 hours from minor flood warning	10 hours from minor flood warning	81 hours from minor flood warning
		30 hours from moderate flood warning	14.5 hours from moderate flood warning	5.5 hours from moderate flood warning	13.5 hours from moderate flood warning
		-	1.5 hours from major flood warning	-	1.5 hours from major flood warning
7	CBD 1	-	-	-	89 hours from minor flood warning
		-	-	-	22 hours from moderate flood warning
		-	-	-	10 hours from major flood warning
8	CBD 1	57.5 hours from minor flood warning	24.5 hours from minor flood warning	14 hours from minor flood warning	85 hours from minor flood warning
		54 hours from moderate flood warning	22.5 hours from moderate flood warning	9.5 hours from moderate flood warning	17.5 hours from moderate flood warning
		18 hours from major flood warning	9.5 hours from major flood warning	4 hours from major flood warning	5.5 hours from major flood warning
9	CBD 1	-	26 hours from minor flood warning	21 hours from minor flood warning	88 hours from minor flood warning
		-	23.5 hours from moderate flood warning	16.5 hours from moderate flood warning	20.5 hours from moderate flood warning
		-	11 hours from major flood warning	11 hours from major flood warning	8.5 hours from major flood warning
10	CBD 1	46 hours from minor flood warning	24 hours from minor flood warning	18.5 hours from minor flood warning	86.5 hours from minor flood warning

Location	Route	10% AEP Flood Event Time to Closure	1% AEP Flood Event Time to Closure	March 2017 Time to Closure	February 2022 Time to Closure
11	CBD 1	42 hours from moderate flood warning	21.5 hours from moderate flood warning	14 hours from moderate flood warning	19 hours from moderate flood warning
		7 hours from major flood warning	9 hours from major flood warning	8.5 hours from major flood warning	7 hours from major flood warning
		-	-	-	93 hours from minor flood warning
		-	-	-	25.5 hours from moderate flood warning
		-	-	-	13.5 hours from major flood warning
		-	-	-	-
12	CBD 2	-	25 hours from minor flood warning	17.5 hours from minor flood warning	87 hours from minor flood warning
		-	22.5 hours from moderate flood warning	13 hours from moderate flood warning	20 hours from moderate flood warning
		-	10 hours from major flood warning	7.5 hours from major flood warning	8 hours from major flood warning
13	CBD 2	44 hours from minor flood warning	23 hours from minor flood warning	16 hours from minor flood warning	85.5 hours from minor flood warning
		40 hours from moderate flood warning	20.5 hours from moderate flood warning	11.5 hours from moderate flood warning	18 hours from moderate flood warning
		5 hours from major flood warning	8 hours from major flood warning	6 hours from major flood warning	6 hours from major flood warning
14	CBD 3	-	24.5 hours from minor flood warning	19 hours from minor flood warning	87 hours from minor flood warning
		-	22 hours from moderate flood warning	14.5 hours from moderate flood warning	19.5 hours from moderate flood warning
		-	9.5 hours from major flood warning	8.5 hours from major flood warning	7.5 hours from major flood warning
15	CBD 3	30.5 hours from minor flood warning	14.5 hours from minor flood warning	11 hours from minor flood warning	78.5 hours from minor flood warning
		27 hours from moderate flood warning	12.5 hours from moderate flood warning	6.5 hours from moderate flood warning	11.5 hours from moderate flood warning
		-	-	0.5 hours from major flood warning	-
16	North 1	34.5 hours from minor flood warning	17.5 hours from minor flood warning	13 hours from minor flood warning	81.5 hours from minor flood warning

Location	Route	10% AEP Flood Event Time to Closure	1% AEP Flood Event Time to Closure	March 2017 Time to Closure	February 2022 Time to Closure
17	North 1	31 hours from moderate flood warning	15.5 hours from moderate flood warning	8.5 hours from moderate flood warning	14.5 hours from moderate flood warning
		-	2.5 hours from major flood warning	2.5 hours from major flood warning	2.5 hours from major flood warning
		-	23.5 hours from minor flood warning	18 hours from minor flood warning	87 hours from minor flood warning
		-	21 hours from moderate flood warning	13.5 hours from moderate flood warning	19.5 hours from moderate flood warning
		-	8 hours from major flood warning	8 hours from major flood warning	7.5 hours from major flood warning
18	North 1	-	21 hours from minor flood warning	16.5 hours from minor flood warning	84.5 hours from minor flood warning
		-	19 hours from moderate flood warning	12 hours from moderate flood warning	17.5 hours from moderate flood warning
		-	6 hours from major flood warning	6 hours from major flood warning	5.5 hours from major flood warning
19	North 2	-	21.5 hours from minor flood warning	17.5 hours from minor flood warning	85 hours from minor flood warning
		-	19.5 hours from moderate flood warning	13 hours from moderate flood warning	17.5 hours from moderate flood warning
		-	6.5 hours from major flood warning	7.5 hours from major flood warning	5.5 hours from major flood warning
20	North 2	36.5 hours from minor flood warning	18.5 hours from minor flood warning	14 hours from minor flood warning	82.5 hours from minor flood warning
		32.5 hours from moderate flood warning	16.5 hours from moderate flood warning	9.5 hours from moderate flood warning	15.5 hours from moderate flood warning
		-	3.5 hours from major flood warning	4 hours from major flood warning	3.5 hours from major flood warning
21	North 2	35.5 hours from minor flood warning	18 hours from minor flood warning	13.5 hours from minor flood warning	82 hours from minor flood warning
		31.5 hours from moderate flood warning	16 hours from moderate flood warning	9 hours from moderate flood warning	15 hours from moderate flood warning
		-	3 hours from major flood warning	3 hours from major flood warning	3 hours from major flood warning
22	North 3	22 hours from minor flood warning	9 hours from minor flood warning	8 hours from minor flood warning	74.5 hours from minor flood warning

Location	Route	10% AEP Flood Event Time to Closure	1% AEP Flood Event Time to Closure	March 2017 Time to Closure	February 2022 Time to Closure
		21 hours from moderate flood warning	6.5 hours from moderate flood warning	3.5 hours from moderate flood warning	7 hours from moderate flood warning
		-	-	-	-
23	East	45 hours from minor flood warning	22.5 hours from minor flood warning	10.5 hours from minor flood warning	87 hours from minor flood warning
		41.5 hours from moderate flood warning	20 hours from moderate flood warning	6 hours from moderate flood warning	20 hours from moderate flood warning
		6 hours from moderate flood warning	7.5 hours from major flood warning	-	8 hours from major flood warning

Duration of closure mapping for the analysed events is provided in Appendix D. These maps indicate the total time in hours that the model area is inundated at a depth greater than 300 mm.

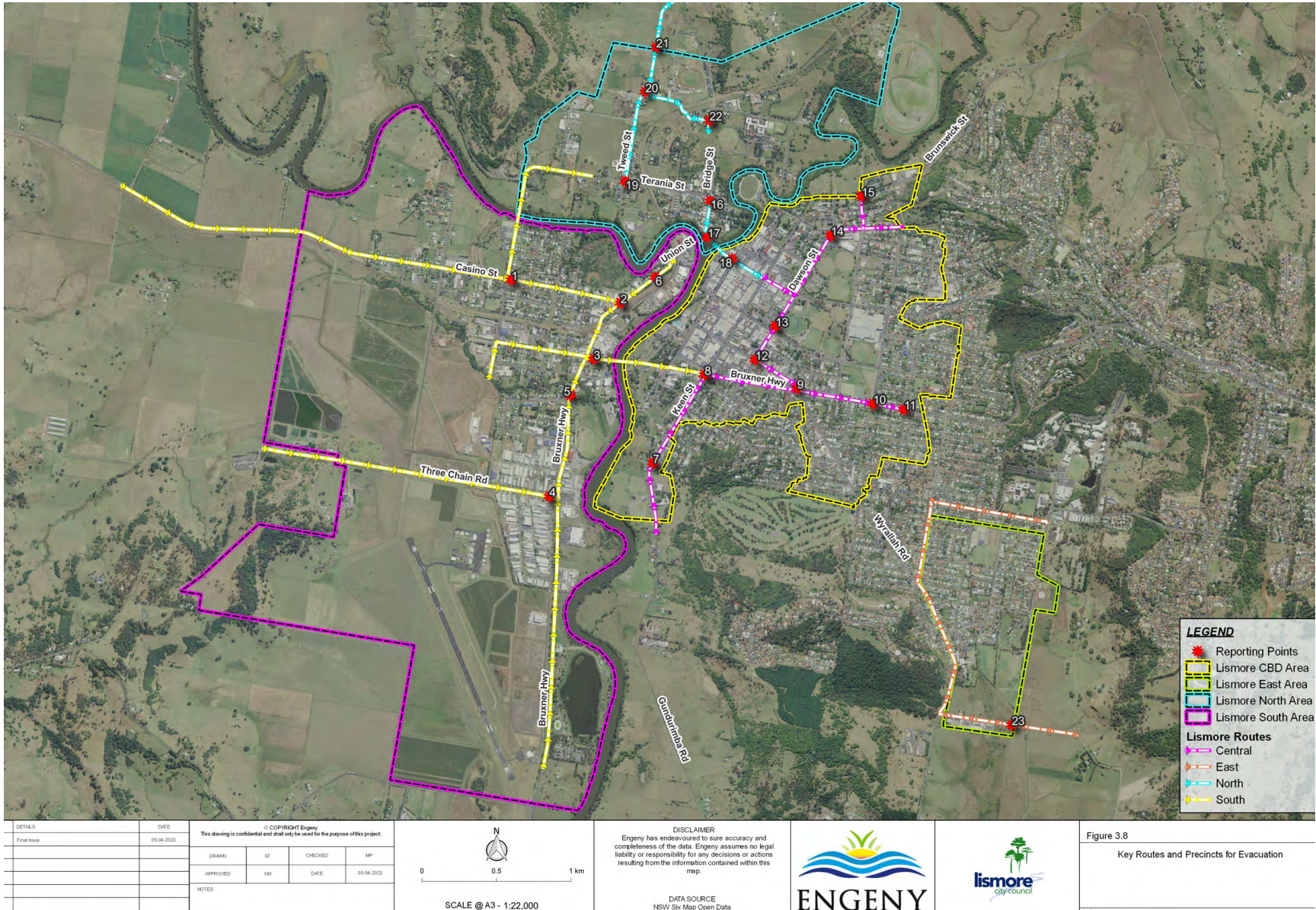
3.6.6 Constraints and Considerations for Evacuation

Utilising the above assessment, key constraints to consider for evacuation are outlined in Table 3.9 for each evacuation precinct in Lismore.

Table 3.9: Evacuation Considerations

Evacuation Precinct	Evacuation Routes	Commentary
South Lismore	South 1 - East along Casino Street, south onto Union Street and across Ballina Street Bridge.	Timely evacuation from South Lismore is necessary, with inundation of isolated areas observed in a 10% AEP flood event, and widespread flooding from a 20% AEP flood event and greater.
	South 2 - East along Three Chain Road, north onto Union Street and across Ballina Street Bridge.	Evacuation route South 1 remains trafficable in a 10% AEP flood event, with closure of roads in South Lismore and along the route occurring in a 20% AEP flood event or greater. Ballina Street Bridge has a high immunity, however, trafficability of the route is impacted by the surrounding roads in South Lismore and the Lismore CBD.
	South 3 – Union Street residents should evacuate south to route South 1.	Trafficability of the Hollingworth Creek Bridge is a key constraint for evacuation along route South 2, and will close relatively early during flood events whilst the remainder of the route remains trafficable.
	South 4 – North along Wilson Street and across Robert White Bridge, and joining North 1 or 2.	For residents along Union Street, evacuation across Union Street Bridge is not recommended, as this crossing only has an estimated 1:100 AEP event immunity and Leicester Creek flooding is observed from a northerly direction onto Union Street.
North Lismore	North 1 - South along Bridge Street and across Fawcett's Bridge.	Route North 1 is a viable option for evacuation up to the point at which the levee overtops, if localised access in North Lismore can be achieved.
	North 2 - North on Tweed Street then Dunoon Road.	It is crucial that evacuation utilising North 2 is considered early in a flood event, with this evacuation route becoming significantly inundated in flood events with as small a magnitude as the 10% AEP event.

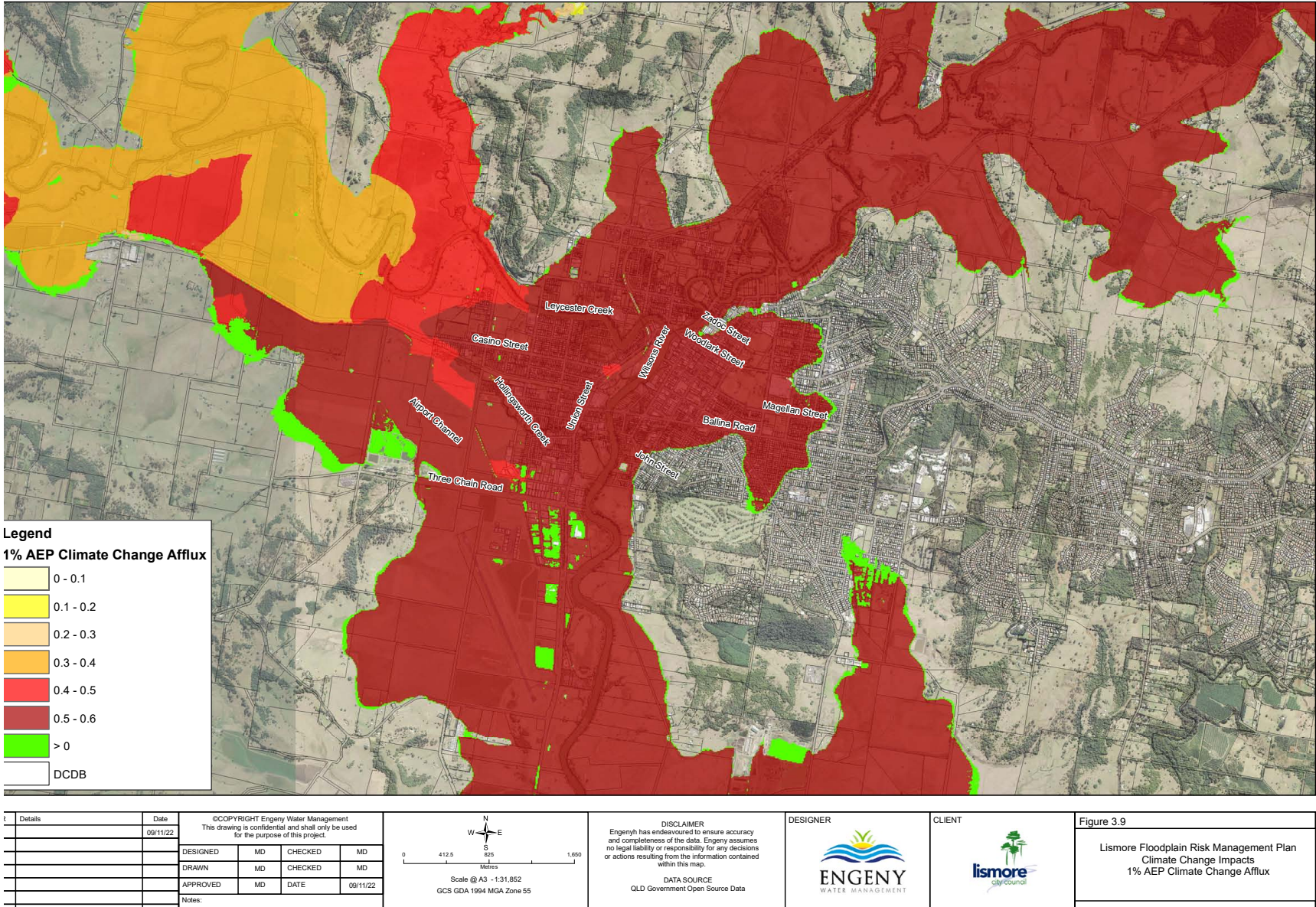
Evacuation Precinct	Evacuation Routes	Commentary
CBD	CBD 1 – North along Keen Street then east along Bruxner Highway.	Route North 3 is a viable option for evacuation whilst flood levels remain low in South Lismore. The CBD levee provides significant opportunity for evacuation of this area, and full evacuation of the CBD should be actioned prior to the levee overtopping, as flows with significant velocity causing risk to persons and vehicle stability is likely to be experienced.
	CBD 2 - North towards Leicester Street then east along Bruxner Highway.	
	CBD 3 – North along Dawson Street then east along New Ballina Road.	
East Lismore	North on Wyrallah Road, Dibbs Street.	Evacuation via Wyrallah Road is recommended as this route remains flood free up to the PMF event from north of the intersection with Skyline Road.



3.7 CLIMATE CHANGE IMPACTS

To estimate the impact of climate change on flood conditions in Lismore, Representative Concentration Pathway (RCP) 8.5 future climate conditions was adopted. This reflects an increase in rainfall intensity of 19.7% to account for a temperature increase of about 4.3°C by 2090, considered the "worst-case" as provided by the Australian Rainfall and Runoff (ARR) 2019 Data Hub. It aligns with the Intergovernmental Panel on Climate Change (IPCC) high emissions scenario, broadly described as the temperature increases expected if mitigating action is not taken. The hydrologic and hydraulic models were simulated for the 1% AEP flood event.

The resultant flood afflux mapping, shown as a difference between the climate change scenario and the design scenario 1% AEP flood height results, is provided in Figure 3.9. The mapping indicates that the estimated increase in intensity will result in increases to design flood levels of approximately 350-600 mm across the PMF flood extent. The extent of inundation was shown to be increased (indicated on flood impact map as 'was dry now wet'), particularly within South Lismore and the fringe areas of the floodplain. This is likely to result in impacts to currently unaffected properties. In particular, impacts to multiple properties surrounding Wade Park and Nielson Park were observed due to backwater from the Wilsons River up the Gundurimba Canal.



4 LAND USE PLANNING AND DEVELOPMENT CONTROLS

The updated and extended design event modelling for Lismore, and the resultant flood planning mapping has been utilised to inform potential development controls to be considered by Council. Land use planning and development controls for Lismore will need to be defined with input from relevant stakeholders, including the community. As such, the potential development controls outlined in this section should be viewed as high level advice only and further consultation and review will be required to ensure there is alignment with the long-term vision and flood risk management strategy for Lismore. These development controls only apply to new development being completed in future, not current development.

Development controls should be applied to various types of future development on flood prone land throughout Lismore. Generally, the controls should be dependent on the flooding hazard that is experienced. It is recommended that LCC review and update the LEP and DCP with consideration for the flood risk outputs provided in this document. Flood risk considerations as applicable to the identified flood risk precincts are provided in Table 4.1.

Table 4.1: Flood Risk Considerations for Future Development Control

Flood Risk Precinct	Flood Risk Considerations	Potential Development Controls
South Lismore Development Restricted Area	<p>Significant risk to life due to restricted evacuation. South Lismore (south of Hollingworth Creek) is isolated once South Lismore levee is overtopped. Evacuation route is via Union Street, the Ballina Street Bridge and Ballina Street or Conway Street to Wyrallah Road. The Hollingworth Creek Bridge represents a low point on the evacuation route that would be cut immediately when flood waters overtop the levee.</p> <p>Includes flood bypass through South Lismore once Leycester Creek breakout occurs.</p> <p>Flood impacts (including to North Lismore) associated with filling or restricting flood conveyance through South Lismore.</p>	<p>Restricted industrial and commercial development.</p> <p>Residential development not accepted.</p> <p>Consider higher Flood Planning Level (FPL) than applied to other flood risk precincts, refer Section 3.2 for options.</p> <p>Consider adoption of site-based Flood Emergency Management Plan for commercial and industrial businesses.</p> <p>Permissible and prohibited land uses should be defined in a new Development Control Plan (DCP) in consultation with the community.</p> <p>Achieve balanced cut to fill, no imported filling, no obstruction of flood conveyance, and completion of a flood impact assessment to demonstrate no worsening of existing flood conditions. Flood impact assessments should consider cumulative development impacts.</p> <p>VHP recommended to facilitate retreat for most vulnerable properties. Where VHP is not possible, consider VHR and retrofit of remaining structures to improve resilience.</p> <p>No critical public infrastructure should be in this precinct.</p>
CBD Development Exemption Area	<p>Significant risk to life and property damage due to Browns Creek conveyance once CBD levee is overtopped.</p> <p>Rising Road evacuation route.</p> <p>Longer evacuation time due to CBD levee.</p>	<p>Define and adopt FPL.</p> <p>Consider VHR or retrofit of structures to improve resilience.</p> <p>Permissible and prohibited land uses should be defined in a new Development Control Plan (DCP) in consultation with the community.</p>
Extreme	<p>Highest flood depth and velocity and is located in regions where H5 and H6 hazard occur over a range of flood events.</p> <p>Extreme flood hazard rating across all flood events.</p>	<p>VHP recommended to facilitate retreat.</p> <p>All development prohibited.</p>
High	<p>Generally represents floodway and flood storage function.</p> <p>Highest flood depth.</p>	<p>Permissible and prohibited land uses should be defined in a new Development Control Plan (DCP) in consultation with the community.</p> <p>Restricted industrial and commercial development.</p> <p>Residential development not accepted.</p>

Flood Risk Precinct	Flood Risk Considerations	Potential Development Controls
	<p>Includes Browns Creek conveyance corridor once CBD levee is overtopped.</p> <p>Includes flood bypass through South Lismore once Leycester Creek breakout occurs.</p>	<p>Define FPL and consider higher FPL for applicable land uses, refer Section 3.2 for options.</p> <p>Achieve balanced cut to fill, no imported filling, no obstruction of flood conveyance, and completion of a flood impact assessment to demonstrate no worsening of existing flood conditions. Flood impact assessments should consider cumulative development impacts.</p> <p>VHP recommended to facilitate retreat for most vulnerable properties. Where VHP is not possible, consider VHR and retrofit of remaining structures to improve resilience.</p> <p>No critical public infrastructure should be in this precinct.</p>
Medium	<p>Flood storage and flood fringe function.</p> <p>Longer evacuation time.</p> <p>Lower flood conveyance.</p>	<p>Define and adopt FPL.</p> <p>Achieve balanced cut to fill, no imported filling, no obstruction of flood conveyance, and completion of a flood impact assessment to demonstrate no worsening of existing flood conditions. Flood impact assessments should consider cumulative development impacts.</p> <p>Consider VHP to facilitate retreat for most vulnerable properties and VHR where VHP is not possible. Consider retrofit of remaining structures to improve resilience.</p>
Low	<p>Generally flood fringe function.</p> <p>Lower flood conveyance and flood depth.</p>	<p>Define and adopt FPL.</p> <p>A flood impact assessment should be completed to demonstrate no worsening of existing flood conditions. Flood impact assessments should consider cumulative development impacts.</p> <p>Consider VHR or retrofit of existing structures to improve resilience.</p>

At the time of preparing this report, the Northern Rivers Reconstruction Corporation (NRRC) through the Resilient Homes Program and the Resilient Land Program was in the process of defining eligible properties for the scheme and flood risk advice has been provided by Engeny to support this. As such, LCC's voluntary house purchase (VHP) and voluntary house raising (VHR) scheme should be reviewed once more specific details of NRRC's program become available.

5 REFERENCES

AIDR (2017), *Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia*. © Commonwealth of Australia: 3rd Edition.

Ball et.al. (2019), *Australian Rainfall and Runoff 2019*. © Commonwealth of Australia

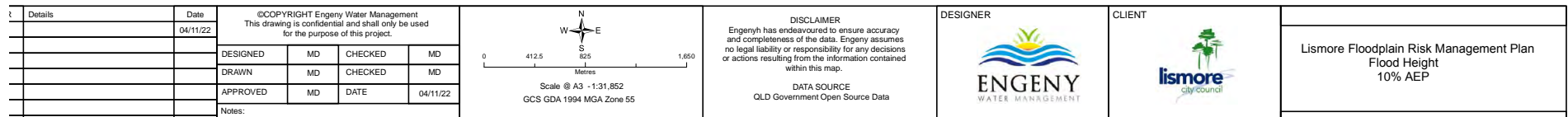
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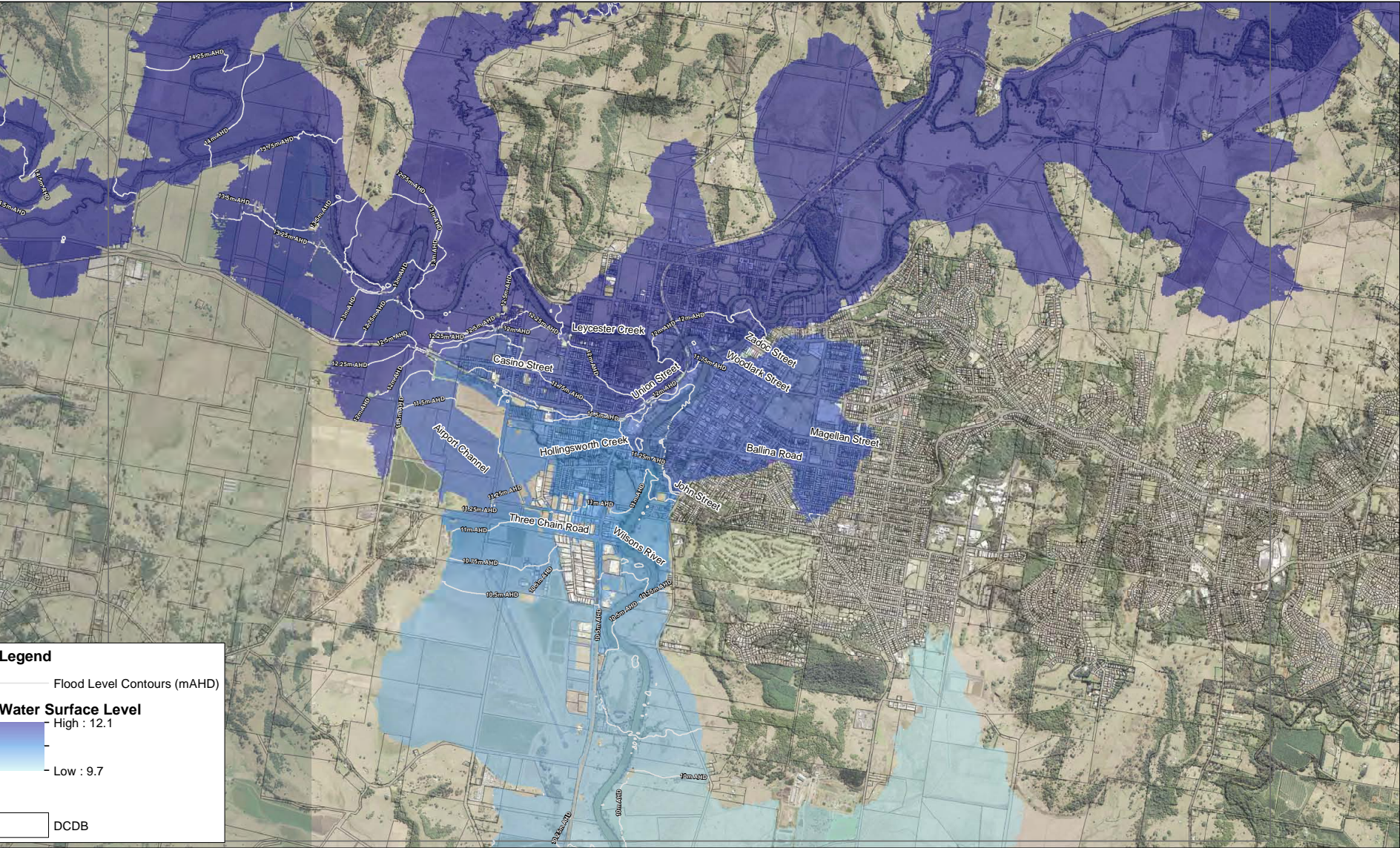
NSW DPE (2022a), *Support for Emergency Management Planning: Flood Risk Management Guide EM01*. © State of New South Wales.

6 QUALIFICATIONS

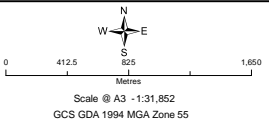
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Appendix A: Design Event Flood Height Mapping





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	04/11/22				
		DESIGNED	MD	CHECKED	MD
		DRAWN	MD	CHECKED	MD
		APPROVED	MD	DATE	04/11/22
		Notes:			

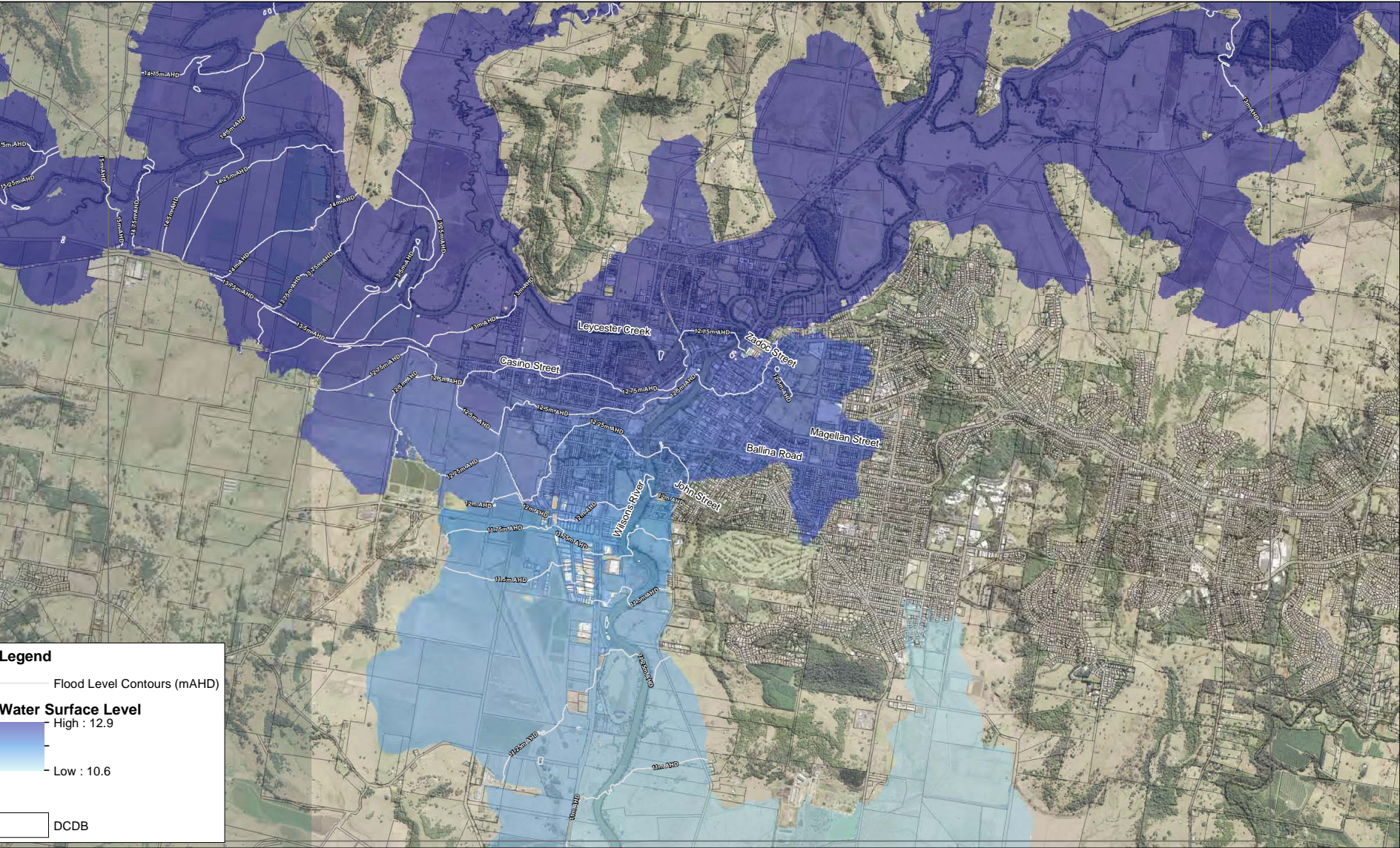


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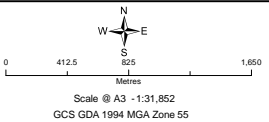
DATA SOURCE
QLD Government Open Source Data



Lismore Floodplain Risk Management Plan
Flood Height
5% AEP



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	04/11/22				
		DESIGNED	MD	CHECKED	MD
		DRAWN	MD	CHECKED	MD
		APPROVED	MD	DATE	04/11/22
Notes:					



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DATA SOURCE
QLD Government Open Source Data

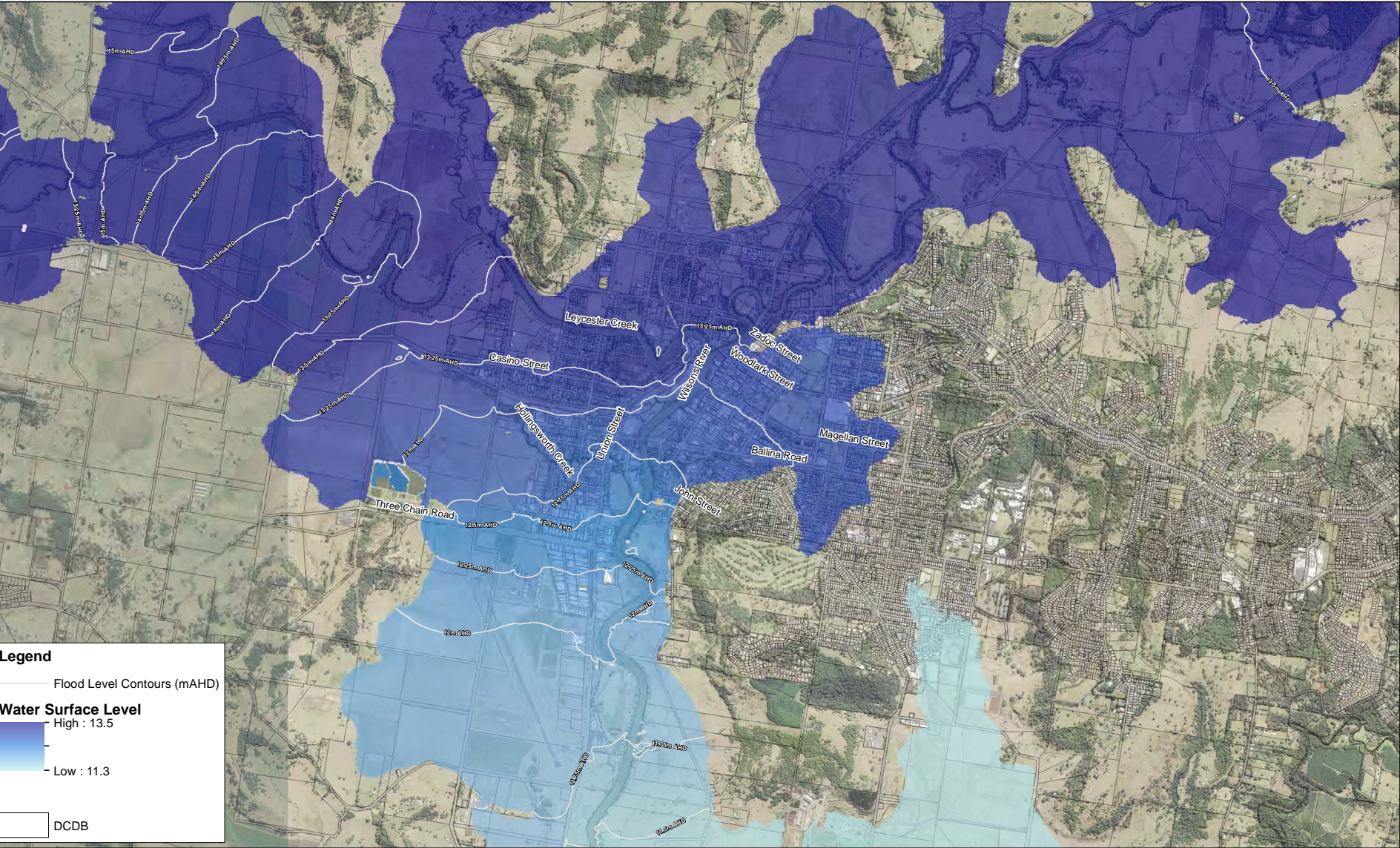
DESIGNER



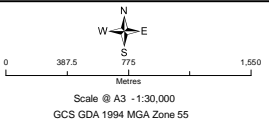
CLIENT



Lismore Floodplain Risk Management Plan
Flood Height
1% AEP



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		DESIGNED	MD	CHECKED	MD
		DRAWN	MD	CHECKED	MD
		APPROVED	MD	DATE	04/11/22
		Notes:			

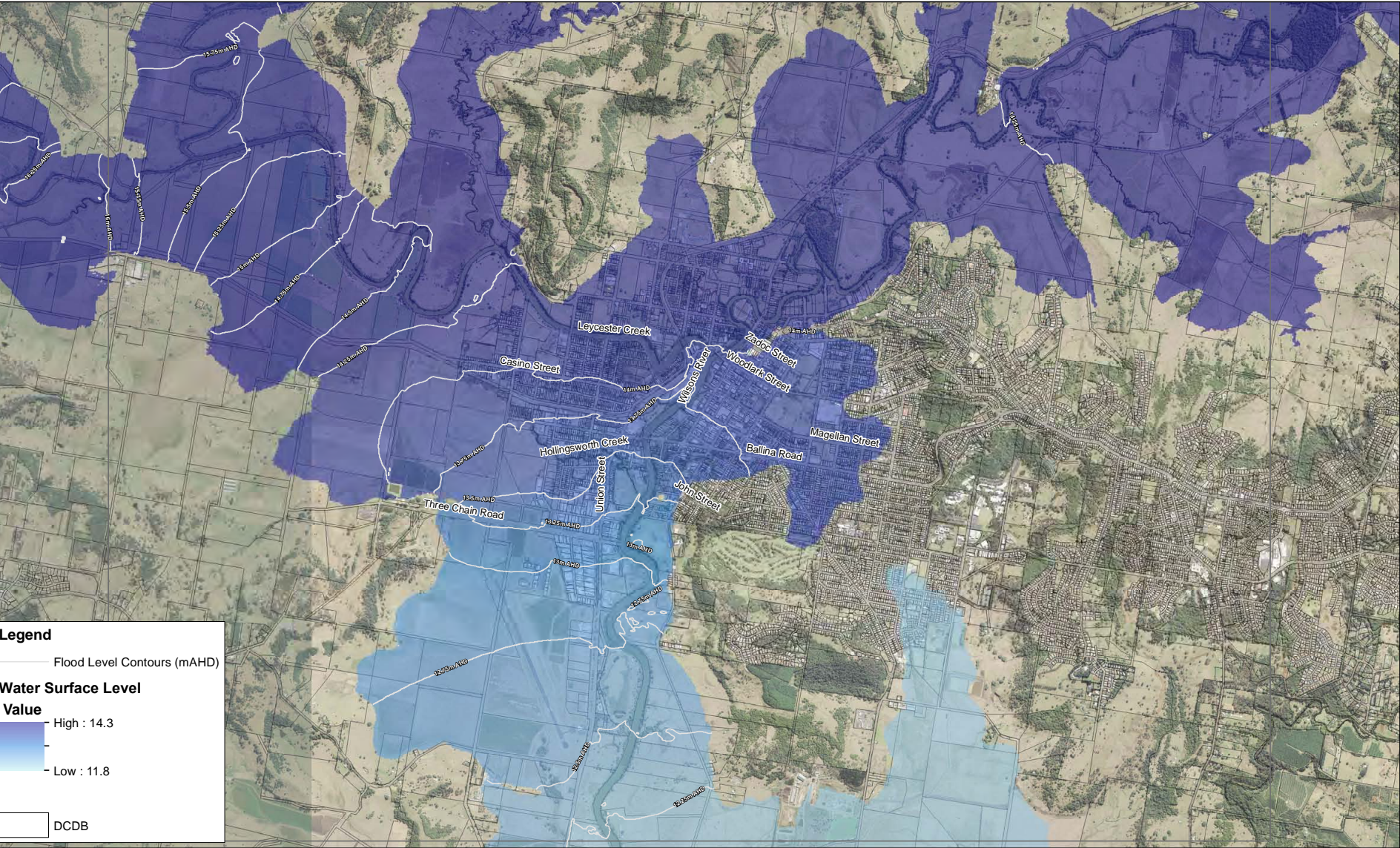


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DATA SOURCE
QLD Government Open Source Data



Lismore Floodplain Risk Management Plan
Flood Height
0.2% AEP



Legend

— Flood Level Contours (mAHD)

Water Surface Level

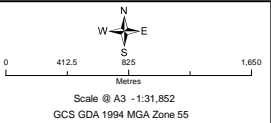
Value

High : 14.3

Low : 11.8

DCDB

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	04/11/22				
		DESIGNED	MD	CHECKED	MD
		DRAWN	MD	CHECKED	MD
		APPROVED	MD	DATE	04/11/22
		Notes:			



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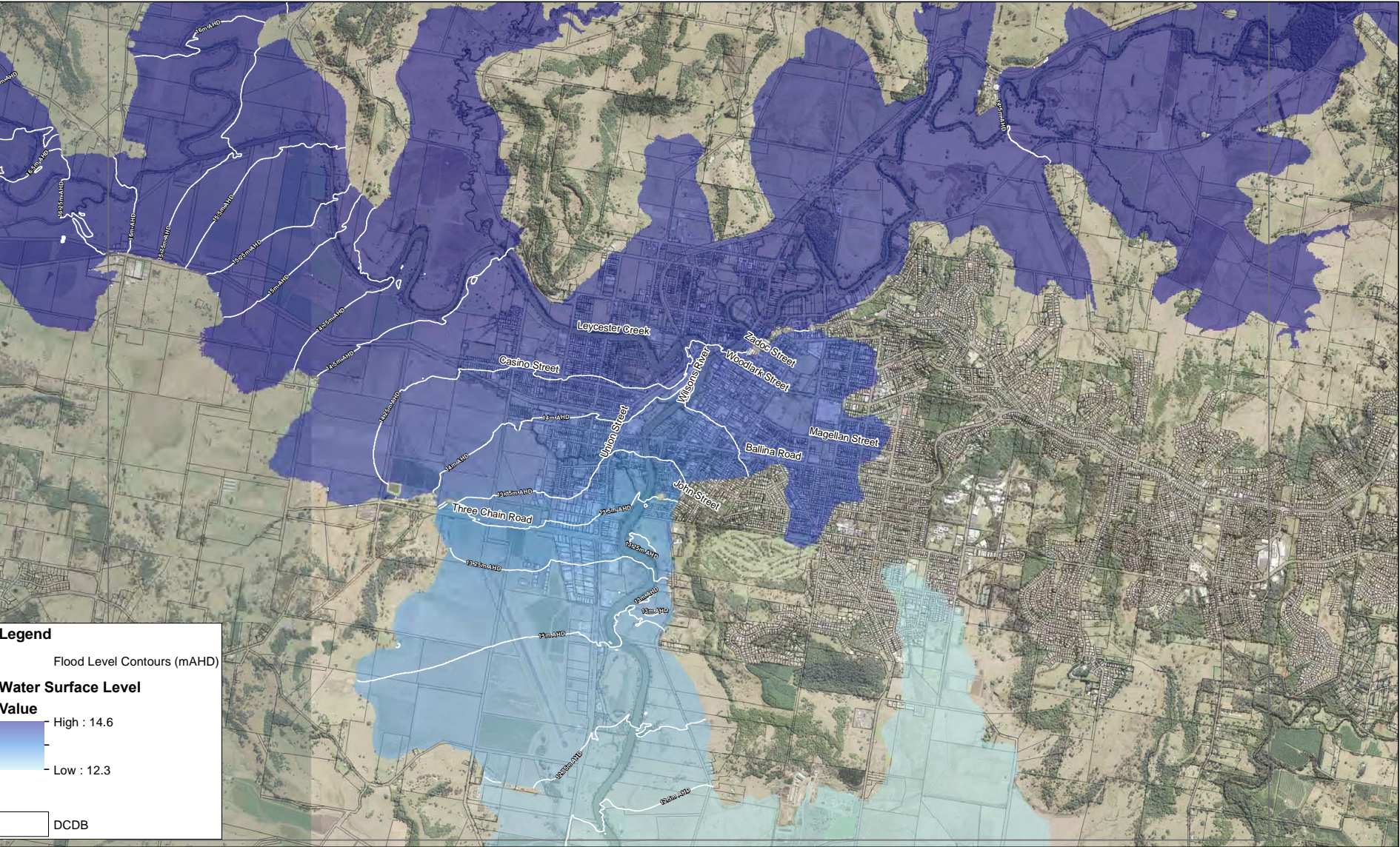
DESIGNER

ENGENY
WATER MANAGEMENT

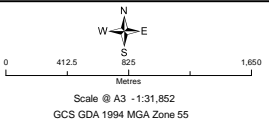
CLIENT

lismore
city council

Lismore Floodplain Risk Management Plan
Flood Height
1:1,000 AEP



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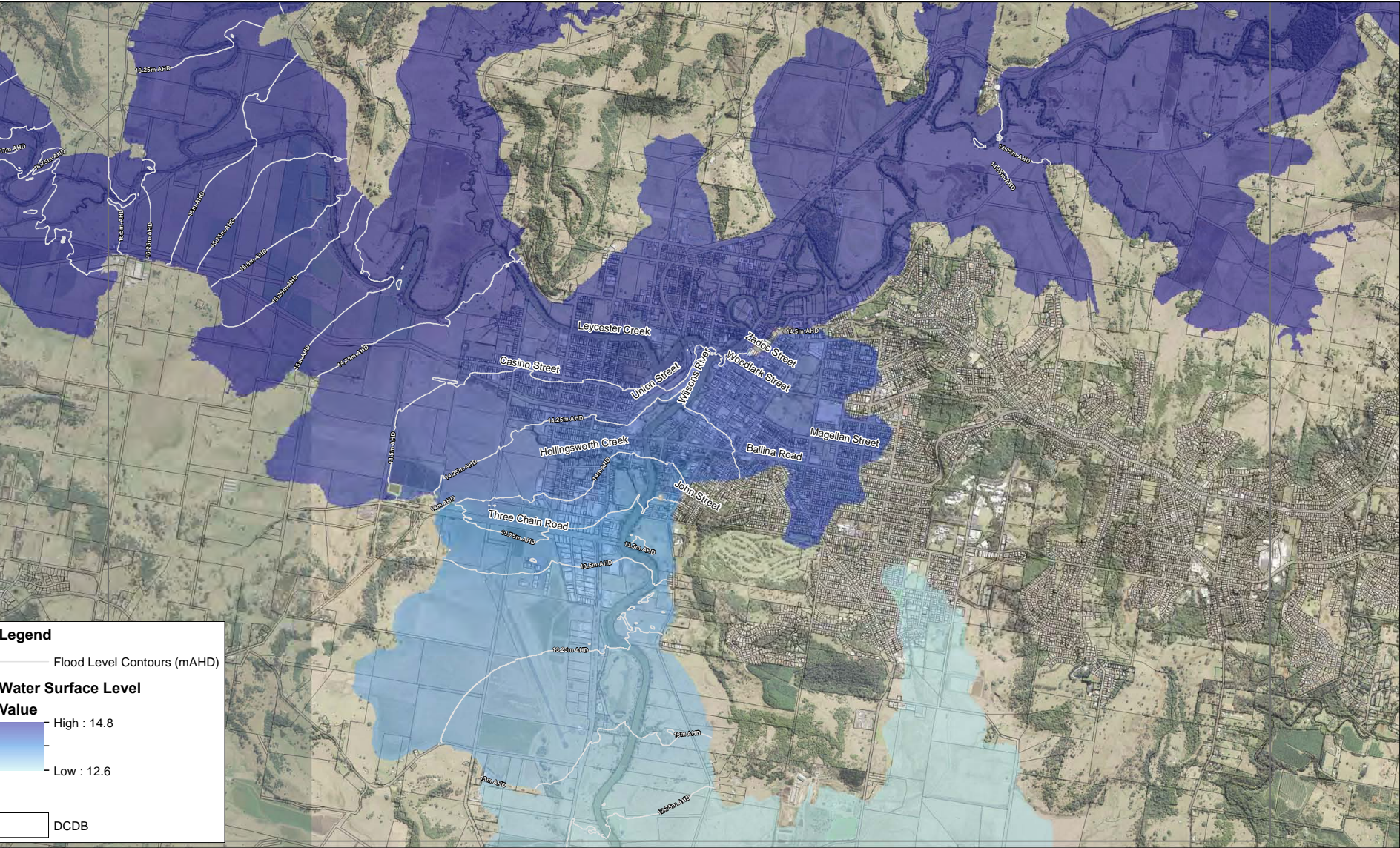


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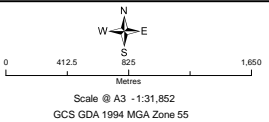
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Lismore Floodplain Risk Management Plan Flood Height 1:2,0000 AEP



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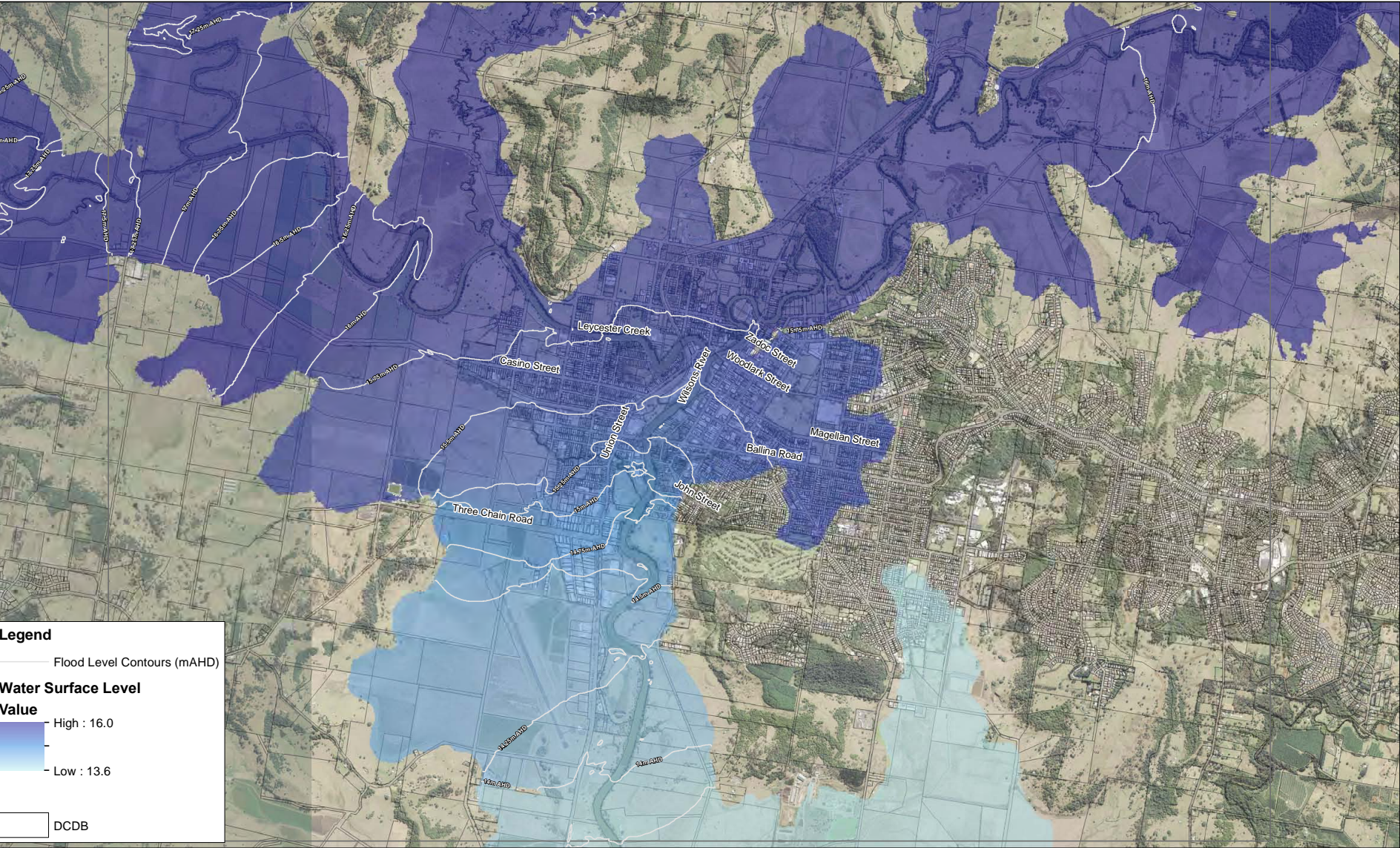


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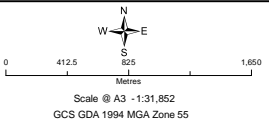
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Lismore Floodplain Risk Management Plan
Flood Height
1:10,000 AEP



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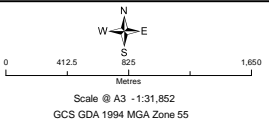
DATA SOURCE
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Lismore Floodplain Risk Management Plan Flood Height 1:100,000 AEP
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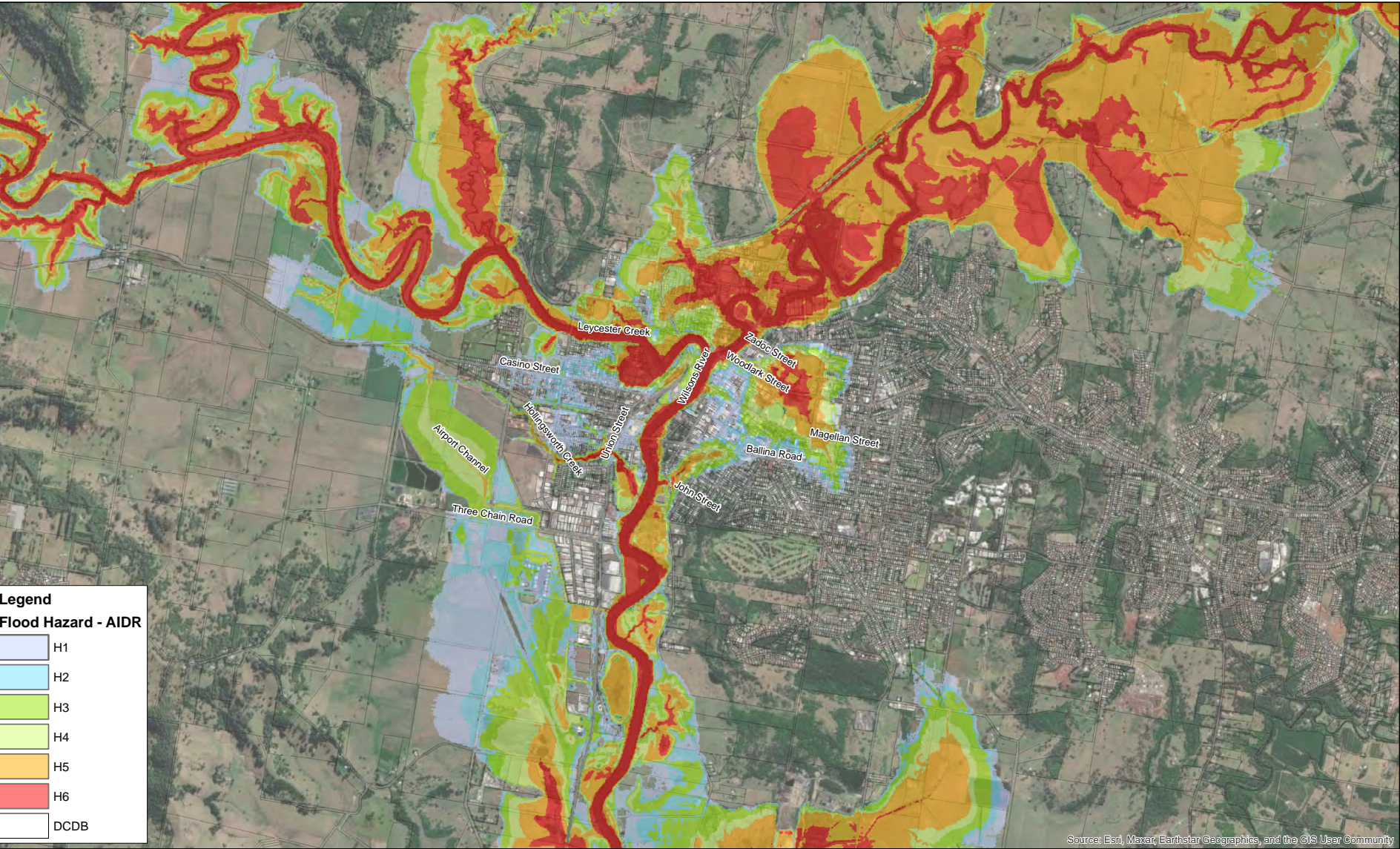
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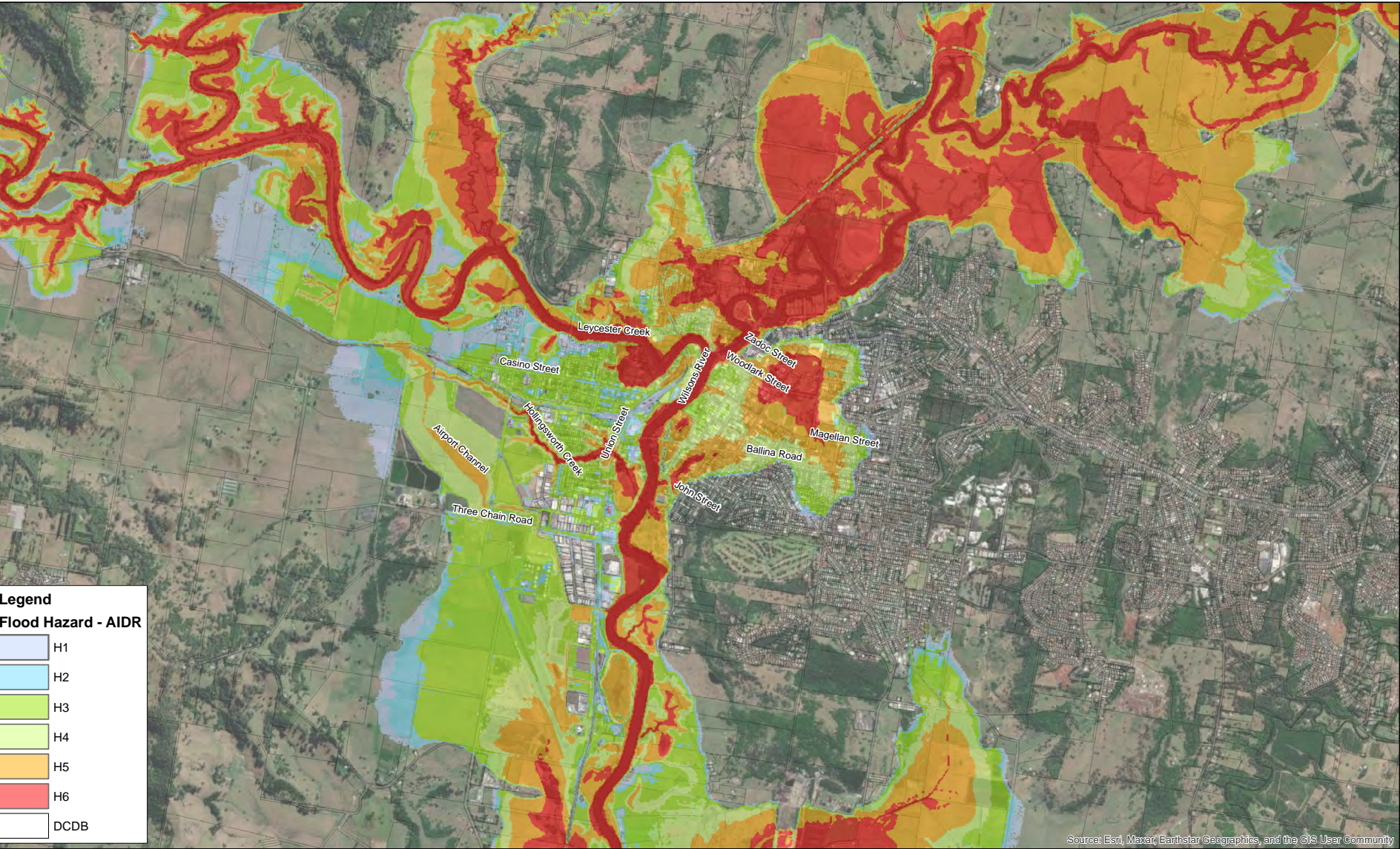
Lismore Floodplain Risk Management Plan
Flood Height
PMF

Appendix B:

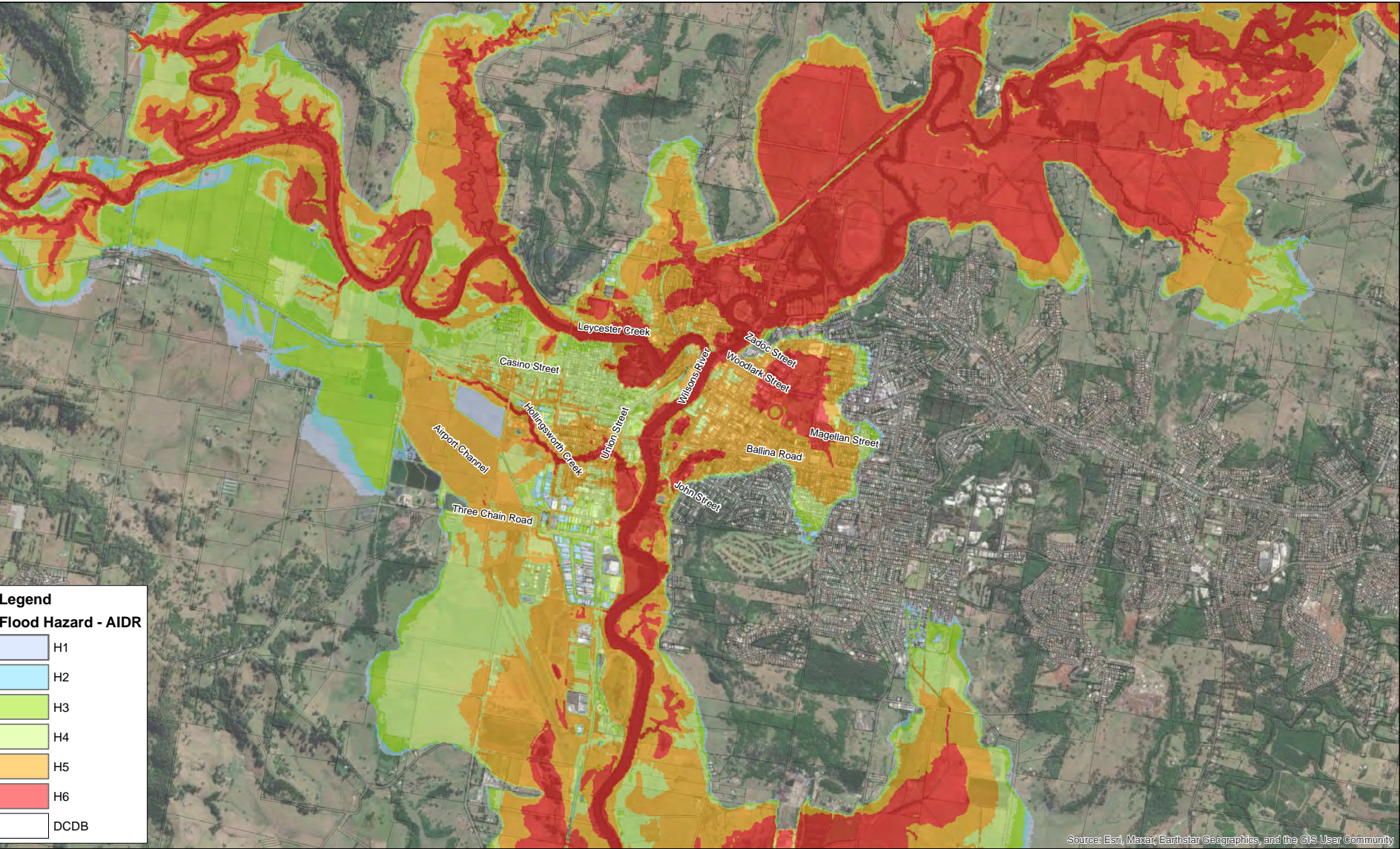
Design Event Flood Hazard Mapping





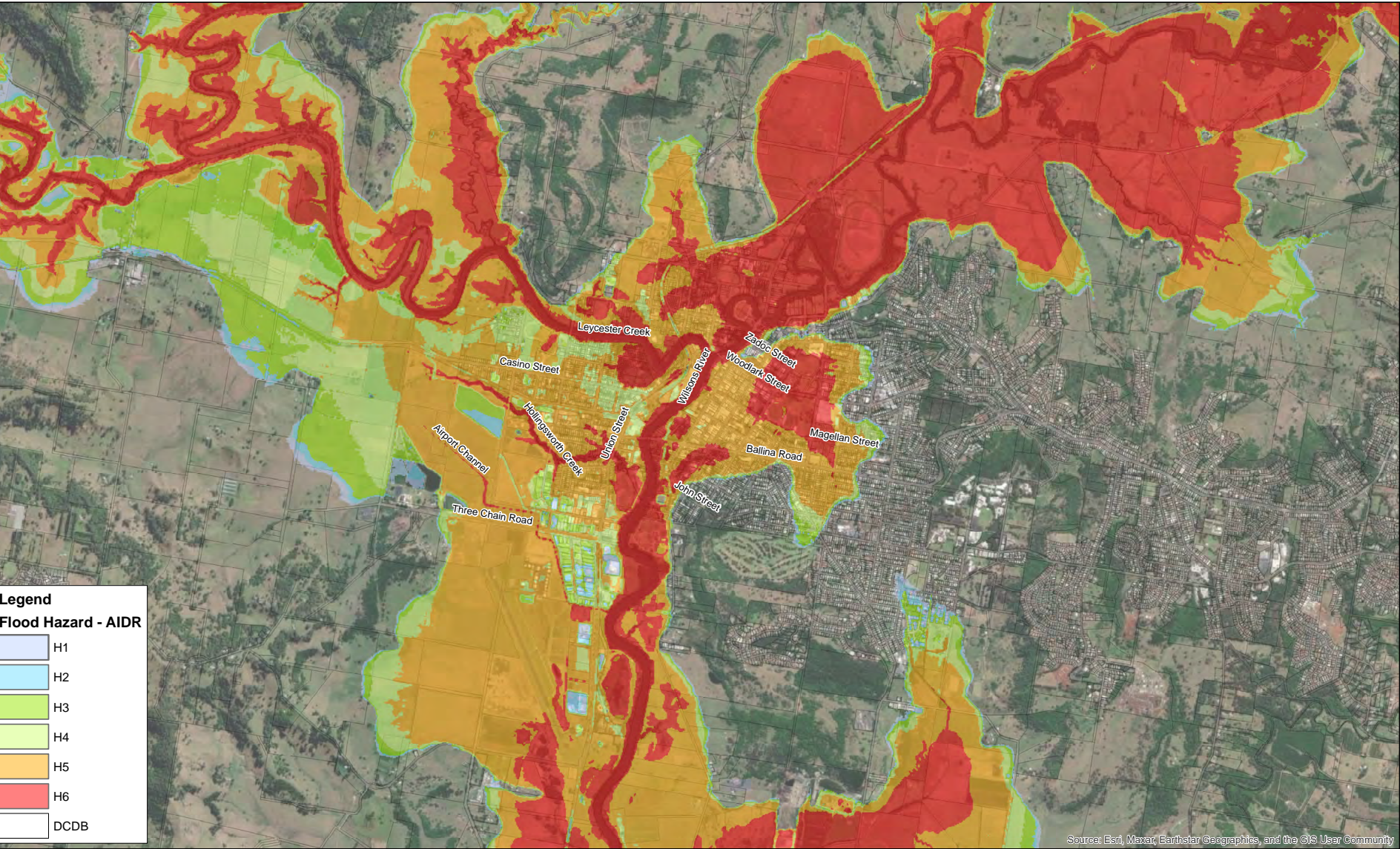
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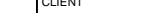



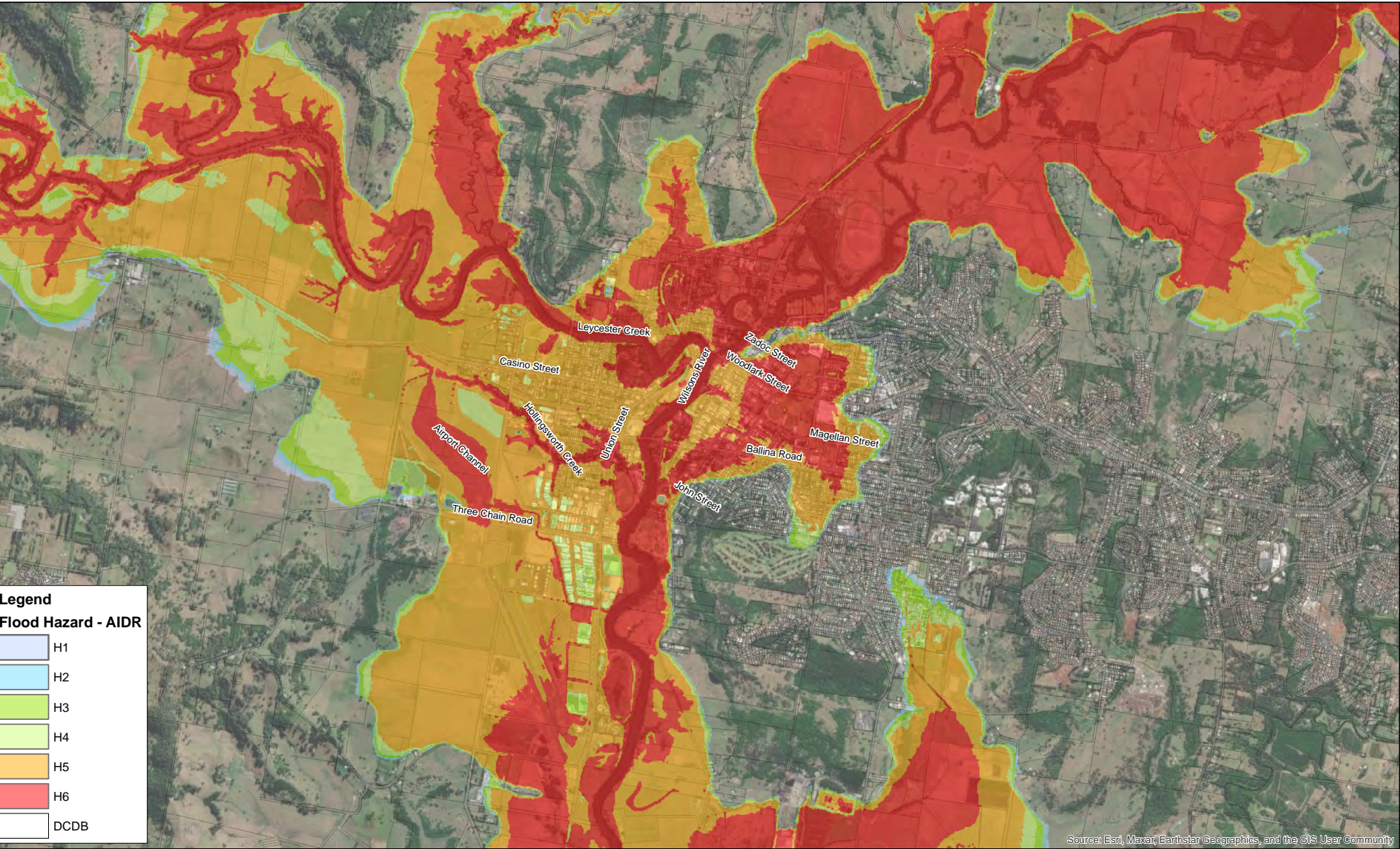
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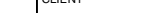



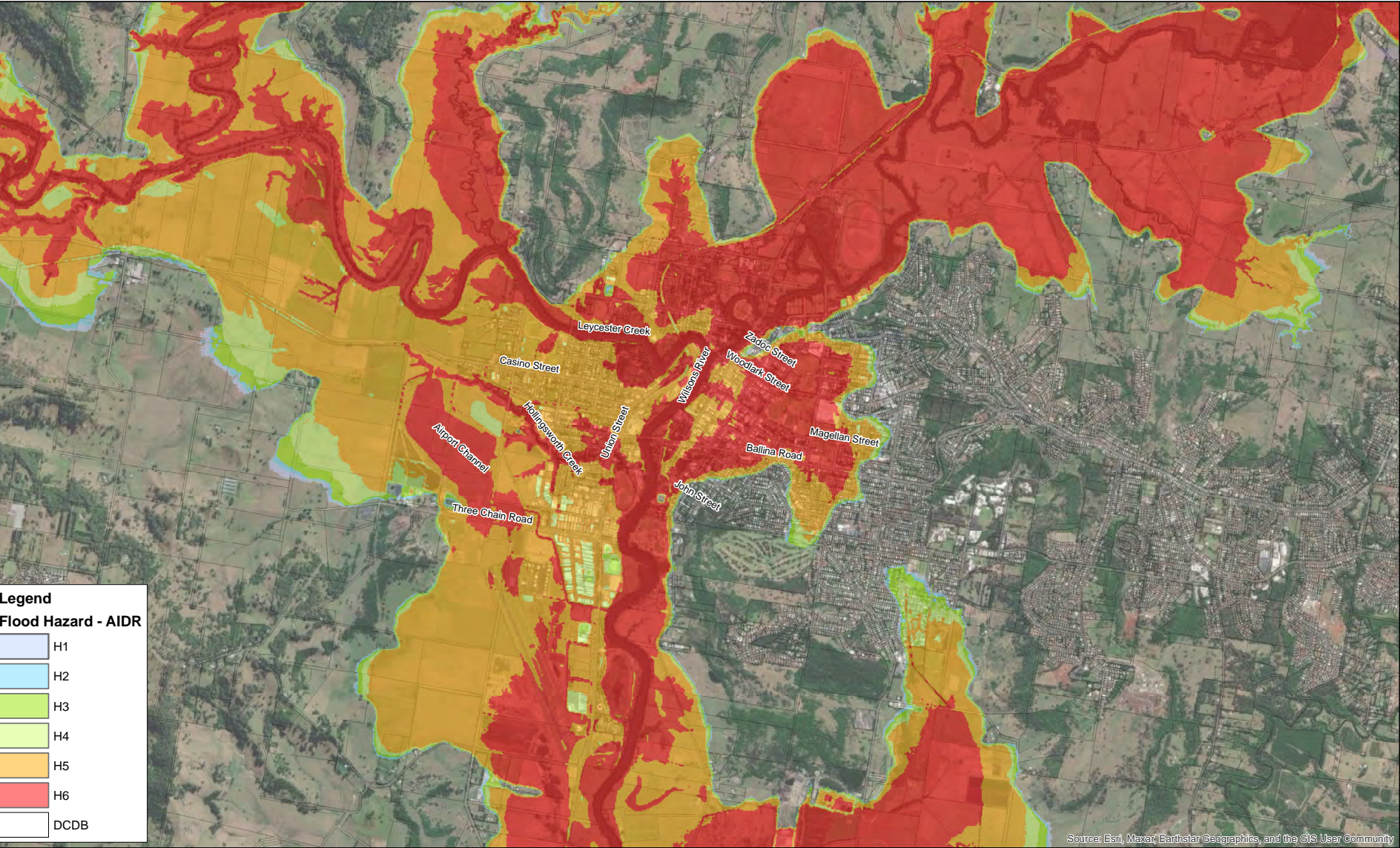
Details		Date		©COPYRIGHT Engeny Water Management This drawing is confidential and shall only be used for the purpose of this project.		<div><div><div><div></div><div>0</div></div><div><div>412.5</div><div>825</div><div>1,850</div></div><div>Metres</div><div>Scale @ A3 - 1:31,852</div><div>GCS GDA 1994 MGA Zone 55</div></div></div>	<div>DISCLAIMER Engenyh has endeavoured to ensure accuracy and completeness of the data. Engeny assumes no legal liability or responsibility for any decisions or actions resulting from the information contained within this map.</div> <div>DATA SOURCE QLD Government Open Source Data</div>	<div>DESIGNER</div> <div></div>	<div>CLIENT</div> <div></div>	<div>Lismore Floodplain Risk Management Plan Flood Hazard - AIDR 1% AEP</div>
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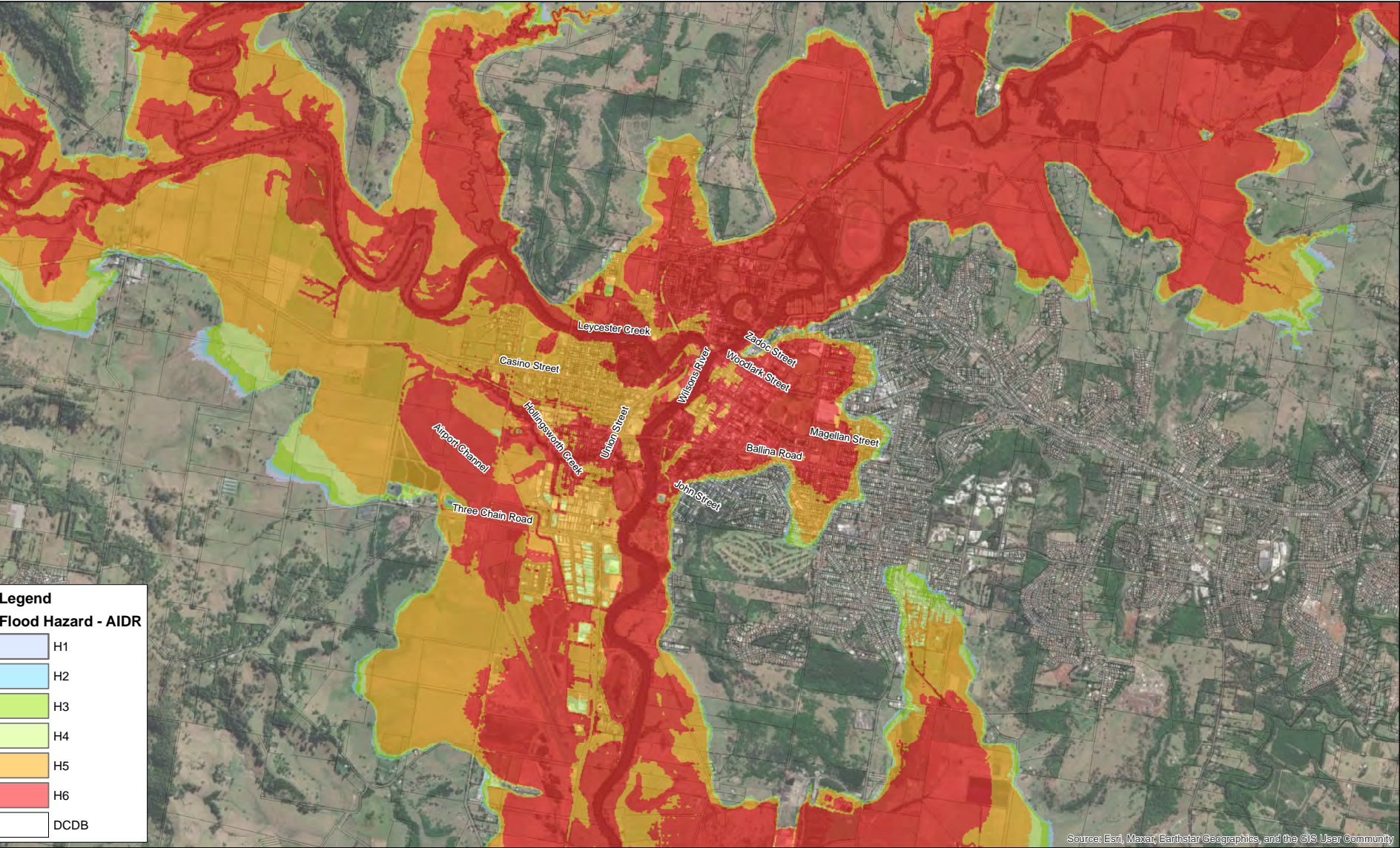
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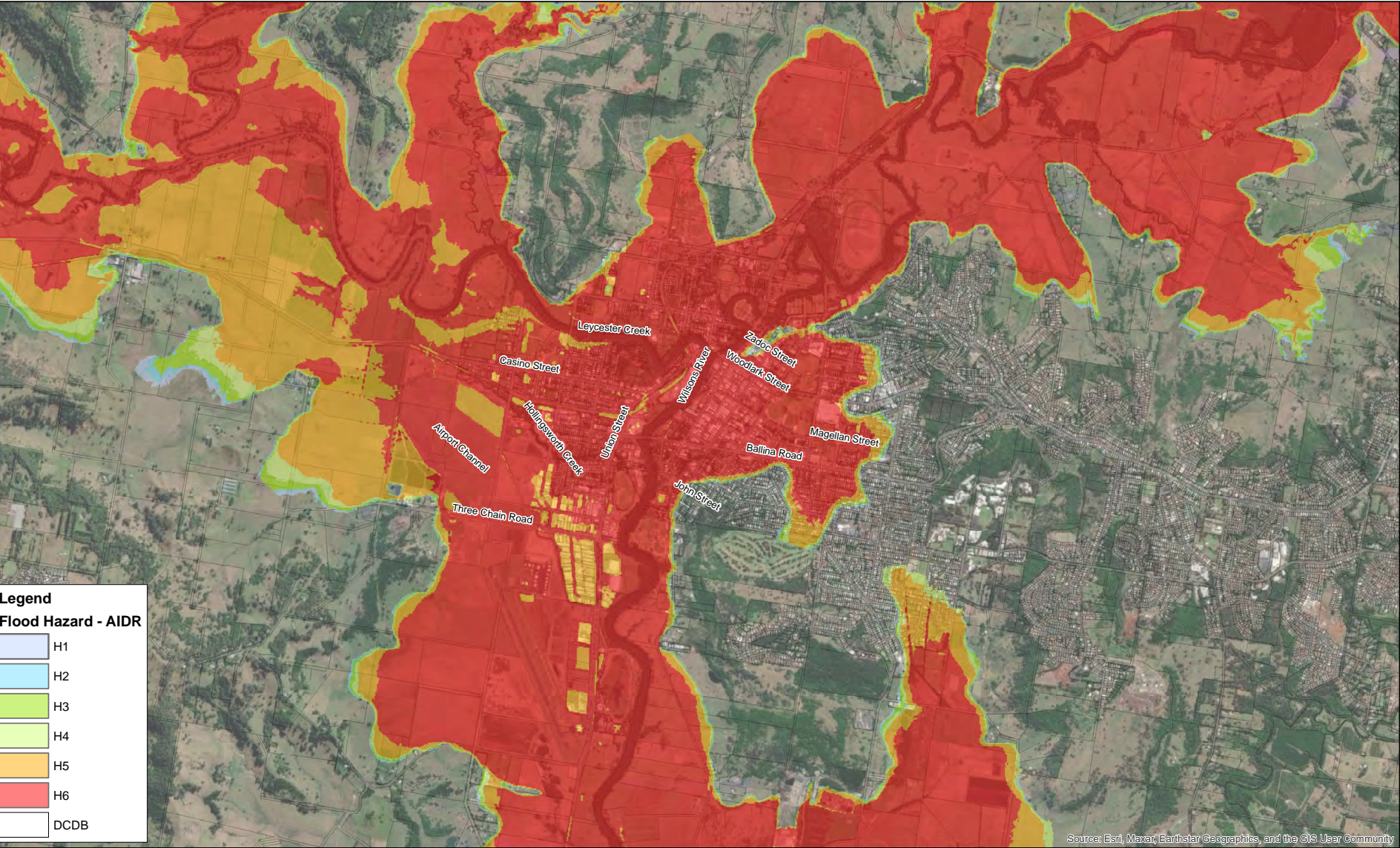
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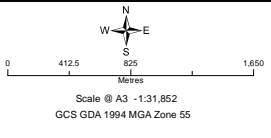
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Client Issue	16/12/22				
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		APPROVED	MP	DATE	16/12/22
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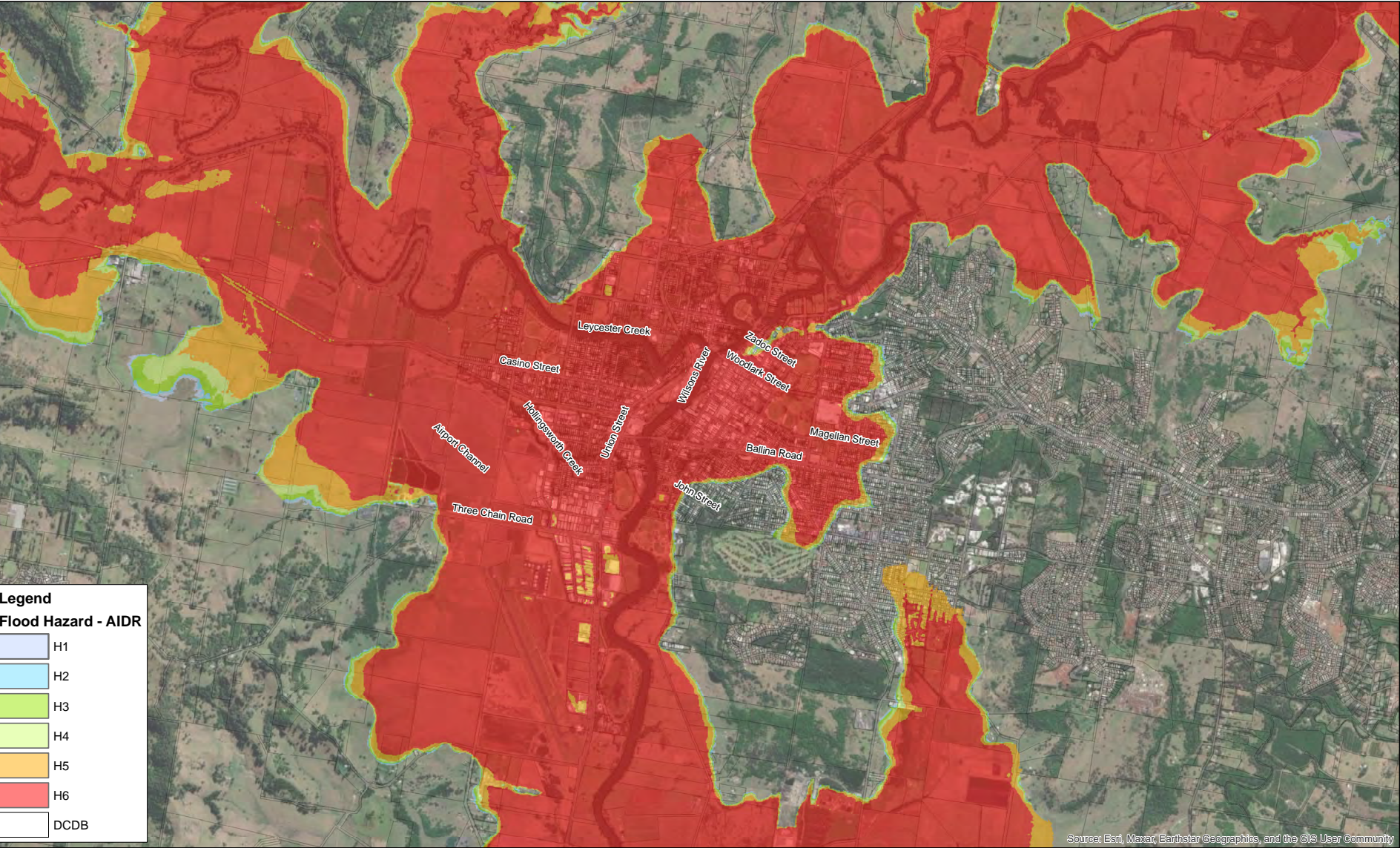




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DATA SOURCE
QLD Government Open Source Data



Lismore Floodplain Risk Management Plan
Flood Hazard - AIDR
1:100,000 AEP



Details		Date		©COPYRIGHT Engeny Water Management This drawing is confidential and shall only be used for the purpose of this project.				<div><div><div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div>0412.58251,650</div><div>Meters</div><div>Scale @ A3 - 1:31,852 GCS GDA 1994 MGA Zone 55</div></div>				<div><div>DISCLAIMER</div><div>Engenyh has endeavoured to ensure accuracy and completeness of the data. Engeny assumes no legal liability or responsibility for any decisions or actions resulting from the information contained within this map.</div><div>DATA SOURCE</div><div>QLD Government Open Source Data</div></div>				<div>DESIGNER</div> <div></div> <div>ENGENY</div> <div>WATER MANAGEMENT</div>		<div>CLIENT</div> <div></div> <div>lismore</div> <div>city council</div>		<div>Lismore Floodplain Risk Management Plan</div> <div>Flood Hazard - AIDR</div> <div>PMF</div>			
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Appendix C:

Extreme Flood Event Modelling

C.1 HYDROLOGIC MODELLING

C.1.1 Methodology

The following methodology was adopted for simulating the extreme events in the Lismore FRMS URBS hydrologic model:

- Rainfall intensities as accessed from the Australian Rainfall and Runoff (ARR) 2019 datahub were applied individually for each sub-catchment in URBS for the 1:1,000 and 1:2,000 AEP events. The rainfall intensities for the 1:10,000 and 1:100,000 AEP events were developed through interpolation between the 1:1,000 and 1:2,000 AEP flood events through to the PMF event in accordance with the procedures outlined in ARR 2019.
- The full ensemble of ten temporal patterns as specified in ARR 2019 were simulated.
- A full range of durations from 6 hours to 72 hours were simulated in the model.
- An Areal Reduction Factor (ARF) equivalent to the Lismore township catchment was applied to the model.
- Initial losses were interpolated from those specified in ARR 2019 for the 1% AEP event down to 0 mm for the PMF event. A continuing loss of 0.92 mm/h was specified for all extreme events modelled.
- An analysis was undertaken to determine the critical durations at the key TUFLOW hydraulic model inflow locations at Tuncester, Woodlawn and the Lismore township.

C.1.2 Results

The peak flows estimated for these extreme events, along with the existing design events from the Lismore FRMS, at the three key gauge locations in Lismore have been provided in Table 6.1.

Table 6.1: Summary of Design Event Flow Rates

Event	Tuncester Gauge (203443)	Woodlawn Gauge (203402)	Wilsons River at Lismore Gauge (58176)
10% AEP	1,520	930	2,310
5% AEP	1,880	1,140	2,890
1% AEP	2,780	1,660	4,150
0.2% AEP	3,280	2,130	5,130
1:1,000 AEP	3,720	2,290	5,770
1:2,000 AEP	4,080	2,480	6,320
1:10,000 AEP	5,120	2,520	7,350
1:100,000 AEP	7,140	3,520	10,250
PMF	10,840	5,270	15,330

C.2 HYDRAULIC MODELLING

C.2.1 Methodology

The inflows for the identified critical durations exported from the URBS hydrologic model were simulated in the Lismore FRMS TUFLOW hydraulic model for the 1:1,000, 1:2,000, 1:10,000 and 1:100,000 AEP extreme flood events. Flood height mapping for the design events is provided in Appendix A.

C.2.2 Results

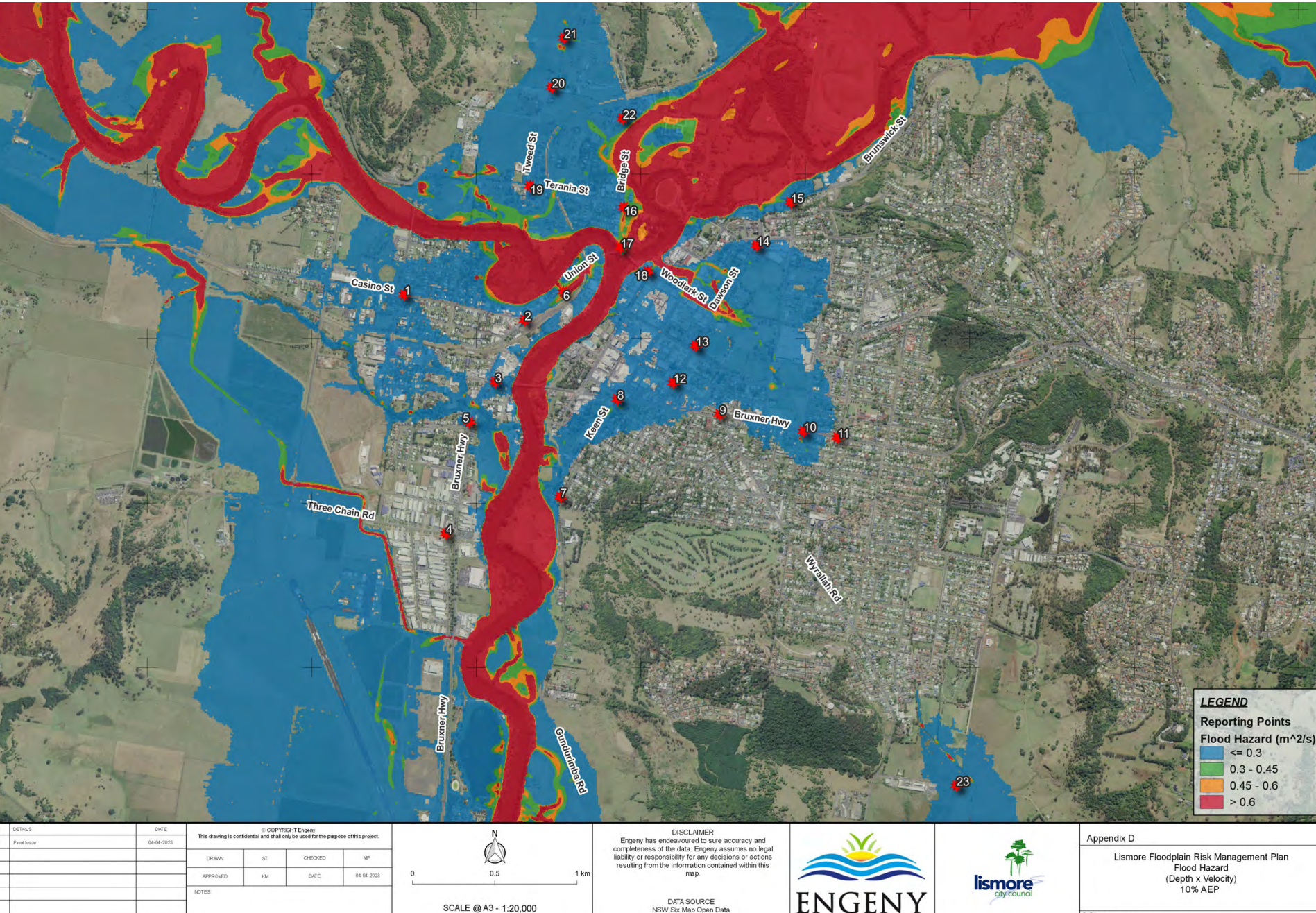
The peak flood levels for the extreme events, along with the existing design events from the Lismore FRMS, at the three key gauge locations in Lismore have been provided in Table 6.2.

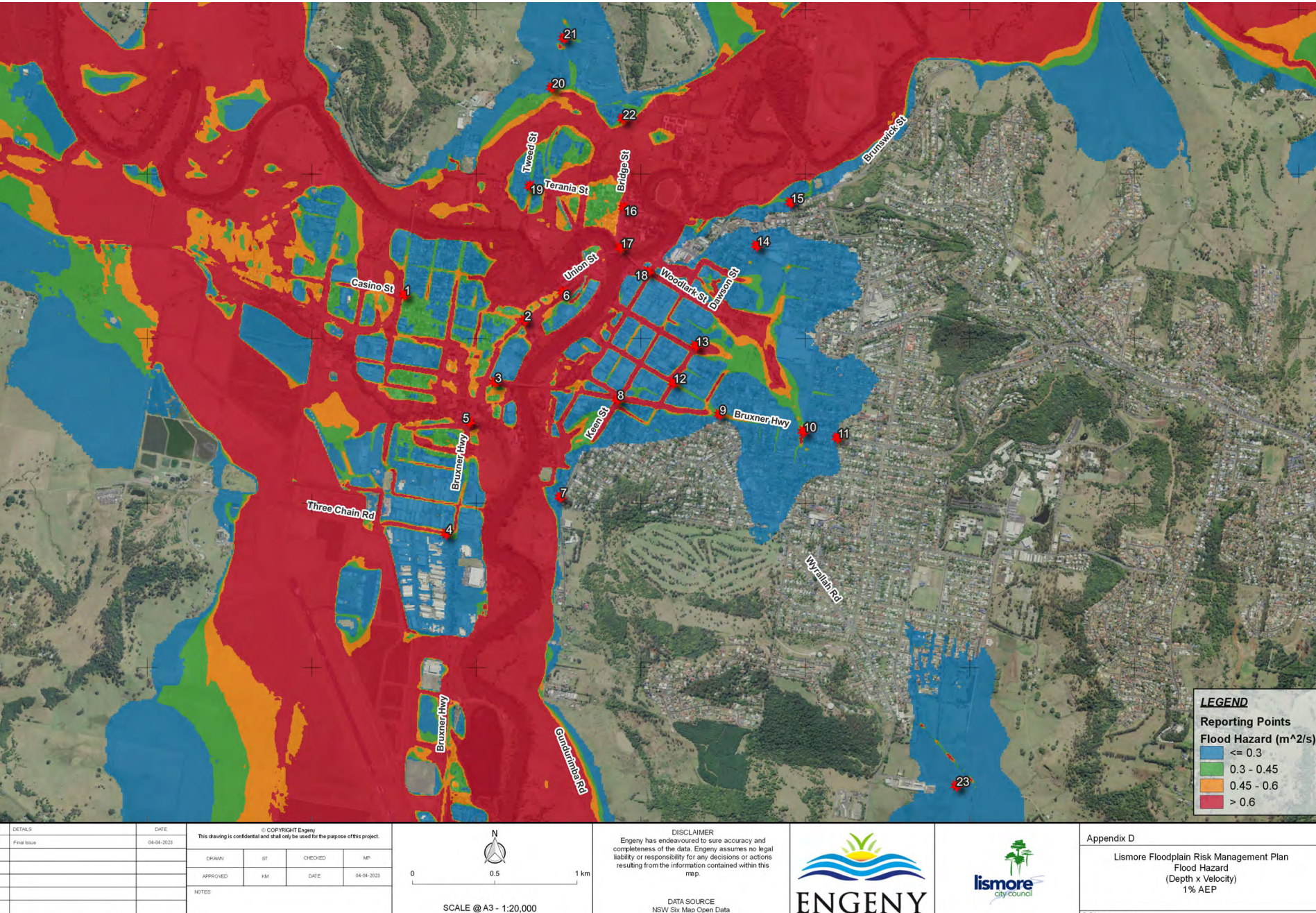
Table 6.2: Summary of Modelled Calibration Event Flood Levels Compared to Modelled Design Event Flood Levels

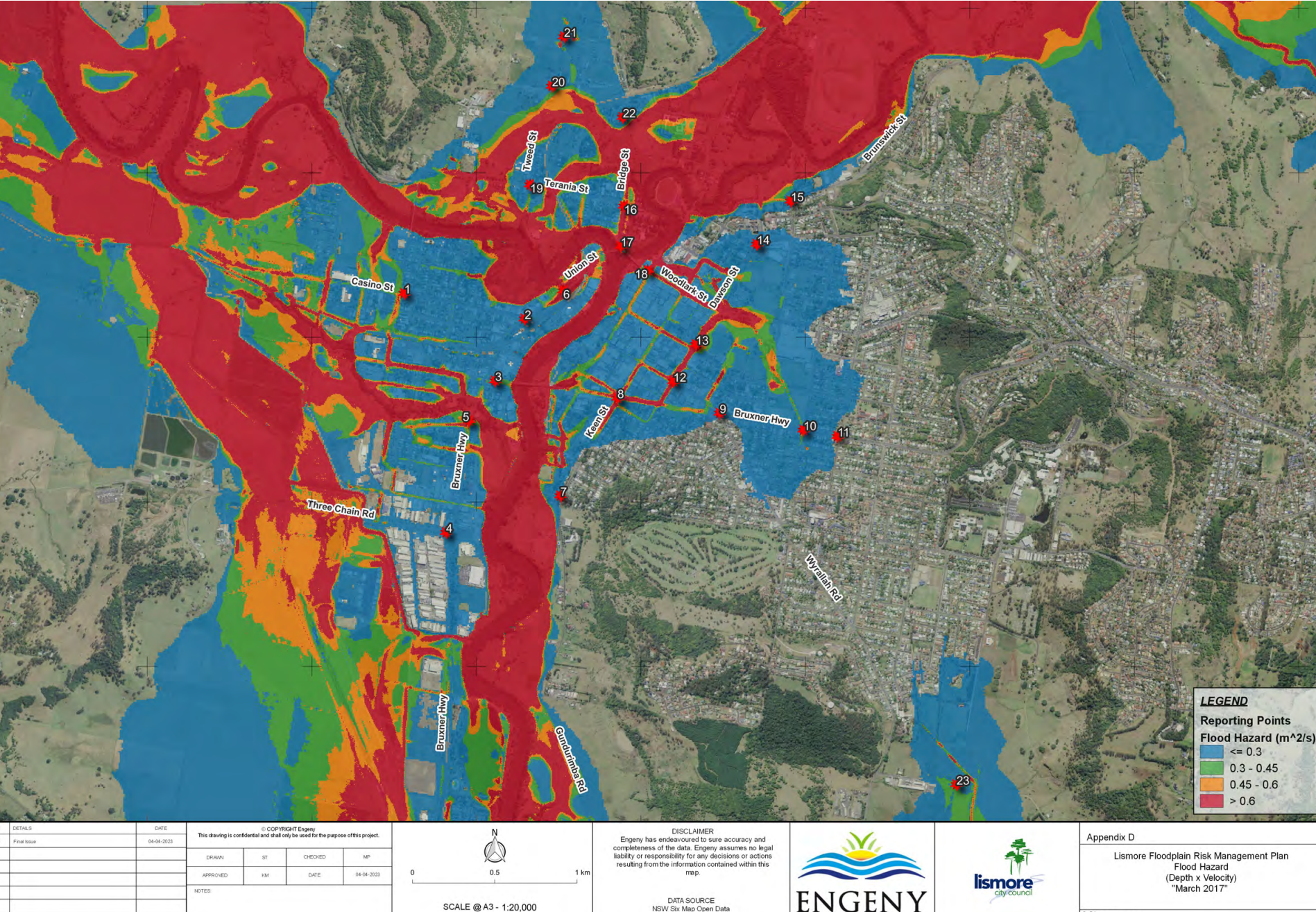
Event	Tuncester Gauge (203443)	Woodlawn Gauge (203402)	Wilsons River at Lismore Gauge (58176)	East Gundurimba Gauge (558047)
10% AEP	12.65	11.39	10.97	9.66
5% AEP	13.22	11.45	11.45	10.03
1% AEP	13.88	12.93	12.57	10.88
0.2% AEP	14.14	13.49	13.02	11.49
1:1,000 AEP	14.85	14.27	13.79	12.23
1:2,000 AEP	15.05	14.52	14.02	12.45
1:10,000 AEP	15.35	14.78	14.39	12.73
1:100,000 AEP	16.40	15.96	15.47	13.76
PMF	17.30	17.06	16.55	14.72

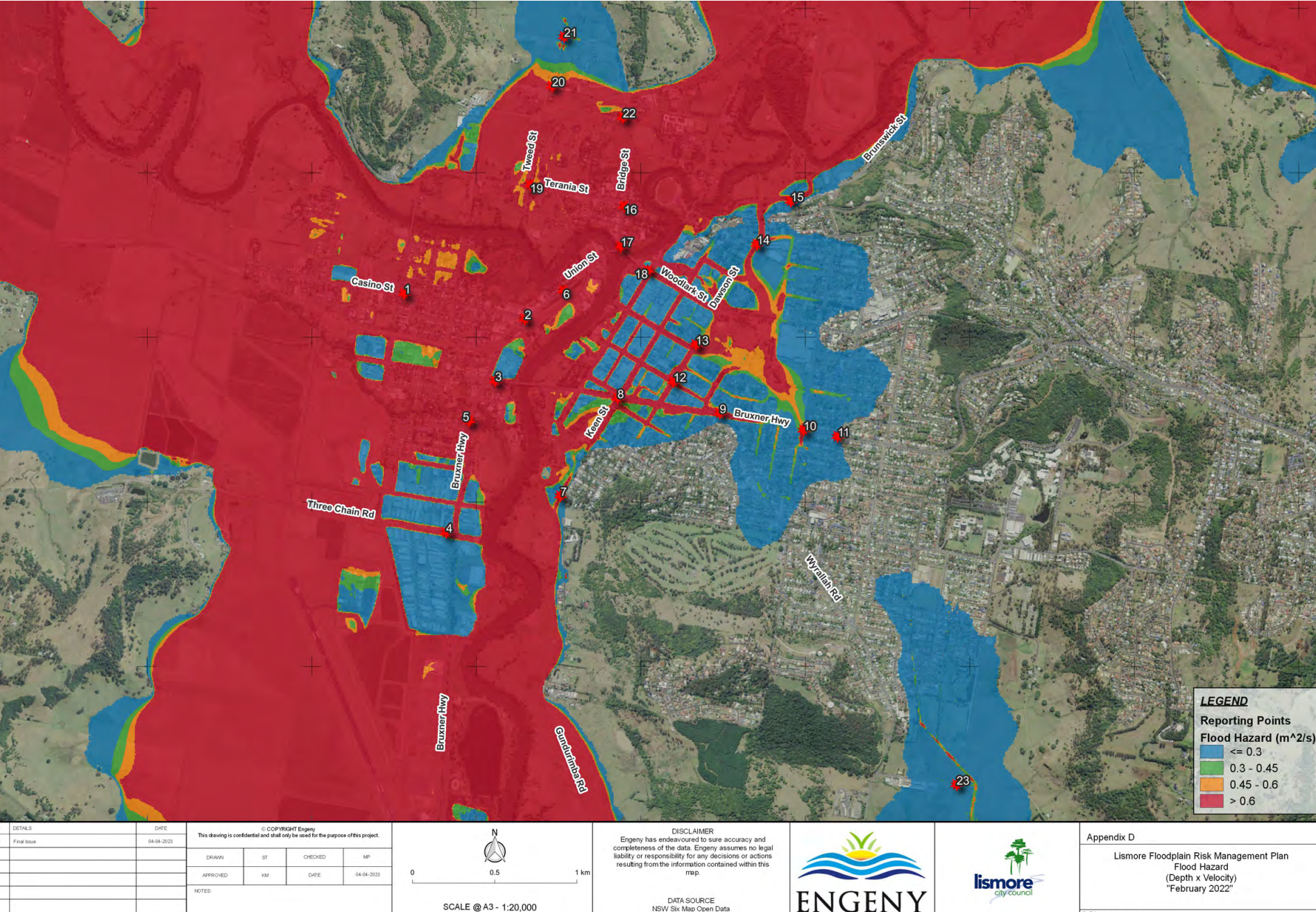
Appendix D:

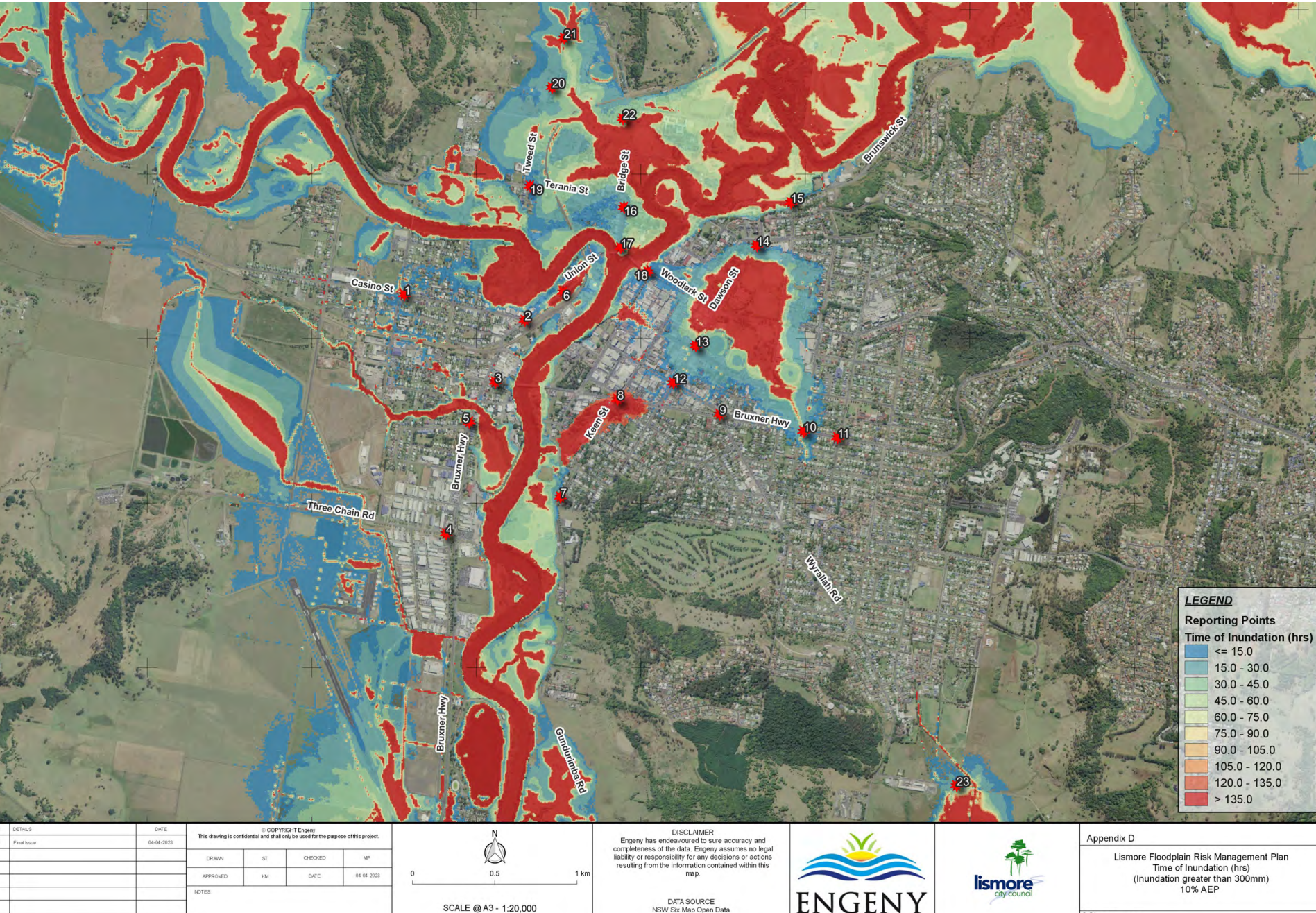
Mapping to Support Road Evacuation Analysis

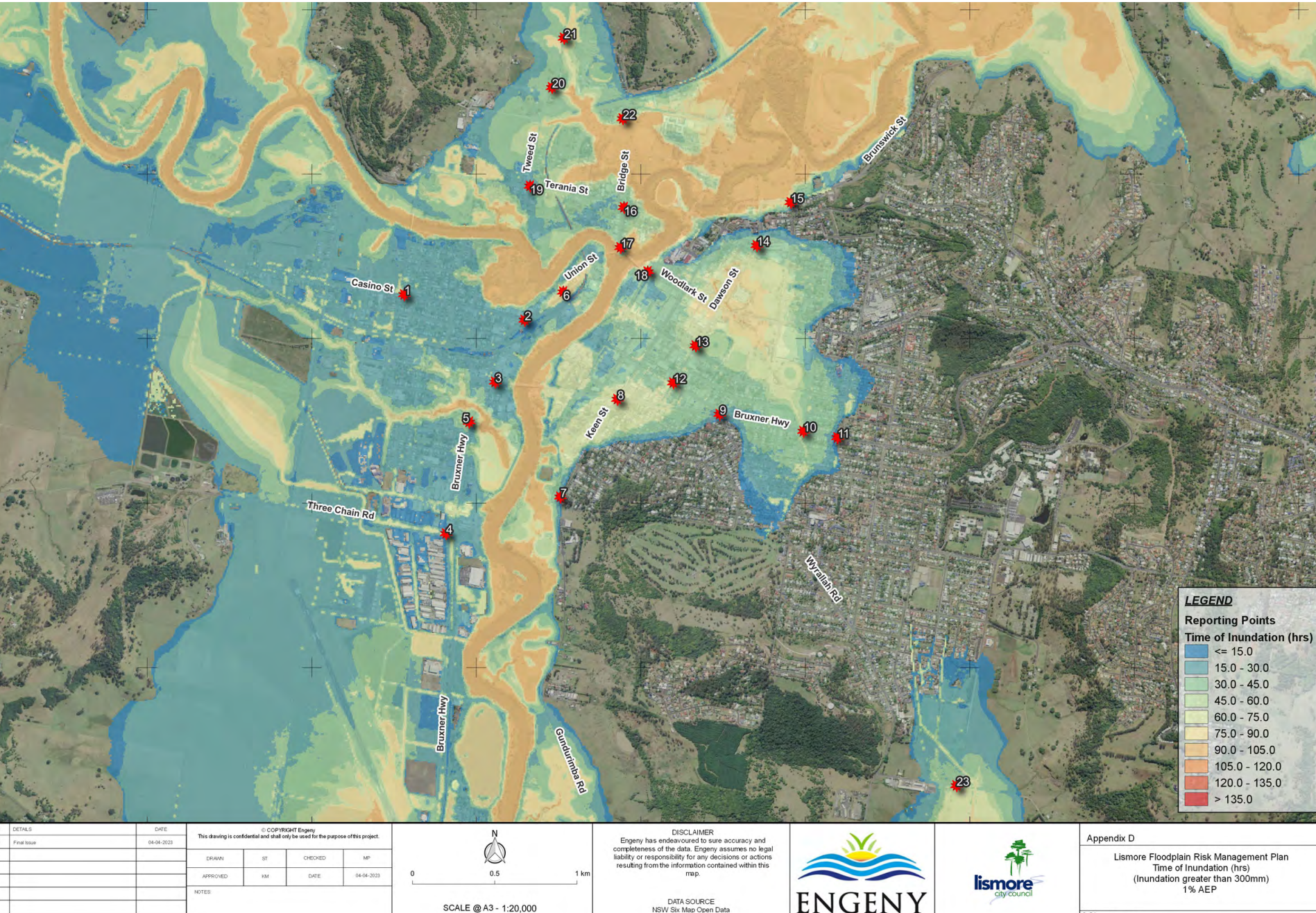


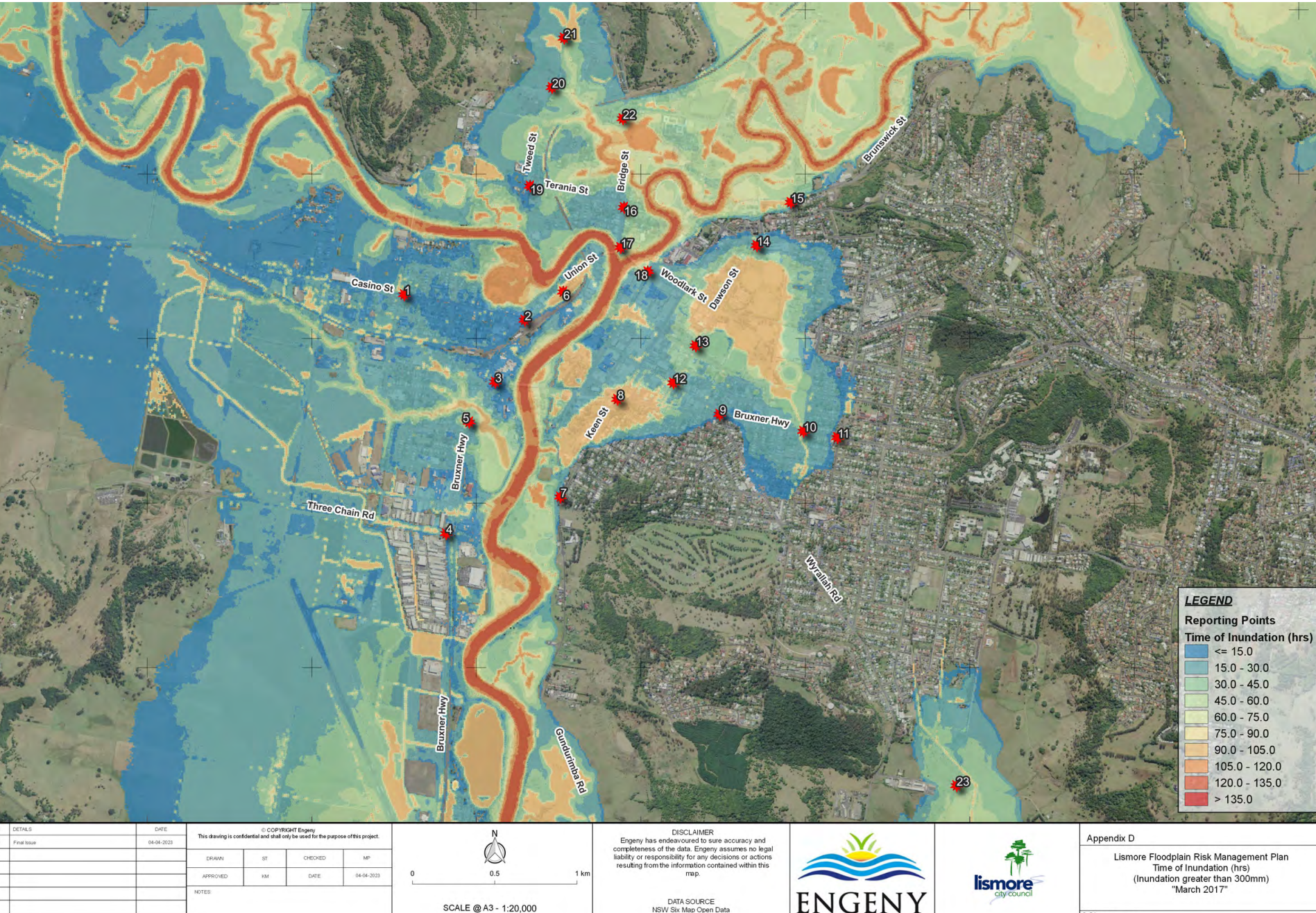


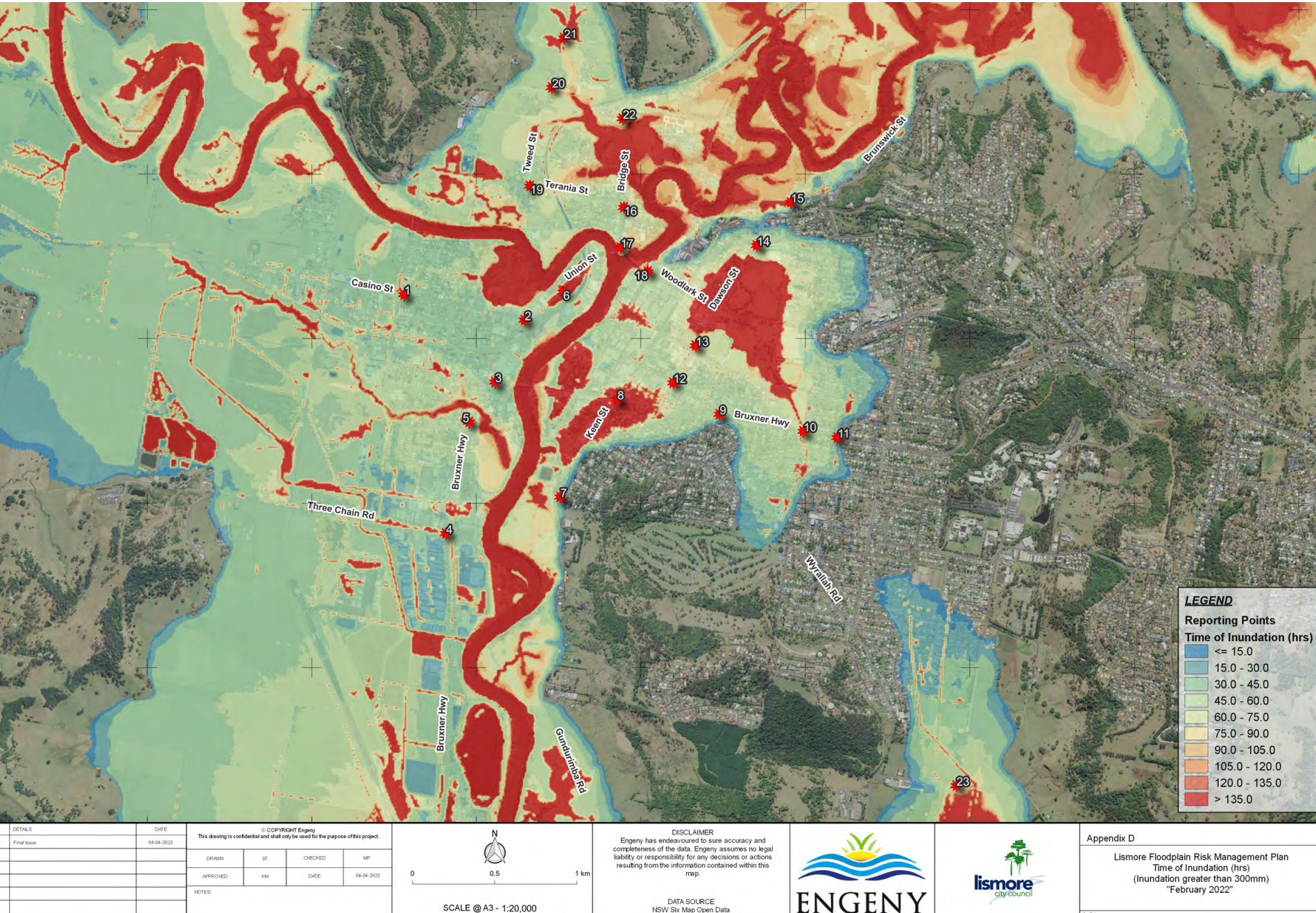














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Chapter 8

Flood Prone Lands



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1 INTRODUCTION

1.1 Name and application of this Chapter

The Flood Prone Lands chapter of Council's Development Control Plan (DCP) provides a risk-based approach to planning and development in the Flood Prone Lands of Lismore LGA. The chapter applies to all development on land within the probable maximum flood extent mapped on the flood risk precinct and flood planning area~~flood-prone land~~ map, as defined in **Appendix 23**. The chapter has been developed as an outcome of the Lismore Flood Risk Management Study and Plan prepared in accordance with the process outlined by the NSW Government Flood Prone Lands Policy and the NSW Flood Risk Management~~plain Development~~ Manual 2023~~05~~.

~~An underlying principle of this Chapter is that any new development or modifications to existing development should always, as far as practical, result in an improvement to the existing flood risk, and in no circumstances should flood risk be made worse.~~

The planning controls in this Chapter apply to all development applications for building, altering or using land within the Flood Planning Area for any development in any zone under Lismore LEP 2012. It also applies to development between the Flood Planning Area and Probable Maximum Flood (PMF) that:

- is listed as sensitive and hazardous development under the Lismore LEP 2012 Clause 5.22 *Special flood considerations*,
- Council considers to pose a particular risk to life or requires evacuation of people or other safety considerations.

The Flood Risk Precincts referred to in this Chapter are defined in **Figure 3 and Appendix 2**.

Full details of a particular lot's flood risk category are available on Council's website under 'flood planning'.

1.2 Purpose of the Chapter

The purpose of this Chapter is to identify Council's requirements relating to development on flood prone land that is appropriate to the degree of flood risk on that land.

~~1.2.1~~ Aims-Objectives of this Chapter

The Aims-Objectives of this Chapter are to:

- provide a holistic approach to managing development on flood prone land;
- encourage development compatible with the relevant flood risk precinct;
- prevent intensification of inappropriate land uses within high and extreme flood risk areas;
- minimise the risk to life and damage to property and assets as a result of floods;
- provide guidelines for determination of the merit of development on flood prone land as required by Section 4.15 of the *Environmental Planning and Assessment Act 1979*, and clauses 5.21 and 5.22 of the Lismore LEP 2012;
- ~~• provide planning controls consistent with the Lismore Floodplain Risk Management Plan 2023~~
- ensure development maintains the existing flood regime and flow conveyance capacity;
- ensure development takes into account changes as a result of climate change; and
- ~~• ensure critical uses and facilities essential services~~ and sensitive and hazardous land uses are planned in consideration of all potential flood events.
-

Development proposals must be consistent with the planning objectives for the Chapter. Consistency is typically demonstrated by compliance with the identified development controls, however there may be circumstances whereby an alternative is considered consistent with the planning objectives.

4.31.4 How does this Chapter work?

The provisions of this Chapter include a range of control measures that are determined based on the specific development type and the flood risk precinct in which that development is located. To understand flood controls applying to development, applicants must first follow the following steps:

1. Determine the land use category/categories of the development as indicated in **Appendix 1**.
2. Locate the flood risk precinct in which the proposed development is to be located as indicated in **Figure 3/Appendix 2** (or for land outside of the Lismore urban area see **Section 3.6**).
3. Use the flood control matrix and development control table in **Section 4** to determine the applicable flood controls.

Note: Compliance with the provisions of this Chapter does not necessarily imply that Council will grant development consent to an application. Council must, in relation to development applications, also take into consideration those matters listed under Section 4.15 of the Environmental Planning and Assessment Act 1979.

~~**Note:** Text in red is dependent on Council resolution and gazettal of a planning proposal to adopt Local Environmental Plan (LEP) optional clause 5.22. The Department of Planning and Environment (DPE) is the plan-making authority for the planning proposal.~~

4.41.5 Relationship to other plans

This DCP chapter must be read in conjunction with all other relevant DCP chapters. The provisions in this chapter prevail over the provisions of other chapters, unless otherwise specified, where there is an inconsistency.

2 DEFINITIONS

annual exceedance probability (AEP) is the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian height datum (AHD) is a common national surface level datum often used as a referenced level for ground, flood and floor levels. 0.0m AHD corresponds approximately to mean sea level.

average recurrence interval (ARI) is the long-term average number of years between the occurrence of a flood as big as, or larger than, the selected event. E.g., floods with a discharge as great as, or greater than, the 100-year ARI flood event will occur on average once in every 100 years. AEP is generally the preferred terminology. ARI is the historical way of describing a flood event.

catchment is the area of land draining to a specific location.

climate change factor is an increase in the 1% AEP design flood level to estimate the impact of climate change on flood conditions. The climate change factor used in this DCP is based upon the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway (RCP) 8.5, which represents a “worst-case” climate change scenario where rainfall intensity increases by 19.7% in 2090. This increases the 1% AEP level by up to 500-600mm on average, depending on location within the floodplain. See **Appendix 34. The addition of the climate factor to the 1% AEP gives a peak flood level similar to the 0.2% AEP.**

defined flood event (DFE) is the flood event selected as the general standard for the management of flooding to development. For the Lismore local government area (LGA), the defined flood event is the 0.2% AEP plus a climate change factor based on predicted rainfall changes in 2090 using the IPCC's high-emissions 'RCP8.5' scenario.

flood refers to a natural phenomenon that occurs when water covers land that is normally dry. It may result from coastal inundation (excluding tsunamis) or catchment flooding, or a combination of both.

flood evacuation refers to the movement of people from a place of danger to a place of relative safety, and their eventual return.

flood fringe areas mean the part of the flood extents for the event remaining after the flood function areas of floodway and flood storage areas have been defined.

flood impact and risk assessment (FIRA) means a study to assess flood behaviour, constraints and risk, understand off-site flood impacts on property and community resulting from the development, and flood risks to the development and its users.

flood mitigation work means work designed and constructed for the express purpose of mitigating flood impacts. It involves changing the characteristics of flood behaviour to alter the level, location, volume, speed or timing of flood waters to mitigate flood impacts. Types of works may include excavation, construction or enlargement of any fill, wall, or levee that will alter riverine flood behaviour, local overland flooding, or tidal action so as to mitigate flood impacts.

flood planning area (FPA) means the area of land below the flood planning level.

flood planning level (FPL) means the combination of the peak flood level from the defined flood event and freeboard selected for floodplain risk management purposes. The flood planning level for the Lismore LGA is the 0.24% AEP plus a climate change factor plus 500mm freeboard.

flood prone land is land susceptible to flooding by the probable maximum flood (PMF) event. It is synonymous with flood liable land.

flood-resilient materials are materials used in building construction that can withstand inundation without suffering significant damage and which can be readily cleaned when floodwaters subside.

flood risk is risk based on the consideration of the consequences of the full range of flood behaviour on communities and their social settings, and the natural and built environment.

flood storage areas means an area of the floodplain that is outside floodways, which generally provides for temporary storage of floodwaters during the passage of a flood, and where flood behaviour is sensitive to changes that impact on temporary storage of water during a flood.

floodplain is the area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is all flood prone land.

floodway means an area of the floodplain which generally conveys a significant discharge of water during floods and is sensitive to changes that impact flow conveyance. Floodways often align with naturally defined channels.

freeboard is a factor of safety typically used in relation to the setting of floor levels or levee crest levels. Freeboard provides a factor of safety to compensate for uncertainties in the estimation of flood levels across the floodplain, such as wave action, localised hydraulic behaviour etc.

habitable floor area is that part of a residential development that is used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom, but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

hazard means a source of potential harm or conditions that may result in loss of life, injury and economic loss due to flooding.

hazardous material means a substance that may cause pollution or be potentially hazardous to humans, animals or the environment during a flood event.

probable maximum flood (PMF) is the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation. Generally, it is not physically or economically possible to provide complete protection against this event. The PMF defines the extent of flood prone land, that is, the floodplain. The extent, nature and potential consequences of flooding associated with the PMF event should be addressed in a Floodplain Management Study.

risk is the chance of something happening that will have an impact. It is measured in terms of consequences and likelihood. In this context it is the likelihood of consequences arising from the interaction of floods, communities and the environment.

Note: A word or expression used in this chapter has the same meaning as it has in LEP 2012 unless otherwise defined in this chapter.

Note: Text in red is dependent on Council resolution following community engagement.

3 FLOOD RISK PRECINCTS

Determination of flood risk is based upon the likelihood of a potential flood event and the severity of its consequences. A flood risk classification matrix (**Figure 1**) has been developed to classify all design flood events up to the probable maximum flood (PMF) event against hazard levels, using the Australian Institute for Disaster Resilience (AIDR) flood hazard vulnerability curves (**Figure 2**). This classification is based on modelling of flood hazard and flood extent undertaken by Engeny in 2021-2022 as part of the preparation of ~~the-an updated~~ Lismore Floodplain Risk Management Plan-2023. Where a flood has high likelihood, areas of highest hazard during such a flood will be designated as extreme risk. As flood likelihood and hazard levels decrease, so too will the associated risk classification.

Four flood risk precincts have been developed based on the matrix – extreme, high, medium and low risk. Two additional precincts have been identified based on their unique characteristics. This includes: ~~the~~

- “South Lismore Restricted Evacuation Precinct”; and
- “CBD Development Precinct”.

See **Figure 3/Appendix 2** for the mapped Lismore Flood Risk Precincts.

Note: Where two or more flood risk precincts apply to a development footprint, the highest flood risk category controls will apply. For development relating to existing buildings, Council can apply a merit-based assessment regarding the risk precinct applied to the proposed use.-

If a development site within the South Lismore Restricted Evacuation Precinct or CBD Development Precinct is identified as extreme risk, the extreme risk category controls will prevail.

Flood Likelihood	Flood Hazard (AIDR)					
	H1	H2	H3	H4	H5	H6
10% AEP	Low	Medium	Medium	High	Extreme	Extreme
5% AEP, 1% AEP	Low	Low	Medium	High	High	Extreme
0.2% AEP	Low	Low	Medium	Medium	High	High
1:1,000 AEP, 1:2,000 AEP	Low	Low	Low	Low	Medium	High
1:10,000 AEP, 1:100,000 AEP, PMF	Low	Low	Low	Low	Low	Medium

Figure 1: Flood Risk Precinct Matrix

Note: Slight adjustments have been made to the low and medium risk precinct boundaries to align with the boundary of the flood planning area.

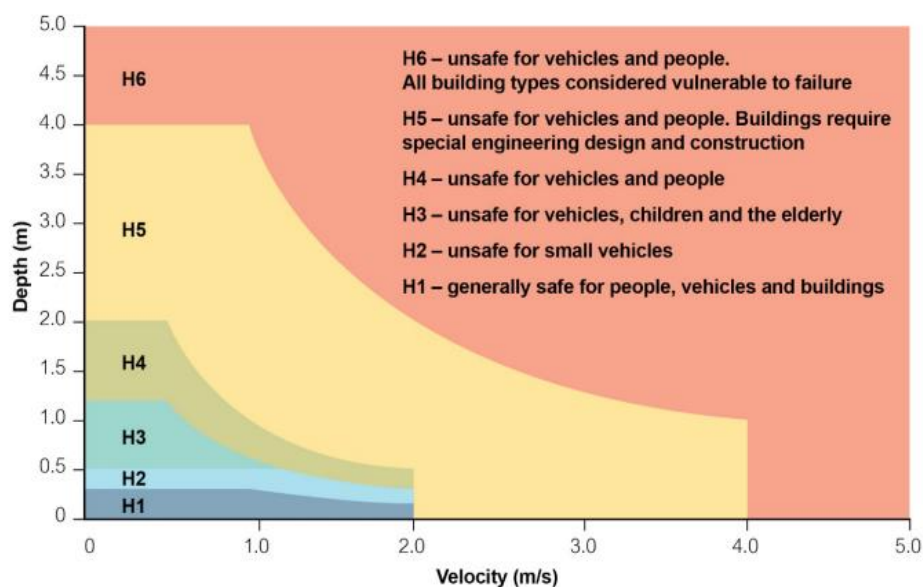


Figure 2: General flood hazard vulnerability curve

3.1 Extreme Risk Precinct

This is an extremely dangerous part of the floodplain due to high velocities and/or depths of floodwaters, even during relatively common floods. The extreme risk precinct applies to the deepest areas within the CBD basin, along with areas adjacent to the Wilsons River, Leycester Creek and Hollingworth Creek where the highest flow velocities exist. It includes areas subject to H5 and H6 hazards even in relatively common floods such as the 10% AEP, as well as areas subject to H6 hazards in a 5% AEP or 1% AEP flood. Generally, no new development will be permissible in these areas given the extreme risk to life and property. ~~Some~~ Recreational and non-urban development, as well as concessional development (defined in Appendix 1), may be allowed subject to assessment meeting development controls.

3.2 High Risk Precinct

The high risk precinct applies to the remaining areas within the CBD basin, South Lismore, the airport and through to Gundurimba, representing areas classified as flood storage and floodway (see Appendix 54). It also applies to the Browns Creek conveyance corridor once the CBD levee is overtopped. It is characterised by high flood depths and includes areas that would experience H6 hazard in a 0.2% AEP (1:500 probability event), a H5 hazard in the 1% or 5% AEP, or a H4 hazard in a 10% AEP. Due to significant risk to life and property in this area, no new residential development is permitted (unless within the CBD Development Precinct). ~~Some~~ Commercial, industrial and community development may be permitted subject to assessment meeting development controls.

3.3 Medium and Low Risk Precincts

The medium and low risk precincts apply to the rest of the floodplain area not mentioned above, such as flood fringe areas, up to the PMF extent. Most development is permissible in these areas, subject to meeting flood development controls, except for critical uses and facilities required in the event of a flood

emergency (defined in **Appendix 1**). Additionally, sensitive and hazardous development (defined in **Appendix 1**) is not permissible in the medium risk precinct.

3.4 South Lismore Restricted Evacuation Precinct

The South Lismore Restricted Evacuation Precinct applies to land in South Lismore as indicated in **Figure 3**. The area south of Hollingworth Creek is isolated in the event of the South Lismore levee overtopping and has a lengthy evacuation route via Union Street, the Ballina Street Bridge and Ballina Street or Conway Street to Wyrallah Road. The Hollingworth Creek bridge represents a low point on the evacuation route that is cut immediately when flood waters overtop the levee. The area north of Hollingworth Creek also has significant evacuation constraints due to roads getting cut early in the event of floods. As such, no additional residential development is permitted in this area. Due to evacuation constraints, there are additional requirements regarding fill, flood refuge, structural soundness and flood evacuation for commercial, industrial and community development south of Hollingworth Creek. Development in areas marked as extreme risk within the precinct will not be permitted, unless ~~the development is~~ characterised as non-urban/rural or concessional ~~development~~.

3.5 CBD Development Exemption Precinct

The CBD Development Exemption Precinct applies to the Lismore CBD area (areas zoned E2 Commercial Centre), and allows for forms of residential development (shop top housing and tourist and visitor accommodation) in areas of high risk, provided that habitable floor levels are above the FPL, structural soundness is proven to the PMF, a site-specific evacuation plan is prepared, and refuge is available above the PMF. This is due to CBD development having adequate evacuation routes, the limited protection provided by the CBD levee, and the ability for dwellings such as shop-top housing to be constructed above the FPL on existing buildings. It is also based on a desire to continue supporting the economic viability of the Lismore CBD while flood mitigation investigations are undertaken. Commercial and community development is also permissible. Development in areas marked as extreme risk within the precinct will not be permitted unless ~~it is~~ characterised as non-urban/rural or concessional ~~development~~.

3.6 Other flood prone land

This DCP only includes flood information and modelling for the Lismore urban area. For flood prone land outside of the Lismore urban area, Council will work with the applicant to determine an applicable flood planning level based on best-available information. ~~applicants must submit a report from a registered surveyor identifying the flood planning level applicable to the site.~~ Habitable floor levels for residential development must be built above the FPL in these areas, and all development below the FPL must be built with flood resilient materials. A flood impact and risk assessment must be provided that demonstrates that any structure can withstand the forces of floodwater, debris and buoyancy up to and including the FPL, and that development will not increase flood affectation to neighbouring sites. Mapping of flood prone land outside the urban area is available on Council's website online maps under 'Flood Management'. Relevant layers for rural areas include 'flood planning' and 'Rural South' layers. For development in Nimbin, see the Nimbin Village DCP chapter for applicable flood planning controls.

Note: Council expects that its flood mapping can be extended to the entire local government area following the release of CSIRO's lidar and bathymetry data. This DCP will be updated once this information is available for Council to utilise.

3.7 Variation of boundaries

The boundaries of the risk precincts have been determined based on flood modelling undertaken by Engeny. The accuracy of the modelling at the individual property level is dependent upon the accuracy and level of information available at the time to generate the model. Any application that seeks to vary the risk precinct boundary lines in order to lower the applicable flood risk precinct category must be justified by a flood ~~report~~ model and report prepared by a suitably qualified consultant, to Council's satisfaction, providing site-specific detail relating to predicted hazards in the full range of flood events, with reference to the criteria adopted in this Plan under the Flood Risk Precinct Matrix (**Figure 1**).

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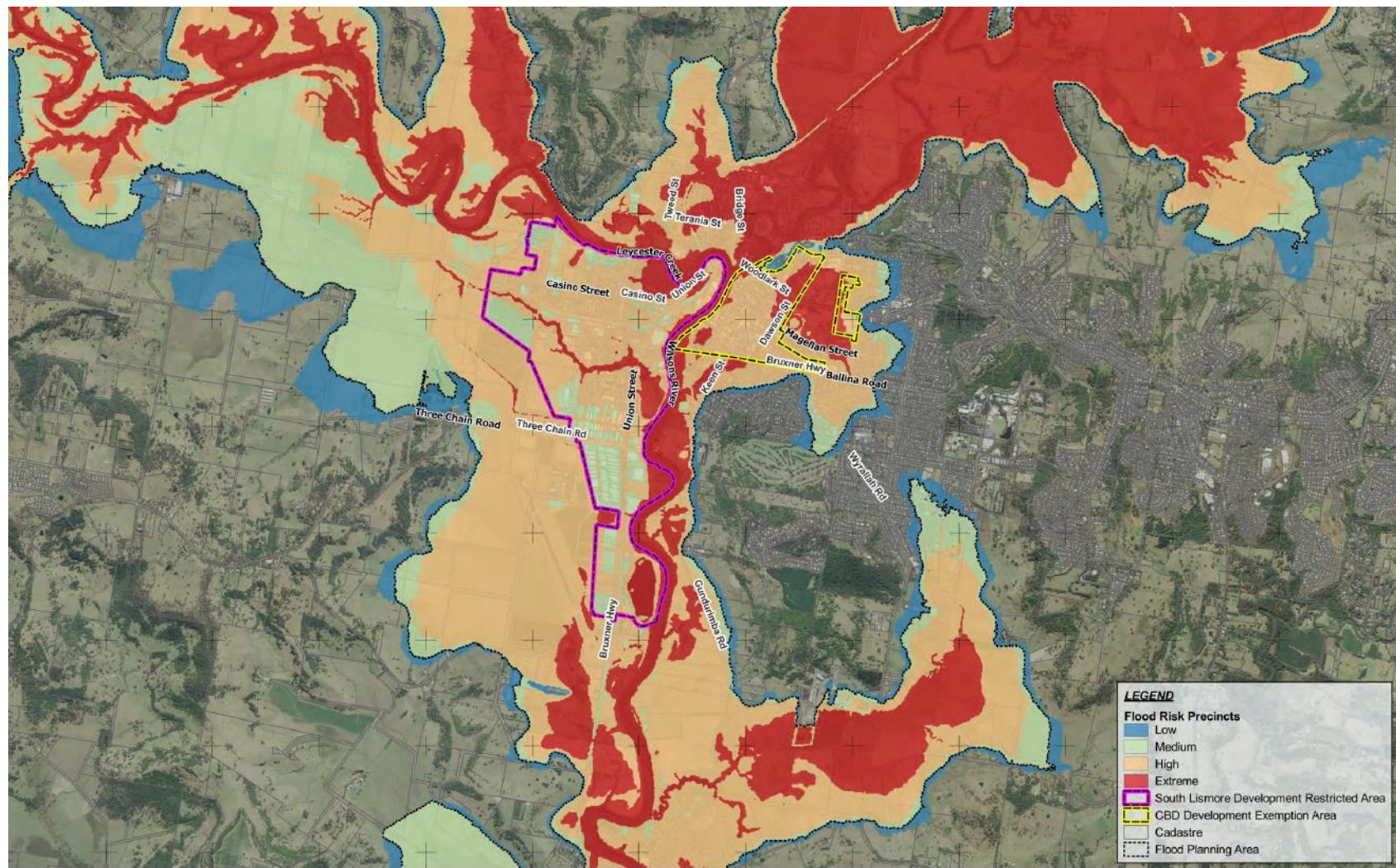


Figure 3: Flood Risk Precincts

4 DEVELOPMENT CONTROLS

Flood risk precinct	Land use category	Floor level	Fill	Flood Affection	Building materials and design	Structural soundness	Emergency response	Management
Extreme	Critical uses & facilities							
	Sensitive and hazardous							
	Residential							
	Subdivision							
	Commercial, industrial & community							
	Recreation & non-urban	4	3	1	1, 3, 4	1	1	2, 3
	Concessional development	1, 3, 5	3	2	1, 3	2	1	2, 3, 4
High	Critical uses & facilities							
	Sensitive and hazardous							
	Residential							
	Subdivision (except for residential)		1	2				1
	Commercial, industrial & community	4	1	1	1, 3, 4	1	1	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	1	1	2, 3
	Concessional development	1, 3, 5	1	2	1, 3	2	1	2, 3, 4
Medium	Critical uses & facilities							
	Sensitive and hazardous							
	Residential	1, 5	1	1	1, 3, 4	2	1	
	Subdivision		1	2				1
	Commercial, industrial & community	4	1	1	1, 3, 4	2	1	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	2	1	2, 3
	Concessional development	1, 3, 5	1	2	1, 3	2	1	2, 3, 4
Low	Critical uses & facilities							
	Sensitive and hazardous	2	1	1	2, 3, 4	3	1	2, 3
	Residential							
	Subdivision							
	Commercial, industrial & community							
	Recreation & non-urban							
	Concessional development	1, 3	1	2	1, 3	2	1	2, 3, 4

Flood risk precinct	Land use category	Floor level	Fill	Flood Affection	Building materials and design	Structural soundness	Emergency response	Management
South Lismore Restricted Development Precinct	Critical uses & facilities							
	Sensitive and hazardous							
	Residential							
	Subdivision (except for residential)		1	2				1
		4	2 (development south of Hollingworth Creek) 1 (other)	1	1, 3, 4	1	1, 2	2, 3
	Commercial, industrial & community	4	1	1	1, 3, 4	1	1	2
	Recreation & non-urban	1, 3, 5	1	2	1, 3	2	1	2, 3, 4
	Concessional development							
CBD Development Exemption Precinct	Critical uses & facilities							
	Sensitive and hazardous							
	Residential	1	1	1	1, 3, 4	1	1, 3	
	Subdivision		1	2				1
	Commercial, industrial & community	4	1	1	1, 3, 4	1	1	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	1	1	2
	Concessional development	1, 3	1	2	1, 3	2	1	2, 3, 4

Key

	Unsuitable use
	No controls
	Not relevant

Note: Outside the defined flood planning area, flood-related development controls only apply to sensitive and hazardous land uses as defined under the Lismore LEP 2012 Clause 5.22 Special Flood Considerations.

Explanation of Development Controls

Reference #	Control
Floor level *	
1	Habitable <u>residential</u> floor levels to be equal or greater than FPL.
2	All floor levels to be equal or greater than PMF.
3	Floor levels to be as close to the FPL as practical and no lower than existing floor levels when undertaking alterations or additions.
4	Floor levels <u>must be</u> as close to FPL as practical, <u>and at least:</u> Where below the FPL, more than 25% of floor space must be above the FPL. <u>Educational establishments and early education and care facilities must not have floor levels below the FPL.</u>
5	Where the lowest habitable floor area is elevated above finished ground level by more than 1.5m, a restriction is to be placed on the title of the land, pursuant to S88B of the <i>Conveyancing Act 1919</i> , confirming that the sub-floor area is not to be enclosed.
Fill	
1	Bulk fill to within 300mm of finished surfaced level is to be sourced from on-site ^{**} . No filling permissible in land identified as floodway ^{***} .
2	Fill required up to the 1:100 flood level. Bulk fill to within 300mm of finished surfaced level is to be sourced from on-site ^{**} .
3	No filling of site permissible.
Flood affectation #	
1	Flood impact and risk assessment (FIRA) required by a suitably qualified professional to certify the development will not increase cause adverse flood impacts <u>flood affectation elsewhere</u> . Such a report to be satisfactory to Council.
2	Development applications must address the impact of development on adjoining sites. Development must not impact flood behaviour cause adverse flood impacts on neighbouring properties or change flood flows/velocities/levels . A report by a suitably qualified professional may be required.
Building materials and design	
1	All structures to have flood resilient materials below or at the FPL [^] . Services such as air conditioning units, electrical switchboards, storage hot water units and water tanks to be placed above the FPL.
2	All structures to have flood resilient materials below or at the PMF. Services such as air conditioning units, electrical switchboards, storage hot water units and water tanks to be placed above the PMF.
3	Fencing must be permeable to allow the passage of flood flows (minimum 75 90% void space), or be collapsible under flood flow.
4	Any enclosure below the flood planning level must have openings to allow automatic entry and exit of floodwater. Development must be compliant with the Australian Building Codes Board's Standard on Construction of Buildings in Flood Hazard Areas.
Structural soundness	
1	Report required that includes certification by a suitably qualified professional. Applicant to demonstrate that any structure can withstand the forces of floodwater, debris & buoyancy up to & including the 0.2% AEP (1:500 probability event), and additionally the PMF for commercial and industrial development, <u>and where on-site refuge is required</u> . Council may require a report from

	a suitably qualified professional. Such a report, to be provided at Construction Certificate stage, to be satisfactory to Council.
22	Report required that includes certification by a suitably qualified professional that any structure can withstand the forces of floodwater, debris & buoyancy up to & including the 0.2%AEP. Such a report, to be provided at Construction Certificate stage, to be satisfactory to Council.
33	Report required that includes certification by a suitably qualified professional. Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyancy up to and including a PMF flood. Council may require a report from a suitably qualified professional. Such a report, to be provided at Construction Certificate stage, to be satisfactory to Council.
Emergency response	
1	A site-specific evacuation plan prepared by a suitably qualified consultant must be submitted ^{^^} with any DA. Plans to be consistent with NSW SES's Local Flood Plan.
32	A mezzanine level with emergency exit for evacuation purposes above the 1:10,000 flood level is required for commercial and industrial development.
43	Reliable egress is required to an area of refuge above the PMF level. ^{^^}
Management	
1	Applicant to demonstrate that any potential development as a result of subdivision can be undertaken in accordance with this DCP chapter.
2	An SES business flood safe plan Emergency Business Continuity Plan ^{##} is to be provided addressing how safety and property damage (including fitouts and goods storage) is addressed, considering the full range of floods.
3	No storage of hazardous materials is allowed below the flood planning level.
4	An SES H ome E mergency P lan ^{##} is to be developed for any residential development.

Note:

*: Where a minimum floor level is specified, a certificate from a registered surveyor is required certifying that the floor has been constructed to the required level.

****:** ~~Council may consider off-site fill from an area of similar flood function that is lower in the floodplain if it can be demonstrated there are no adverse flood impacts on surrounding properties. Any proposal to fill a site must be accompanied by an analysis of the effect on flood levels of similar filling of developable sites in the area.~~

*****:** Council considers the top 300mm of any filling to be a capping. To ensure appropriate material is used this can be sourced from outside the floodplain (i.e., quarry materials), however flood affectation controls must be met. Filling outside the building footprint is generally not permitted, other than for driveways and/or pedestrian pathways adjoining the walls of the building.

^: It is recommended that flood compatible building materials also be implemented above the flood planning level where practical. The Northern Rivers Reconstruction Corporation's *Flood Resilient Design Framework* should be consulted when determining flood compatible building materials and designs. See **Appendix 56**.

^^: ~~Prior to the issue of any Occupation Certificate the proponent shall submit to Council a flood evacuation plan for the development. This plan shall identify the following:~~

- ~~• The height at which the Lismore (Wilson's River) Rowing Club station (Station No 058176) needs to reach before evacuation procedures begin;~~
- ~~• The procedure for evacuation of staff and the actions taken to minimise damage to equipment, goods or other property stored in the development; and~~
- ~~• The available evacuation routes out of Lismore.~~

^^^: Conditions for refuge include:

- Permanent internal access via permanent staircase with minimum 1.2m width
- External access to refuge provided, accessible by boat during flooding
- Must have natural light and ventilation

•
#: When assessing flood affectation the following must be considered:

- Loss of storage in floodplain
- Changes is flood level and velocity caused by altering flood conveyance
- The cumulative impact of developable sites in the area

##: SES Emergency Business Continuity Plans and Home Emergency Plans can be completed at <https://www.sesemergencyplan.com.au/>

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Appendix 1: Land use categories

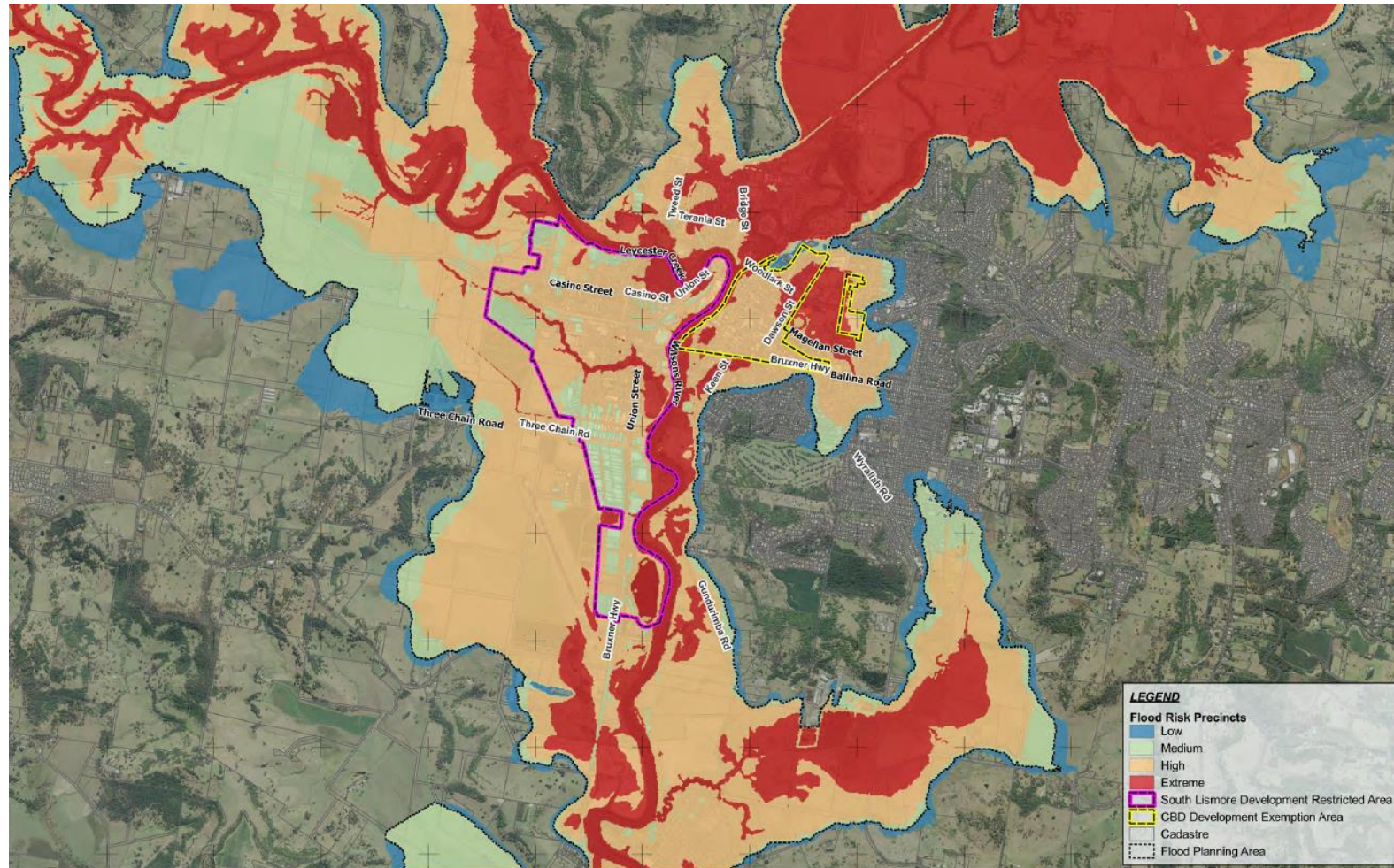
Category	Land uses
Residential	Attached dwellings, backpackers' accommodation, bed and breakfast accommodation, camping grounds, caravan parks, co-living housing, dual occupancies, dwelling houses, eco-tourist facilities, farm stay accommodation, hotel or motel accommodation, independent living units, multi dwelling housing, residential accommodation, residential flat buildings, rural workers' dwellings, secondary dwellings, semi-detached dwellings, serviced apartments, shop top housing, tourist and visitor accommodation
Commercial, industrial & community	Agricultural produce industries, agritourism, air transport facilities, airports, amusement centres, animal boarding and training establishments, artisan food and drink industries, boat building and repair facilities, business premises, car parks, cellar door premises, centre-based childcare facilities, commercial premises, community facilities (other than those listed as sensitive or hazardous), creative industries, crematoria, dairies (restricted), data centres, depots, early education and care facilities, educational establishments, entertainment facilities, exhibition homes, exhibition villages, farm experience premises, farm gate premises, food and drink premises, freight transport facilities, function centres, funeral homes, garden centres, general industries, goods repair and reuse premises, hardware and building supplies, health consulting rooms, heavy industrial storage establishments, heavy industries, high technology industries, highway service centres, industrial retail outlets, industrial training facilities, industries, information and education facilities, landscaping material supplies, light industries, liquid fuel depots, livestock processing industries, local distribution premises, medical centres, mortuaries, neighbourhood shops, neighbourhood supermarkets, offensive industries, offensive storage establishments, office premises, passenger transport facilities, public administration buildings (other than that designated as an emergency services facility), places of public worship, pubs, recreation facilities (indoor), recreation facilities (major) except showgrounds, registered clubs, resource recovery facilities, restaurants or cafes, restricted premises, retail premises, rural industries, rural supplies, school-based childcare, schools, self-storage units, service stations, sewerage systems, sex services premises, shops, small bars, specialised retail premises, storage premises, take away food and drink premises, timber yards, transport depots, truck depots, vehicle body repair works, vehicle sales or hire premises, veterinary hospitals, warehouse or distribution centres, waste disposal facilities, waste or resource management facilities, waste or resource transfer stations, water supply systems, wholesale supplies
Recreation & non-urban	Agriculture, airstrips, aquaculture, bee keeping, boat launching ramps, boat sheds, cemeteries, charter and tourism boating facilities, dairies (pasture-based), environmental facilities, environmental protection works, extensive agriculture, extractive industries, farm buildings, feedlots, flood mitigation works, forestry, helipads, heliports, horticulture, intensive livestock agriculture, intensive plant agriculture, jetties, kiosks, marinas, markets, moorings, mooring pens, open cut mining, oyster aquaculture, pig farms, plant nurseries, pond-based aquaculture, port facilities, poultry farms, recreation areas, recreation facilities (outdoor), research stations, roadside stalls, sawmill or log processing works, showgrounds, stock and sale yards, tank-based aquaculture, turf farming, viticulture, water recreation structures, water storage facilities, wharf or boating facilities

Category	Land uses
Critical uses and facilities	Emergency services facilities, hospitals
Sensitive and hazardous development	Boarding houses, correctional centres, electricity generating works, group homes, hazardous industries, hazardous storage establishments, hostels, residential care facilities, respite day care centres, seniors housing
Concessional development	<ul style="list-style-type: none"> Rebuilding of an approved development in a way that substantially reduces flood risk compared to the existing building. An addition, alteration or outbuilding (class 10A buildings under the Building Code of Australia) of not more than 10% or 30m² (excluding access) additional to the original approved development's building footprint, except where in a floodway where no further expansion is permissible. Changes of use that do not significantly increase flood risk regarding property damage and personal safety.* Development that is moveable/transportable and able to be safely moved to an area above the PMF during the design flood event. This does not include caravan parks or moveable dwellings.* Subdivision that does not involve the creation of additional allotments, aside from lots created under LEP Clause 4.2.*

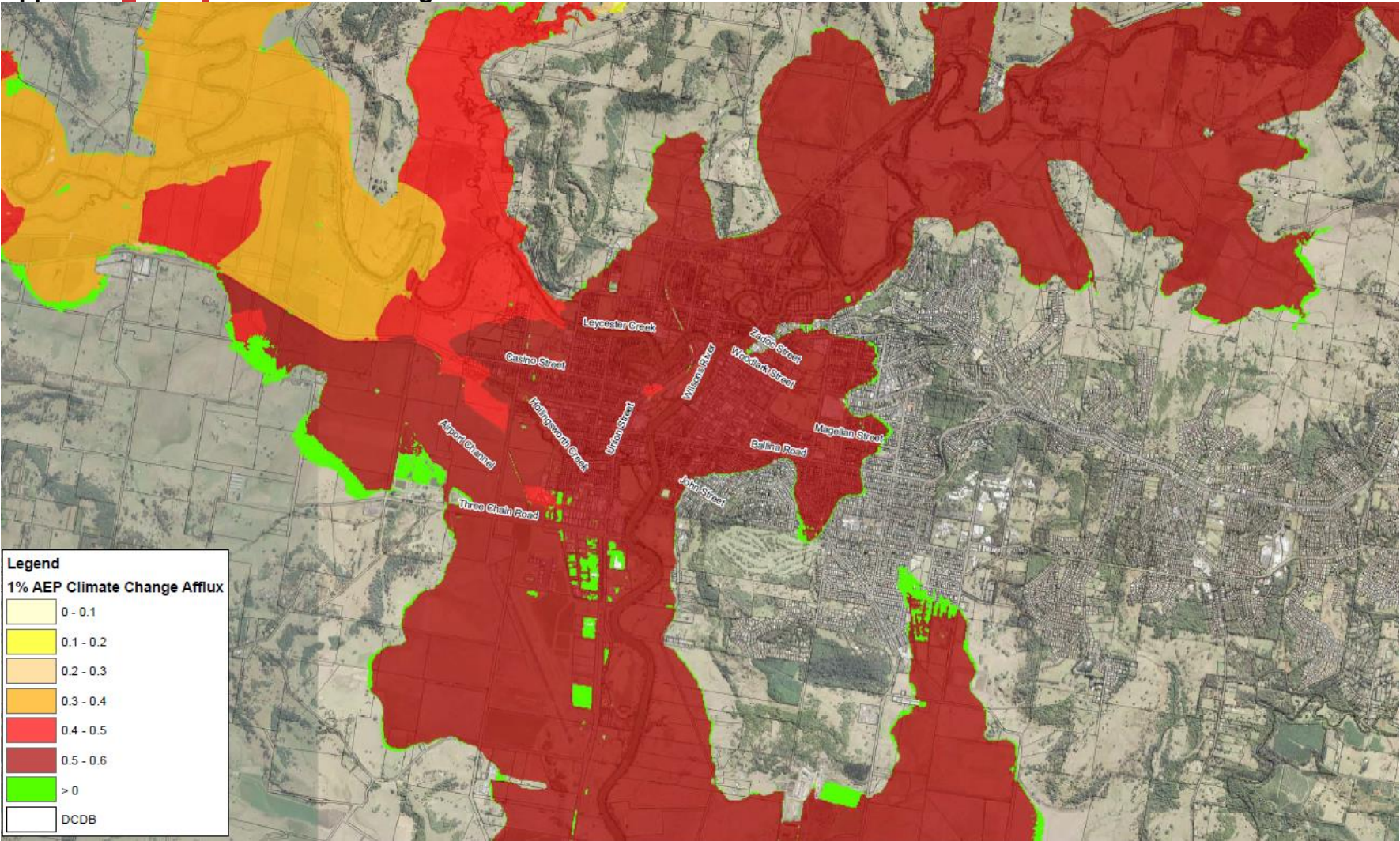
Note: The definitions of each land use have the same meaning as in the Lismore LEP 2012.

* Only relevant development controls apply

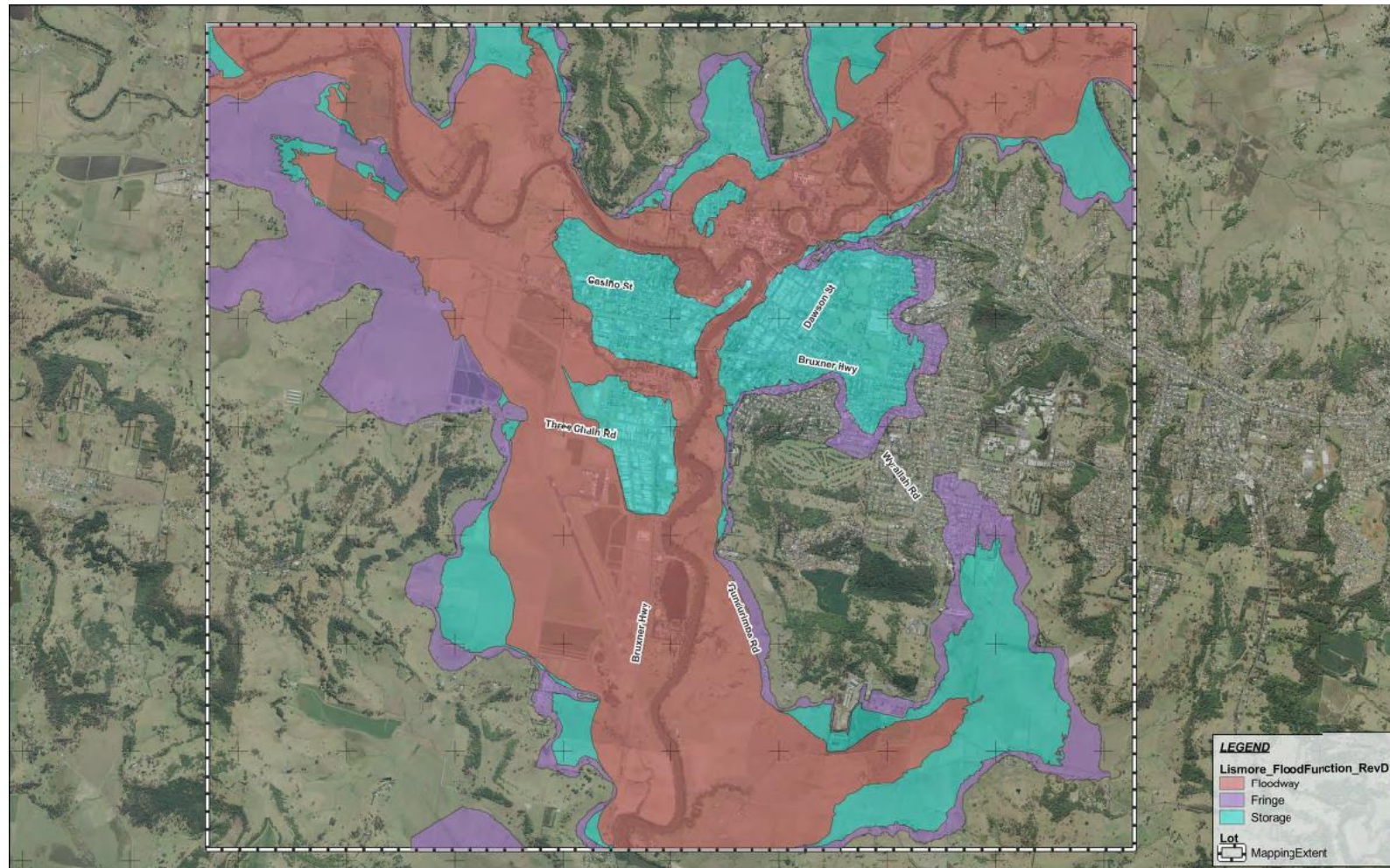
Appendix 2: Lismore flood risk precincts and flood planning area



Appendix 34: 1% AEP climate change afflux



Appendix 54: Flood function



Appendix 56: Flood-Resilient Materials

Building component	Non-flood-resilient materials X	Flood-resilient materials ✓
External ground cover	<ul style="list-style-type: none"> Large areas of impervious concrete surfaces 	<ul style="list-style-type: none"> Grass Mulch, deep crumbly soil Permeable concrete Permeable paving Gravel, stones
Fencing	<ul style="list-style-type: none"> Pine and other softwoods 	<ul style="list-style-type: none"> Hardwood timber fencing Composite timber fencing PVC fencing Metal fencing
Wall construction	<ul style="list-style-type: none"> Wall with cavities 	<ul style="list-style-type: none"> Single skin hardwood stud walls Single skin brick walls Single skin concrete block walls Off-form concrete walls Autoclaved aerated concrete walls with waterproofing membrane
Wall framing	<ul style="list-style-type: none"> Pine 	<ul style="list-style-type: none"> Hardwood Steel
Internal wall linings	<ul style="list-style-type: none"> Plasterboard Panelling made from pine or other softwoods Medium-density fibreboard (MDF) panels 	<ul style="list-style-type: none"> FC (fibre cement sheeting) Tiles Hardwood panelling Metal Polycarbonate / translucent sheeting Marine grade plywood
Internal flooring	<ul style="list-style-type: none"> Carpet Floating timber floors Vinyl on a non-resilient substrate Cork 	<ul style="list-style-type: none"> Polished concrete Tiles with epoxy grout and water-resistant adhesive Hardwood flooring on a suspended hardwood sub-floor that is ventilated. Rubber / vinyl on a flood resilient substrate with chemical set adhesive

Building component	Non-flood-resilient materials X	Flood-resilient materials ✓
Internal floor substrate	<ul style="list-style-type: none"> • Medium-density fibreboard (MDF) panels • Particle board (yellow tongue sheet flooring) • Low grade, non-marine plywood 	<ul style="list-style-type: none"> • FC (fibre cement sheeting)
Insulation	<ul style="list-style-type: none"> • Wool and fibre cement batts • Other spray products 	<ul style="list-style-type: none"> • XPS (rigid) insulation • Closed cell flexible sheet insulation • Sprayed polyurethane foam
Doors and windows	<ul style="list-style-type: none"> • Hollow core doors 	<ul style="list-style-type: none"> • Solid core doors (wet proofing) • Aluminium doors and windows • Flood doors (dry proofing) • Hardwood architraves
Mouldings (skirtings, dado rails, architraves, cornices)	<ul style="list-style-type: none"> • Pine mouldings 	<ul style="list-style-type: none"> • Hardwood mouldings • Tile skirting
Cabinetry	<ul style="list-style-type: none"> • Particle board • Medium-density fibreboard (MDF) panels 	<ul style="list-style-type: none"> • Compact laminate • Acrylic solid surface • Marine grade plywood • Composite timber panels • Stainless steel frame (open) • 316 grade stainless steel
Cabinetry benchtops	<ul style="list-style-type: none"> • Laminate • Particle board • Medium-density fibreboard (MDF) panels 	<ul style="list-style-type: none"> • Acrylic solid surface • Marine grade plywood • Stone • Composite stone • 316 grade stainless steel
Grout	<ul style="list-style-type: none"> • Cement based grout 	<ul style="list-style-type: none"> • Semi-epoxy grout • Epoxy grout • Polymer resin grout

Note: This table has been adopted from the NRRC Flood Resilient Design Framework, which is based on the Queensland Government's Design guidance for flood resilient homes.

Chapter 8

Flood Prone Lands



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1 INTRODUCTION

1.1 Name and application of this Chapter

The Flood Prone Lands chapter of Council's Development Control Plan (DCP) provides a risk-based approach to planning and development in the Flood Prone Lands of Lismore LGA. The chapter applies to all development on land within the probable maximum flood extent mapped on the flood risk precinct and flood planning area map, as defined in **Appendix 2**. The chapter has been developed as an outcome of the Lismore Flood Risk Management Study and Plan prepared in accordance with the process outlined by the NSW Government Flood Prone Lands Policy and the NSW Flood Risk Management Manual 2023.

The planning controls in this Chapter apply to all development applications for building, altering or using land within the Flood Planning Area for any development in any zone under Lismore LEP 2012. It also applies to development between the Flood Planning Area and Probable Maximum Flood (PMF) that:

- is listed as sensitive and hazardous development under the Lismore LEP 2012 Clause 5.22 *Special flood considerations*,
- Council considers to pose a particular risk to life or requires evacuation of people or other safety considerations.

The Flood Risk Precincts referred to in this Chapter are defined in **Figure 3 and Appendix 2**.

Full details of a particular lot's flood risk category are available on Council's website under 'flood planning'.

1.2 Purpose of the Chapter

The purpose of this Chapter is to identify Council's requirements relating to development on flood prone land that is appropriate to the degree of flood risk on that land.

1.3 Objectives of this Chapter

The Objectives of this Chapter are to:

- provide a holistic approach to managing development on flood prone land;
- encourage development compatible with the relevant flood risk precinct;
- prevent intensification of inappropriate land uses within high and extreme flood risk areas;
- minimise the risk to life and damage to property and assets as a result of floods;
- provide guidelines for determination of the merit of development on flood prone land as required by Section 4.15 of the *Environmental Planning and Assessment Act 1979*, and clauses 5.21 and 5.22 of the Lismore LEP 2012;
- ensure development maintains the existing flood regime and flow conveyance capacity;
- ensure development takes into account changes as a result of climate change; and
- ensure critical uses and facilities and sensitive and hazardous land uses are planned in consideration of all potential flood events.

Development proposals must be consistent with the planning objectives for the Chapter. Consistency is typically demonstrated by compliance with the identified development controls, however there may be circumstances whereby an alternative is considered consistent with the planning objectives.

1.4 How does this Chapter work?

The provisions of this Chapter include a range of control measures that are determined based on the specific development type and the flood risk precinct in which that development is located. To understand flood controls applying to development, applicants must first follow the following steps:

1. Determine the land use category/categories of the development as indicated in **Appendix 1**.
2. Locate the flood risk precinct in which the proposed development is to be located as indicated in **Figure 3/Appendix 2** (or for land outside of the Lismore urban area see **Section 3.6**).
3. Use the flood control matrix and development control table in **Section 4** to determine the applicable flood controls.

Note: Compliance with the provisions of this Chapter does not necessarily imply that Council will grant development consent to an application. Council must, in relation to development applications, also take into consideration those matters listed under Section 4.15 of the Environmental Planning and Assessment Act 1979.

1.5 Relationship to other plans

This DCP chapter must be read in conjunction with all other relevant DCP chapters. The provisions in this chapter prevail over the provisions of other chapters, unless otherwise specified, where there is an inconsistency.

2 DEFINITIONS

annual exceedance probability (AEP) is the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian height datum (AHD) is a common national surface level datum often used as a referenced level for ground, flood and floor levels. 0.0m AHD corresponds approximately to mean sea level.

average recurrence interval (ARI) is the long-term average number of years between the occurrence of a flood as big as, or larger than, the selected event. E.g., floods with a discharge as great as, or greater than, the 100-year ARI flood event will occur on average once in every 100 years. AEP is generally the preferred terminology. ARI is the historical way of describing a flood event.

catchment is the area of land draining to a specific location.

climate change factor is an increase in the 1% AEP design flood level to estimate the impact of climate change on flood conditions. The climate change factor used in this DCP is based upon the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway (RCP) 8.5, which represents a “worst-case” climate change scenario where rainfall intensity increases by 19.7% in 2090. This increases the 1% AEP level by up to 500-600mm on average, depending on location within the floodplain. See **Appendix 3**. The addition of the climate factor to the 1% AEP gives a peak flood level similar to the 0.2% AEP.

defined flood event (DFE) is the flood event selected as the general standard for the management of flooding to development. For the Lismore local government area (LGA), the defined flood event is the 0.2% AEP.

flood refers to a natural phenomenon that occurs when water covers land that is normally dry. It may result from coastal inundation (excluding tsunamis) or catchment flooding, or a combination of both.

flood evacuation refers to the movement of people from a place of danger to a place of relative safety, and their eventual return.

flood fringe areas mean the part of the flood extents for the event remaining after the flood function areas of floodway and flood storage areas have been defined.

flood impact and risk assessment (FIRA) means a study to assess flood behaviour, constraints and risk, understand off-site flood impacts on property and community resulting from the development, and flood risks to the development and its users.

flood mitigation work means work designed and constructed for the express purpose of mitigating flood impacts. It involves changing the characteristics of flood behaviour to alter the level, location, volume, speed or timing of flood waters to mitigate flood impacts. Types of works may include excavation, construction or enlargement of any fill, wall, or levee that will alter riverine flood behaviour, local overland flooding, or tidal action so as to mitigate flood impacts.

flood planning area (FPA) means the area of land below the flood planning level.

flood planning level (FPL) means the combination of the peak flood level from the defined flood event and freeboard selected for floodplain risk management purposes. The flood planning level for the Lismore LGA is the 0.2% AEP plus 500mm freeboard.

flood prone land is land susceptible to flooding by the probable maximum flood (PMF) event. It is synonymous with flood liable land.

flood-resilient materials are materials used in building construction that can withstand inundation without suffering significant damage and which can be readily cleaned when floodwaters subside.

flood risk is risk based on the consideration of the consequences of the full range of flood behaviour on communities and their social settings, and the natural and built environment.

flood storage area means an area of the floodplain that is outside floodways, which generally provides for temporary storage of floodwaters during the passage of a flood, and where flood behaviour is sensitive to changes that impact on temporary storage of water during a flood.

floodplain is the area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is all flood prone land.

floodway means an area of the floodplain which generally conveys a significant discharge of water during floods and is sensitive to changes that impact flow conveyance. Floodways often align with naturally defined channels.

freeboard is a factor of safety typically used in relation to the setting of floor levels or levee crest levels. Freeboard provides a factor of safety to compensate for uncertainties in the estimation of flood levels across the floodplain, such as wave action, localised hydraulic behaviour etc.

habitable floor area is that part of a residential development that is used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom, but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

hazard means a source of potential harm or conditions that may result in loss of life, injury and economic loss due to flooding.

hazardous material means a substance that may cause pollution or be potentially hazardous to humans, animals or the environment during a flood event.

probable maximum flood (PMF) is the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation. Generally, it is not physically or economically possible to provide complete protection against this event. The PMF defines the extent of flood prone land, that is, the floodplain. The extent, nature and potential consequences of flooding associated with the PMF event should be addressed in a Floodplain Management Study.

risk is the chance of something happening that will have an impact. It is measured in terms of consequences and likelihood. In this context it is the likelihood of consequences arising from the interaction of floods, communities and the environment.

Note: A word or expression used in this chapter has the same meaning as it has in LEP 2012 unless otherwise defined in this chapter.

3 FLOOD RISK PRECINCTS

Determination of flood risk is based upon the likelihood of a potential flood event and the severity of its consequences. A flood risk classification matrix (**Figure 1**) has been developed to classify all design flood events up to the probable maximum flood (PMF) event against hazard levels, using the Australian Institute for Disaster Resilience (AIDR) flood hazard vulnerability curves (**Figure 2**). This classification is based on modelling of flood hazard and flood extent undertaken by Engeny in 2021-2022 as part of the preparation of an updated Lismore Floodplain Risk Management Plan. Where a flood has high likelihood, areas of highest hazard during such a flood will be designated as extreme risk. As flood likelihood and hazard levels decrease, so too will the associated risk classification.

Four flood risk precincts have been developed based on the matrix – extreme, high, medium and low risk. Two additional precincts have been identified based on their unique characteristics. This includes:

- “South Lismore Restricted Evacuation Precinct”; and
- “CBD Development Precinct”.

See **Figure 3/Appendix 2** for the mapped Lismore Flood Risk Precincts.

Where two or more flood risk precincts apply to a development footprint, the highest flood risk category controls will apply. For development relating to existing buildings, Council can apply a merit-based assessment regarding the risk precinct applied to the proposed use.

If a development site within the South Lismore Restricted Evacuation Precinct or CBD Development Precinct is identified as extreme risk, the extreme risk category controls will prevail.

Flood Likelihood	Flood Hazard (AIDR)					
	H1	H2	H3	H4	H5	H6
10% AEP	Low	Medium	Medium	High	Extreme	Extreme
5% AEP, 1% AEP	Low	Low	Medium	High	High	Extreme
0.2% AEP	Low	Low	Medium	Medium	High	High
1:1,000 AEP, 1:2,000 AEP	Low	Low	Low	Low	Medium	High
1:10,000 AEP, 1:100,000 AEP, PMF	Low	Low	Low	Low	Low	Medium

Figure 1: Flood Risk Precinct Matrix

Note: Slight adjustments have been made to the low and medium risk precinct boundaries to align with the boundary of the flood planning area.

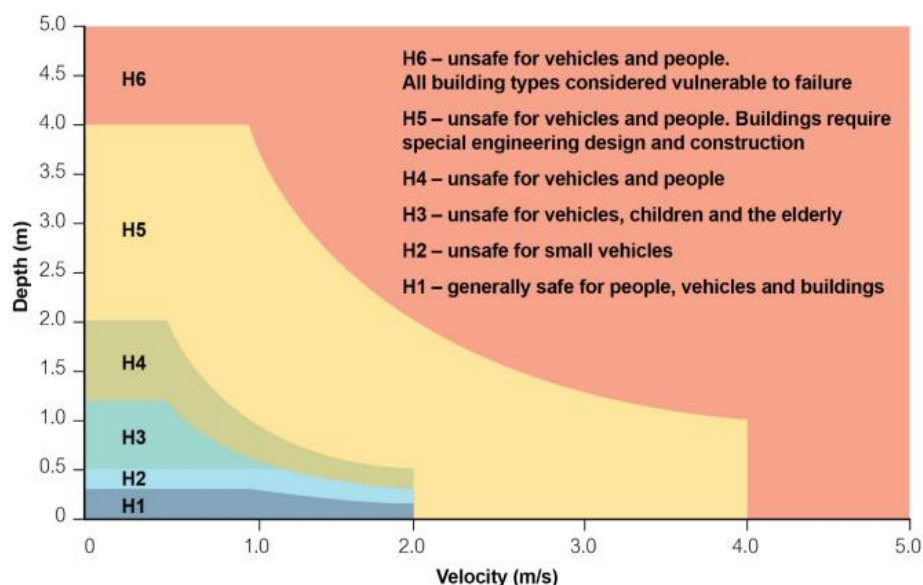


Figure 2: General flood hazard vulnerability curve

3.1 Extreme Risk Precinct

This is an extremely dangerous part of the floodplain due to high velocities and/or depths of floodwaters, even during relatively common floods. The extreme risk precinct applies to the deepest areas within the CBD basin, along with areas adjacent to the Wilsons River, Leycester Creek and Hollingworth Creek where the highest flow velocities exist. It includes areas subject to H5 and H6 hazards even in relatively common floods such as the 10% AEP, as well as areas subject to H6 hazards in a 5% AEP or 1% AEP flood. Generally, no new development will be permissible in these areas given the extreme risk to life and property. Recreational and non-urban development, as well as concessional development (defined in **Appendix 1**), may be allowed subject to meeting development controls.

3.2 High Risk Precinct

The high risk precinct applies to the remaining areas within the CBD basin, South Lismore, the airport and through to Gundurimba, representing areas classified as flood storage and floodway (see **Appendix 4**). It also applies to the Browns Creek conveyance corridor once the CBD levee is overtopped. It is characterised by high flood depths and includes areas that would experience H6 hazard in a 0.2% AEP (1:500 probability event), a H5 hazard in the 1% or 5% AEP, or a H4 hazard in a 10% AEP. Due to significant risk to life and property in this area, no new residential development is permitted (unless within the CBD Development Precinct). Commercial, industrial and community development may be permitted subject to meeting development controls.

3.3 Medium and Low Risk Precincts

The medium and low risk precincts apply to the rest of the floodplain area not mentioned above, such as flood fringe areas, up to the PMF extent. Most development is permissible in these areas, subject to meeting flood development controls, except for critical uses and facilities required in the event of a flood emergency (defined in **Appendix 1**). Additionally, sensitive and hazardous development (defined in **Appendix 1**) is not permissible in the medium risk precinct.

3.4 South Lismore Restricted Evacuation Precinct

The South Lismore Restricted Evacuation Precinct applies to land in South Lismore as indicated in **Figure 3**. The area south of Hollingworth Creek is isolated in the event of the South Lismore levee overtopping and has a lengthy evacuation route via Union Street, the Ballina Street Bridge and Ballina Street or Conway Street to Wyrallah Road. The Hollingworth Creek bridge represents a low point on the evacuation route that is cut immediately when flood waters overtop the levee. The area north of Hollingworth Creek also has significant evacuation constraints due to roads getting cut early in the event of floods. As such, no additional residential development is permitted in this area. Due to evacuation constraints, there are additional requirements regarding fill, flood refuge, structural soundness and flood evacuation for commercial, industrial and community development south of Hollingworth Creek. Development in areas marked as extreme risk within the precinct will not be permitted unless characterised as non-urban/rural or concessional.

3.5 CBD Development Exemption Precinct

The CBD Development Exemption Precinct applies to the Lismore CBD area (areas zoned E2 Commercial Centre), and allows for forms of residential development (shop top housing and tourist and visitor accommodation) in areas of high risk, provided that habitable floor levels are above the FPL, structural soundness is proven to the PMF, a site-specific evacuation plan is prepared, and refuge is available above the PMF. This is due to CBD development having adequate evacuation routes, the limited protection provided by the CBD levee, and the ability for dwellings such as shop-top housing to be constructed above the FPL on existing buildings. It is also based on a desire to continue supporting the economic viability of the Lismore CBD while flood mitigation investigations are undertaken. Commercial and community development is also permissible. Development in areas marked as extreme risk within the precinct will not be permitted unless characterised as non-urban/rural or concessional.

3.6 Other flood prone land

This DCP only includes flood information and modelling for the Lismore urban area. For flood prone land outside of the Lismore urban area, Council will work with the applicant to determine an applicable flood planning level based on best-available information. Habitable floor levels for residential development must be built above the FPL in these areas, and all development below the FPL must be built with flood resilient materials. A flood impact and risk assessment must be provided that demonstrates that any structure can withstand the forces of floodwater, debris and buoyancy up to and including the FPL, and that development will not increase flood affectation to neighbouring sites. Mapping of flood prone land outside the urban area is available on Council's online maps under 'Flood Management'. Relevant layers for rural areas include 'flood planning' and 'Rural South' layers. For development in Nimbin, see the Nimbin Village DCP chapter for applicable flood planning controls.

***Note:** Council expects that its flood mapping can be extended to the entire local government area following the release of CSIRO's lidar and bathymetry data. This DCP will be updated once this information is available for Council to utilise.*

3.7 Variation of boundaries

The boundaries of the risk precincts have been determined based on flood modelling undertaken by Engeny. The accuracy of the modelling at the individual property level is dependent upon the accuracy and level of information available at the time to generate the model. Any application that seeks to vary the risk precinct boundary lines in order to lower the applicable flood risk precinct category must be justified by a flood model and report prepared by a suitably qualified consultant to Council's satisfaction, providing site-specific detail relating to predicted hazards in the full range of flood events, with reference to the criteria adopted in this Plan under the Flood Risk Precinct Matrix (**Figure 1**).

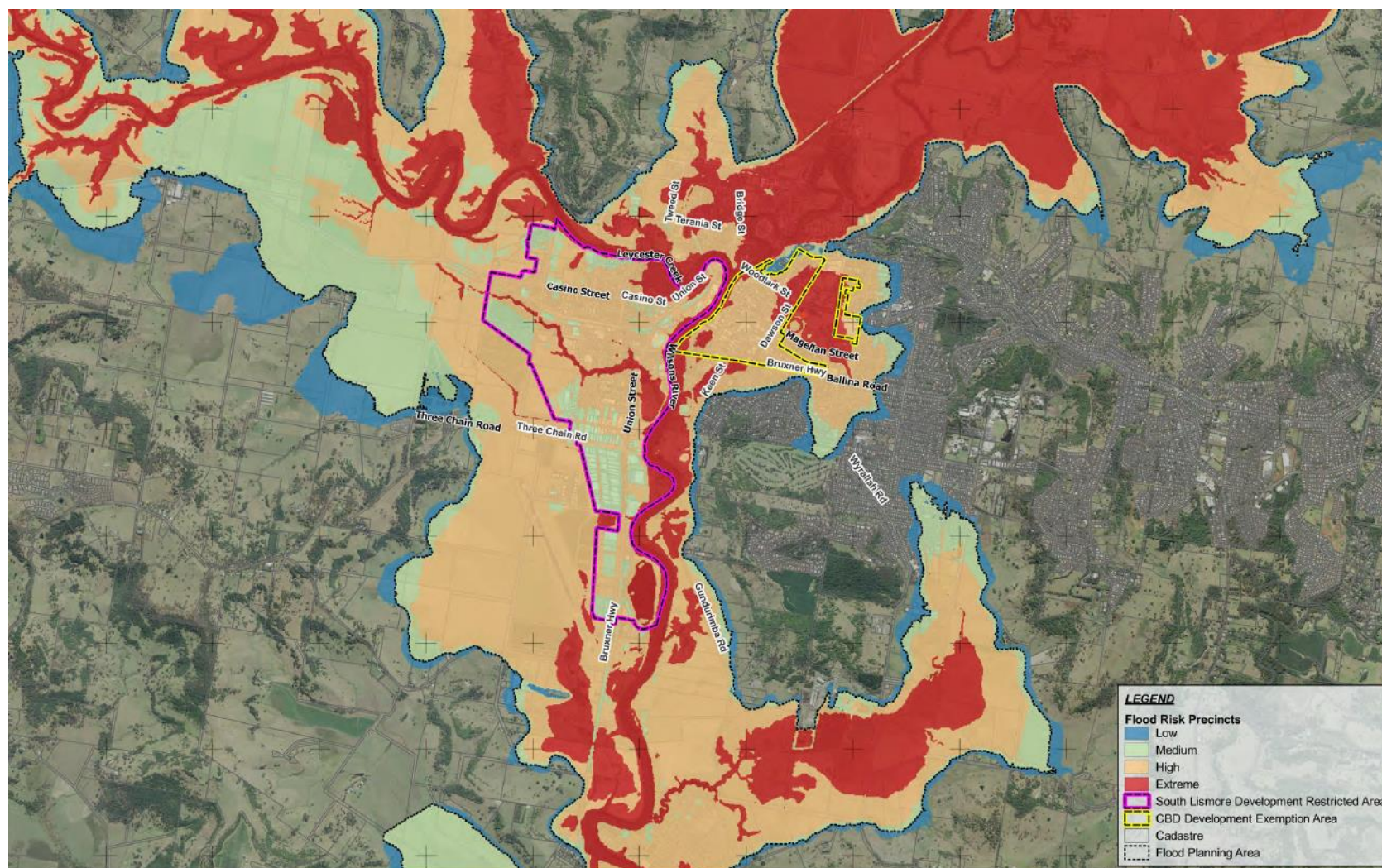


Figure 3: Flood Risk Precincts

4 DEVELOPMENT CONTROLS

Flood risk precinct	Land use category	Floor level	Fill	Flood Affection	Building materials and design	Structural soundness	Emergency response	Management
Extreme	Critical uses & facilities							
	Sensitive and hazardous							
	Residential							
	Subdivision							
	Commercial, industrial & community							
	Recreation & non-urban	4	3	1	1, 3, 4	1	1	2, 3
	Concessional development	1, 3, 5	3	2	1, 3	2	1	2, 3, 4
High	Critical uses & facilities							
	Sensitive and hazardous							
	Residential							
	Subdivision (except for residential)		1	2				1
	Commercial, industrial & community	4	1	1	1, 3, 4	1	1	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	1	1	2, 3
	Concessional development	1, 3, 5	1	2	1, 3	2	1	2, 3, 4
Medium	Critical uses & facilities							
	Sensitive and hazardous							
	Residential	1, 5	1	1	1, 3, 4	2	1	
	Subdivision		1	2				1
	Commercial, industrial & community	4	1	1	1, 3, 4	2	1	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	2	1	2, 3
	Concessional development	1, 3, 5	1	2	1, 3	2	1	2, 3, 4
Low	Critical uses & facilities							
	Sensitive and hazardous	2	1	1	2, 3, 4	3	1	2, 3
	Residential							
	Subdivision							
	Commercial, industrial & community							
	Recreation & non-urban							
	Concessional development	1, 3	1	2	1, 3	2	1	2, 3, 4

Flood risk precinct	Land use category	Floor level	Fill	Flood Affection	Building materials and design	Structural soundness	Emergency response	Management
South Lismore Restricted Development Precinct	Critical uses & facilities							
	Sensitive and hazardous							
	Residential							
	Subdivision (except for residential)		1	2				1
		4	2 (development south of Hollingworth Creek) 1 (other)	1	1, 3, 4	1	1, 2	2, 3
	Commercial, industrial & community	4	1	1	1, 3, 4	1	1	2
	Recreation & non-urban	1, 3, 5	1	2	1, 3	2	1	2, 3, 4
CBD Development Exemption Precinct	Critical uses & facilities							
	Sensitive and hazardous							
	Residential	1	1	1	1, 3, 4	1	1, 3	
	Subdivision		1	2				1
	Commercial, industrial & community	4	1	1	1, 3, 4	1	1	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	1	1	2
	Concessional development	1, 3	1	2	1, 3	2	1	2, 3, 4

Key

	Unsuitable use
	No controls
	Not relevant

Note: Outside the defined flood planning area, flood-related development controls only apply to sensitive and hazardous land uses as defined under the Lismore LEP 2012 Clause 5.22 Special Flood Considerations.

Explanation of Development Controls

Reference #	Control
Floor level *	
1	Habitable residential floor levels to be equal or greater than FPL.
2	All floor levels to be equal or greater than PMF.
3	Floor levels to be as close to the FPL as practical and no lower than existing floor levels when undertaking alterations or additions.
4	Floor levels must be as close to FPL as practical, and at least 25% must be above the FPL. Educational establishments and early education and care facilities must not have floor levels below the FPL.
5	Where the lowest habitable floor area is elevated above finished ground level by more than 1.5m, a restriction is to be placed on the title of the land, pursuant to S88B of the <i>Conveyancing Act 1919</i> , confirming that the sub-floor area is not to be enclosed.
Fill	
1	Bulk fill to within 300mm of finished surfaced level is to be sourced from on-site**. No filling permissible in land identified as floodway***.
2	Fill required up to the 1:100 flood level. Bulk fill to within 300mm of finished surfaced level is to be sourced from on-site**.
3	No filling of site permissible.
Flood affectation #	
1	Flood impact and risk assessment (FIRA) required by a suitably qualified professional to certify the development will not cause adverse flood impacts. Such a report to be satisfactory to Council.
2	Development applications must address the impact of development on adjoining sites. Development must not cause adverse flood impacts. A report by a suitably qualified professional may be required.
Building materials and design	
1	All structures to have flood resilient materials below or at the FPL [^] . Services such as air conditioning units, electrical switchboards, storage hot water units and water tanks to be placed above the FPL.
2	All structures to have flood resilient materials below or at the PMF. Services such as air conditioning units, electrical switchboards, storage hot water units and water tanks to be placed above the PMF.
3	Fencing must be permeable to allow the passage of flood flows (minimum 75% void space) or be collapsible under flood flow.
4	Development must be compliant with the Australian Building Codes Board's Standard on Construction of Buildings in Flood Hazard Areas.
Structural soundness	
1	Report required that includes certification by a suitably qualified professional that any structure can withstand the forces of floodwater, debris & buoyancy up to & including the 0.2%AEP (1:500 probability event), and additionally the PMF for commercial and industrial development, and where on-site refuge is required. Such a report, to be provided at Construction Certificate stage, to be satisfactory to Council.

2	Report required that includes certification by a suitably qualified professional that any structure can withstand the forces of floodwater, debris & buoyancy up to & including the 0.2%AEP. Such a report, to be provided at Construction Certificate stage, to be satisfactory to Council.
3	Report required that includes certification by a suitably qualified professional that any structure can withstand the forces of floodwater, debris and buoyancy up to and including a PMF flood. Such a report, to be provided at Construction Certificate stage, to be satisfactory to Council.
Emergency response	
1	A site-specific evacuation plan must be submitted ^{^^} . Plans to be consistent with NSW SES's Local Flood Plan.
2	A mezzanine level with emergency exit for evacuation purposes above the 1:10,000 flood level is required for commercial and industrial development.
3	Reliable egress is required to an area of refuge above the PMF level. ^{^^^}
Management	
1	Applicant to demonstrate that any potential development as a result of subdivision can be undertaken in accordance with this DCP chapter.
2	An SES Emergency Business Continuity Plan ^{##} is to be provided addressing how safety and property damage (including fitouts and goods storage) is addressed, considering the full range of floods.
3	No storage of hazardous materials is allowed below the flood planning level.
4	An SES Home Emergency Plan ^{##} is to be developed for any residential development.

Note:

*: Where a minimum floor level is specified, a certificate from a registered surveyor is required certifying that the floor has been constructed to the required level.

**: Council may consider off-site fill from an area of similar flood function that is lower in the floodplain if it can be demonstrated there are no adverse flood impacts on surrounding properties. Any proposal to fill a site must be accompanied by an analysis of the effect on flood levels of similar filling of developable sites in the area.

***: Council considers the top 300mm of any filling to be a capping. To ensure appropriate material is used this can be sourced from outside the floodplain (i.e., quarry materials), however flood affectation controls must be met. Filling outside the building footprint is generally not permitted, other than for driveways and/or pedestrian pathways adjoining the walls of the building.

^: It is recommended that flood compatible building materials also be implemented above the flood planning level where practical. The Northern Rivers Reconstruction Corporation's *Flood Resilient Design Framework* should be consulted when determining flood compatible building materials and designs. See **Appendix 5**.

^^: Prior to the issue of any Occupation Certificate the proponent shall submit to Council a flood evacuation plan for the development. This plan shall identify the following:

- The height at which the Lismore (Wilson's River) Rowing Club station (Station No 058176) needs to reach before evacuation procedures begin;
- The procedure for evacuation of staff and the actions taken to minimise damage to equipment, goods or other property stored in the development; and
- The available evacuation routes out of Lismore.

^^^: Conditions for refuge include:

- Permanent internal access via permanent staircase with minimum 1.2m width
- External access to refuge provided, accessible by boat during flooding
- Must have natural light and ventilation

#: When assessing flood affectation the following must be considered:

- Loss of storage in floodplain
- Changes in flood level and velocity caused by altering flood conveyance
- The cumulative impact of developable sites in the area

##: SES Emergency Business Continuity Plans and Home Emergency Plans can be completed at <https://www.sesemergencyplan.com.au/>

Appendix 1: Land use categories

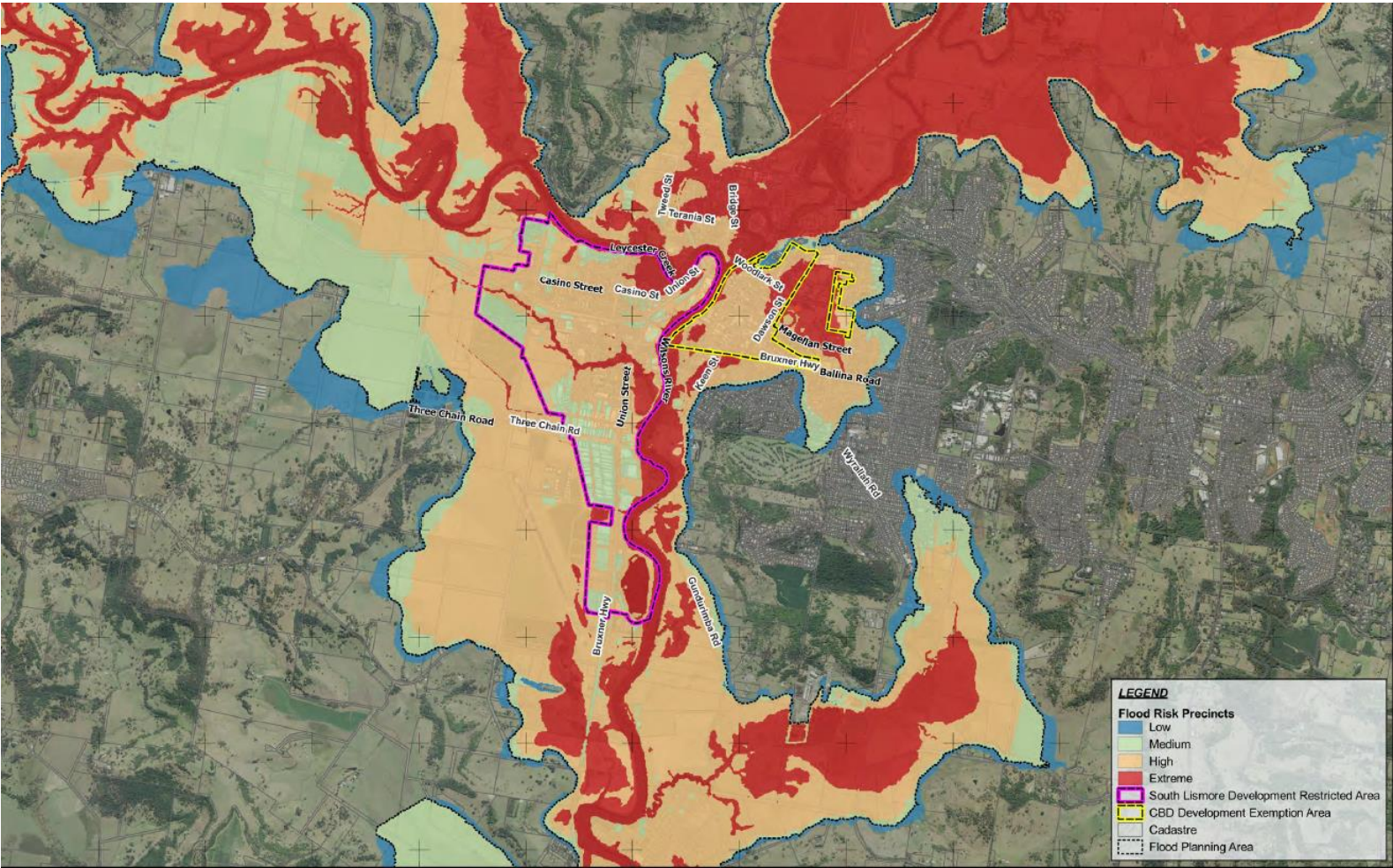
Category	Land uses
Residential	Attached dwellings, backpackers' accommodation, bed and breakfast accommodation, camping grounds, caravan parks, co-living housing, dual occupancies, dwelling houses, eco-tourist facilities, farm stay accommodation, hotel or motel accommodation, independent living units, multi dwelling housing, residential accommodation, residential flat buildings, rural workers' dwellings, secondary dwellings, semi-detached dwellings, serviced apartments, shop top housing, tourist and visitor accommodation
Commercial, industrial & community	Agricultural produce industries, agritourism, air transport facilities, airports, amusement centres, animal boarding and training establishments, artisan food and drink industries, boat building and repair facilities, business premises, car parks, cellar door premises, centre-based childcare facilities, commercial premises, community facilities (other than those listed as sensitive or hazardous), creative industries, crematoria, dairies (restricted), data centres, depots, early education and care facilities, educational establishments, entertainment facilities, exhibition homes, exhibition villages, farm experience premises, farm gate premises, food and drink premises, freight transport facilities, function centres, funeral homes, garden centres, general industries, goods repair and reuse premises, hardware and building supplies, health consulting rooms, heavy industrial storage establishments, heavy industries, high technology industries, highway service centres, industrial retail outlets, industrial training facilities, industries, information and education facilities, landscaping material supplies, light industries, liquid fuel depots, livestock processing industries, local distribution premises, medical centres, mortuaries, neighbourhood shops, neighbourhood supermarkets, offensive industries, offensive storage establishments, office premises, passenger transport facilities, public administration buildings (other than that designated as an emergency services facility), places of public worship, pubs, recreation facilities (indoor), recreation facilities (major) except showgrounds, registered clubs, resource recovery facilities, restaurants or cafes, restricted premises, retail premises, rural industries, rural supplies, school-based childcare, schools, self-storage units, service stations, sewerage systems, sex services premises, shops, small bars, specialised retail premises, storage premises, take away food and drink premises, timber yards, transport depots, truck depots, vehicle body repair works, vehicle sales or hire premises, veterinary hospitals, warehouse or distribution centres, waste disposal facilities, waste or resource management facilities, waste or resource transfer stations, water supply systems, wholesale supplies
Recreation & non-urban	Agriculture, airstrips, aquaculture, bee keeping, boat launching ramps, boat sheds, cemeteries, charter and tourism boating facilities, dairies (pasture-based), environmental facilities, environmental protection works, extensive agriculture, extractive industries, farm buildings, feedlots, flood mitigation works, forestry, helipads, heliports, horticulture, intensive livestock agriculture, intensive plant agriculture, jetties, kiosks, marinas, markets, moorings, mooring pens, open cut mining, oyster aquaculture, pig farms, plant nurseries, pond-based aquaculture, port facilities, poultry farms, recreation areas, recreation facilities (outdoor), research stations, roadside stalls, sawmill or log processing works, showgrounds, stock and sale yards, tank-based aquaculture, turf farming, viticulture, water recreation structures, water storage facilities, wharf or boating facilities

Category	Land uses
Critical uses and facilities	Emergency services facilities, hospitals
Sensitive and hazardous development	Boarding houses, correctional centres, electricity generating works, group homes, hazardous industries, hazardous storage establishments, hostels, residential care facilities, respite day care centres, seniors housing
Concessional development	<ul style="list-style-type: none"> Rebuilding of an approved development in a way that substantially reduces flood risk compared to the existing building. An addition, alteration or outbuilding (class 10A buildings under the Building Code of Australia) of not more than 10% or 30m² (excluding access) additional to the original approved development's building footprint, except where in a floodway where no further expansion is permissible. Changes of use that do not significantly increase flood risk regarding property damage and personal safety.* Development that is moveable/transportable and able to be safely moved to an area above the PMF during the design flood event. This does not include caravan parks or moveable dwellings.* Subdivision that does not involve the creation of additional allotments, aside from lots created under LEP Clause 4.2.*

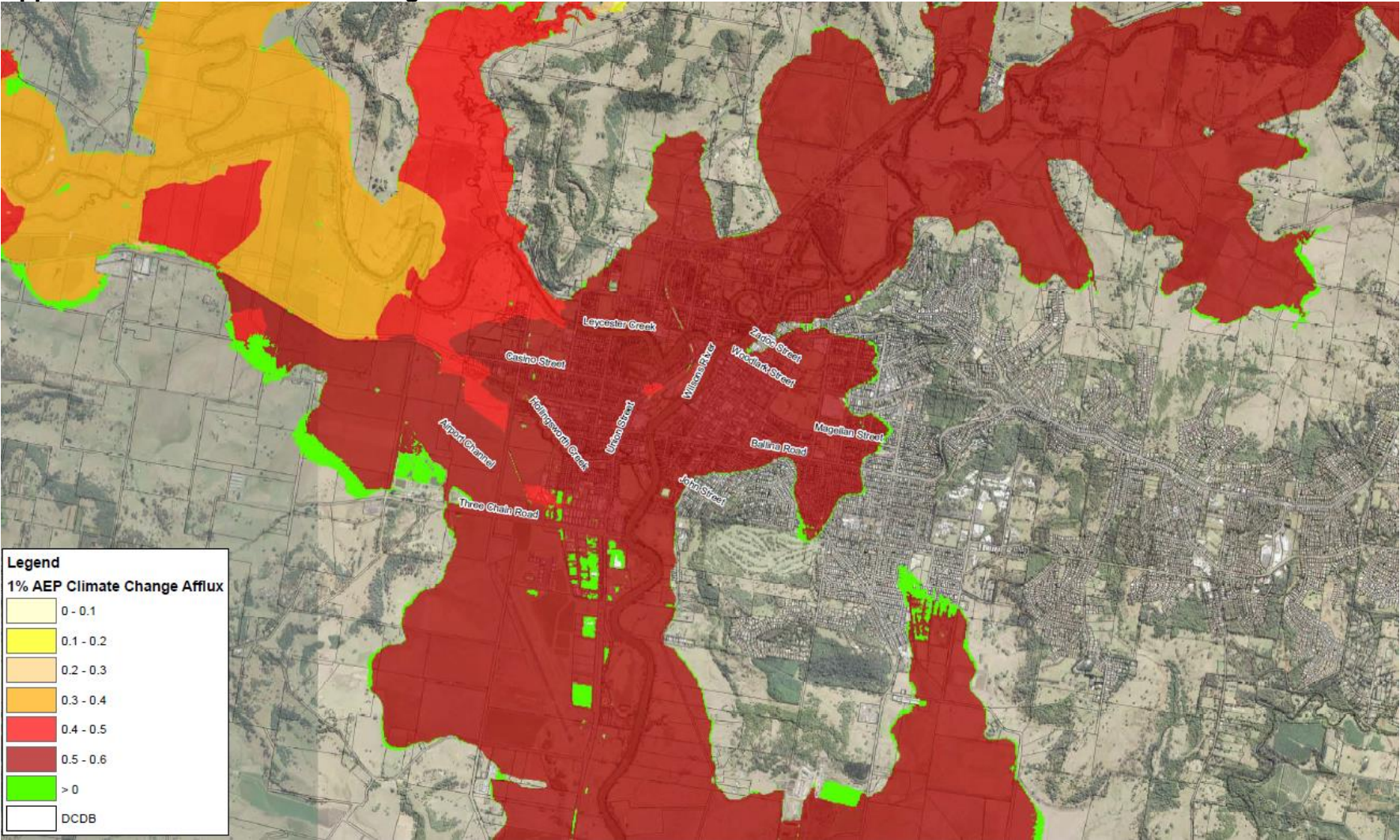
Note: The definitions of each land use have the same meaning as in the Lismore LEP 2012.

* Only relevant development controls apply

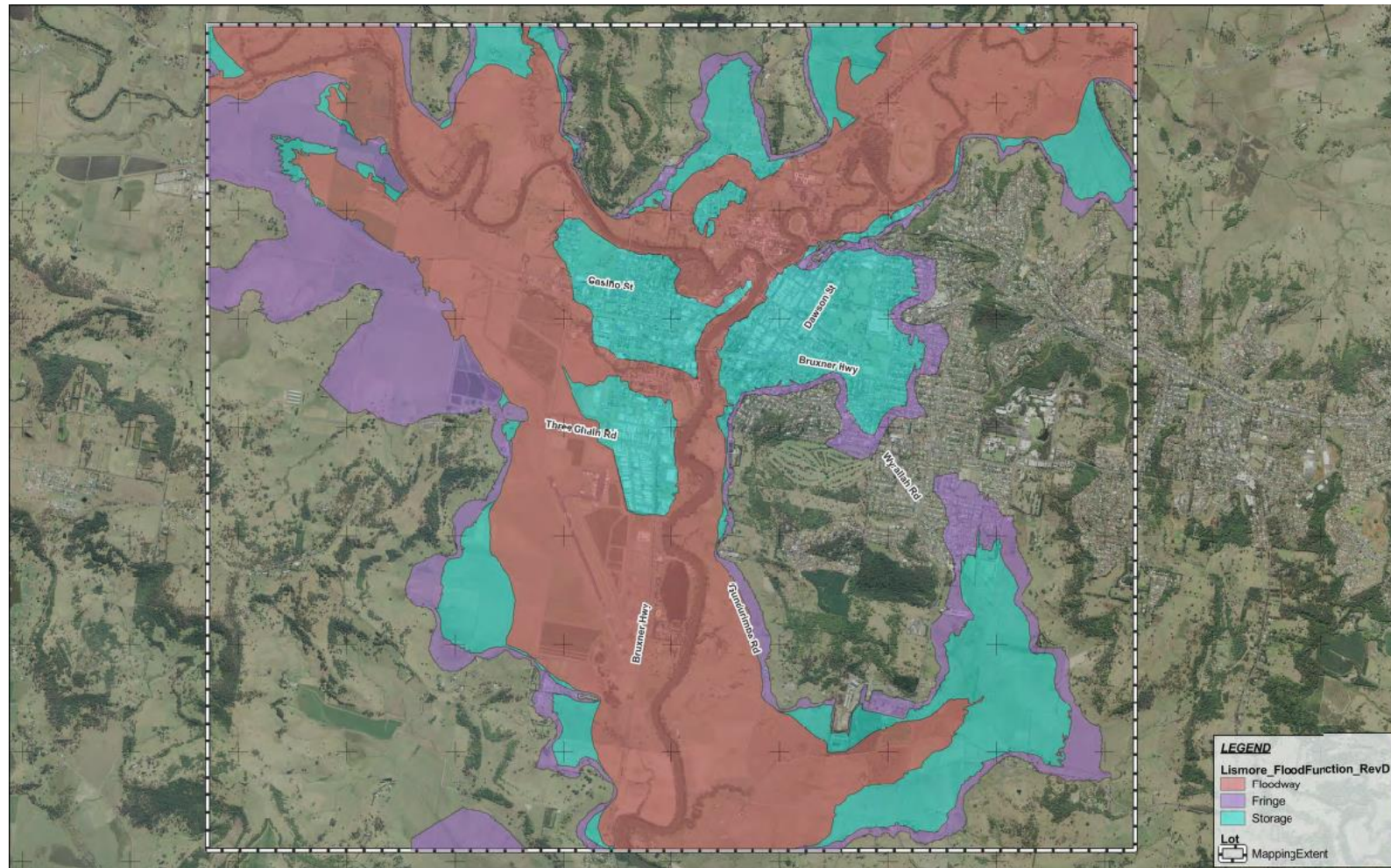
Appendix 2: Lismore flood risk precincts and flood planning area



Appendix 3: 1% AEP climate change afflux



Appendix 4: Flood function



Appendix 5: Flood-Resilient Materials

Building component	Non-flood-resilient materials X	Flood-resilient materials ✓
External ground cover	<ul style="list-style-type: none"> Large areas of impervious concrete surfaces 	<ul style="list-style-type: none"> Grass Mulch, deep crumbly soil Permeable concrete Permeable paving Gravel, stones
Fencing	<ul style="list-style-type: none"> Pine and other softwoods 	<ul style="list-style-type: none"> Hardwood timber fencing Composite timber fencing PVC fencing Metal fencing
Wall construction	<ul style="list-style-type: none"> Wall with cavities 	<ul style="list-style-type: none"> Single skin hardwood stud walls Single skin brick walls Single skin concrete block walls Off-form concrete walls Autoclaved aerated concrete walls with waterproofing membrane
Wall framing	<ul style="list-style-type: none"> Pine 	<ul style="list-style-type: none"> Hardwood Steel
Internal wall linings	<ul style="list-style-type: none"> Plasterboard Panelling made from pine or other softwoods Medium-density fibreboard (MDF) panels 	<ul style="list-style-type: none"> FC (fibre cement sheeting) Tiles Hardwood panelling Metal Polycarbonate / translucent sheeting Marine grade plywood
Internal flooring	<ul style="list-style-type: none"> Carpet Floating timber floors Vinyl on a non-resilient substrate Cork 	<ul style="list-style-type: none"> Polished concrete Tiles with epoxy grout and water-resistant adhesive Hardwood flooring on a suspended hardwood sub-floor that is ventilated. Rubber / vinyl on a flood resilient substrate with chemical set adhesive

Building component	Non-flood-resilient materials X	Flood-resilient materials ✓
Internal floor substrate	<ul style="list-style-type: none"> • Medium-density fibreboard (MDF) panels • Particle board (yellow tongue sheet flooring) • Low grade, non-marine plywood 	<ul style="list-style-type: none"> • FC (fibre cement sheeting)
Insulation	<ul style="list-style-type: none"> • Wool and fibre cement batts • Other spray products 	<ul style="list-style-type: none"> • XPS (rigid) insulation • Closed cell flexible sheet insulation • Sprayed polyurethane foam
Doors and windows	<ul style="list-style-type: none"> • Hollow core doors 	<ul style="list-style-type: none"> • Solid core doors (wet proofing) • Aluminium doors and windows • Flood doors (dry proofing) • Hardwood architraves
Mouldings (skirtings, dado rails, architraves, cornices)	<ul style="list-style-type: none"> • Pine mouldings 	<ul style="list-style-type: none"> • Hardwood mouldings • Tile skirting
Cabinetry	<ul style="list-style-type: none"> • Particle board • Medium-density fibreboard (MDF) panels 	<ul style="list-style-type: none"> • Compact laminate • Acrylic solid surface • Marine grade plywood • Composite timber panels • Stainless steel frame (open) • 316 grade stainless steel
Cabinetry benchtops	<ul style="list-style-type: none"> • Laminate • Particle board • Medium-density fibreboard (MDF) panels 	<ul style="list-style-type: none"> • Acrylic solid surface • Marine grade plywood • Stone • Composite stone • 316 grade stainless steel
Grout	<ul style="list-style-type: none"> • Cement based grout 	<ul style="list-style-type: none"> • Semi-epoxy grout • Epoxy grout • Polymer resin grout

Note: This table has been adopted from the NRRC Flood Resilient Design Framework, which is based on the Queensland Government's Design guidance for flood resilient homes.

Submissions summary and Council staff response

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
Email submissions				
1	Alexandria Brown	Increase to flood planning level would see her home below this level, whereas currently it is above the current flood planning level.	Noted.	No change
		Landowners of rural land would like to be able to subdivide and sell portion to flood-affected residents. This is needed. Is it being looked at.	It would be unlikely that Council could reduce minimum subdivision sizes of RU1 land, as it would require a planning proposal and the support of DPI and DPE, which is unlikely. Council is preparing the development of a Rural Lands Strategy, which may look at applying different rural zonings, some of which may have reduced minimum lot sizes. A discussion paper will be presented to the community in 2024.	No change
2	Indra Dhanusha	The floodplain should be depopulated entirely, including all Council buildings.	Depopulation of the floodplain is not a matter for the DCP. The DCP only applies to future development requiring a DA. Council is preparing to conduct a visioning process to determine the future of Lismore's development, which will be a separate exercise that may include rezonings and updates to the DCP.	No change
		The February flood event should be the flood planning level. If businesses, schools or homes can't obtain insurance, how can it be any other way?	Noted. Council staff have selected the 1% AEP + climate change factor + 500mm freeboard in order to balance the protection of the community with economic and social considerations, including feasibility of development to the February 2022 level. The flood planning level is a minimum level. Floor levels can be raised beyond this	No change proposed, noting that setting the FPL will be a matter for Council.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		Having experienced the trauma of being rescued with small children, I believe my home/area should be depopulated therefore it is impossible for me to think of any development occurring at my address on North Street. NRRC may not acknowledge I cannot continue to live here, but Council should protect us from any thought there is a future in it.	Council's DCP only relates to future risk. The DCP deems the subject site as 'high risk' and therefore indicates that it is not appropriate for future/further residential development. Council cannot compel NRRC to acquire properties or extinguish existing use rights.	No change
3	Alan & Pam Mace	Find the DCP confusing and don't understand flood planning levels and their consequences. Are advanced in years.	A letter has been sent to Mr & Mrs Mace indicating what the changes mean for their specific South Lismore property.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
4	Housing Industry Association (HIA)	Disagree that limitation to extensions and alterations of existing residential in extreme and high-risk flood precinct should be set at the lesser of 10% or 30m ² . Domestic renovations and additions do not constitute intensification of the existing land use or result in a greater number of households vulnerable to flooding. The DCP should permit extensions of detached houses in all areas if meeting Council's minimum floor level height requirements.	<p>Increasing floor space of residential development may encourage increased numbers of people living on the flood plain, even if not increasing household numbers. Additional development may also impact on flood flows in floods greater than the defined flood event. Therefore even development above the flood planning level could have impacts beyond the property. Council must consider the full range of flood events when developing flood planning controls, and thus consider that the controls stated are appropriate. It should be noted that applicants may seek variations to the control if it can be established that the development would be compatible with the flood function and behaviour on the land.</p> <p>Council may consider including a flat 30m² instead of the lesser 30m² or 10%. This may provide additional flexibility, particularly with small homes. A flood impact assessment would need to be completed.</p>	Remove reference to 'lesser than', allowing the greater of the two under a concessional development pathway as long as flood impact assessment is completed.
		Planning for a worst-case climate change scenario will mean that more properties will be identified as being subject to flooding. This may result in greater home insurance premiums for residents. HIA suggests a consistent national approach to climate change predictions and the impact on flood modelling is required which should consider the international commitments to reduce emissions.	Council's approach to considering climate change is not expected to affect how insurance companies determine risk or the flood-prone nature of individual properties. Insurance companies have detailed information and perform their own assessments and calculations of risk. Council also cannot influence whether a national approach to climate change predictions is taken. Council has taken a risk-based approach in selecting RCP8.5 as its climate change scenario.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		The DCP includes a requirement that a restriction is placed on the title of land such that sub-floor areas are not to be enclosed if the height from ground level to floor level is greater than 1.5m. In consideration of existing provisions in flood prone areas relating to the creation of habitable and non-habitable spaces, the requirement to register further restrictions on the land title appears an unreasonable imposition on industry. HIA also fails to understand the reference to one point five metres (1.5m) when the National Construction Code has a minimum floor to ceiling height for non-habitable spaces of two point one metres (2.1m).	<p>Council's requirement mirrors that which would be imposed if going through a complying development pathway. The inclusion of this requirement is to minimise the likelihood that sub-floor areas are enclosed and used for habitable purposes. Council has multiple examples of where this has occurred.</p> <p>Council has aligned with other DCPs in choosing 1.5m as the height from which the requirement for the covenant comes into effect. For heights under 1.5m, there is less likelihood that space would be considered for habitable uses. Even though the NCC minimum floor to ceiling height is 2.1m, in situations where illegal dwelling spaces are being created, this requirement is unlikely to be considered. The use of a covenant will assist compliance officers in dealing with improper use of undercroft spaces.</p>	No change
5	Janet Spinaze	The changes will devalue properties and severely restrict future developments in the designated risk precincts.	An aim of Council's DCP is to prevent intensification of inappropriate land uses within high and extreme flood risk areas and minimise the risk to life and damage to property and assets as a result of floods. There may be some examples where development potential is lessened however this is based on modelling of flood risk, and staff believe the balance struck is appropriate.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		Council has not provided an overall picture of what the future of these flood prone areas will look like.	Council will separately be conducting a vision exercise regarding the future of Lismore, including its flood prone land. This may lead to rezoning of land and changes to the DCP in the future. It is considered appropriate to now amend the DCP to ensure inappropriate development does not occur in the flood plain.	No change
		Has vacant E1 zoned land in North Lismore and wants to build two shops on ground level and shop-top housing above, considering this the only economically feasible option. The proposed DCP will make property unviable for development and unsaleable.	Council's current DCP restricts additional residential development in this area, as it is currently in a 'high risk' precinct. This would include additional shop-top housing, therefore the new DCP does not alter development potential for the site. Commercial development would still be considered suitable on the site.	No change
		As residents leave due to the home buyback scheme, there is less demand for commercial developments.	Council understands that there may be less demand for population serving commercial, however it would be unwise to therefore allow for growth in residential particularly as the Resilient Homes Program is working to derisk the area through the removal of residential.	No change
		Council cannot expect property owners to continue paying rates for land when Council changes planning rules which makes a parcel of land unviable to develop.	Residential was already indicated as an unsuitable use in the existing DCP.	No change
		If Council want to remove residential property and residents from the flood plain, then they need to establish and fund a buyback scheme as part of implementing this proposed DCP.	The DCP is about limiting future risk rather than existing or residual risk. Council through the DCP is not removing residential properties or residents from the flood plain.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
6	Mark Young	Likes the idea of the proposed changes. Please work with people who would like to raise their homes. A buy back doesn't suit everyone. Raising his house an extra metre would not look out of place. Worries about another flood but would put his mind at ease if he could raise his house.	Eligibility for house raising funding is a matter for the NRRC. Council's DCP would require any house raising to meet the chosen flood planning level, however if all conditions of DCP and LEP are met Council would be supportive of house raisings.	No change
7	Jerry Vanclay	The exemption for shop-top housing and tourist and visitor accommodation in the CBD is irresponsible, as the threat of floods in Lismore is real, and will increase with climate change.	Council is not proposing to change what is currently allowed in the CBD. Based on the visioning work proposed for Lismore and the results of the CSIRO flood mitigation work, Council may decide to revise controls applying to the Lismore CBD in the future. Council has also been guided by the case study on Lismore in the Flood Inquiry report Volume 3, which states: "Consider diverse CBD residential development including shop top and other types of increased density above the flood planning level, to bring back life to the business district, combined with improved levee protection and flood mitigation schemes."	No change
		The DCP needs to be realistic about flooding and avoid wishful thinking that the 2022 event was extraordinary and can be disregarded.	The DCP does not disregard the 2022 flood event. The modelling from the Lismore Floodplain Risk Management Study, which is the best data Council currently has access to, indicates that the 2022 event was a rare event. Once CSIRO work is completed and a catchment model developed, updates to calculations of flood frequencies and levels may be undertaken.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		A graph of flood heights recorded since 1861 shows that the flood of February 2022 flood was not an anomaly, but is consistent with the long-term trend, and that the potential recurrence is more frequent than 1:200 (greater than 0.5%). PMF could be greater than 20m. The timing of flood flows shows that peak flood flow from tributaries was successive and not simultaneous. Had the rainfall pattern been slightly different and created the peaks that arrived simultaneously, the flooding in Lismore could have been much worse.	Council is relying on the modelling conducted by Engeny to inform its DCP, as this is the best source of data currently available to Council. Once the CSIRO catchment model is completed, Council may consider the data and update its DCP and Floodplain Risk Management Plan based on this. Until such time, Council staff consider this data the best in which to develop flood planning controls. It is acknowledged that these controls may be interim.	No change
		Engeny did not validate their findings with data from the February 2022 flood in which this rainfall was exceeded.	<p>Engeny has completed post flood event analysis in relation to the 2022 flood. This involved recreating the 2022 flood event using river and rainfall gauge records, the 2022 Flood Inquiry report, and flood warning data.</p> <p>The hydraulic model indicated suitable replication of the recorded gauge heights at Lismore and close comparison to recorded flood debris markers.</p> <p>The report was completed for DPE and is unable to be shared publicly by Council at this stage.</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>The DCP is vague about the 'climate change factor'. Page 5 of the DCP proposes a flood planning level (FPL) that is 1%AEP plus a 500-600mm climate change factor, plus 500mm freeboard. Given that climate change is expected to increase rainfall intensity by 20% by 2090 (DCP, p.4), it is essential to increase the DFE accordingly. However, since an increase in rainfall will have a greater impact where the floodway is narrow (eg Gundurimba), it would seem logical to account for climate change by adjusting the specified AEP (for example, from 1%AEP to 0.1%AEP) rather than using a constant 500mm increase across the entire catchment.</p>	<p>The DCP and floodplain risk management plan are clear regarding the climate change factor. The climate change factor refers to increase in rainfall intensity based on the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathway (RCP) 8.5 – considered a worst-case pathway with a 19.7% increase in rainfall intensity. This has been modelled for the 1%AEP. There is not a consistent 500mm increase across the catchment. The increase ranges from 350-600mm depending on location within the floodplain.</p> <p>It is agreed that changing the specified AEP chosen for the defined flood event may be a simpler way in which to account for potential effects from climate change. This is consistent with flood planning guidelines on how climate change can be factored into development controls.</p>	Adopt the 0.2% AEP rather than the 1% AEP + climate change factor for the defined flood event to improve clarity. These events are similar in terms of flood heights.
		<p>The Insurance Council of Australia recently warned that we “must consider flood risk beyond the 100-year flood event as well as projected changes driven by climate change”. Lismore should consider whether 1%AEP (or even 0.1%AEP) is sufficient as we plan for the future.</p>	<p>The DCP takes into account the full range of flood events in determining appropriate uses. It has used the 1%AEP + climate change factor as the flood planning level, which is similar to the 0.2% AEP today.</p>	No change, noting that the FPL set will be a decision of Council.
		<p>The climate change afflux map highlights some areas in green, denoted “>0”, which seems inconsistent with the legend – should green denote approximately 0, rather than greater than zero?</p>	<p>The green areas denotes areas that are now inundated under the flood event, that would not have been if climate change were not taken into account.</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		The limitations of the DCP detract from the reliability of the DCP, and given the importance of the DCP for the safety of our community, it seems appropriate either to ask Engeny to validate their work against data from the 2022 flood, or to await the findings of the CSIRO study.	<p>As indicated previously, Engeny has conducted post-event validation which found suitable replication of the recorded gauge heights at Lismore and close comparison to recorded flood debris markers.</p> <p>Once the CSIRO process is complete, Council will make a decision on updating the floodplain risk management study, plan and DCP, including analysis of design flood event heights.</p> <p>It is considered important and appropriate to update the current DCP in the meantime as it is significantly out of date and this update is necessary to avoid what is now considered inappropriate development in areas of the floodplain where the current DCP indicates that that development would be acceptable.</p>	No change
8	John Stewart, Living School	Has plans for school in high-risk flood area, however DCP classifies schools and 'sensitive and hazardous development', which would only be allowed in the low-risk precinct. Believes nature of school and evacuation plans should mean that development should be	Although schools have lower risk profiles than uses that are inhabited overnight, there is significant concern regarding cost of clean-up, and the impact on children and their education of discontinuation of service due to flood impacts. Council may consider whether 'educational establishments' may be better considered as 'commercial, industrial and community' but there would need to be controls on these facilities to ensure that all floors are built above the flood planning level.	Include education establishments and early education and care facilities as commercial, industrial & community use but have controls requiring all floors to be above FPL.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
9	Greg Alderson Associates	Will the LEP – flood planning area be modified to be consistent with the DCP? The LEP allows development within the areas, provided that impacts on the surrounding properties and risk is undertaken. The current DCP is more in line with the LEP, allowing for development provided that assessments are undertaken.	<p>The flood planning area will be defined in the DCP rather than the LEP, as indicated by the State Government.</p> <p>The current DCP provides for areas (floodway and high risk) where certain development is not considered appropriate, and thus is similar to the proposed DCP. In the high risk area, Council allows proponents to provide information that show the flood velocities and depths that define Council's risk precincts are not correct and thus should be considered a different precinct. This is separate to 'assessments' such as flood impact and structural assessments.</p> <p>The DCP provides guidance to DA planners in applying Clause 5.21(2)(a). Proponents may be able to satisfy the consent authority that development meets this clause. In this instance Council may decide that a variation to the DCP is appropriate. As always the DCP is a guidance document.</p>	No change
		Is there a need now? Flood modelling has not included the 2022 flood, and has not included any flooding mitigation works that may come from the CSIRO study that will be out in 2024-2025.	<p>Post-2022-event validation has been conducted, which found suitable replication of the recorded gauge heights at Lismore and close comparison to recorded flood debris markers.</p> <p>Once CSIRO data is available, Council will reconsider whether an update to the study, plan and/or DCP is warranted. However, as the current DCP is well out-of-date it is considered appropriate to update now, even if these may be interim changes</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		Current DCP allows development within South Lismore precinct so long as adequate flood assessments are undertaken. Considered that there are many low to medium risk areas within this precinct that won't be eligible for NRRC funding therefore the DCP is too restrictive. The evacuation routes and education should be improved.	<p>Council must consider risks to emergency services responsible for evacuation when developing flood controls. It is considered appropriate that no further residential development is permitted in South Lismore. This does not stop rebuilding, small alterations or house raisings.</p> <p>Separate funding has been procured through the Northern Rivers Resilience Initiative to investigate flood evacuation constraints. Once evacuation constraints of the precinct are resolved, Council may choose to revisit the controls that apply to this area.</p>	No change
		The lesser of 10% or 30m ² increase for alterations/additions treated as concessional development is very restrictive. Encourages Council to allow for development that does not increase beyond 1 equivalent tenement for a house to allow people who cannot afford to move to expand on their dwellings.	Restriction on increase in floor space is to discourage additional residents or cause additional flood impact. Council could consider applying 30m ² as the limit in order to provide additional ability for alterations.	Remove reference to 'lesser than', allowing the greater of the two under a concessional development pathway as long as flood impact assessment is completed.
		Filling for sites is restrictive. Current DCP allows fill to be imported if it cannot be sourced on-site and a flood impact assessment shows it is appropriate. This should be kept.	The Floodplain Risk Management Plan is clear in indicating that off-site fill should not be brought into floodplain and that Council should consider cumulative impact of development on flood flow and function. It is not considered appropriate to allow additional fill into the floodplain without appropriate compensation.	Fill requirement has been altered to indicate that off-site fill from a nearby area in the floodplain can be considered if it does not result in adverse effects on neighbouring properties.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		The current DCP should be updated to include new maps, flood data related to 1%AEP and climate change, and PMF, rather than creating a new DCP	The current DCP is out-of-date and it is considered that a new DCP that reflects modern flood planning information is developed.	No change
		The DCP seems to be a reaction to the floods from last year, based on the evacuation routes and the proposed restriction in building areas, such as the South Lismore Restricted Evacuation Precinct.	The DCP considers a range of modelled flood events from the 10% AEP up to the PMF, as is recommended. The DCP is not a reaction to the 2022 flood, rather a response to the data from the Floodplain Risk Management Study and Plan, which have been in train since before the 2022 floods. Regarding the South Lismore Restricted Development Precinct, the controls of the DCP are not dissimilar to recommendations in the 2014 Floodplain Risk Management Plan that were never formally adopted into the DCP.	No change
10	Mick Sullivan, RSGL	Owner of property in South Lismore that has development consent for filling of land and industrial development. Wants to ensure that consent does not have to apply new DCP	The existing consent will only need to comply to DCP in force when consent was granted.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		When a property has two risk precincts covering the site that the relevant risk precinct applicable for that site and associated development in terms of the DCP be determined to be that precinct which is of the largest extent over that property (rather than automatically determined to be that of the greater risk precinct) so that properties are not disadvantaged when a very small section of a higher risk precinct would restrict development over the site as a whole. This would be more logical.	Agree that instances in which only a small portion of site is a higher risk that that risk precinct not necessarily apply.	Update DCP to indicate that in instances where multiple risk precincts apply that Council will consider the extent of the risk precincts and the type of development in considering controls to apply. Council would expect development to avoid highest risk areas where possible.
		The current wording to the DCP 'where two or more flood risk precincts apply to a development, the highest flood risk category controls will apply' creates significant and practical complications for future development with a prime example being my Development Consent, in which it would appear that a very small section of the site is mapped as extreme risk, but the substantial majority of the site is mapped as high risk.	The control is intended to apply to the development footprint and not the entire lot.	As above.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
11	Diocese of Lismore	<p>Regarding site of Trinity College, believes that the rationale behind the CBD development exemption area in relation to shop-top housing and tourist and visitor accommodation is satisfied by this site too and the area should be extended to include the site.</p> <p>Allowing inclusion in this precinct would allow an adaptive reuse of the infrastructure located on a significant gateway site to Lismore.</p>	The CBD development exemption area applies to the extent of the E2 commercial zone in the CBD area. The site is currently zoned R1 General Residential. Development of site for use other than a school may require rezoning from the current R1 zoning to a more appropriate zone. Amendments to the DCP can be considered in conjunction with a rezoning or when a plan for the site is presented to Council.	No change
12	NDC	Given the flood characteristics of Lismore, the majority of the lower parts of the city are mapped as extreme or high risk, meaning that permissibility decisions are particularly important, as they impact on a large number of properties. These uses need to be reviewed in a strategic context having regard to the future vision for Lismore. The strategic visioning stage seems to have been skipped in the preparation of the DCP.	A visioning exercise for the future of Lismore is currently in its preliminary stages. While it is not ideal to have a DCP developed prior to this, there is significant reason to enact a DCP at this stage, even if interim, to arrest what is considered inappropriate development that is enabled by the existing DCP. Following the outcome of the vision for Lismore, and the CSIRO report/modelling, Council may choose to revise the DCP.	No change
		Shop-top housing is proposed to be permitted in CBD however a school would not, even though it could be argue that shop-top housing would be riskier due to people reasonably expected to want to shelter in place whereas schools could ensure evacuation	Council staff agree that educational establishments should be considered as commercial or community development, as long as floor levels are built to the FPL.	Include education establishments and early education and care facilities as commercial, industrial & community use but have controls requiring all floors to be above FPL.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		R3 medium density precinct as part of the health precinct planning reforms will now not be able to occur as originally planned. It is suggested that suitable design measures are available (such as parking below and housing above) to enable residential development to occur in this area	Based on the updated flood modelling conducted post-2017 Council staff believe that the current R3 zone contains some land that is now not appropriate for increased residential density. The updated Growth and Realignment Strategy has considered other less flood-affected land that may be suitable for increased density.	No change
		The new mapping (and associated land use permissibility matrix) has not been clearly communicated to landholders. It is our expectation that landholders throughout the flood prone areas are not aware that the extensive list of uses fitting within the 'sensitive and hazardous' categorisation are now effectively prohibited	Council has engaged in a significant consultation process as part of the revised DCP. This included presence at Living Lab and markets, the production of a video, 2800 letters sent to landowners in extreme and high risk precincts, and workshops and presentations.	No change
		DCP requires fill to be obtained on-site. The floodplain is largely flat, this presents significant challenges with respect to achieving required floor levels, grades and drainage. In this regard, we are aware that there is vacant industrial land within South Lismore which will be effectively sterilised for development under the proposed new DCP framework. We note also that fill is also required to achieve drainage and fall (rather for the purpose of raising floor levels). The current draft DCP does not readily enable this to occur and as such circumvents the flood planning controls under Clause 5.21 of the Lismore LEP.	The Floodplain Risk Management Plan is clear in indicating that off-site fill should not be brought into floodplain and that Council should consider cumulative impact of development on flood flow and function. It is not considered appropriate to allow additional fill into the floodplain without appropriate compensation. As this is a DCP, Council may consider an individual approach if it can be demonstrated that the approach would satisfy the objectives of the DCP and not impact flood flows or other developments. As such, it is not considered that the DCP circumvents the LEP	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		Recommend that Council introduces the new flood planning level incorporating climate change, however defer decision to introduce other flood planning controls/restrictions until strategic plan and economic recovery strategy is enacted.	Staff believe that controls are needed in the interim so that inappropriate development is halted. Controls can again be reviewed once vision and CSIRO work is complete.	No change
13	Lismore Shoppingworld	<p>The risk precinct mapping from the Floodplain Risk Management Plan (FRMP) is underdeveloped, having consideration only to ground level, and not other factors necessary to inform a considered and balanced approach to risk management, including floor levels and evacuation potential. The risk precinct mapping should be further developed on a site-specific basis so matters such as floor levels of existing and future development, warning times, and accessibility to evacuation routes can be appropriately factored into the assessment. Council should investigate a merits-based approach and site-specific exemption to the prescriptive controls by undertaking a strategic planning exercise to identify sites where overly prescriptive controls should not apply.</p> <p>The DCP has not been prepared consistent with the Floodplain Risk Management Plan, which recommends a merit-based approach.</p>	<p>Engeny has developed the risk matrix based on NSW flood planning guidelines. It is not considered correct that the DCP is not aligned with the Floodplain Risk Management Manual 2023. Basing the risk precincts on a matrix that considers flood frequency and hazard (based on ground level data) is considered appropriate, as evidenced in flood risk management guidelines FB01 and FB03. Altering flood risk precincts based on current development would not be consistent with flood planning guidelines and would require constant updating of risk precinct maps based on new development.</p> <p>Risk also includes emergency services risk, which is not ameliorated by building design or development controls.</p> <p>It should be noted that given that much of the development at Lismore Square would likely be considered concessional development, there is no major restrictions on development.</p> <p>Council can consider development applications on their merits if aims and objectives of DCP, and relevant sections of LEP and EP&A Act are met.</p>	<p>Update DCP to make clearer that alternatives to development controls can be considered as long as objectives are met.</p> <p>Update DCP to indicate that for existing development sites, Council may consider the risk precinct to be that which has the largest extent over the development footprint.</p>

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>Council should commission a peer review of the FRMP given the serious implications of the development controls proposed. The modelled results for the 2022 flood event should also be compared to the results within the FRMS and FRMP so that consideration can be given to how successful the model has been in replication major flood events and predicting flood levels for major and extreme flood events.</p>	<p>Council staff are satisfied with the work of Engeny and do not consider that a peer review is necessary. If Council choose to have a peer review conducted, budget would need to be allocated.</p> <p>Post-2022-event validation has been conducted, which found suitable replication of the recorded gauge heights at Lismore and close comparison to recorded flood debris markers. This work was done by Engeny on behalf of DPE and as such Council cannot currently share the results of this validation. However, Council is confident in the model.</p>	No change
		<p>The CBD Exemption Precinct is arbitrary and creates inequity with other shopping precincts. Reading the DCP, commercial and industrial development will be permissible in the extreme risk areas of the precinct, however outside the precinct would not be.</p>	<p>This is a misreading of the DCP. No commercial or industrial development will be marked as suitable within any land marked as extreme risk. The CBD exemption precinct allows for shop-top housing and tourist and visitor accommodation in the high risk areas of the precinct. For commercial and industrial development, there is no significant difference between what is suitable for high risk areas within or outside the exemption precinct, therefore staff do not agree that there is inequity.</p>	<p>Update DCP to make clear that the CBD exemption only refers to shop-top housing and tourist and visitor accommodation within the high-risk areas of the precinct. Increase boundary to include all zoned E2 land.</p>

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>There is no justification provided for the boundary of the CBD Exemption Precinct. The exclusion would create inequity with competing retail centres and other uses.</p> <p>Council should include the Lismore Shopping Square in the CBD exemption zone or have the same controls apply across the high risk floodplain.</p> <p>Development controls are relaxed in precinct in relation to floor levels.</p>	<p>As noted above, there is not considered to be inequity for retail centres. The CBD exemption precinct has been included to preserve the area's ability to have shop-top housing and visitor and tourist accommodation in the E2 zoned commercial core, with consideration of evacuation, ability for development to be set above flood planning level on top of existing development, and the limited protection provided by the CBD levee. Council has also been guided by the case study on Lismore in the Flood Inquiry report Volume 3, which states: "Consider diverse CBD residential development including shop top and other types of increased density above the flood planning level, to bring back life to the business district, combined with improved levee protection and flood mitigation schemes." The controls preserve what is currently permissible in the CBD core. It is now recommended that the CBD be defined by the area that is zoned E2 Commercial Centre, therefore the boundary will be refined to include all E2 zoned land.</p> <p>It is considered appropriate that the same development controls apply to commercial development for high risk areas in and out of the precinct, therefore an adjustment should be made to the CBD Development Precinct floor level controls for commercial, industrial and community use to align with that of the high risk precinct.</p>	<p>Align CBD Development Exemption Precinct floor level control with that of high risk precinct. Increase CBD zone to include all zoned E2.</p>

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>The outcome provided for in the Draft Revised DCP should not be pursued, as this would offend the objectives of the Environmental Planning and Assessment Act 1979, namely:</p> <p>(a) The objective to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment (section 1.3(b)).</p> <p>(b) The objective to promote the orderly and economic use and development of land (section 1.3(c)).</p> <p>(c) The objective to promote good design and amenity of the built environment (section 1.3(g)).</p>	<p>Council staff do not agree that the draft DCP is in conflict with the objectives of the EP&A Act, as the DCP does look at economic, environmental and social considerations, including the cost of damage and clean up of flood events, which covers Section 1.3(b) and (c). In regards to Section 1.3(g), Council's requirement to develop in an appropriate way considering flood risk, including use of flood compatible materials, is considered to meet this objective.</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>The proposed controls would unreasonably prohibit future modifications or development at the Lismore Square Shopping Centre, and have an adverse effect on land values for commercial and industrial assets in Lismore.</p> <p>Overly prescriptive controls will have an adverse effect on land values for a large number of commercial and industrial assets throughout the floodplain.</p> <p>On the current drafting, a modest partial redevelopment of the Lismore Square Shopping Centre affecting 15% of the current development would be prohibited under these prescriptive controls.</p>	<p>Council can consider development that does not meet development controls as long as objectives of DCP are met.</p> <p>Council staff must take a holistic approach to development and there are certain areas of the floodplain where intensification is not appropriate. Council has an obligation not only to landowners but the entire community of the local government area.</p> <p>Council can consider alternatives to prescriptive controls if objectives can be met.</p>	<p>Update DCP to indicate that in instances where multiple risk precincts apply that Council will consider the extent of the risk precincts and the type of development in considering controls to apply. Council would expect development to avoid highest risk areas where possible.</p> <p>Make clearer that alternatives to prescribed development controls can be considered if objectives are met.</p>

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>Adoption of the DCP is premature and relies upon an unadopted floodplain risk management plan. Council should exhibit the flood prone lands package as a whole and defer the Draft Revised DCP until the floodplain risk management plan is adopted.</p> <p>The Draft Revised DCP should not be adopted until:</p> <p>(a) A Flood Study is adopted by Council following public exhibition and consultation.</p> <p>(b) The Lismore FRMS, or any successor flood risk management study, is adopted by the Council following public exhibition and consultation.</p> <p>(c) The Lismore FRMP, or any successor flood risk management plan, is adopted by the Council following public exhibition and consultation.</p> <p>(d) It is known whether the Lismore LEP will be amended in the manner currently suggested by the Draft Revised DCP.</p>	<p>The land use planning component of the FRMP was separated from the overall plan for the express purpose of developing the DCP. This 'interim report' and DCP have been presented to Council and to the public. The FRMP will not be finalised until the SES Local Flood Plan is finalised in 2023. Given timeframes for finalisation and exhibition, waiting for a final FRMP will mean the DCP would not be adopted until mid-2024 at the earliest. It is considered necessary to adopt a new DCP based on updated modelling to ensure that Council is only approving development that is compatible with the flood function of the land.</p> <p>A flood study and floodplain risk management study have been exhibited, finalised and noted by Council.</p> <p>As stated above the land use planning and development control section of the FRMP has been separated for the purpose of developing DCP controls.</p> <p>Amending the LEP, if deemed necessary, will follow adoption of the DCP and following a visioning process for the future of Lismore.</p>	No change
		It is unclear how the last sentence of section 3.5 of the Draft Revised DCP is to be applied or enforced, given it conflicts with the three-step process outlined in section 1.3 of the Draft Revised DCP.	If an area is marked as extreme risk but is within the South Lismore or CBD precinct boundaries, the controls for the extreme risk precinct will apply.	Update DCP to provide more clarity about extreme risk areas within the defined South Lismore and CBD precinct boundaries.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		<p>McConaghy's respectful submission is that the outcome provided for in the Draft Revised DCP should not be pursued, as this would offend the objectives of the Environmental Planning and Assessment Act 1979, namely:</p> <ul style="list-style-type: none"> (a) The objective to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment (section 1.3(b)). (b) The objective to promote the orderly and economic use and development of land (section 1.3(c)). (c) The objective to promote good design and amenity of the built environment (section 1.3(g)). 	<p>Council staff do not agree that the draft DCP conflicts with the objectives of the EP&A Act, as the DCP does look at economic, environmental and social considerations, including the cost of damage and clean up of flood events, which covers Section 1.3(b) and (c). Regarding Section 1.3(g), Council's requirement to develop in an appropriate way considering flood risk, including use of flood compatible materials is considered to meet this objective.</p>	
14	Westpac Rescue Helicopter Service	<p>Requests a more flexible planning control is inserted as an additional item in the concessional development provision, not linked to the floodway status, as follows:</p> <p>In the case of the [rescue helicopter site], any alterations and additions to the existing development reasonably required for continuing operations at the site.</p>	<p>The organisation could be considered an emergency services organisation or acting on behalf of an emergency services organisation, therefore additions and alterations to an existing emergency services facility are permitted without consent under the SEPP (Transport and Infrastructure), therefore the DCP does not apply, and no amendment is necessary. For modifications where the DCP does apply, Council is able to consider applications on their merit.</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
Survey submissions				
1	Liam Bolitho	<p>If minimum height for house raising is enforced without any flexibility, then there may be engineering issues and practical limitations to house raising. For example if someone wants to raise their house 4.5m but the flood planning level is 5.1m above ground height, they should be able to just go to 4.5m.</p> <p>Request an alternative provision where households are able to raise house as high as practically possible</p>	<p>Council can consider instances where an applicant wants to raise house but cannot meet the flood planning level requirement. While the complying development pathway may require floor levels to be above flood planning level, a development application can propose a solution that doesn't meet development control as long as objectives of DCP are met. This example would be an instance of where objectives would be met.</p> <p>It is not considered necessary to include a provision for house raising in the DCP. Could consider including more information when an alternative to development controls may be considered.</p>	Update DCP to indicate that alternative solutions can be considered as long as objectives are met.

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
2	Helen Robinson	The map is wrong. Almost all the houses that were devastated in 2022 had never flooded before and won't until there is a flood of similar proportion. Support all on flood plain to move off it. It is only thing that makes sense. Flood toughening of buildings ignores the massive loss of personal possessions. It also ignores immense difficulties of rescuing people in South Lismore.	<p>Council has confidence in Engeny's modelling and does not agree that the map is wrong. The modelling shows that the 2022 flood was an extreme event.</p> <p>The DCP is focused on future development and risk. It does not relate to buybacks or moving people off the flood plain.</p> <p>The DCP recommends that flood safe plans are developed so people and businesses can evacuate themselves and valuables during flood events.</p> <p>In terms of South Lismore, the DCP indicates that intensification of residential development is not appropriate in this area due to flood evacuation issues.</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
3	Yagia	Need safe rooms and roof access. The bathrooms should be safe rooms from flooding with access to the ceiling and outside through the roof with emergency flares.	<p>For areas of highest risk, Council is proposing that there is no additional residential. In the CBD for shop-top housing refuge above the PMF will be required.</p> <p>In areas of lower risk, it is not considered necessary to mandate roof access in development or safe rooms, which would need to be above PMF, making it impractical.</p> <p>Council is proposing to increase flood planning level to improve safety, however this level is for all habitable rooms and is proposed to be based on the 1%AEP + a climate change factor, or the 0.2%AEP.</p> <p>Improving evacuation processes is considered the best way in which to ensure safety during flood events.</p>	No change
4	Mike Roberttson	The map is too small and unclear to offer any firm opinions. However, there is plenty of land, currently undeveloped, that can be used, where there is NO possible future flood threat.	The mapping is available on Council's website at higher resolution. Council continues to investigate flood-free land suitable for residential development across the LGA.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
5	Simon van Grootel	Either Council / State Government buys back the land on which no development is allowed or some form of commercially viable and appropriately safe development should be allowed. It is unreasonable to ban all development on undeveloped land but continue to charge rates to owners.	<p>Based on updated modelling, there are some areas of the floodplain where it has been determined that most development types are unsuitable.</p> <p>Council may consider updating ratings category to align better with uses allowable on land e.g. commercial > farmland.</p> <p>Council will continue to make representations to the State Government about support for owners of commercial and industrial land.</p>	No change
6	Dian Edwards	There should be no new development at all in the flood plain. It is not feasible to raise houses over the maximum perceived floods. Unless development is high-rise units with lifts with nothing but car parking below the maximum perceived flood heights this loss and trauma should never be allowed to occur again. I believe Lismore should be abandoned and put back to green flood and wetlands with pop up stalls and parks.	<p>The floodplain extends to areas that would only be inundated very rarely (greater than every 10,000 years for example). Council is taking a holistic and risk-based approach to flood planning that takes into account economic, social and environmental impact. Disallowing all development in the flood plain would have significant economic and social impacts.</p> <p>There will be a visioning exercise regarding the future of Lismore. Following this, Council may choose to revisit the DCP as well as the LEP.</p>	No change
7	Victoria Lane	If can't use our land to build for family, which was what the land was bought for, then you are taking so much more away than the flood did. Feels stuck with 10 acres of land in town that is not useable and if it can't be developed it is worth nothing if wanted to sell.	<p>There are already restrictions in South Lismore that limit ability for additional new residential.</p> <p>Council staff need to take a holistic approach to risk, and it is deemed that there is too much risk to intensity development in the South Lismore precinct.</p>	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
8	Toby Lea	The document should state how high above ground level residents were permitted to raise homes before the Feb 2022 flood. Know of people who weren't permitted to go higher than 3.5m above ground before flood.	There is no Council policy on how high homes can be raised, and was not prior to the flood. Council's LEP has height of building controls that may affect how high a home may be raised from ground level. Council will assess development applications for house raisings on their merit and compliance with current controls.	No change
		Council should demand that the NSW Reconstruction Authority explain why the house raising and retrofit scheme is limited to homes with floors at or below the 5%AEP, and advocate for this to be changed so we can have all homes above the flood planning level. It would be cheaper than the flawed buy back scheme that has generated much confusion, anxiety and relived trauma in its piecemeal, opaque approach that has lacked community, consultation and care.	Council is actively discussing the parameters of the Resilient Homes Program with the NRRC.	No change
		Why was the Leycester Creek bypass not recommended for further investigation in the Floodplain Risk Management Study.	This decision was recommended by the then Floodplain Risk Management Committee. CSIRO is completing a catchment-wide model and will be investigating interventions to reduce flood risk as part of that work. Separately DPE has investigated options for large-scale engineered mitigation solutions, including a bypass channel. All these components, however, are separate to this DCP. Once mitigation options are implemented, Council may revise the DCP if risk changes.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
9	Howard Porter	Believes Frank Street should be H4 not H5. The modelling has exaggerated the water movement in Frank Street.	The modelling has been done based on best-available information. It uses a range of flood events. The hazard level applying to the site would change based on the flood event. Council cannot change the hazard level applying to the site as this is governed by the modelling results.	No change
10	Gail Doggett	Frank Street should not be a higher risk area than Charles Street. Frank Street should be a lower risk, from H5 to H4.	The modelling has been done based on best-available information. Council cannot change the hazard level applying to the site as this is governed by the modelling results.	No change
11	Judd Brennand	Anyone that can't have their land used anymore to build a home or business must have rates frozen, and be purchased off them at current prices. If it is impossible to use it should be considered useless and sold to Crown or Council for other uses.	Based on updated modelling, there are some areas of the floodplain where it has been determined that most development types are unsuitable. Council may consider updating rezoning and updating ratings category to align better with uses allowable on land e.g. commercial > farmland. This will follow of visioning process for the future of Lismore.	No change
		I believe it is Council's responsibility to police the laws but not make them so why is this being written by Council and not the NSW Government.	Local government has a responsibility for land use planning within the local government area, including planning on flood prone land.	No change
12	Kara Kennedy	Development applications should be individually risk informed and assessed on a performance basis rather than dictated by a static map. There has been zero commitment from NRRC to flood mitigation. If flood mitigation measures are implemented as they should be, the flood maps will be useless.	Following flood mitigation infrastructure being implemented Council may update its flood study, floodplain risk management plan and DCP.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		There is already a 50cm freeboard so I don't believe an additional "climate change factor" is warranted. When the climate changes the appropriate amendments should be made at that time and not before.	Council is obligated to consider the impact of climate change on development. As developments can have lifespans of multiple decades it is considered appropriate to consider future effects of climate change.	No change
13	Louise Frare	Housing should be another 50cm higher than the new height.	Council staff have recommended the 0.2% AEP + 50cm freeboard. A decision on setting a new flood planning level will be up to the elected Council.	No change
		There should be no new fill for industrial development. Fill makes levels rise and changes water flow. Industrial should be on large pylons like Lismore Square. Preferable development should be out of the flood area as much as possible.	Council currently requires fill in the South Lismore industrial areas, with most of this having already occurred. Balanced cut and fill from on-site is required so that flood storage is not affected. Applicants must also satisfy flood affectation controls so that neighbouring sites are not affected by changes in flood flow. With these controls in place it is considered that there is no significant issue in this precinct. Requiring industrial development to build suspended slab may make development infeasible.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		There should be no residential in the CBD.	Council is not proposing to change what is currently allowed in the CBD. Based on the visioning work proposed for Lismore and the results of the CSIRO flood mitigation work, Council may decide to revise controls applying to the Lismore CBD in the future. Council has also been guided by the case study on Lismore in the Flood Inquiry report Volume 3, which states: "Consider diverse CBD residential development including shop top and other types of increased density above the flood planning level, to bring back life to the business district, combined with improved levee protection and flood mitigation schemes."	No change
14	Maggie Roden	It's time to rezone areas to reflect flood probability	Following the adoption of the DCP, the visioning work for Lismore and any commitments made regarding flood mitigation infrastructure, Council may choose to rezone certain areas of the floodplain to better reflect appropriate uses or functions.	No change
		The red zones should become marsh land and bird habitat regeneration.	Council will work with the State Government to determine appropriate uses and functions of the floodplain.	No change
15	Melanie Vanaria Jamieson	The town is not safe on the flood plane, it should not be a residential area nor CBD. Lismore needs to move.	Council will undertake a visioning process to determine a future vision for Lismore.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
16	Finn S	There needs to be no more building of any sort anywhere the Feb 2022 flood covered. Floods will go higher. Planned retreat is the only strategy. It is not resilience to keep recovering and rebuilding flood after flood.	Council modelling indicates that the February 2022 flood was a rare event. Council's risk precinct look at flood frequency and hazard to determine areas suitable for additional development. However, Council will undertake a visioning process to determine a future vision for Lismore. A strategy for planned retreat would be separate to the DCP.	No change
17	Serge Killingbeck	It's time to move the town. Understand the CBD landlords' situation but need to act for the greater good. Planning to stay is a costly mistake, and short-sighted socially, commercially and financially.	The DCP is separate to decisions around planned retreat. Council will soon undertake community consultation regarding a vision for the future of Lismore. Changes to the LEP and DCP may be an outcome of the visioning work.	No change
		A key consideration for climate change isn't the level but the increased probability.	The level a flood reaches is related to its probability. The proposed addition of a climate change factor to the 1%AEP means that the defined flood event's probability is closer to a 0.2%AEP (1 in 500 probability).	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
18	Robert Roder	Doesn't understand why flood planning level provisions have to apply to non-residential development, where no persons are allowed to reside and therefore no lives are at risk. Thought Council would be trying to encourage industry and business. Council has already lost business to Casino due to not approving development because of excess noise. Also notes that the current 1% +500mm freeboard has not been breached by floodwaters since records began apart from 2022.	Only 25% of floor space has to be above the flood planning level. This has not changed from current DCP. Council must consider issues beyond risk to life, such as damage to property and clean up costs. This is why a proportion of development must be above the FPL. For instances of new development, Council does not consider these changes will impact greatly on development feasibility. For existing development, Council's concessional development provisions provide less onerous controls. Applicants may suggest non-compliance with controls if objectives of DCP are met. It should also be noted that Council must not take into account the effects of climate change and adding a climate change factor is considered an appropriate approach to meeting this requirement.	No change
		The 'Considering flooding in land use planning' states that different flood planning levels can be set for different land uses like commercial and industrial. Council should consider this.	Council's controls provide generous measures for business, including that only 25% of development must be above flood planning level. This has not changed from current DCP. It is not considered appropriate to incorporate less restrictive controls in updated DCP.	No change
19	Ann Jarman	All the flood zone area should be revegetated back to swamp land. This will help disperse water evenly.	Decisions about depopulating, rezoning and repurposing land are separate to the DCP.	No change
		Rain water gauges need to be fixed and emergency signals need to be better resourced and houses out of the flood zone.	Noted. These issues are separate to what the DCP can control.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
20	Yvette Andrews	Frank Street's risk is no lower than Charles Street. Area should be a H4 risk not H5.	The modelling has been done based on best-available information. It uses a range of flood events. The hazard level applying to the site would change based on the flood event. Council cannot change the hazard level applying to the site as this is governed by the modelling results.	No change
21	Virginia White	Would like there to be an active caution mechanism flagged when people are looking to move into pale green zone	All flood prone land will be noted on planning certificates.	No change
		Flood planning level should either be 2022 event of PMF. No new development should be allowed in flood area.	Noted. The floodplain extends to areas that would only be inundated very rarely (greater than every 10,000 years for example). Council is taking a holistic and risk-based approach to flood planning that takes into account economic, social and environmental impact. Disallowing all development in the flood plain would have significant economic and social impacts. There will be a visioning exercise regarding the future of Lismore. Following this, Council may choose to revisit the DCP as well as the LEP.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
22	David Tomlinson	No new development should be allowed below the PMF. Climate change is happening rapidly and the old AEP measures are not valid when the climate is changing. Big floods will happen again.	Council has recommended applying a worst-case climate change factor to the 1%AEP to counter the effects climate change may have on flooding. The floodplain extends to areas that would only be inundated very rarely (greater than every 10,000 years for example). Council is taking a holistic and risk-based approach to flood planning that takes into account economic, social and environmental impact. Disallowing all development in the flood plain would have significant economic and social impacts. There will be a visioning exercise regarding the future of Lismore. Following this, Council may choose to revisit the DCP as well as the LEP.	No change
23	Catherine Tomlinson	Increase the flood planning level to the PMF. It is crazy allowing development in areas that we know will flood.	Council has recommended applying a worst-case climate change factor to the 1%AEP to counter the effects climate change may have on flooding. The floodplain extends to areas that would only be inundated very rarely (greater than every 10,000 years for example). Council is taking a holistic and risk-based approach to flood planning that takes into account economic, social and environmental impact. Disallowing all development in the flood plain would have significant economic and social impacts. There will be a visioning exercise regarding the future of Lismore. Following this, Council may choose to revisit the DCP as well as the LEP.	No change
24	Brad Paull	Property includes some area of medium risk. Doesn't understand why.	Staff have contacted respondent regarding the mapping. Drainage area near property/ground level a factor in risk precinct applied. Not expected to have impact on property in terms of development potential.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
25	Ros Martens	There should be not further commercial development in high risk precincts or the South Lismore area. Council needs to be working to remove all residential and the majority of commercial business in the extreme and high-risk areas.	Council staff have proposed to continue to allow commercial and industrial development in high risk and South Lismore zones due to the lower risk to life from this type of development. Controls have been tightened to improve safety and damage from flood events.	No change
26	Annie Kia	We are on track for 3 degrees of global warming. LCC's planning controls must be based on this reality.	Council's proposed flood planning level uses a worst-case climate change scenario, which would see average global temperatures increase by more than 3 degrees by the end of the century.	No change
		Historical analysis by Professor Jerry Vanclay shows that very large floods occurred in the historical record. Calculation of AEP must integrate this data, and this should be reflected in the DCP.	Council may consider revising flood studies following the completion of the CSIRO catchment-wide model. Council may then choose to update the DCP. In the interim, it is considered appropriate to adopt a new DCP in order to stop inappropriate development.	No change
		The area on rural properties seems dismissive. It is unclear where the mapping of the non-urban areas is. It is unclear how Council can indicate flood levels when there was no effort to ask community to record levels after 2022 flood.	It is agreed that the rural section of the DCP could be improved. Council is waiting on modelling data from CSIRO, after which the flood mapping can be extended to the entire LGA. In the interim, Council's flood planning area map and the Richmond River flood study can be used to inform flood risk and appropriate controls. This section can be updated to be more informative.	Update rural section to add more context and more information on mapping resources
27	Nathan Kesteven	Should allow flood-resistant development to occur in CBD extreme risk precinct area if appropriate, such as cafes.	Council staff have been informed by the floodplain risk management plan in determining that the extreme risk precinct is not appropriate for new development.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		Medium density housing should be allowed if minimum floor height for residential is at second storey and above.	Council must also consider flood evacuation and potential damage costs when indicating appropriate areas for development. It is considered that the high-risk zone is inappropriate for residential intensification. This is based on recommendations in Council's floodplain risk management plan.	No change
		South Lismore should also have medium density development allowable if residential is above the flood planning level.	As above	No change
28	Nanette Nicholson	The map does not show the extreme risk in most of South Lismore. The red zone should be much more extensive and reflect accurately the extent of the 2022 flood.	The flood risk precinct mapping is based on a number of modelled flood events, including those rarer and less rare than the 2022 event. Council staff are comfortable that it is an accurate representation of risk across the modelled flood events.	No change
		Extreme weather events induced by climate change will become more severe and more frequent. This is well established. The next flood could be only as far away as the next La Niña. Lismore needs to take this very seriously and plan for a full retreat from the flood plain.	Council's flood planning level incorporates a worst-case climate change factor in order to better protect new development from the impacts of climate change. A plan to retreat from the flood plain is separate to the DCP. If such a decision is pursued then the DCP could be updated in response.	No change
29	Hugh Nicholson	I agree with the restrictions in the red zone but am concerned that the red zone is not as extensive as it should be. Mapping should take into account the Feb/March 2022 flood heights.	The flood risk precinct mapping is based on a number of modelled flood events, including those rarer and less rare than the 2022 event. Council staff are comfortable that it is an accurate representation of risk across the modelled flood events.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		The 2022 flood is a wake-up call for the potential of extreme events caused by the looming uncertainty of climate change. It is time for Lismore to accept that it is built on a flood plain, at the confluence of 2 rivers with large catchments. We need to withdraw from the flood plain.	Based on best available modelling, the 2022 event was a rare event. Council staff are proposing a worst-case climate change factor to add to the flood planning level to better protect new development. A plan to retreat from the flood plain is separate to the DCP. If such a decision is pursued then the DCP could be updated in response.	No change
30	Darron Wolter	The video states that the new flood planning levels won't cover every event. This is a failure.	Flood planning is based on probability. It is standard across NSW and Australia to apply the 1%AEP as the defined flood event. This means there is a 1% chance this level could be breached every year. It is considered setting the flood planning level at the PMF (ie covering every possible event) is not an appropriate solution taking into account economic and social impacts. Council's suggested flood planning level is equivalent to a 1 in 500 probability event, which is considered to be a risk-averse approach.	No change
		If it is unsafe to build a new residential house in H5 and H6 hazard areas, then all residential from these areas need to be removed	The DCP cannot control removal or relocation of homes. It is focused on future risk, rather than existing or residual risk.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
31	Brian Henry	The decision on a revised DCP proposing changes to current heights should be delayed until out of flood land is made available for both residential, commercial and industrial use. This will allow us to continue to attract both reinvestment and new investment to Lismore by having an alternative; that is, either develop on existing flood impacted land with its restrictions or develop out of flood. If possible, we should wait for the release of the CSIRO report as some of the DCP restrictive flood levels may not be required in the future.	Council staff believe it is appropriate to implement a new DCP at present in order to stop development that is considered inappropriate. Following outcomes of the CSIRO project, Council may update its DCP to better reflect risk. Council is working with the NRRC and others to increase the amount of land available for residential, commercial and industrial uses.	No change
		The use of flood compatible materials should be compulsory.	Council's DCP indicates that flood compatible materials need to be used if below the flood planning level, and recommended above.	No change
		All properties in at least the red and orange flood zone should have an approved flood management plan.	Council requires evacuation plan for all development in extreme and high risk zones. Additionally, flood safe management plans are required for commercial and industrial development. Because developers of property are not necessarily those living in the homes, setting this requirement for residential is not considered necessary	No change
		Owners/tenants (especially of commercial/industrial) should be permitted back on the property whilst flood waters remain (say at 500mm) as the key to flood clean up is to hose the muddy residue into the water as it subsides.	Evacuation management is not something that can be controlled through a DCP.	No change

Submission number	Name	Issue summary	Officer response	Recommended change to DCP
		Consider the option of permitting medium density apartments with ground floor parking in orange areas located in and around the CBD where the DCP is suggesting no residential	Council staff recommend focusing any increase in residential density, including tourist and visitor accommodation, to the CBD precinct.	No change
		Ensure we return to the "good old days" when BOM and SES forecasts and actions greatly assisted the community in responding effectively in times of major floods, particularly in times when the levee is topped. Decentralise authority.	This is a concern that is unrelated to the DCP. It is understood that the flood inquiry has led to some changes in how State entities will operate during flood events.	No change
32	Judith Forsyth	The DCP is not clear about how the climate change component has been determined and the flood risk map is indecipherable.	The DCP in its definitions section explains how Council has calculated the climate change factor. The risk precinct mapping is also available on Council's website, accessible to the public.	No change


Survey Responses

11 June 2023 - 17 July 2023

SUBMISSION - Revised Flood Prone Lands DCP

Your Say Lismore

Project: Public Exhibition - Revised Flood Prone Lands DCP



VISITORS					
62					
CONTRIBUTORS			RESPONSES		
37			38		
0	0	37	0	0	38
Registered	Unverified	Anonymous	Registered	Unverified	Anonymous



Respondent No: 1

Login: Anonymous

Email: n/a

Responded At: Jun 19, 2023 21:57:33 pm

Last Seen: Jun 19, 2023 21:57:33 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Yes
Q5. What type/s of properties (tick all that apply)	Residential (owner-occupier)
Q6. Have you ever experienced flood damage to your property or business?	Yes
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes

Q13. Why did you answer Yes or No to the previous question?

I am writing to express my concerns regarding the proposed minimum height for house lifting, specifically the proposed requirement of 13.6 meters. While I understand the need for regulations to ensure safety and uniformity, I would like to bring to your attention the potential engineering restrictions that some homeowners may face if this minimum height is enforced without any flexibility. As a resident and an active member of the community, I have spoken to several homeowners who are interested in raising their houses for the purpose of flood risk mitigation. These homeowners have shared their concerns about the proposed minimum height, as it could pose significant challenges due to engineering and practical limitations. In many cases, the level of the ground where the house is located, may not allow for raising the structure to the full height of 13.6 meters because lifting a house greater than 5m off the ground creates many engineering and practical challenges. For example, a homeowner who's house is built on land at 8.5m AHD wants to raise their house but lifting it more than five meters to meet the 13.6m requirement creates enormous practical and engineering problems. As a result the house lift is not feasible and the homeowner must continue to reside in a high risk situation. Requiring all houses to meet this specific minimum height without considering such limitations could result in some residents being unable to raise their homes altogether, despite their genuine desire to do so. To address this issue, I kindly request that the Lismore City Council consider incorporating an alternative provision within the proposed changes. This provision would allow homeowners to raise their houses to the highest level possible within the confines of engineering and practical restrictions, even if it falls below the mandated 13.6 meters. For example if a homeowner lifts their house 4.5 meters above the ground to a height of 13m the council should consider approval as a lift of 5.1 meters is not feasible. This would provide a fair and practical solution that accommodates both the council's objectives and the specific circumstances of each property. I believe that by implementing this suggested option, the council can strike a balance between blanket safety requirements and the flexibility needed to support residents who wish to improve their risk of flooding. It would demonstrate a commitment to considering individual situations and ensuring that regulations are not overly restrictive, thus encouraging community participation in house lifting initiatives and increasing resilience and safety within the community. I kindly request that you review and consider my concerns and proposal during the decision-making process. If necessary, I would be more than willing to provide additional information or engage in a constructive discussion. Thank you for your attention to this matter. I have confidence that the Lismore City Council will carefully consider the potential consequences of the proposed minimum height and make a well-informed decision that upholds the best interests of the community. Yours sincerely, [REDACTED]

Q14. Is there anything else you would like to add to your submission?

not answered



Respondent No: 2

Login: Anonymous

Email: n/a

Responded At: Jun 20, 2023 08:49:15 am

Last Seen: Jun 20, 2023 08:49:15 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	No
Q13. Why did you answer Yes or No to the previous question?	Seems an appropriate response to flood risk.
Q14. Is there anything else you would like to add to your submission?	not answered



Respondent No: 3

Login: Anonymous

Email: n/a

Responded At: Jun 20, 2023 16:19:04 pm

Last Seen: Jun 20, 2023 16:19:04 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	No
Q8. What do you think the new flood planning level should be?	not answered
Q9. Do you agree with the red zone restrictions?	No
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	<p>because that map is wrong and because almost all the houses that were devastated in 2022 Big Flood had NEVER flooded before and wont until there is a flood of similar proportions so this is all a waste of time. Support all on the flood plain in the urban area to move off it. It is the only thing that makes sense according to DRR around the world in such a wealthy society. Flood toughening of buildings totally ignores the massive loss of personal possessions including furniture, clothes and other household accoutrements and the massive devastation loss and severe damage to these occurs. It also ignores the immense difficulties of rescuing the people of South Lismore when situations change as they did in the Big Flood.</p>
Q14. Is there anything else you would like to add to your submission?	not answered



Respondent No: 4

Login: Anonymous

Email: n/a

Responded At: Jun 22, 2023 11:41:26 am

Last Seen: Jun 22, 2023 11:41:26 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	Safe rooms and roof access
Q14. Is there anything else you would like to add to your submission?	The bathrooms should be safe rooms from flooding with access to the ceiling and outside through the roof with emergency flares



Respondent No: 5

Login: Anonymous

Email: n/a

Responded At: Jun 22, 2023 15:34:06 pm

Last Seen: Jun 22, 2023 15:34:06 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	Other (please specify) No-one imagined the possibility of the Feb. 2022 level & no-one knows the extent to which future climate change can be limited too., so lets not make further mistakes. Assume the PMF could be much, much higher.
Q9. Do you agree with the red zone restrictions?	No
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	The map is too small and unclear to offer any firm opinions. However, there is actually plenty of land, currently undeveloped, that can be used, where there is NO possible future flood threat.
Q14. Is there anything else you would like to add to your submission?	Preventing future catastrophes is one thing, but if you drive down- say Elliott Rd now, you'll see that virtually nothing has happened in 16 months to assist residents still suffering from the last flood..



Respondent No: 6

Login: Anonymous

Email: n/a

Responded At: Jun 23, 2023 10:39:49 am

Last Seen: Jun 23, 2023 10:39:49 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	No
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Yes
Q5. What type/s of properties (tick all that apply)	Commercial (investment property) Industrial (investment property)
Q6. Have you ever experienced flood damage to your property or business?	No
Q7. Do you believe that Council should increase its flood planning level?	No
Q8. What do you think the new flood planning level should be?	not answered
Q9. Do you agree with the red zone restrictions?	No
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	Either Council / State Government buys back land which no development is allowed or some form of commercially viable & appropriately safe development should be allowed.
Q14. Is there anything else you would like to add to your submission?	See comments above. It is unreasonable to ban all development on undeveloped land but continue to charge rates to owners.



Respondent No: 7

Login: Anonymous

Email: n/a

Responded At: Jun 23, 2023 14:14:33 pm

Last Seen: Jun 23, 2023 14:14:33 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The Probable Maximum Flood (PMF) event (largest conceivable flood)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	Because I believe there should be no new development at all in the flood plain. It is not feasible to raise houses over the maximum perceived floods. Unless development is highrise units with lifts with nothing but car parking below the maximum perceived flood heights this loss and trauma should never be allowed to occur again.
Q14. Is there anything else you would like to add to your submission?	I believe Lismore should be abandoned and put back to green flood and wetlands with pop up stalls and parks.



Respondent No: 8

Login: Anonymous

Email: n/a

Responded At: Jun 28, 2023 11:25:49 am

Last Seen: Jun 28, 2023 11:25:49 am

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Because , I Own 10 acres in South Lismore and the NRRC, think we didn't flood here , and that is not true it flooded in South Lismore over my 1466 floor level , but seems they think we are not at risk to our lives and can not get buy back , I Feel that if we can't use our land to build for my family as that's why I brought it in the first place , that you have just taking so much more away from me and my family then the flood did , we are stuck with 10 acres of land in town that we can't use ,and if we wanted to sell . that now Makes it worth nothing , So its just seems like we have worked all our life for nothings ,I'm shaw you can understands how we are feeling to loss every thing , then you to slab us all again with this letter in the mail this week

Q14. Is there anything else you would like to add to your submission?

everyone talks shit, we really don't no what our future holds



Respondent No: 9

Login: Anonymous

Email: n/a

Responded At: Jul 02, 2023 06:46:00 am

Last Seen: Jul 02, 2023 06:46:00 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Yes
Q5. What type/s of properties (tick all that apply)	Residential (owner-occupier)
Q6. Have you ever experienced flood damage to your property or business?	Yes
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	<p>The document should state how high above ground level residents were permitted to raise their homes to before the Feb 2022 event and how high they will be permitted to under this new plan. I know of some residents in our local streets that raised their homes before the flood but were not permitted to go higher than 3.5m above ground. Some clarification and transparency around this would help assuage community concerns and fears about future floods and the possibility of raising our homes given that the NRRC scheme is woefully inadequate for house raising and retrofitting.</p>

Q14. Is there anything else you would like to add to your submission?

We support the proposed DCP. However, the community needs financial support to raise their existing homes if the Council is going to raise the flood planning level to 13.6m. The NRRC house raising and retrofit scheme is limited to homes with habitable living areas under the 5% AEP flood level so the proposed DCP is at odds with the NRRC program. I think the Council owes it to the community to take this to the NSW Reconstruction Authority and demand an explanation for why the NRRC house raising and retrofit scheme is limited to the 5% AEP flood level and advocate for this to be changed so we can all have homes above the proposed flood planning level. It would be a lot cheaper than the flawed buyback scheme that has generated much confusion, anxiety and relived trauma in its piecemeal, opaque approach that has lacked community consultation and care. Our home in Girards Hill is currently at 12.9m and was raised in 1990. We want to stay, and financial support to raise our home another 70-100cm would give us greater confidence and peace of mind in this decision. Raising the CBD levee has been costed at \$800M and would deliver much larger savings (both economic and social) in both a 5% and 1% AEP flood according to the Engeny report. Making this an issue right now would be poorly timed given the possible impact on South Lismore who have been poorly serviced by the NRRC Resilient Homes fund. However, it would be encouraging to see this built after the CSIRO report is released but before the next La Nina. Why has a Leycester Creek bypass been "not recommended for further assessment" when this could divert water away from South Lismore? An explanation from Council would be helpful.



Respondent No: 10

Login: Anonymous

Email: n/a

Responded At: Jul 02, 2023 21:33:40 pm

Last Seen: Jul 02, 2023 21:33:40 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Yes
Q5. What type/s of properties (tick all that apply)	Residential (investment property)
Q6. Have you ever experienced flood damage to your property or business?	Yes
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	There needs to be change but Franks St is very high, there was little water movement, I lost no wooden building materials under my house for my extension I was building that demonstrates that, in short, it is a safe area although visually close to the Lycester creek.
Q14. Is there anything else you would like to add to your submission?	Our land at Gate level is 10.489m or 10.88m at road Centre and my floor level is 13.15m and many floor levels in the st are higher again , up to 14.2m. I believe Frank St should be H4 not H5 as there are other streets with similar heights in the H5 category. I believe the modeling has exaggerated the water movement in Frank St making it appear worse than it is. My request is to make the bulk of Frank St H4 rather than H5.



Respondent No: 11

Login: Anonymous

Email: n/a

Responded At: Jul 03, 2023 13:23:41 pm

Last Seen: Jul 03, 2023 13:23:41 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Not sure
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	No
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	I live in Frank Street and do not think it is a higher risk area than Charles street
Q14. Is there anything else you would like to add to your submission?	I would like Frank Street to be rezoned to a lower risk . From H5 to H4.



Respondent No: 12

Login: Anonymous

Email: n/a

Responded At: Jul 04, 2023 18:39:18 pm

Last Seen: Jul 04, 2023 18:39:18 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The February 2022 flood event

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

I believe anyone who has land that cannot be used anymore to build a home or business must have all rates frozen and be purchased off them at current prices. If it's impossible to use it should be considered useless and handed back to crown or council land for other uses.

Q14. Is there anything else you would like to add to your submission?

Yes, I believe it's council's responsibility to police the new laws but not make them, therefore why is this survey being written by council and not NSW government?



Respondent No: 13

Login: Anonymous

Email: n/a

Responded At: Jul 04, 2023 22:24:47 pm

Last Seen: Jul 04, 2023 22:24:47 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

No

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Commercial (investment property)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

No

Q8. What do you think the new flood planning level should be?

not answered

Q9. Do you agree with the red zone restrictions?

No

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Development applications should be individually risk informed and assessed as on a performance basis rather than dictated by a static map. The Australian and NSW Governments have committed more than \$3.5 billion to support the recovery, repair and rebuilding of impacted communities. The NRRC website list the priorities for this funding with zero commitment to flood mitigation. Funding should be committed to flood mitigation to protect life, property, the community, and this huge \$3.5Billion investment or this all risks being lost in the next flood event. If flood mitigation measures are implemented as they should be, the flood maps will be useless. There is already a 50cm freeboard so I don't believe an additional "climate change factor" is warranted. When the climate changes the appropriate amendments should be made at that time and not before.

Q14. Is there anything else you would like to add to your submission?

Please keep us updated on decisions



Respondent No: 14

Login: Anonymous

Email: n/a

Responded At: Jul 05, 2023 05:46:19 am

Last Seen: Jul 05, 2023 05:46:19 am

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (investment property)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

No

Q8. What do you think the new flood planning level should be?

not answered

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Have viewed in relation to future development

Q14. Is there anything else you would like to add to your submission?

Zoning appears unfair. Eg. My properties kerb AHD is equivalent to the lever wall, yet is treated the same as lower areas eg. CBD.



Respondent No: 15

Login: Anonymous

Email: n/a

Responded At: Jul 05, 2023 09:14:28 am

Last Seen: Jul 05, 2023 09:14:28 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	Other (please specify) Housing to be another 50cm higher then the new height. Industrial where new height BUT NO FILL . Fill makes levels rise and changes were the water flows. Industrial should be on large pylons like Lismore square. Even if only a meter off the ground. But preferably..keep as much new development out of the flood zones.
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	Housing to be another 50cm higher then the new height. Industrial where new height BUT NO FILL . Fill makes levels rise and changes were the water flows. Industrial should be on large pylons like Lismore square. Even if only a meter off the ground. But preferably..keep as much new development out of the flood zones.
Q14. Is there anything else you would like to add to your submission?	No residential in the CBD.



Respondent No: 16

Login: Anonymous

Email: n/a

Responded At: Jul 05, 2023 09:29:59 am

Last Seen: Jul 05, 2023 09:29:59 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	No
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	No
Q13. Why did you answer Yes or No to the previous question?	I agree it's time to rezone areas to reflect flood probability
Q14. Is there anything else you would like to add to your submission?	The focus on marsh land and bird habitat regeneration to red zones.



Respondent No: 17

Login: Anonymous

Email: n/a

Responded At: Jul 05, 2023 17:20:13 pm

Last Seen: Jul 05, 2023 17:20:13 pm

IP Address: n/a

Q1. Name	PMF is above 13.4 ADH, so with loft conversions how many houses (%),would then be fine as they are
Q2. Email	[REDACTED]
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Yes
Q5. What type/s of properties (tick all that apply)	Residential (owner-occupier)
Q6. Have you ever experienced flood damage to your property or business?	Yes
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	No airbnb under houses
Q14. Is there anything else you would like to add to your submission?	Yes I'd like to see low emission betterment build incorporating; Non water absorbing insulation Shower room rather than bathroom Microwave ovens No gas Domestic on roof heat pumps Higher grass cutting 150mm No combustion heating Plant back trees on dog racing track/community garden Plant back forest higher up the catchment Ban under house development Reconsider demolitions Top up the \$20k so ppl can get on with repair and resilience



Respondent No: 18

Login: Anonymous

Email: n/a

Responded At: Jul 05, 2023 18:04:44 pm

Last Seen: Jul 05, 2023 18:04:44 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

Other (please specify)

The town is not safe on the flood plane, it should not be a residential area nor cbd.

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

No

Q13. Why did you answer Yes or No to the previous question?

Lismore is not a safe place for residence.

Q14. Is there anything else you would like to add to your submission?

Lismore needs to move



Respondent No: 19

Login: Anonymous

Email: n/a

Responded At: Jul 06, 2023 20:39:22 pm

Last Seen: Jul 06, 2023 20:39:22 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

There needs to be NO more building of any sort anywhere the Feb 2022 flood covered. And it will go higher.

Q14. Is there anything else you would like to add to your submission?

Planned retreat off the flood plain is the only viable strategy. It is not resilience to keep recovering and rebuilding flood after flood after flood, it is stupidity.



Respondent No: 20

Login: Anonymous

Email: n/a

Responded At: Jul 06, 2023 21:26:09 pm

Last Seen: Jul 06, 2023 21:26:09 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

We got lucky in February 2022. It's time to move the town. Key consideration for climate change isn't the level but increased frequency of extreme weather events i.e. 1:500 becomes 1:5, read the research not the press releases, please

Q14. Is there anything else you would like to add to your submission?

While I understand the concerns of CBD landlords if we move the town, we have to consider the greater good. Next time the insurance companies will have nothing to do. Planning to stay put is a mistake that will cost us dearly. It's very short sighted, socially, commercially and financially. Better to use reconstruction funding to help people and businesses to move off the flood plain, out of harms way now, while we have time to plan the retreat with care. Reconstruction of the community doesn't mean physically staying put. After the next one, the federal and state Governments may not be so willing to pay if it becomes apparent there's been no real plan to move the town out of harms way in the medium to long term, as has occurred elsewhere in Australia on numerous occasions



Respondent No: 21

Login: Anonymous

Email: n/a

Responded At: Jul 09, 2023 21:40:46 pm

Last Seen: Jul 09, 2023 21:40:46 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (investment property)

Industrial (investment property)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

No

Q8. What do you think the new flood planning level should be?

not answered

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Please read the following information regarding changes I would like to see to the DCP... I notice that Council plans to change the 'minimum floor level' applicable to all developments that require a DA. While there may now be a case to raise those floor levels for Residential Dwellings, I fail to see why this change should also be applied to Non Residential development, where no persons are allowed to reside, and therefore, no lives are at risk. After the disastrous flood events of 2022, I would have thought that Council would be trying to encourage Industry and Business in this area instead of introducing additional burdens for new industry to overcome. To that end I should mention that Council lost (to Casino) what would have been a new Lismore enterprise, when they indicated to a prospective buyer of my Light Industrial Land, that his proposed DA would not be approved (citing noise issues). However, nearby industries of a similar nature (emitting similar noise levels) already exist. In fact, one nearby, ill-placed IN1 (general Industrial) business, emits extensive noise. That above-mentioned reality, combined with these new proposed floor level changes, makes me think that Council is intent on driving Industry away, instead of encouraging it. It also seems odd that Council would want to add extra burden to the already mammoth tasks faced by recent purchasers of land in Krauss Avenue, South Lismore, which was formerly owned by Council. As you would be aware, Council sold these blocks just prior to the 2022 flood event... don't the purchasers have enough to contend with, without these added burdens that Council wishes to introduce? Does Council have any conscience at all? I'm not saying that industrial DA's (on flood prone land) could not voluntarily meet the proposed increased floor levels, but it would be nice to have the choice. Please remember that we are talking about Non-Residential land here, where no lives are at risk. Certainly... ensure that all new buildings are strong enough to withstand future flood impacts, but I fail to see how an increased floor level (that would still be breached by a repeat of the Feb 2022 flood) would be of any noteworthy benefit in a Non-Residential situation. I have also noted that the existing applicable (1 in 100 year) floor level, plus the 500mm freeboard requirement, doesn't appear to have been breached by floodwater (since records began around 1870) until 2022, and the NRRC refers to the 2022 flood as 'an extraordinary event that was unlikely to happen again'. Please also note this extract taken from 'Considering Flooding in Land Use Planning' (July 2021)... 'Council may also have different FPLs based on the land use type (for example, residential, industrial, commercial developments) these should be documented in their DCP'. All existing Non-Residential DA's were approved at or below the existing floor level requirements (still above almost all recorded floods since 1870), yet newcomers will be expected to pay considerably more to build to these proposed increased floor levels, when no lives are at risk... does that seem fair? Surely if developers (in Non-Residential areas of flood prone land) choose to build at the existing floor levels, they would be well aware of any associated flood risks (which would still exist at the newly proposed floor heights). What are you thinking Lismore Council?? How about a fair go for local industry and a fresh approach to Council's views in this regard?

Q14. Is there anything else you would like to add to your submission?

Please consider my reply to question 12 of this submission. Basically, I don't feel that increased FPLs should apply to Non-Residential DA's. The existing FPL seems to be more than sufficient for Non-Residential, Non Life Threatening zones.



Respondent No: 22

Login: Anonymous

Email: n/a

Responded At: Jul 10, 2023 14:09:48 pm

Last Seen: Jul 10, 2023 14:09:48 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

I believe all the flood zone area should be revegetated back to swamp land. This will help disperse water evenly and hopefully there will not be big gushes of water zooming down the river.

Q14. Is there anything else you would like to add to your submission?

Rain water gages need to be fixed and emergency signals in working order. SES need to be better resourced and houses out of the flood zone.



Respondent No: 23

Login: Anonymous

Email: n/a

Responded At: Jul 10, 2023 14:20:53 pm

Last Seen: Jul 10, 2023 14:20:53 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Not sure

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

No

Q8. What do you think the new flood planning level should be?

not answered

Q9. Do you agree with the red zone restrictions?

No

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Frank St is no lower than Charles St

Q14. Is there anything else you would like to add to your submission?

We should be H4 not H5



Respondent No: 24

Login: Anonymous

Email: n/a

Responded At: Jul 11, 2023 15:38:46 pm

Last Seen: Jul 11, 2023 15:38:46 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The February 2022 flood event

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Would like there to be an active caution mechanism flagged when people are looking to move into pale green zone.

Q14. Is there anything else you would like to add to your submission?

I'm in 2 minds as to whether to nominate the PMF as the FPL or the 2022 flood. Whichever, for me it's a no brainer, no new development in the flood area, make the move now,



Respondent No: 25

Login: Anonymous

Email: n/a

Responded At: Jul 11, 2023 16:37:48 pm

Last Seen: Jul 11, 2023 16:37:48 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

No new development should be allowed below the PMF. Climate change is happening rapidly and the old AEP measures are not valid when the climate is changing. We do not know when or how high the next flood maybe. But big floods will happen again. We have to ensure that we do not come to regret decisions made now when there is no need. We are still paying heavily for the mistakes made in the 1950s and 1960s. It is time to stop this. We have to adapt. Allowing new development in areas that flood is a huge mistake. It will be costly in terms of resources and possibly lives and livelihoods.

Q14. Is there anything else you would like to add to your submission?

Have Councillors considered the legal ramifications for ratepayers and themselves if they allow new development in areas which they know will flood?



Respondent No: 26

Login: Anonymous

Email: n/a

Responded At: Jul 11, 2023 17:18:47 pm

Last Seen: Jul 11, 2023 17:18:47 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Increase the flood planning level to the PMF. It is crazy allowing development in areas that we know will flood.

Q14. Is there anything else you would like to add to your submission?

I hope that council is not going to rebuild all community infrastructure back on the flood plain.



Respondent No: 27

Login: Anonymous

Email: n/a

Responded At: Jul 12, 2023 15:52:49 pm

Last Seen: Jul 12, 2023 15:52:49 pm

IP Address: n/a

Q1. Name	<div></div>
Q2. Email	<div></div>
Q3. Do you live or work in the Lismore LGA?	No
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	Yes
Q5. What type/s of properties (tick all that apply)	Residential (investment property)
Q6. Have you ever experienced flood damage to your property or business?	Yes
Q7. Do you believe that Council should increase its flood planning level?	No
Q8. What do you think the new flood planning level should be?	not answered
Q9. Do you agree with the red zone restrictions?	No
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	<p>I would like to make sure my Property at 74 Walker st is in the low area as about 20% of our building is in the medium area. I don't understand why. Could someone please contact me with a response or <div></div></p>
Q14. Is there anything else you would like to add to your submission?	not answered



Respondent No: 28

Login: Anonymous

Email: n/a

Responded At: Jul 12, 2023 17:30:11 pm

Last Seen: Jul 12, 2023 17:30:11 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

No

Q5. What type/s of properties (tick all that apply)

not answered

Q6. Have you ever experienced flood damage to your property or business?

not answered

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The February 2022 flood event

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

I believe there should be no further commercial development, as well as residential, in the high risk precincts and that the DCP needs to be updated regarding Permitted and Prohibited land uses in this high risk area. I also believe there should be no further new commercial development in the South Lismore area as well as residential

Q14. Is there anything else you would like to add to your submission?

Council needs to be working to remove all residential and the majority of commercial businesses in the extreme and high risk mapping areas



Respondent No: 29

Login: Anonymous

Email: n/a

Responded At: Jul 12, 2023 19:51:26 pm

Last Seen: Jul 12, 2023 19:51:26 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (tenant)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The February 2022 flood event

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

I'd like to see a survey that didn't force me to answer yes or no to a complex question.

Q14. Is there anything else you would like to add to your submission?

I'd like to see a survey that didn't force me to answer yes or no to a complex question. In regard to the question about risk zones in particular, this requires a level of complex thinking beyond a survey like this. How will the zones be enforced, what is the time scale, what alternatives will be offered, what of people in the red and orange zones who have not been offered any solutions from the Homes Program. How will you manage this contradiction? Any changes to zoning, particularly in areas with high numbers of rentals (almost 30% in Nth and Sth Lismore at time of flood) must take this into account. What of the light industry that continues, in particular where the is use of toxic or hazardous materials, will the plan take account of or deal with this issue



Respondent No: 30

Login: Anonymous

Email: n/a

Responded At: Jul 13, 2023 13:59:30 pm

Last Seen: Jul 13, 2023 13:59:30 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The Probable Maximum Flood (PMF) event (largest conceivable flood)
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	Yes
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes

Q13. Why did you answer Yes or No to the previous question?

At the moment we are on track for 3 degrees C of global warming. Worldwide, rain intensity is increasing at just over 1 degree of warming. Please read this article that cites four climate scientists on the increase in intense rain and floods: <https://www.vox.com/climate/2023/7/11/23791452/vermont-flooding-climate-change>. LCC's planning regulations must be based on this reality. Development restrictions on the floodplain should reflect the PMF. My second point relates to your assessment of flood risks. Historical analysis by Prof Jerry Vanclay shows that very large floods occurred in the historical record. Calculation of AEP must integrate this data, and this should be reflected in the DCP. Thirdly, the section on flood prone rural properties is not at all helpful to the forgotten people whose valleys flooded. It seems quite dismissive. I understand that this document is focussed on the city but it would be desirable to at least point to WHERE on the website we can find the hidden maps (I could not find them). I also wonder how LCC can possibly estimate levels in the rural areas when council has made no effort to ask community to record levels after the Feb 2022 flood? I understand the flood aftermath must have been awful for council staff, who are doing their best under very difficult circumstances, but with 20:20 hindsight, council should have asked rural people to record flood levels before the evidence was lost. (Byron Shire council did this). LCC does not appear to be interested in rural people and their risk, even if they nearly died in the February event. We were very lucky not to have fatalities in the Keerrong valley. It is worth noting that SES have a new capacity to deliver flood warnings to rural areas, but they can't work out risk if we don't know how flooding occurs in the valleys. In the Terania subcatchment we are trying to make up for these deficiencies by conducting a Flood Observations survey, where residents of the subcatchment share their observations of the extent of 2027 and 2022 on the landscape.

Q14. Is there anything else you would like to add to your submission?

There is a lot of good work in the draft DCP. Thank you for this. It is really good to see a flood risk plan, and very good to see the controls for flood resilient building materials, banning hazardous industries in flood risk areas. If you are interested in my comments about the at-risk rural areas, I'd be keen for a conversation.



Respondent No: 31

Login: Anonymous

Email: n/a

Responded At: Jul 13, 2023 13:59:40 pm

Last Seen: Jul 13, 2023 13:59:40 pm

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
Q9. Do you agree with the red zone restrictions?	No
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	No
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	Red Zone New Development - no to any new housing but allow flood-resistant development to occur in the CBD area if appropriate - say cafes - like in the CBD Orange Zone - allow Medium Density housing with a minimum floor height for the residential component at 2nd story and above - first two floors for office/carparking South Lismore - same as the Orange Zone. If such developments were to occur then they would be a point of exacuation in a cataclysmic event in the future
Q14. Is there anything else you would like to add to your submission?	not answered



Respondent No: 32

Login: Anonymous

Email: n/a

Responded At: Jul 14, 2023 17:42:07 pm

Last Seen: Jul 14, 2023 17:42:07 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

No

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

I believe the map does not show the extreme risk in most of South Lismore. The red zone should be much more extensive and reflect accurately the extent of the 2022 flood.

Q14. Is there anything else you would like to add to your submission?

Extreme weather events induced by climate change will become more severe and more frequent. This is well established. The next flood could be only as far away as the next La Niña. Lismore needs to take this very seriously and plan for a full retreat from the flood plain. This must be done with full regard to recompense for those disadvantaged by this decision. Even disregarding the human tragedy and misery caused by severe flood events, the economics alone dictate that we cannot afford to keep reconstructing after events like the 2022 flood. Believing that we can go on with business as usual, with some expensive and unfounded engineering 'solutions' to mitigate floods, is magical thinking and has no place in sound planning. I believe we should use the PMF as a base for establishing building limits and should examine an even more restrictive level.



Respondent No: 33

Login: Anonymous

Email: n/a

Responded At: Jul 14, 2023 21:57:39 pm

Last Seen: Jul 14, 2023 21:57:39 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

I agree with the restrictions in the red zone but am concerned that the red zone is not as extensive as it should be. Mapping should take into account the Feb/March 2022 flood heights.

Q14. Is there anything else you would like to add to your submission?

This Flood Prone Land Development Control Plan needs to take the risks of possible extreme events more seriously. The 2022 flood was so much higher than any experienced during 'white' settlement. We were caught by surprise. This should be recognised as a wake-up call for the potential of extreme events caused by the looming uncertainty of climate change. It is time for Lismore to accept that it is built on a flood plain, at the confluence of 2 rivers with large catchments. The Government is unlikely to continue to step-up with funding to aid recovery if Lismore ignores the risks and warnings and rebuilds with only marginal changes to regulations. Withdraw from the flood plain.



Respondent No: 34

Login: Anonymous

Email: n/a

Responded At: Jul 15, 2023 08:52:54 am

Last Seen: Jul 15, 2023 08:52:54 am

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (tenant)

Residential (investment property)

Commercial (owner-occupier)

Commercial (investment property)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The February 2022 flood event

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

The video states that the new levels won't cover ever event. This is a failure. Imagine if I submitted a DA that only covered some of the Fire Restrictions, or only partially complied with the BCA or DDA. You need to state how you came to these levels, has mitigation been put in place?

Q14. Is there anything else you would like to add to your submission?

If it is unsafe and hence restricted to build a residential dwelling in zones H5 & 6, then all existing dwellings classified as "Residential" need to be removed.



Respondent No: 35

Login: Anonymous

Email: n/a

Responded At: Jul 17, 2023 11:41:56 am

Last Seen: Jul 17, 2023 11:41:56 am

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Commercial (investment property)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

No

Q8. What do you think the new flood planning level should be?

not answered

Q9. Do you agree with the red zone restrictions?

No

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

The decision on a revised DCP proposing changes to current heights should be delayed until out of flood land is made available for both residential, commercial and industrial use. This will allow us to continue to attract both reinvestment and new investment to Lismore by having an alternative ; that is, either develop on existing flood impacted land with its restrictions or develop out of flood. Right now that option cannot be offered. This would be more in line with genuinely supporting the Build, Back, Better Program. Also, if possible we should wait for the release of the CSIRO report as some of the DCP restrictive flood levels may not be required in the future; although it is noted that the are comments on this issue..

Q14. Is there anything else you would like to add to your submission?

Five other comments, some indirectly related to the DCP: i. The use of flood compatible materials should be compulsory ii. All properties in at least the red and orange flood zone should have an approved flood management plan. iii. Owners/tenants (especially of commercial/industrial) should be permitted back on the property whilst flood waters remain (say at 500mm) as the key to flood clean up is to hose the muddy residue into the water as it subsides iv. Consider the option of permitting medium density apartments with ground floor parking in orange areas located in and around the CBD where the DCP is suggesting no residential. v. Ensure we return to the "good old days" when BOM and SES forecasts and actions greatly assisted the community in responding effectively in times of major floods, particularly in times when the levee is topped.....decentralise authority..



Respondent No: 36

Login: Anonymous

Email: n/a

Responded At: Jul 17, 2023 10:34:17 am

Last Seen: Jul 17, 2023 10:34:17 am

IP Address: n/a

Q1. Name	
Q2. Email	
Q3. Do you live or work in the Lismore LGA?	Yes
Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]	No
Q5. What type/s of properties (tick all that apply)	not answered
Q6. Have you ever experienced flood damage to your property or business?	not answered
Q7. Do you believe that Council should increase its flood planning level?	Yes
Q8. What do you think the new flood planning level should be?	Other (please specify) recalculate AEP with 2022 data, apply 0.1%AEP and 500mm freeboard
Q9. Do you agree with the red zone restrictions?	Yes
Q10. Do you agree with the orange zone restrictions?	No
Q11. Do you agree with the South Lismore restrictions?	Yes
Q12. Are there any changes you'd like to see to the DCP?	Yes
Q13. Why did you answer Yes or No to the previous question?	See attachment under separate cover
Q14. Is there anything else you would like to add to your submission?	See attachment under separate cover



Respondent No: 37

Login: Anonymous

Email: n/a

Responded At: Jul 17, 2023 12:15:00 pm

Last Seen: Jul 17, 2023 12:15:00 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (tenant)

Q6. Have you ever experienced flood damage to your property or business?

Yes

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

Other (please specify)

Higher than present predictions

Q9. Do you agree with the red zone restrictions?

Yes

Q10. Do you agree with the orange zone restrictions?

Yes

Q11. Do you agree with the South Lismore restrictions?

Yes

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

Higher levels for new buildings than suggested here

Q14. Is there anything else you would like to add to your submission?

No thankyou



Respondent No: 38

Login: Anonymous

Email: n/a

Responded At: Jul 17, 2023 13:40:04 pm

Last Seen: Jul 17, 2023 13:40:04 pm

IP Address: n/a

Q1. Name

Q2. Email

Q3. Do you live or work in the Lismore LGA?

Yes

Q4. Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

Yes

Q5. What type/s of properties (tick all that apply)

Residential (owner-occupier)

Q6. Have you ever experienced flood damage to your property or business?

No

Q7. Do you believe that Council should increase its flood planning level?

Yes

Q8. What do you think the new flood planning level should be?

The Probable Maximum Flood (PMF) event (largest conceivable flood)

Q9. Do you agree with the red zone restrictions?

No

Q10. Do you agree with the orange zone restrictions?

No

Q11. Do you agree with the South Lismore restrictions?

No

Q12. Are there any changes you'd like to see to the DCP?

Yes

Q13. Why did you answer Yes or No to the previous question?

The CPD is not clear about how Climate Change/Global Warming component determined and the Flood risk Map is indecipherable.

Q14. Is there anything else you would like to add to your submission?

not answered



learning



thinking



regenerating



nature



connections

Living Schools Global ABN: 40874834862

67 Conway St, Lismore, NSW 2480

4 July 2023

To Whom It May Concern,

I am writing in response to the Draft Chapter 8 - Flood Prone Lands of the Development Control Plan (DCP) on public exhibition.

These considerations will impact having a school positioned in the CBD unless consideration for amendments is made.

The benefits for the community in having Living School sited in the heart of the CBD are extensive and will draw a spotlight on Lismore, a university town. Living School has national and international interest – and Living School is defined as a new progressive model of schooling. A school brings community together, and the Living School model is to connect our youth with our public spaces.

As a school, there are direct benefits commercially and socially.

Our intention is to develop the Brown and Jolly building into a very unique middle school precinct, which will be a highlight for our town.

With regard to the 'high' flood risks, we believe we have planned extensive mitigation. The materials and design is focused on flood mitigation – as we know there will be floods. The flood plan emphasises safety and evacuation – in the worst case scenario. As Lismore floods, we do have a good understanding of the weather patterns, and we would close the school as families travel along rural roads to access our campus (as does public transport).

We also know the evacuation routes out of Lismore – in case we have staff on the premises – are available and SES will provide ample warning (12 hours all going to plan).

There is a direct evacuation route from the school, which is above the highest recorded flood level in Browns Creek.

The levee overtopping has happened three times in the past fifteen years. Having been born in Lismore, with experience of major floods (1974, 2017, 2022), I am confident in our ability to have no people present in the buildings when flooding peaks.

With a focus on the meteorology reports, studying the weather patterns, and our staffing make-up, we are confident that we will have mitigated any flooding – and we will have no-one in the buildings. For

instance, in regards to our Conway Street campus in 2022, we had moved all possessions above the 2017 level – way beyond the levels forecasted by the Saturday.

We returned on the Sunday to finalise the preparation – and we could have raised equipment even higher on this day – but we were assured the levee was not going to be topped (and we still raised above the 2017 level).

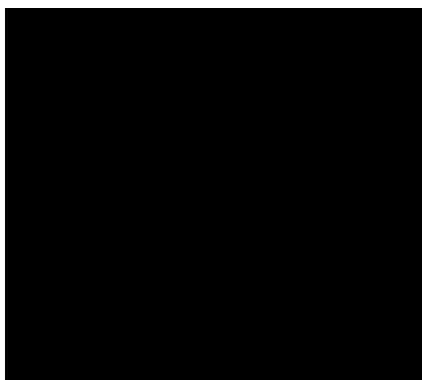
The procedures we managed for our approved Conway Street campus will be applied to our proposed Brown and Jolly campus, bearing in mind the 2022 February flood did not inundate the second level of the Woodlark Street building. And the proposed DA, that is soon to be submitted, will have upper floor levels above the identified flood heights.

As a school, occupation of the proposed campus will only be for less than 8 hours of daylight, and this is only for 40 weeks of the year. In a flood warning, our management would ensure children who had been dropped off were picked up in the event of a flood warning being issued.

As an additional measure we have our own buses, which can assist in transporting goods and people as needed.

I do understand the wise consideration of Council to this matter: Lismore floods. But we need to respect the heritage of this river-town. As a community, as a school, we can meet the challenges of flooding and gain benefit from these natural disasters by carefully planning and managing the events. The heart of Lismore is the coming together of people. This was so apparent in the support shared with Living School. And we feel a responsibility to give back, too.

Yours faithfully,



Living School

<http://living.school>

<http://livingkinder.com>

Westpac Rescue Helicopter Service

Northern NSW Newcastle PO Box 230, New Lambton NSW 2305

Tamworth PO Box 6187, Westdale NSW 2340 | Lismore PO Box 3080, Lismore Delivery Centre NSW 2480

ABN 40 002 862 026 | CFN 11992 | Westpac Rescue Helicopter Service is operated by Northern NSW Helicopter Rescue Service Ltd



8 August 2023

Lismore City Council
Attn: General Manager
PO Box 23A,
Lismore, NSW 2480
Also by email – council@lismore.nsw.gov.au

To Sir/Madam,

RE: Submission in relation to the Revised Flood Prone Lands Development Control Plan

[REDACTED] matter, the holding submission sent to Lismore City Council (Council) by email on 14 [REDACTED] (submission) and our recent discussions with Council.

Northern NSW Helicopter Rescue Service Limited, known as and trading by the name Westpac Rescue Helicopter Service (**the Service**) in Northern NSW appreciates the opportunity to provide a submission to Council in relation to the Draft Revised Flood Prone Lands Development Control Plan (**Draft DCP**) recently on public exhibition, and provides this further submission and information as noted in the Holding Submission. Thank you for your assistance in providing the Service additional time to prepare and provide this information.

About the Service

The Service is a registered charity that provides helicopter emergency medical services throughout Northern NSW for the Ambulance Service of New South Wales under a long-term contract with the NSW government through the Health Administration Corporation. The majority of services are provided to the Greater Hunter Region, the Tamworth and New England areas, and the Northern Rivers area of Lismore through Tenterfield and to the Queensland border. The Service operates 24 hours per day, every day of the year from three NSW line bases located within Belmont Airport, Tamworth Airport, and Lismore Airport (**the Lismore Base**). As Council would be aware, the Service owns the land and the fixtures that form the Lismore Base within Lismore Airport, situated at 77 Krauss Avenue, South Lismore.

The Service operates with a joint funding model from the NSW Government, Corporate Business and Community Support throughout Northern NSW. The Service is a corporate trustee of a charitable trust which holds monies and assets on trust for members of the public resident in the regions set out in our Constitution. One of those regions is the Northern region of New South Wales.

Our Rescue Helicopter Crews fly three types of missions using Agusta Westland AW139 helicopters:

- **Pre-hospital missions** – response to Triple 0 emergency calls to assist people injured in locations such as roads, farms, workplaces, the ocean, on sporting fields or in the bush.

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NSW Ambulance



NSW Health

And the Community

Westpac Rescue Helicopter Service

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- **Inter Hospital Transfers (IHT)** – transfer the state’s most critical patients to the appropriate standard of specialist hospital care required.
- **Search and Rescue Missions** – Search to locate missing people and return them to safety.

To conduct these missions, the Service’s AW139 helicopters are deployed from three line bases, including the Lismore Base.

In 2022, the Service was tasked to 457 missions from the Lismore Base, comprised of the above categories of missions. In addition to these missions, the Service undertakes standard in-flight training, maintenance and check flights in and out of the Lismore Base.

The Service’s rescue helicopter crews on duty at each of the line bases at any one time usually consist of a minimum of a pilot and an air crew officer as well as a NSW Ambulance staff doctor and paramedic. The rescue helicopter crews perform their duties during two 12 hour shifts each day 7am – 7pm, and 7pm – 7am. The Service is on call 24 hours per day, 365 days per year and is mission tasked by NSW Ambulance. The Lismore Base has dedicated lodging quarters for the crews when on shift, where crews are able to sleep and rest between missions when possible.

In addition to the helicopter emergency medical services that are undertaken from the Lismore Base, the Lismore Base is also used for the following functions, which are critical to the provision of the broader support services provided by the Service:

- **Marketing, Sponsorship and Hospitality** – To contribute to its funding, the Service conducts fundraising activities across northern NSW, including in the Lismore, Northern Rivers and Tenterfield areas. The Lismore Base accommodates some of the Service’s fundraising, marketing and hospitality staff, as well as providing facilities for external stakeholders including sponsors, media, volunteers and community supporters also attend the facility for meetings and functions;
- **Administration** – Some of the Service’s support staff are located at the Lismore Base carrying out the necessary administrative functions including finance, safety, administration, and facilities management.

The DCP and the Lismore Base

The Service has now had the opportunity to review the Draft DCP. The area that is affected under the Draft DCP includes the Lismore Base.

The Draft DCP identifies land use categories, and overlays this with the flood risk precincts to determine controls (the Flood Risk Precincts). Under the Draft DCP, the Lismore Base is within three flood risk precincts, being the low (blue), medium (green) and the South Lismore Restricted Evacuation Precinct. Please see below capture of the map for convenience.

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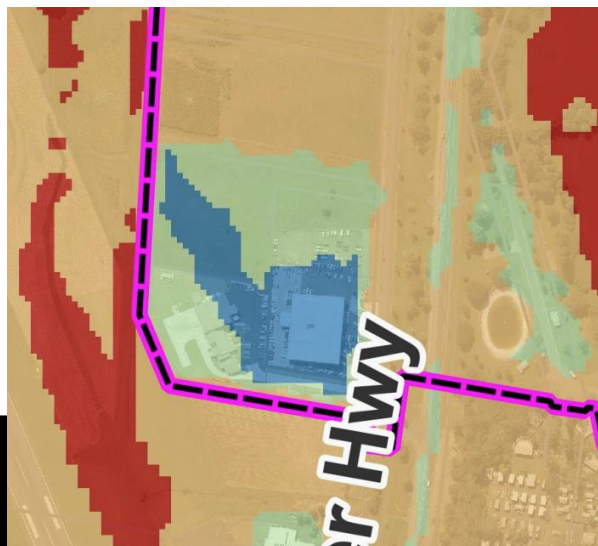
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... personnel at the drop-in session on 12 July 2023 in Lismore, clause 3.3 of the Draft DCP provides the explanation of the low and medium risk precincts. It states that “most development is permissible in these areas, subject to meeting flood development controls, except for critical uses and facilities required in the event of a flood emergency (defined in Appendix 1)”. Appendix 1 (on page 15) provides that “critical uses and facilities” means “emergency services facilities”. “Emergency services facilities” is defined in the Lismore Local Environmental Plan 2012 (Lismore LEP) as “a building or place (including a helipad) used in connection with the provision of emergency services by an emergency services organisation.” The definition of emergency services organisation under the Lismore LEP includes the “Ambulance Service of New South Wales”. As noted above, the Service operates helicopter emergency medical services throughout Northern NSW for the Ambulance Service of New South Wales under a contract with the Health Administration Corporation.

As you are aware, under the proposed development controls that will apply to the Flood Risk Precincts at clause 4 of the Draft DCP, in every precinct, a critical use and facility is identified as an “unsuitable use”. In the “critical uses and facilities” category, there is “concessional development” that may be undertaken, being an alteration or addition that is not more than a 10% change to the original approved development, and that does not make the property less flood resilient. However, under the Draft DCP concessional development cannot be undertaken in a “floodway”.

Please see below extract of the Flood Function map from Appendix 5 of the Draft DCP, which identifies the red area as a “floodway”. The blue X is the approximate location of the Lismore Base. In the floodway plan there is mention that the Airport at South Lismore is a key part of the “floodway”. This means that the Service will be unable to rely on the concessional development exemption, despite it being a ‘critical use and facility’ under the Draft DCP.

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[REDACTED] restriction does not affect existing development, the Draft DCP suggests that no further approvals will be needed within that area, including for minor alterations and additions to any existing structures given that a development control plan is a matter for consideration in the assessment of any development application. This has been confirmed by Council at the 'drop in' session. This raises significant concerns for the Service, particularly noting the Service's ongoing operations at the Lismore Base. It also raises concerns for the Service, as the Service owns the land and facilities at the Lismore Base and the Draft DCP will potentially have material implications for the underlying value of the land.

Requested Amendment to the DCP

Given the above information and the affect that the Draft DCP will have on the Service, its operations and the Lismore Base, the Service requests that an amendment be made to the Draft DCP before it is finalised and published.

The Service would request that, at a minimum, a new more flexible planning control is inserted as an additional item in the concessional development provisions of the Draft DCP. The Service would ask for a site-specific concessional development provision to be added into Appendix 1 that is not linked to the floodway status, as follows:

In the case of 77 Krauss Avenue, Loftville, folio identifier 82/1214371, any alterations and additions to the existing development reasonably required for continuing operations at the site.

In Conclusion

The Service has a strong connection with Lismore and the Northern Rivers built through years of providing critical emergency health care services, is widely recognised and respected within the community and actively engaged in community fundraising across the region.

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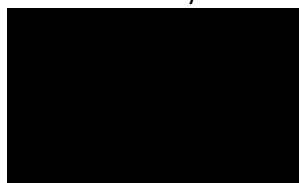


While the Service supports Council's work and review processes in relation to the recent flooding events, the Service would request that Council considers the amendments suggested in this letter for the reasons set out.

We would welcome the opportunity to provide further information on the matters set out in this submission should Council wish to engage further or wish to consider an alternative 'concessional development' regime.

We thank you for the opportunity to provide this information. Please do not hesitate to contact us on 02 49 52 0000 or at [REDACTED] should you require any further information or if you would like to discuss.

Yours Sincerely



Acting Chief Executive Officer

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NSW Ambulance



Health

And the Community

From: [REDACTED] <[REDACTED]>
Sent: Tuesday, 20 June 2023 2:37 PM
To: Records
Subject: Your Say

CAUTION: This email was sent from outside our organisation. Be cautious, particularly with links and attachments unless you recognise the sender and know the content is safe.

Good afternoon,

As a north Lismore resident with a floor level above the previously stated 1/100 flood level, an increase of 35-60cm would see our floor level under this threshold.

We want to get out of floodzone and will consider the buy Back offer when we receive it. Separate to this is my question:

Many landowners with large acreage have expressed the desire to sell off smaller land packages to flood affected people if current subdivision laws are changed to enable subdivision. Enabling subdivision of large acreage would facilitate availability of land on the open market for flood affected people, which is what we need. Is this something that's being looked at and by whom?

Many thanks.

Kind regards,

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

*I acknowledge Widjabal people, the First Peoples of Lismore where I live and work.
I respect and acknowledge their Elders, past and present.*



Lead, Simplify and Win with Integrity

**COLIN
BIGGERS
& PAISLEY**
LAWYERS

SUBMISSION TO THE LISMORE CITY COUNCIL – Revised Flood Prone Lands Development Control Plan

Lismore Shoppingworld Pty Ltd, c/- its solicitors Colin Biggers & Paisley Lawyers, Attention: Ian Wright and Todd Neal

21 July 2023

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Preliminary

Submitter

1. This submission is made on behalf of Lismore Shoppingworld Pty Ltd (**McConaghy**), which is the owner of the Lismore Square Shopping Centre located at the corner of Brewster and Uralba Streets in Lismore.
2. McConaghy thanks the Lismore City Council (**Council**) for the invitation to prepare a written submission in relation to the revised flood prone lands development control plan that was placed onto public exhibition on 17 June 2023.

Exhibition Documents

3. McConaghy and its consultants having in preparing this submission, reviewed the following documents which are part of the exhibition materials (**Exhibition Documents**):
 - (a) Draft Revised Flood Prone Lands Development Control Plan (**Draft Revised DCP**).
 - (b) Lismore Floodplain Risk Management Study - Final (**Lismore FRMS**).
 - (c) Lismore Floodplain Risk Management Plan - Land Use Planning and Development Control (**Lismore FRMP**).
 - (d) **Flood Precincts Map**.
 - (e) Explainer: Understanding Lismore City Council's Flood Risk Precinct Map and the NRRC's Flood Priority Map (**Explainer**).
 - (f) Flood Planning FAQs prepared by the Council.

Consultant Documents

4. McConaghy has engaged independent consultants who have prepared the following documents in support of McConaghy's submission (**Consultant Documents**):
 - (a) Hydrological engineering review prepared by Martin Giles, Water Engineering Plus (**WEP Engineering Report**), which is included in **Attachment 1**.
 - (b) Town planning review prepared by Neil Kennan, Nexus Environmental Planning (**Nexus Planning Report**), which is included in **Attachment 2**.

Summary of issues

5. McConaghy understands and supports the need for the Council to revise its planning controls to achieve the end of flood risk management for Lismore, particularly given the recent 2022 flood event. There are however significant and important issues with the Draft Revised DCP which need to be considered and addressed. These issues are summarised in the Table below.

Issue		Summary
A	The risk precinct mapping imported into the Draft Revised DCP is underdeveloped	<p>The Draft Revised DCP imports the risk mapping in the Lismore FRMP and bases the proposed development controls on this mapping. Upon review, the risk precinct mapping is underdeveloped and does not take into account all of the relevant factors necessary to inform a considered and balanced approach to risk management. The risk precinct mapping has only considered ground levels, which does not correlate with and overestimates the actual flood risk associated with existing or future development.</p> <p>The Lismore Square Shopping Centre is mapped within the 'Extreme' risk precinct, yet the retail floor level is constructed above the 1:100 year flood level, and has direct access to a flood free area and evacuation point at the corner of Uralba Street and Diadem Street.</p>
B	The CBD Exemption Precinct is arbitrary and creates inequity	<p>The Draft Revised DCP proposes to differentiate the applicable development controls on the basis of whether land is within the CBD Exemption Precinct, or outside of it. The most significant point of differentiation is that on a literal reading of the flood control matrix and development control table in clause 4 of the Draft Revised DCP, commercial and industrial development may occur in the 'Extreme' risk precinct if it is within the CBD Exemption Precinct, but is not intended to occur if it outside of the CBD Exemption Precinct.</p> <p>There is with respect no justification provided for the boundary of the CBD Exemption Precinct which notably excludes the Lismore Square Shopping Centre. The exclusion would create inequity with competing retail centres and other uses within the CBD Exemption Precinct.</p>
C	The proposed controls would unreasonably prohibit future modifications or development at the Lismore Square Shopping Centre, and have an adverse effect on land values for commercial and industrial assets in Lismore	<p>If adopted and applied by the Council, the proposed development controls within the Draft Revised DCP will have serious impacts to future commercial and industrial development mapped within the 'Extreme' risk precinct, since that type of development is to be prohibited.</p> <p>The proposed controls are overly prescriptive and would have an adverse effect on land values for considerable commercial and industrial assets.</p>
D	Adoption of the Draft Revised DCP would be premature	<p>The Draft Revised DCP relies on the risk precinct mapping in an unadopted flood risk management plan. There are also references to potential amendments to the Lismore Local Environmental Plan 2012, but those amendments have not occurred.</p> <p>It would be premature to adopt the controls in the Draft Revised DCP in circumstances where the documents relied upon are not final and have not been adopted by the Council.</p>

Summary of submissions

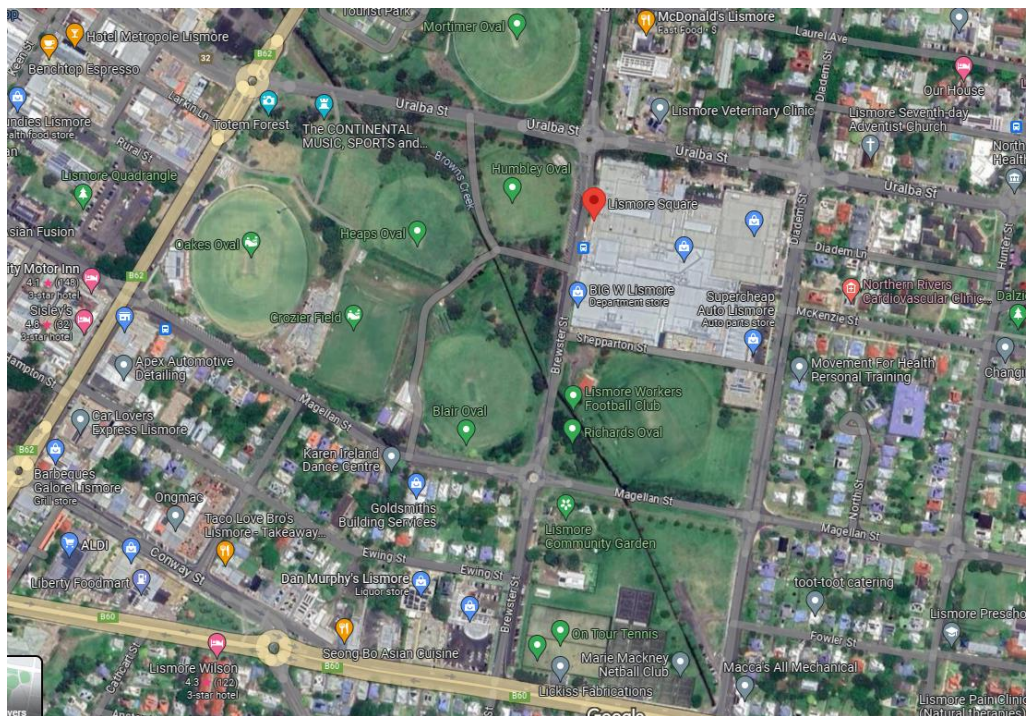
6. McConaghy respectfully requests that the Council give reasonable and fair consideration to the submissions set out in this document in respect of the identified matters, as well as matters set out in the Consultant Documents.

Submission in respect of issue		Summary
A1	The risk precinct mapping should be further developed	<p>A more sophisticated exercise is warranted for the risk precinct mapping, given that it is the basis upon which the Draft Revised DCP proposes to limit or prohibit future development in the floodplain.</p> <p>The risk precinct mapping should be revised on a site specific basis, so matters such as floor levels of existing and future development, warning times, and accessibility to evacuation routes can be appropriately factored into the assessment.</p>
A2	Council should commission a peer review of the Flood Risk Management Plan	<p>A peer review of the Lismore FRMP should be commissioned by the Council given the serious implications of the development controls proposed by the Draft Revised DCP.</p> <p>The modelled results for the 2022 flood event should also be compared to the results within the Lismore FRMS and FRMP so that consideration can be given to how successful the model has been in replicating major flood events and predicting flood levels for major and extreme flood events.</p>
B	The boundaries of the CBD Exemption precinct should be justified, and if necessary, reconsidered	<p>Given the inequity that would arise by the less prescriptive controls inside the CBD Exemption Precinct, the Council should provide the justification for how the boundaries were decided upon.</p> <p>The Council should also reconsider the boundaries of the CBD Exemption Precinct based on advice from an economist or other qualified consultant about the effects of such development controls, on the provision of facilities to service existing and future demand, in particular, for non-residential uses such as shopping centres.</p>
C	Council should investigate a merits-based approach and site specific exemptions to the prescriptive controls	<p>The Council should investigate a merits-based approach and undertake a strategic planning exercise to identify sites where the proposed highly prescriptive controls should not apply, based on matters such as existing floor levels and proximity to evacuation routes.</p> <p>These types of sites should not be subject to a prohibition, but rather should be subject to objectives-based requirements that any future development application may be assessed against to demonstrate that the site is suitable for the proposed development from a flood risk management perspective.</p>
D	Council should exhibit the flood prone lands package as a whole, and defer the Draft Revised DCP until the flood risk management plan is adopted	<p>The flood prone lands package should be exhibited as a whole, including the final flood study, flood risk management plan, amended Local Environmental Plan, and revised development control plan.</p> <p>The controls in the Draft Revised DCP should not be adopted until all of the documents which inform the proposed development controls have been adopted by the Council.</p>

Background

Overview of the Lismore Square Shopping Centre

7. McConaghy is the owner of the Lismore Square Shopping Centre which is located at the corner of Brewster and Uralba Streets in Lismore. The location of the Lismore Square Shopping Centre is shown below.



8. The Lismore Square Shopping Centre is a large thriving shopping mall that services over 80,000 people living in Lismore's main trade area. The Shopping Centre has a gross lettable area of 29,901 m², and is anchored by two major supermarkets (Coles and Woolworths) and two major retailers (Big W and Kmart). There are also four mini-major retailers (Supercheap Auto, Petbarn, Priceline Pharmacy, and Kmart Tyre & Auto), 65 speciality stores, and 1,264 car parking spaces.
9. McConaghy has owned the Lismore Square Shopping Centre since 1996. A major extension occurred in 2005.
10. The plans for the Lismore Square Shopping Centre, which are included in **Attachment 3**, show that the levels of the Lismore Square Shopping Centre are as follows:
 - (a) Carpark level – RL 7.000.
 - (b) Mezzanine car park level – RL 9.980.
 - (c) Mall floor level – RL 12.750 - RL 12.770.
 - (d) Mezzanine floor level – RL 16.250 - RL 17.250.

Flooding at the Lismore Square Shopping Centre

11. The Council's records confirm the flood planning level for the Lismore Square Shopping Centre is 12.4m¹.
12. McConaghy maintains a detailed Flood Procedure document (**Flood Procedure Plan**) to manage flood impacts safely and expeditiously. McConaghy has a detailed understanding of how flood events impact the Lismore Square Shopping Centre. Below is an extract from McConaghy's Flood Procedure Plan showing the impact of rising flood waters:

1	Water enters the carpark, first entry point (Brewster ST #3)	7.00m
2	Water enters the lift	9.5m
3	Water enters both travelators	11.5m
4	Water reaches the base of the mezzanine level	11.6m
5	Water reaches the Diadem Street stores	11.5m
6	Water enters the Service Station	11.0m
7	Water enters the bulky goods stores	11.5m
8	Water enters the shopping Mall /Major tenancies	12.75m AHD
9	Water enters the Bulky Retailers mezzanine	14.0m AHD
10	Water enters the Big W staff dining, storage and plant room	16.25m AHD
11	Water enters the Woolworths plant room / MBS	17.25m AHD

13. McConaghy can provide to the Council a copy of its Flood Procedure Plan for its information, on request.
14. Following the 2022 flood event, McConaghy commissioned a flood level certification report from a surveyor. The findings of that survey were as follows:
 - (a) The average peak flood water height was 14.489 m.
 - (b) The average internal inundation level was 1.725 m.
15. McConaghy can provide the Council with a copy of this flood level certification report upon request.

Overview of the Exhibition Documents

Key documents and the Consultant Documents

16. The key documents of the Exhibition Documents relevant for this submission are the Draft Revised DCP and the Lismore FRMP. These documents have been well summarised by McConaghy's hydrological engineering consultant in the WEP Engineering Report at **Attachment 1** and McConaghy's town planning consultant in the Nexus Planning Report at **Attachment 2**.

¹ See the document titled 'Lismore Suburb Floor & Flood Levels', available on Lismore City Council's website at https://www.lismore.nsw.gov.au/files/assets/public/2.-community/7.-emergencies-and-disasters/documents/floor_and_flood_levels_2017_-_lismore.pdf

17. These Consultant Documents, which form part of the submission, ought to be considered by the Council. This document does not summarise those Consultant Documents, but rather focuses on a number of significant and important issues in respect of which McConaghy wishes to make more detailed submissions.

Lismore FRMP

18. McConaghy makes the following observations in respect of the Lismore Square Shopping Centre based on the mapping included in the Lismore FRMP:
 - (a) The Lismore Square Shopping Centre is identified as being within a flood storage area, and not within a floodway (Figure 3.4).
 - (b) The Lismore Square Shopping Centre is identified as having an applicable flood height contour of 12.5m in the 1% AEP (see the mapping at Appendix A).
 - (c) The Lismore Square Shopping Centre is mapped as part H6 and part H5 in the 1% AEP. The north-eastern corner near the corner of Uralba Street and Diadem Street is hazard free (see the mapping at Appendix B).
 - (d) The Lismore Square Shopping Centre is identified as being partly within the 'Extreme Flood Risk Precinct' and partly within the 'High Risk Flood Precinct' (Figure 3.6).
 - (e) The Lismore Square Shopping Centre is identified as having an applicable climate change factor of 0.5m - 0.6m based on an increase in rainfall intensity of 19.7%, modelled to reflect a temperature increase of 4.3 degrees by 2090 (considered the "worst-case" as provided by the Australian Rainfall and Runoff (ARR) 2019 Data Hub).
19. The matters above are explained in further detail in the WEP Engineering Report at **Attachment 1**. Mr Giles has provided extracts of the Lismore FRMP mapping showing the above matters (see pages 5 to 10).

Draft Revised DCP

20. For land affected by the Draft Revised DCP, it is proposed under that document that there be a three step process for the assessment of development.
 - (a) Firstly, the land use category/categories for the development are to be determined based on Appendix 1. For the Lismore Square Shopping Centre, the applicable land use category is "commercial industrial and community".
 - (b) Secondly, the flood risk precinct for the proposed development is to be determined based on Appendix 2, which is a reproduction of the flood risk mapping in the Lismore FRMP. The Lismore Square Shopping Centre is mapped as partly within the 'Extreme' risk precinct, and partly within the 'High' risk precinct.
 - (c) Thirdly, the flood control matrix and development control table in Section 4 are used to determine the applicable development controls. This matrix is reproduced on page 10 of Mr Giles' report at **Attachment 1**, and page 6 of Mr Kennan's report at **Attachment 2**.
21. Under the Draft Revised DCP, all commercial, industrial, and community development within the 'Extreme' risk precinct would be prohibited.
22. For land within the 'High' risk precinct, a series of controls would apply to commercial, industrial, and community development related to floor level, fill, building materials and design, structural soundness, emergency response, and management.

23. The Draft Revised DCP sets out a CBD Development Exemption Precinct (**CBD Exemption Precinct**). Development within the CBD Exemption Precinct is proposed to be subject to a different set of development controls compared to land outside of the CBD Exemption Precinct.
24. The Draft Revised DCP provides only a very limited basis for the CBD Development Exemption Precinct (see section 3.5). It is significant and important to note that this precinct is stated as having "adequate evacuation routes" and "limited protection provided by the CBD levee". Section 3.5 of the Draft Revised DCP states as follows:

"3.5 CBD Development Exemption Precinct

The CBD Development Exemption Precinct applies to the Lismore CBD area, and allows for forms of residential development (shop top housing and tourist and visitor accommodation), provided that habitable floor levels are above the FPL, structural soundness is proven, a site-specific evacuation plan is prepared, and refuge is available above the PMF. This is due to CBD development having adequate evacuation routes, the limited protection provided by the CBD levee, and the ability for dwellings such as shop-top housing to be constructed above the FPL on existing buildings. Commercial and community development is also permissible. Development in areas marked as extreme risk within the precinct will not be permitted unless it is characterised as non-urban/rural or concessional development."

25. In particular, it is unclear how the last sentence of section 3.5 of the Draft Revised DCP is to be applied or enforced, given it conflicts with the three step process outlined in section 1.3 of the Draft Revised DCP.

Issue A – The risk precinct mapping imported into the Draft Revised DCP is underdeveloped

Overview of issue

26. The Draft Revised DCP imports the risk precinct mapping contained within the Lismore FRMP, which is contained within Appendix 2 of the Draft Revised DCP. The proposed development controls are then based around this mapping. The flood control matrix and development control table at clause 4 assigns controls to development on the basis of the risk precinct mapping. Therefore, the risk precinct mapping is central to the flood planning being undertaken by the Council at this time.
27. Upon review, the risk precinct mapping in the Lismore FRMP is underdeveloped and does not take into account all of the relevant factors necessary to inform a considered and balanced approach to risk management. As noted in the WEP Engineering Report, the risk precinct mapping has only considered ground levels, which does not correlate with and overestimates the actual flood risk associated with existing and future development.
28. In the WEP Engineering Report, Mr Giles provides an opinion that the Lismore Square Shopping Centre can achieve an acceptable flood risk outcome based on the following matters (see section 3.2.2 on page 14):
 - (a) The Big W mezzanine level (RL 16.250 - RL 17.250) is immune to the 1 in 100,000 AEP event.
 - (b) The mall floor level (RL 12.750 - RL 12.770) has a low flood risk and is managed via a Flood Procedure Plan that is already in place. This level is above the 1:100 year floor level.
 - (c) The carpark (RL 7.000) has a high flood risk, but there is sufficient warning time for it to be managed by evacuation and closure using the Flood Procedure Plan that is already in place.

- (d) There is an evacuation route available in the 1:100 AEP event providing rising road access over the short distance to land above the level of the PMF flood. This is the flood free area and evacuation point at the intersection of Uralba Street and Diadem Street at the north-eastern corner of the Shopping Centre.
29. Despite these facts and circumstances, the Lismore Square Shopping Centre is mapped within the 'Extreme' risk precinct, which has the highest level of risk on the four-point scale of low-medium-high-extreme.
30. McConaghy respectfully submits that the underdeveloped risk precinct mapping leads to unreasonable and unfair outcomes once the Draft Revised DCP is applied, because the risk precinct mapping is central to how the development controls are proposed to apply, and whether blanket prohibitions on certain types of development are to be imposed. Mr Giles has supported this in the conclusion of the WEP Engineering Report (see page 18):
- "... it is considered that the Draft Revised DCPs use of the flood risk mapping as the basis for determining whether development is acceptable is not appropriate as it unduly constrains the potential for or precludes future development of the Site. Instead, the risk-based approach should be used as a framework for the consideration of the compatibility of a proposed development to the flood risk relevant to the use, taking into account site-specific factors such as proposed floor levels, proposed use, and the ability to evacuate and operate the development in accordance with a Flood Risk Management Plan."*
31. In response to this issue, McConaghy submits that the Council should accept the two submissions (Submission A1 and Submission A2) discussed below.

Submission A1: The risk precinct mapping should be further developed

32. The risk precinct mapping should be further developed given the issues outlined above. These issues stem from the fact that the risk precinct mapping in the Lismore FRMP has only considered ground levels, which does not correlate with and overestimates the actual flood risk associated with existing and future development. A more sophisticated exercise is warranted for the risk precinct mapping, given that it is the basis upon which the Draft Revised DCP proposes to limit or prohibit future development.
33. Reasonable and fair risk assessments consider all of the relevant factors that impact the severity and likelihood of risk. The assessment of risk solely on the basis of ground levels means that existing and future development is ignored, which can skew the results of a risk assessment.
34. The risk precinct mapping should therefore be revised on a site-specific basis, so matters such as floor levels of existing and future development, warning times, and accessibility to evacuation routes can be appropriately factored into the risk assessment.

Submission A2: Council should commission a peer review of the Flood Risk Management Plan

35. The development controls in the Draft Revised DCP are significant and will impact a very large number of properties and land owners in the floodplain. A very high number of properties have been mapped as being in the 'Extreme' risk precinct and the 'High' risk precinct. Under the Draft Revised DCP, there are restrictions on future development associated with these designations. This submission has focused in particular upon how commercial, industrial and community development is proposed to be prohibited in the 'Extreme' risk precinct, unless it is for the rebuilding of an approved development in a way that substantially reduces flood risk compared to the existing building, or alterations and additions of not more than 10% from the original approved development.

36. Given the serious consequences of the development controls proposed by the Draft Revised DCP, a peer review of the Lismore FRMP should be commissioned by the Council. Whilst no disrespect is intended to Engemy Water Management (the author of the Lismore FRMP), the fact of the matter is that the findings of this document are proposed by the Council to be applied in a highly prescriptive way. Members of the public including McConaghy are entitled to the comfort that the findings have not been disturbed after the completion of an independent peer review.
37. As noted by Mr Giles in the WEP Engineering Report, the modelled results for the 2022 flood event should also be compared to the results within the Lismore FRMS and FRMP so that consideration can be given to how successful the model has been in replicating major flood events and predicting flood levels for major and extreme flood events. This exercise should give further confidence to the model given the high amount of interest in the recent 2022 flood event, which remains fresh in the collective memory of the Lismore community, including McConaghy.

Issue B – The CBD exemption precinct is arbitrary and creates inequity

Overview of issue

38. The Draft Revised DCP proposes to differentiate the applicable development controls on the basis of whether land is within or outside the CBD Exemption Precinct. Below is a reproduction of Figure 6 from the Nexus Planning Report which shows the proposed CBD Exemption Precinct outlined in yellow, and site of the Lismore Square Shopping Centre outlined in black.

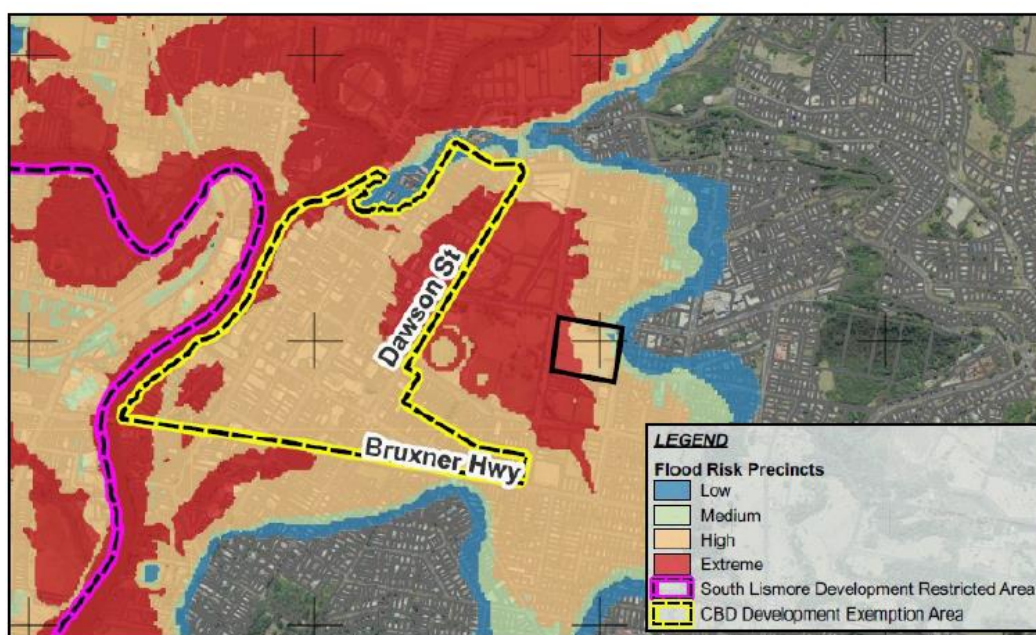


Figure 6: Extract from the flood mapping showing the location of the Lismore Square Shopping Centre outlined in black.

39. In the context of this submission, the most important difference between land which is within and outside of the CBD Exemption Precinct is that on a literal reading of the flood control matrix and development control table in clause 4 of the Draft Revised DCP, commercial and industrial development can occur on land designated 'Extreme' risk if that land is within the CBD Exemption Precinct. Development cannot occur on land designated 'Extreme' risk if that land is outside of the CBD Exemption Precinct. Notably, the CBD Exemption Precinct excludes the site of the Lismore Square Shopping Centre.

40. There is with respect no justification provided for the boundary of the CBD Exemption Precinct in the Exhibition Documents, which raises concerns about transparency and the merit of the proposed CBD Exemption Precinct boundaries.
41. Further, the exclusion of the Lismore Square Shopping Centre from the CBD Exemption Precinct would create inequity with competing retail centres and other uses within the CBD Exemption Precinct. It would also lead to planning outcomes that are likely to be found absurd. For example, the Lismore Square Shopping Centre would be prohibited from undertaking alterations and additions involving 15% the existing development in circumstances where the mall level is above the 1:100 ARI flood level, yet other competing commercial development in the CBD Exemption Precinct could occur, subject to the following development control, which provides flexibility to facilitate commercial development below the flood planning level ('floor level - 3'):
- Floor levels to be as close to the FPL as practical and no lower than existing floor levels when undertaking alterations or additions.*
42. McConaghy's independent consultants support the above submission. The Consultant Documents relevantly state as follows:
- (a) The Nexus Planning Report opines that it is "*unclear why the Lismore Square Shopping Centre site has not been included within the CBD Exemption Precinct when that precinct has the same Flood Hazard characteristics as the shopping centre site*" (see page 9, item 2).
 - (b) The WEP Engineering Report opines that the Lismore Square Shopping Centre has a similar risk profile to the land proposed to be within the CBD Exemption Precinct, but has a superior ability to achieve evacuation (see page 19).
 - (c) The WEP Engineering Report opines that the relaxation of controls for the CBD Exemption Precinct "*presents an inconsistent and unreasonable approach to flood risk*" (see page 18).
 - (d) The WEP Engineering Report concludes that there is no reason for different (and more restrictive) development controls to be placed upon the Lismore Square Shopping Centre compared to the CBD Exemption Precinct (see page 19).
43. In response to this issue, McConaghy requests that the Council should accept Submission B discussed below.

Submission B: The boundaries of the CBD Exemption precinct should be justified, and if necessary, reconsidered

44. Although very limited justification for the CBD Exemption Precinct is provided, McConaghy's understanding is that the primary drivers of the CBD Exemption Precinct concept are the community's access to amenities and economic considerations for the local region. McConaghy understands that these drivers are providing the counterforce to the otherwise prevailing driver of flood risk management.
45. If flood risk is deemed sufficient to warrant the imposition of certain controls in order to adequately safeguard public safety, then those controls should apply equally wherever that flood risk occurs having regard to the existing floor levels of development and the proximity of that development to evacuation routes, which in the case of the Lismore Square Shopping Centre, are far superior to much of the existing development within the CBD Exemption Precinct.
46. Putting to one side the matters in Items 44 and 45 above, McConaghy respectfully submits that Council should acknowledge the inequity that would arise by the relaxation of development controls inside the CBD Exemption Precinct, compared to land immediately outside of it. The Lismore Square Shopping Centre is an example of significant existing development located immediately outside of the proposed CBD Exemption Precinct.

47. The Council should also provide the justification for how the boundaries of the CBD Exemption Precinct were decided upon. This will assist the Council to meet the public interest objectives of transparency, particularly in a situation where the Council is proposing to impose blanket restrictions on future development, but carve out an area of the floodplain where such restrictions would be considerably relaxed.
48. The Council should also reconsider the boundaries of the CBD Exemption Precinct based on the advice from an economist or other qualified consultant about the effects of such controls on the provision of facilities to service existing and future demand, in particular, for non-residential uses such as shopping centres.
49. McConaghy also submits that the recommendation of Mr Giles in the WEP Engineering Report that the CBD Exemption Precinct be expanded to include the Lismore Square Shopping Centre ought to be accepted (see page 19).

Issue C – The proposed development controls would unreasonably and unfairly prohibit future modifications or development at the Lismore Square Shopping Centre, and have an adverse effect on land values for commercial and industrial assets in Lismore

Overview of issue

50. If adopted and applied by the Council, the development controls within the Draft Revised DCP will have serious impacts to all existing and future commercial and industrial development mapped within the 'Extreme' risk precinct, since that type of development is to be prohibited except for very limited scenarios. These overly prescriptive controls will have an adverse effect on land values for a large number of commercial and industrial assets throughout the floodplain. The Lismore Square Shopping Centre is one example of a property that would suffer from these proposed restrictions, which arise through the application of the flood control matrix and development control table in clause 4 of the Draft Revised DCP.
51. The prohibition on future commercial and industrial development mapped within the 'Extreme' risk precinct is not proposed to apply to 'concessional development'. But that concept under the Draft Revised DCP would only encompass the following:
 - (a) The rebuilding of an approved development in a way that substantially reduces flood risk compared to the existing building.
 - (b) Alterations and additions of not more than 10% from the original approved development.
52. It follows that any other kind of future development at the Lismore Square Shopping Centre would be prohibited under the controls in the Draft Revised DCP, unless some flexibility is built into how the flood control matrix and development control table is to apply. On the current drafting, a modest partial redevelopment of the Lismore Square Shopping Centre affecting 15% of the current development would be prohibited under these prescriptive controls.
53. As the Nexus Planning Report and the WEP Engineering Report have opined, the Draft Revised DCP would prohibit future development on at the Lismore Square Shopping Centre (other than 'concessional development') despite the following matters, facts and circumstances:
 - (a) Part of the Lismore Square Shopping Centre is flood free.
 - (b) The mall floor level (RL 12.750 - RL 12.770) has a low flood risk and is managed via a Flood Procedure Plan that is already in place. This level is above the 1:100 year floor level.

- (c) The Big W mezzanine level (RL 16.250 - RL 17.250) is immune to the 1 in 100,000 AEP event.
 - (d) There is sufficient warning time to evacuate people and vehicles from the Lismore Square Shopping Centre during a flood event.
 - (e) There is also sufficient warning time to manage the evacuation and closure of the Lismore Square Shopping Centre carpark in a flood event. McConaghy's Flood Procedure Plan document plans for this very thing.
 - (f) There is an evacuation route available in the 1:100 AEP event providing rising road access over the short distance to land above the level of the PMF flood. This is the flood free area and evacuation point at the intersection of Uralba Street and Diadem Street at the north-eastern corner of the Lismore Square Shopping Centre.
54. McConaghy's respectful submission is that the outcome provided for in the Draft Revised DCP should not be pursued, as this would offend the objectives of the *Environmental Planning and Assessment Act 1979*, namely:
- (a) The objective to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment (section 1.3(b)).
 - (b) The objective to promote the orderly and economic use and development of land (section 1.3(c)).
 - (c) The objective to promote good design and amenity of the built environment (section 1.3(g)).
55. In response to this issue, and observing the advice of Mr Kennan and Mr Giles, McConaghy submits that the Council should accept Submission C discussed below.

Submission C: Council should investigate a merits-based approach and site-specific exemptions to the prescriptive controls

56. The Nexus Planning Report asserts that the Draft Revised DCP has not been prepared based on the merit-based approach recommended in the Floodplain Risk Management Manual 2023 (see page 9, item 3).
57. In accordance with the conclusion reached in the Nexus Planning Report (page 9, item 3), the Council should undertake a strategic planning exercise to identify sites where the proposed highly prescriptive controls should not apply, based on matters such as the existing floor levels and proximity to evacuation routes. As part of this exercise, the Council should identify areas within the floodplain which demonstrate characteristics that warrant a relaxation of the blanket controls, and the adoption of a merits-based approach in place of blanket controls.
58. These types of sites should not be subject to a prohibition, but rather should be subject to an objectives-based requirement that any future development application must demonstrate that the site is suitable for the proposed development from a flood risk management perspective.
59. The above course is supported by the WEP Engineering Report prepared by Mr Giles. In the conclusion of that report, Mr Giles opines that the Draft Revised DCP's use of the flood risk mapping as the basis for determining whether development is acceptable is not an appropriate method (see the extract reproduced above at paragraph 30).

Issue D – Adoption of the Draft Revised DCP would be premature

Overview of issue

60. As set out earlier in this submission, the Draft Revised DCP relies on the risk precinct mapping in the Lismore FRMP. It is important to observe that the Lismore FRMP is an unadopted flood risk management plan. The document itself also retains a draft watermark. The version of the document included within the Exhibition Documents is revision 4 dated 4 May 2023. The description of that version is "Draft Report for Community Engagement".
61. We also observe that there are also references in the Draft Revised DCP to potential amendments to the Lismore Local Environmental Plan 2012 (**Lismore LEP**), but those amendments have not occurred. Examples include the references to the not yet adopted clause 5.22 in the Lismore LEP, and the definition of "*defined flood event*".
62. McConaghy's respectful submission is that it would be premature to adopt the controls in the Draft Revised DCP in circumstances where the documents that the Draft Revised DCP relies upon are not final and have not been adopted by Council. Mr Kennan has provided further explanation in respect of this issue in the Nexus Town Planning Report at section 2 (see pages 1 to 3).
63. In response to this issue, McConaghy respectfully submits that the Council should accept Submission D discussed below.

Submission D: Council should exhibit the flood prone lands package as a whole, and defer the Draft Revised DCP until the flood risk management plan is adopted

64. The flood prone lands package should be exhibited as a whole, including the final flood study, flood risk management plan, amended Local Environmental Plan, and revised development control plan.
65. Upon receiving initial feedback from the community, McConaghy respectfully submits that the Council should implement a staged implementation of the documents within this package, following the correct logical sequencing.
66. To this end, the controls in the Draft Revised DCP should not be adopted by the Council until all of the documents which inform the proposed control have been adopted by the Council. More specifically, the Draft Revised DCP should not be adopted until:
 - (a) A Flood Study is adopted by Council following public exhibition and consultation.
 - (b) The Lismore FRMS, or any successor flood risk management study, is adopted by the Council following public exhibition and consultation.
 - (c) The Lismore FRMP, or any successor flood risk management plan, is adopted by the Council following public exhibition and consultation.
 - (d) It is known whether or not the Lismore LEP will be amended in the manner currently suggested by the Draft Revised DCP.

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Attachment 1 – WEP Engineering Report



Water Engineering Plus Pty Ltd

Lismore Square Shopping Centre Review of Draft Revised Flood Prone Lands DCP and Supporting Reports- Flooding

Prepared for: Lismore Shoppingworld Pty Ltd

Date: 20 July 2023

File Reference: 30113



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1 Introduction

Lismore Shoppingworld Pty Ltd (**McConaghy**) owns the Lismore Square Shopping Centre (the **Site**) at 95 Diadem Street (Lot 100 on DP1163274) in Central Lismore.

The shopping centre, which is shown on Figure 1.1, is bounded by Uralba Street to the north, Brewster Street to the west, Diadem Street to the east, and a sports ground to the south.

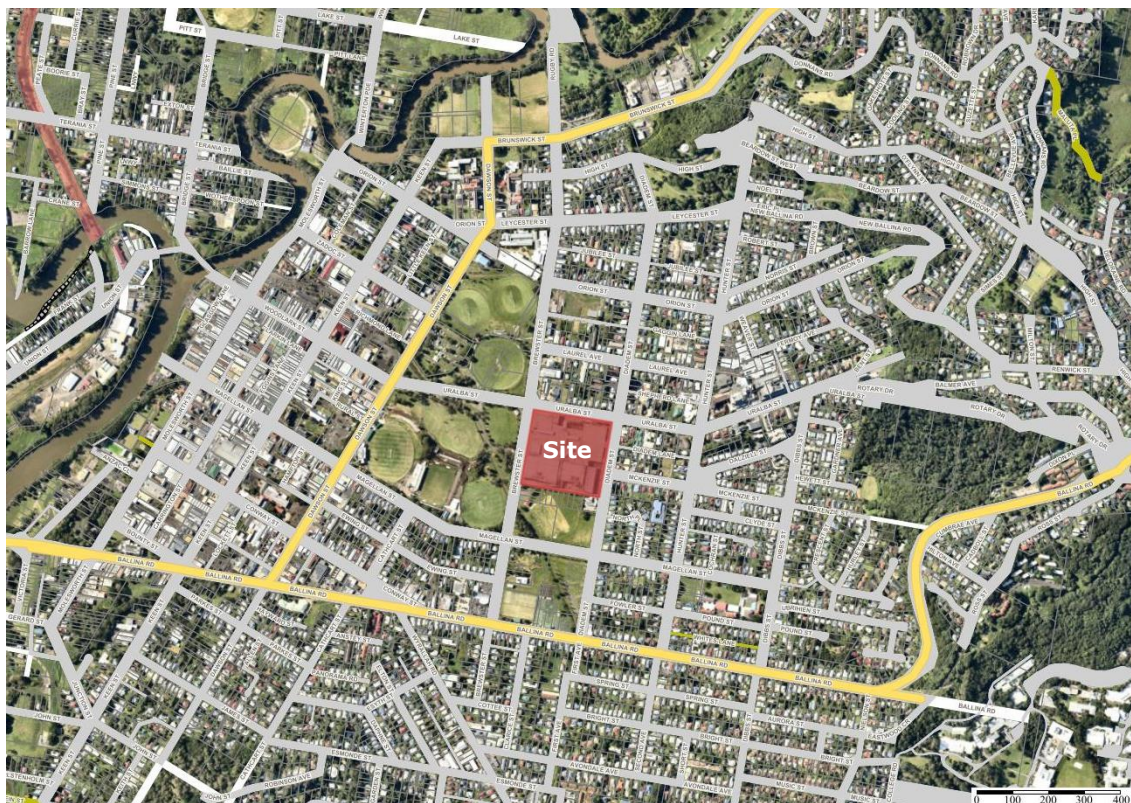


Figure 1.1 Lismore Square Shopping Centre

On 17 June 2023, Lismore City Council (**Council**) placed the following documents on public exhibition.

- Engeny. 2021, *Rous County Council, Lismore Floodplain Risk Management Study*, Final Draft (Revision 3, 18 February) (the **Lismore FRMS**).
- Engeny. 2023, Lismore City Council, *Lismore Floodplain Risk Management Plan – Land Use Planning and Development Control*, Interim Report, Draft (Revision 4, 4 May) (the **Lismore FRMP**).
- Engeny, 2023, *Lismore Floodplain Risk Management Plan, Flood Risk Precincts*, Figure 3.6 (10 May) (the **Flood Precincts Map**).
- Lismore City Council. (n.d.), *Explainer: understanding Lismore City Council's Flood Risk Precinct map and the NRRC's Flood Priority map*.
- Lismore City Council. (n.d.), *Flood Prone Lands Development Control Plan*, Draft (**Draft Revised DCP**).
- Lismore City Council. (n.d.), *Flood Planning FAQ's*.

This report presents the results of:

- a review of the above documents with regard to flooding and flood risk management;
- based on the review, a consideration of the reasonableness and fairness of the provisions of the Draft Revised DCP with respect to the potential for future development of the Site and the CBD Development Exemption Precinct.

The review was undertaken by Martin Giles, Principal of Water Engineering Plus, who has over 30 years of experience specialising in hydrologic and hydraulic investigations and floodplain management.

To assist in the review, I was provided with the following information.

- ***Drawings of Shopping Centre***

The following drawings prepared by pdt Architects in relation to the Stage 3 Extensions to the Site were provided to allow an understanding of the existing development to be obtained:

- Proposed Site Plan & Carpark Layout: 2940/WD/A1.10 Issue C;
- Proposed Shopping Mall: 2940/WD/A2.00 Issue C;
- Proposed Elevations: 2940/WD/A.400 Issue B;
- Proposed Elevations: 2940/WD/A4.10 Issue J;
- Proposed Elevations: 2940/WD/A4.20 Issue K;
- Proposed Elevations: 2940/WD/A4.30 Issue E;
- Existing/ Proposed Sections: 2940/WD/A5.00 Issue E;
- Proposed Sections: 2940/WD/A5.10 Issue G; and
- Proposed Sections: 2940/WD/A5.20 Issue E.

- ***Site Flooding Operations Manual***

The document *Lismore Shopping Square Flood Procedure* (Version 14, February 2020) (the **Flood Procedure Plan**) provides detailed procedures to manage the Site in the event of a flood occurring, allowing the progressive closure of the Site in response to increasing flood risk.

2 Site Context- Flooding

This section presents the flood information available in relation to the Site.

2.1 Flooding

2.1.1 Flood Levels

Lismore is subject to inundation as a result of flooding in Leycester Creek and/or Wilsons River. Central Lismore, in which the Site is located, is protected to a certain degree by a levee (known as the CBD Levee) located on the southern bank of Wilsons River.

According to Table 5.3 of the Lismore FRMS, there is isolated overtopping of the levee in the 10% Annual Exceedance Probability (**or AEP**) event (of the order of a 10-year average recurrence interval (ARI) event). For the 5% AEP (20-year ARI) event or greater, overtopping of the levee occurs along its full length.

The flood levels at the Site associated with a range of design events are listed in Table 2-1. The nominated levels are based on flood mapping presented in Appendix A of the Lismore FRMP which provides flood levels at 0.25 metre intervals. This level of accuracy is considered suitable for the purposes of the flood review. The table includes the calculated flood level for the Probable Maximum Flood (**or PMF**), the largest flood event that could conceivably occur.

It is considered that the flood mapping in Appendix A of the Lismore FRMP matches the flood mapping in Appendix A of the Lismore FRMS, noting that the Lismore FRMS presents flood mapping for a subset of the events considered in the Lismore FRMP.

For the report, a single flood level was adopted at the Site based on the location of the flood level contours relative to the Site.

Table 2-1 Flood Levels at Site

Event	Flood Level Range (mAHD)	Adopted Flood Level (mAHD)
10% AEP (10-year ARI)	10.0 – 10.25	10.2
5% AEP (5-year ARI)	11.5 – 11.75	11.7
1% AEP (100-year ARI)	12.25 – 12.5	12.5
0.2% AEP (500-year ARI)	13.0 – 13.25	13.2
1 in 1,000 AEP	13.75 – 14.0	13.9
1 in 2,000 AEP	14.0 – 14.25	14.2
1 in 10,000 AEP	14.25 – 14.5	14.4
1 in 100,000 AEP	15.5 – 15.75	15.6
PMF	16.5 – 17.0	16.7

The depths of flooding at the Site for the 1% AEP event and the PMF event are shown on Figure 2.1 and Figure 2.2 respectively.

With reference to the figures, the north-eastern corner of the Site (near the intersection of Uralba Street and Diadem Street) is free from inundation in the 1% AEP event, allowing flood free access to and from the Site.

Even for the PMF event, areas above flood level in Uralba Street are available within a short distance of the Site, allowing for progressive and timely evacuation of the Site to areas above flood level.

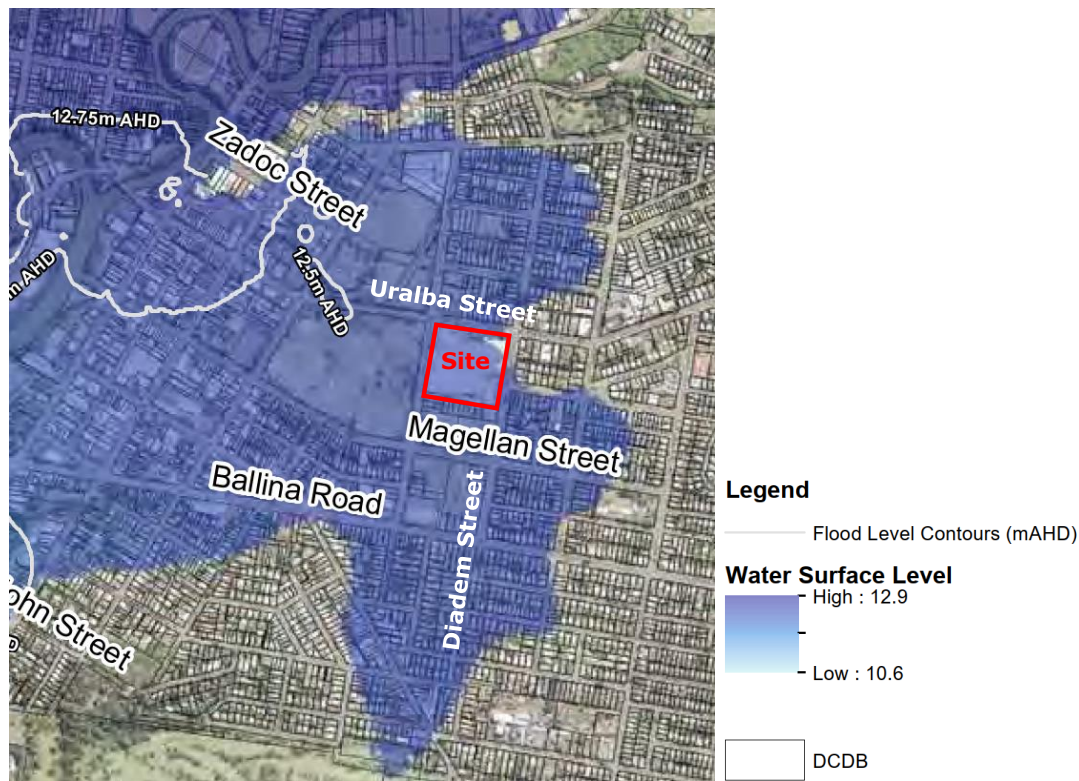


Figure 2.1 1% AEP Event, Flood Depths and Level Contours

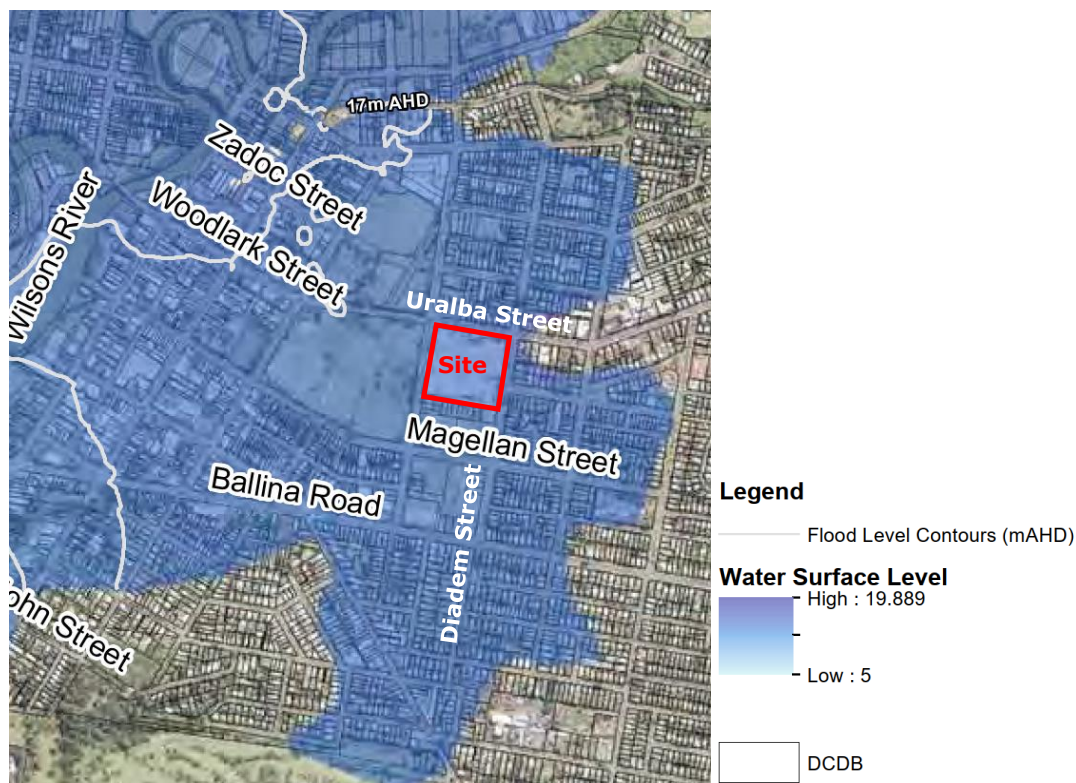


Figure 2.2 PMF Event, Flood Depths and Level Contours

The flood levels nominated for the 1% AEP event in Table 2-1 do not include an allowance for climate change.

Figure 4.5 of the Lismore FRMS indicates that climate change to 2090 in accordance with the RCP8.5 pathway will result in an increase in the 1% AEP event flood level of between 0.55 and 0.6 metres, resulting in a flood level of between 13.05 mAHD and 13.1 mAHD.

2.1.2 Type of Flooding

As discussed in Section 2.2, the depth of flooding that occurs in Central Lismore (including the Site) when the CBD levee is overtopped is significant. However, the associated velocity of flow is relatively low. To demonstrate this, Figure 2.3 presents the calculated product of depth and velocity (a measure of flood hazard) for the 1% AEP and 2022 flood events from the mapping presented in Appendix D of the Lismore FRMP.

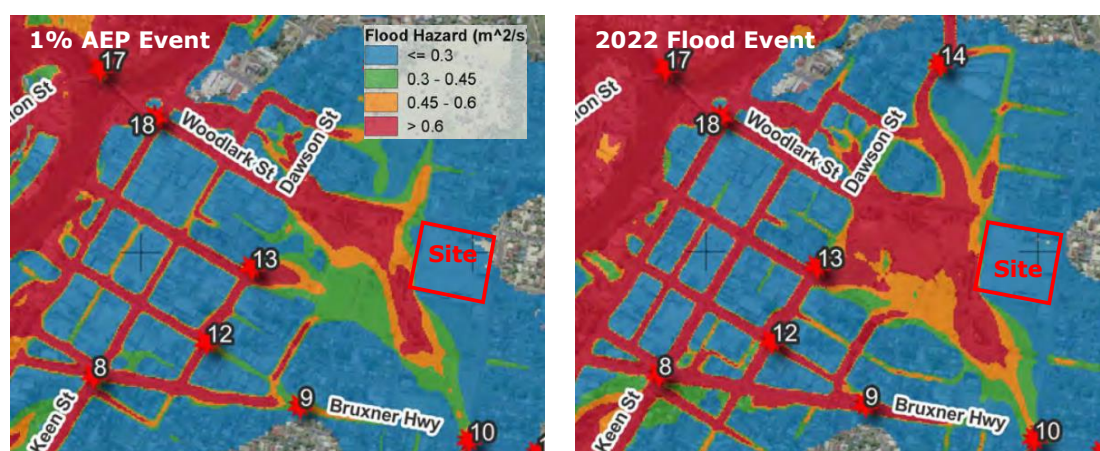


Figure 2.3 Depth-Velocity Product, 1% AEP and 2022 Events

With reference to the figure, the depth-velocity product within the Site is low, being generally less than 0.3 m²/s.

Due to these relatively low flow velocities, the Site is designated as being within a flood storage area according to Flood Risk Management Manual (NSW DPE, 2022). Flood storage areas are areas of the floodplain that are outside of floodways (which generally convey a significant discharge of water during floods and generally align with naturally defined channels) that generally provide for temporary storage of floodwaters during a flood event (Lismore FRMP, p7).

Figure 2.4 presents an excerpt from Figure 3-4 of the Lismore FRMP which indicates that the Site is predominantly in a flood storage area and not in a floodway.

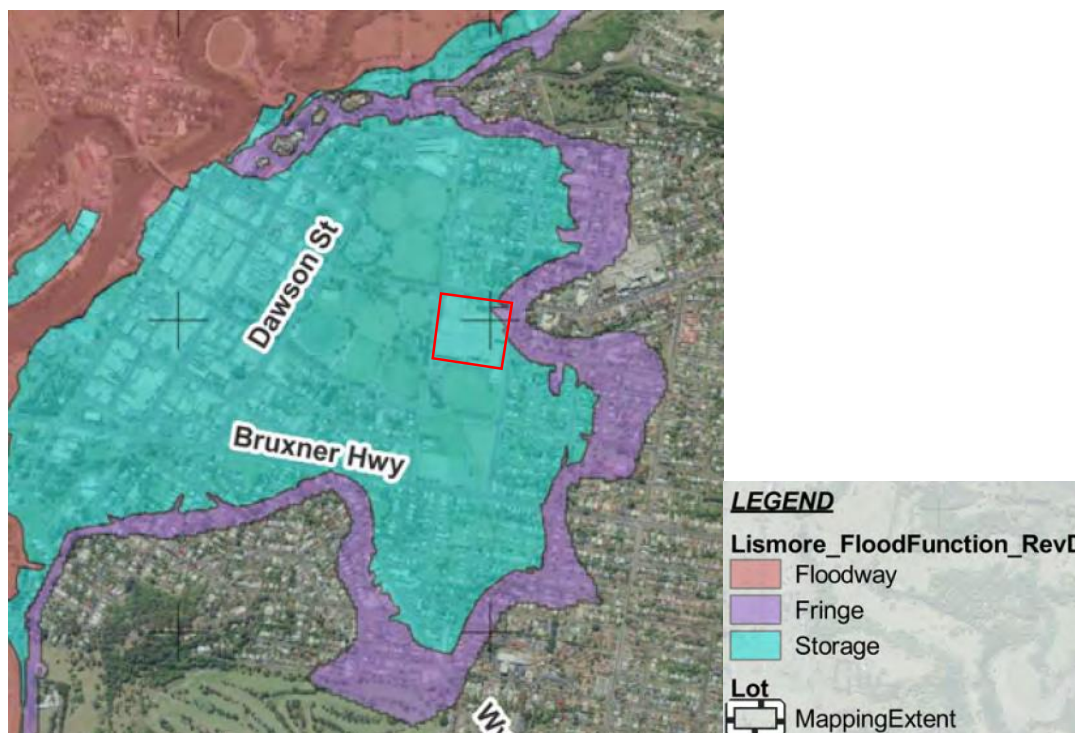


Figure 2.4 Flood Function

2.1.3 Warning Time

As Leicester Creek and Wilsons River command large catchment areas, there is considerable warning time available prior to the inundation of Central Lismore and the Site. The CBD levee also adds to the available warning time.

According to Table 3.8 of the Lismore FRMP (for points 13 and 14 on Figure 3.8 of the Lismore FRMP which have a similar flood risk as the Site), the warning times prior to inundation are likely to be of the order of (subject to confirmation by model interrogation):

- For the 1% AEP event:
 - 23 hours from minor flood warning;
 - 20.5 hours from moderate flood warning; and
 - 8 hours from major flood warning.
- For the 2022 historic event:
 - 87 hours from minor flood warning;
 - 18 hours from moderate flood warning; and
 - 6 hours from major flood warning.

The above warning times (and even lesser warning times) are considered sufficient for the closure and evacuation of commercial sites (such as the Lismore Square Shopping Centre) in advance of the commencement of flooding.

It is also relevant to note that the warning times detailed above relate to the ground level of the Site. Additional warning time would be available prior to the inundation of upper levels of the Site.

2.1.4 Period of Inundation

Figure 2.5 presents the calculated period of inundation for the 1% AEP and 2022 flood events from the mapping presented in Appendix D of the Lismore FRMP.

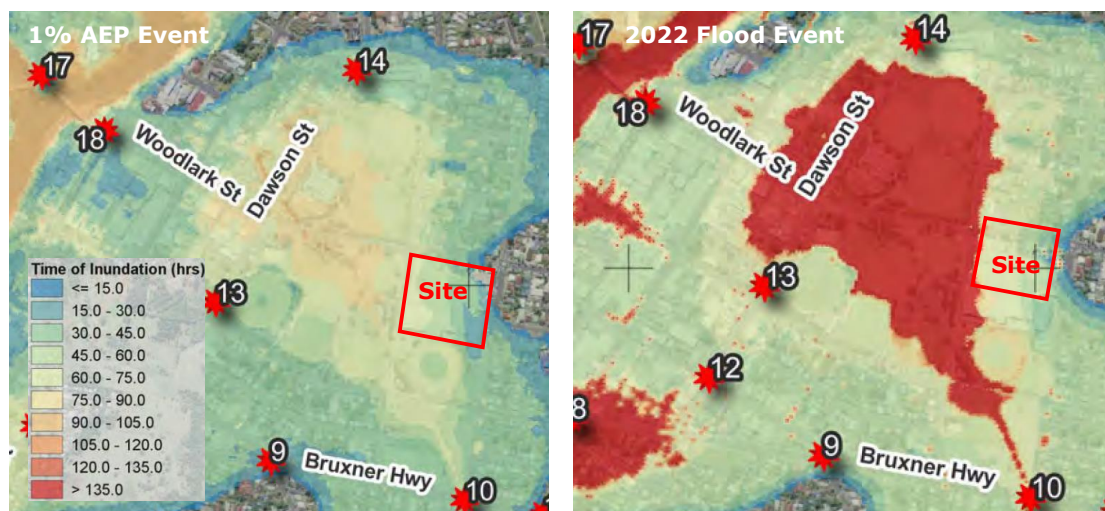


Figure 2.5 Period of Inundation, 1% AEP and 2022 Events

For the 1% AEP event, parts of Central Lismore are inundated for 90- 105 hours. At the Site, the period of inundation of the ground varies from between 60 – 75 hours to less than 15 hours. For the 2022 historic event, the period of inundation was longer than calculated for the 1% AEP event.

Similar to warning time, the period of inundation applies to the ground level. The period of inundation of upper levels of the Site would be shorter than the length of time applicable at ground level.

2.1.5 Summary

In summary, the flood modelling presented in the Lismore FRMP and the Lismore FRMS indicates that:

- The Site is subject to inundation when the CBD levee overtops (commencing at about the 10% AEP event);
- Flooding occurs to a significant depth across Central Lismore, including the Site;
- The velocity of flow through the Site is relatively low, resulting in the flood function of the Site being defined as Flood Storage rather than Floodway;
- The warning time prior to the commencement of inundation is significant;
- The period of inundation will be significant in the lowest parts of the Site (reducing for upper levels/ higher parts of the Site; and
- Flood free access is available to the Site for the 1% AEP event and a rising road away from the Site over a relatively short distance allows areas above the level of the PMF to be reached.

2.2 Flood Risk

The Lismore FRMP defines flood risk based on the flood hazard associated with a range of events.

According to Section 3.1 of the Lismore FRMP, flood hazard was calculated using the Australian Institute for Disaster Resilience (AIDR) flood hazard classification. The classification, which is shown on Figure 2.6, uses hazard categories ranging from H1 (generally safe for people, vehicles and buildings) that is associated with shallow and/or low velocity flow to H6 (unsafe for vehicles and people) which is associated with deep and/or high velocity flow.

The hazard vulnerability curves are a standard means for quantifying flood hazard. It is noted that, in the case of Central Lismore, as the depth of flooding is significant, there are broad areas defined as having a high hazard despite the velocity of flow being relatively low.

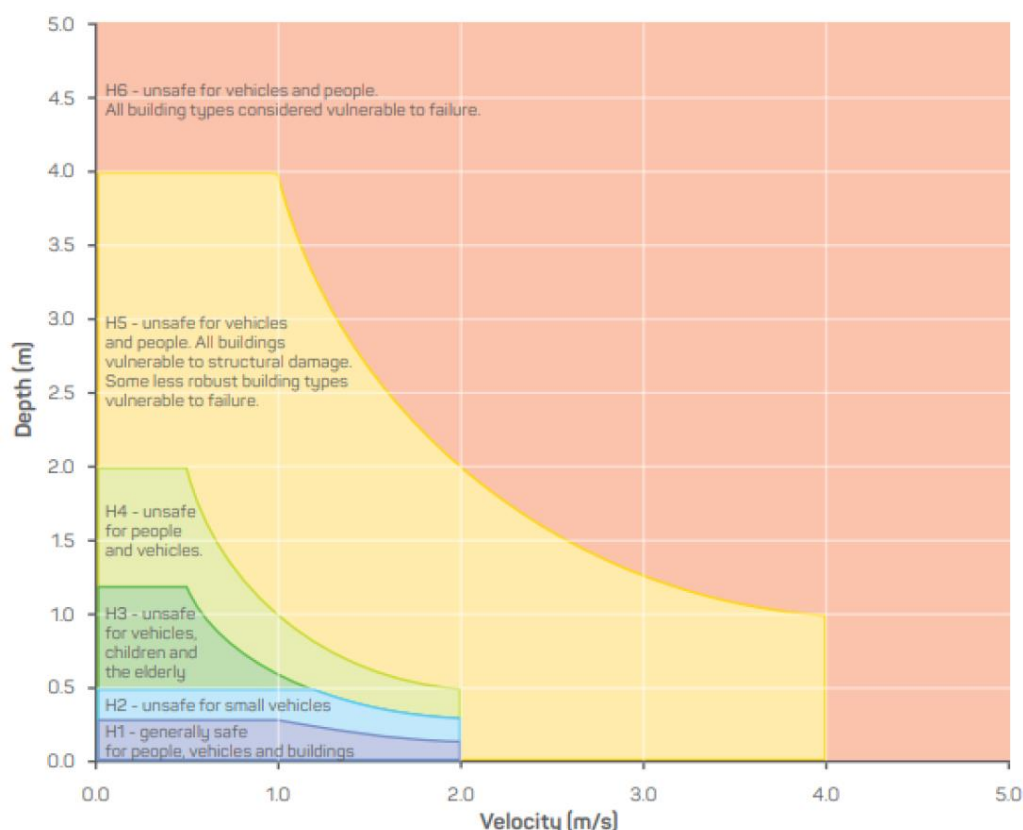


Figure 2.6 AIDR Flood Hazard Vulnerability Curves

The Lismore FRMP calculated flood hazard for the 10% AEP, 5% AEP, 1% AEP, 0.2% AEP, 1 in 1,000 AEP, 1 in 2,000 AEP, 1 in 10,000 AEP, 1 in 100,000 AEP and PMF events.

The flood hazard calculated for each event was converted to flood risk using a flood risk matrix developed for Lismore. Figure 2.7 presents the flood risk matrix provided in Figure 3.5 of the Lismore FRMP. For a given flood hazard level, the matrix nominates lower levels of risk for larger flood events, reflecting the reduced probability of a larger event (such as the 1 in 2,000 AEP event) occurring compared to a more frequent event (such as the 5% AEP event).

The flood risk assigned at a particular point reflects the highest risk across the range of events considered.

It is noted that while many authorities are introducing similar matrices, there are differences between the range of events considered and the flood risk defined for a particular combination of event and flood hazard.

Flood Likelihood	Flood Hazard (AIDR)					
	H1	H2	H3	H4	H5	H6
10% AEP	Low	Medium	Medium	High	Extreme	Extreme
5% AEP, 1% AEP	Low	Low	Medium	High	High	Extreme
0.2% AEP	Low	Low	Medium	Medium	High	High
1:1,000 AEP, 1:2,000 AEP	Low	Low	Low	Low	Medium	High
1:10,000 AEP, 1:100,000 AEP, PMF	Low	Low	Low	Low	Low	Medium

Figure 2.7 Flood Risk Matrix

Based on the mapping of the flood hazard and the definition of flood risk, the Flood Precincts Map (also shown in Figure 3.6 of the Lismore FRMP) was prepared.

The defined Flood Precincts Map in the vicinity of the Site is shown on Figure 2.8.

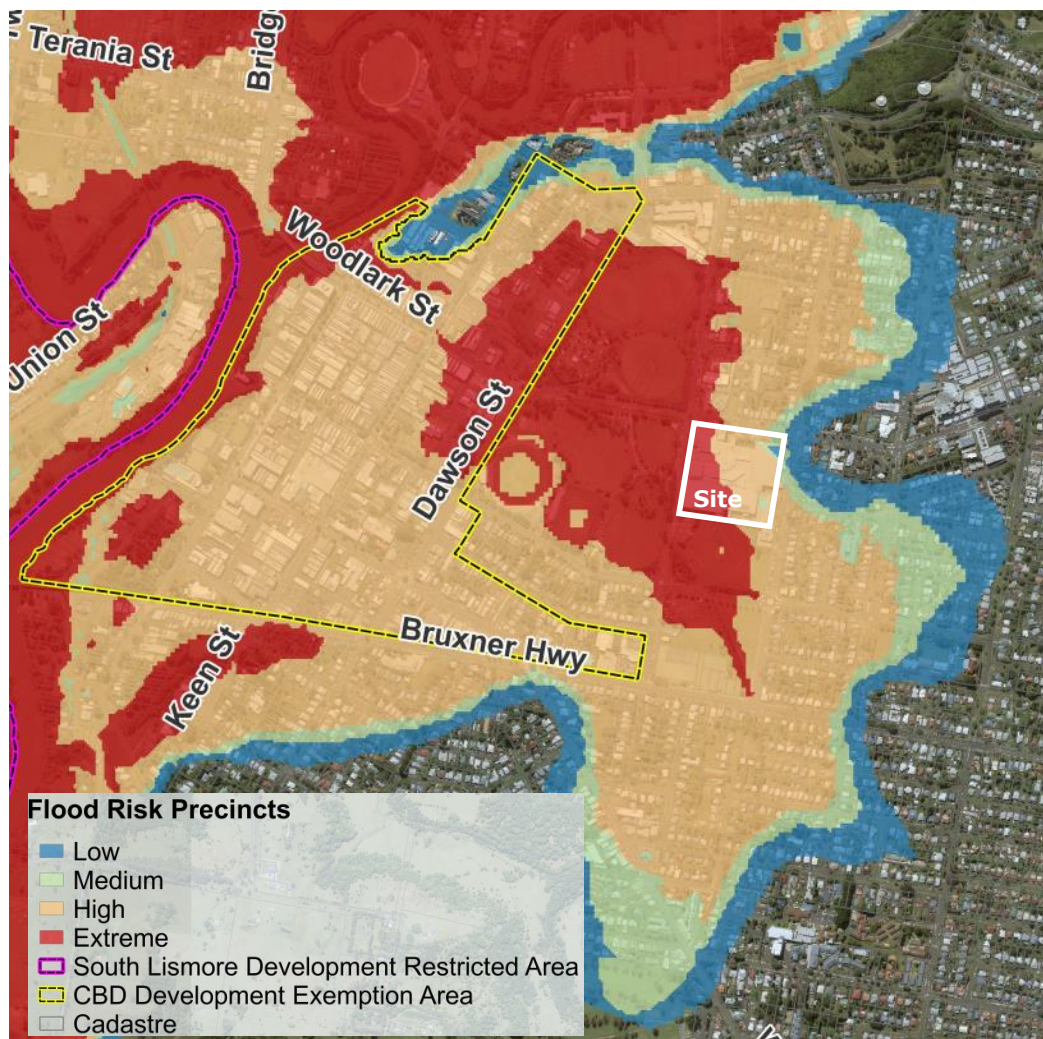


Figure 2.8 Flood Precincts Map, Central Lismore

With reference to Figure 2.8, the flood risk assigned to the ground level of the Site varies between low in the north-eastern corner of the Site to extreme in the south-western part of the Site.

3 Observations on Exhibition Documents

3.1 Lismore FRMS

A review of the Lismore FRMS was undertaken. As the review excluded a review of the model itself, the scope of the review was limited to the report document.

The report presents the results of model calibration and the use of the calibrated model to derive flood characteristics for a range of design events and the consideration of sensitivity cases such as the 1% AEP event with climate change.

It is noted that the peak flows derived for design events in the Lismore FRMS differ significantly from those obtained by previous studies (refer Table 4.4 of the Lismore FRMS). Despite this, the calculated flood levels at a number of key points are somewhat similar to those obtained by previous studies (refer Table 4.7 to Table 4.11 of the Lismore FRMS).

As the reliability of a flood model is dependent on its calibration, it would be beneficial for Council to provide details regarding the quality of the model calibration to the 2022 flood event. Although the event occurred after the completion of the Lismore FRMS, mapping in Appendix D of the Lismore FRMP indicates that the event has been modelled.

A comparison between recorded and calculated levels and flows for the 2022 event would allow the ability of the model to accurately predict flood levels for major flood events to be reviewed together. This is of particular relevance given the variation in peak flow predictions across the studies completed in relation to the area. At present, the largest event that the model has been calibrated to is the 2017 event, which has a magnitude of less than the 1% AEP event.

3.2 Draft Revised DCP

3.2.1 Overview and Actual Site Flood Risk

The Draft Revised DCP introduces a '*risk-based approach to planning and development in the Flood Prone Lands of Lismore LGA*' (p3). The risk-based approach is based on the flood risk mapping developed through the Lismore FRMS and Lismore FRMP (Section 3 of the Draft Revised DCP).

While such a philosophy is consistent with the risk-based approach being adopted by many local government authorities, it is considered that the approach adopted in the Draft Revised DCP is overly prescriptive.

Although it is recognised that the factors considered by the Draft Revised DCP and its supporting documents (the Lismore FRMS and Lismore FRMP) are of relevance and should be taken into account in relation to proposed development, the site-specific nature of flooding (for example, whether hazard classification is due to the depth or velocity of water or the availability of an escape route), and the particular nature of a proposed development (for example the creation of floors with a high level of flood immunity) needs to be considered on a case-by-case basis. The mapping developed as part of the Lismore FRMS should be used to provide guidance and not definitive direction.

The Site provides a relevant example of the appropriateness of a site-specific study based on the nature of development and its location. The flood risk assigned to the ground level of the Site varies between low (a small area in the north-eastern corner of the Site) to extreme (the south-western part of the Site) (refer Figure 2.8). The majority of the Site is classified as having either a high or extreme flood risk.

However, this mapping only considers ground levels and does not take into account the higher level of the shopping mall itself and its lower flood risk.

To demonstrate this, Figure 3.1 presents an excerpt from pdt Architects Drawing 2940/WD/A4.20 Issue K which shows relevant floor levels for the existing Site:

- Lower carpark: 7 mAHd, increasing to over 8 mAHd;
- Mezzanine carpark: 9.98 mAHd;
- Mall floor level: 12.75 mAHd; and
- Big W mezzanine floor level: 16.25 mAHd.

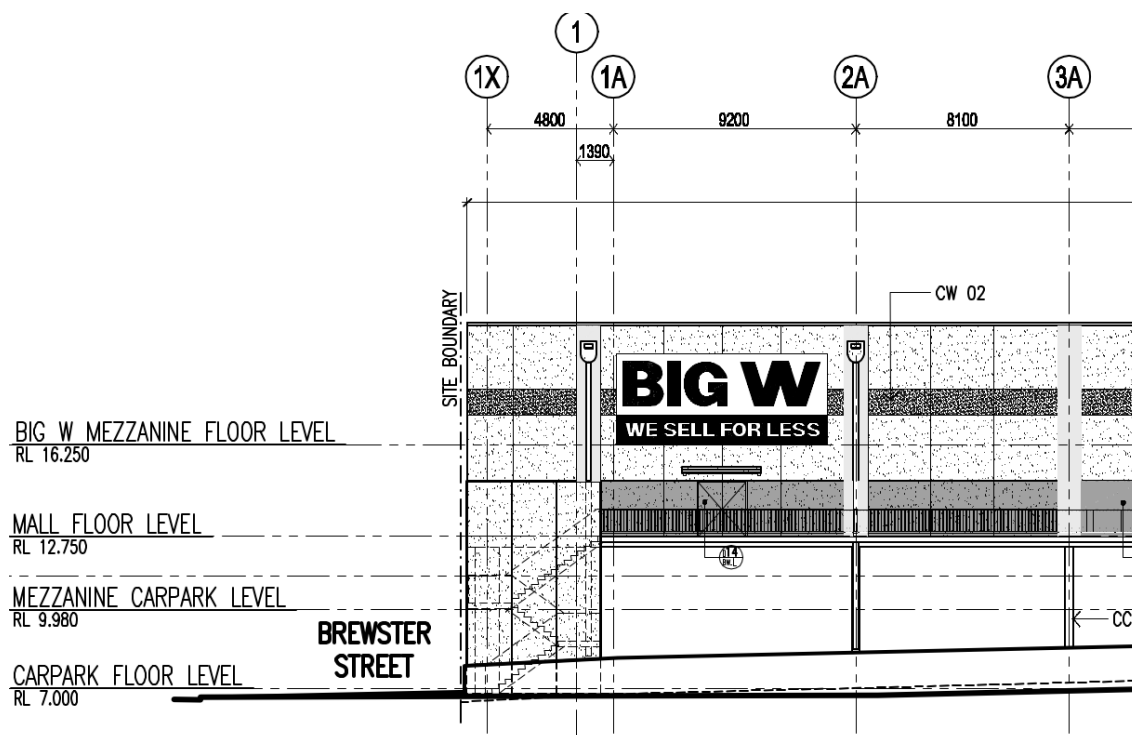


Figure 3.1 Site Typical Section

Based on these floor levels and assuming relatively low associated flow velocities, the flood hazard associated with each level was calculated. The results of the calculation are presented in Table 3-1, noting that the level of the lower car park varies and the presented results reflect the lowest level of the car park.

With reference to Table 3-1, while the flood risk associated with the lowest part of the car park is nominated as extreme, the flood risk reduces on upper levels of the Lismore Square Shopping Centre. For the mall level itself, the floor is above the current climate 1% AEP event flood level and has a low flood risk. The Big W mezzanine level is also classified as having a low flood risk, being immune to the 1 in 100,000 AEP flood event and only being inundated to a shallow depth in the PMF.

By only considering ground levels when defining flood risk, the mapping suggests a flood risk that does not correlate with and overestimates the actual flood risk associated with:

- the existing Site; or
- future development of the Site.

Table 3-1 Flood Risk Calculation for Site

Flood Likelihood	Level			
	Lowest Carpark	Mezzanine Carpark	Mall Floor	Big W Mezzanine
10% AEP	Extreme	Low	-	-
5% AEP	Extreme	High	-	-
1% AEP	Extreme	High	-	-
1% AEP Climate Change	Extreme	High	Low	-
0.2% AEP	High	High	Low	-
1:1,000	High	Medium	Low	-
1:2,000	High	High	Low	-
1:10,000	Medium	Medium	Low	-
1:100,000	Medium	Medium	Low	-
PMF	Medium	Medium	Low	Low
Governing	Extreme	High	Low	Low

3.2.2 Implications for Future Site Development

It is recognised that the Draft Revised DCP does not refer to existing development and therefore the existing use of the Site. However, it is considered that the document limits the potential for future modifications or development to the Site to an unreasonable and unfair extent based on flood risk.

As detailed in Section 3.2.1, the flood risk mapping applicable to the Site is based on ground levels rather than the floor level of the development.

The mapping, used as a basis for the consideration of the acceptability of new development in the Draft Revised DCP, either significantly constrains or precludes further development despite the current development of the Site demonstrating that an acceptable flood risk outcome can be achieved:

- The flood risk associated with the Big W mezzanine level is low (and the level is immune to the 1 in 100,000 AEP event);
- The flood risk associated with the mall floor level is low (and is managed via a Flood Procedure Plan already in place);
- While the flood risk associated with the mezzanine carpark level is high, sufficient warning time exists for it to be managed (by evacuation and closure) using a Flood Procedure Plan (already in place);
- Similarly, while the flood risk associated with the ground level carpark level is extreme, sufficient warning time exists for it to be managed (by evacuation and closure) using a Flood Procedure Plan (already in place); and
- An evacuation route (open in the 1% AEP event) providing rising road access over the short distance to land above the level of the PMF exists.

The related provisions of the Draft Revised DCP that are considered to either preclude or significantly restrict development unreasonably and unfairly are detailed below.

- **Extreme risk precinct**

For the extreme risk precinct, Section 3.1 of the Draft Revised DCP states that *'generally, no new development will be permissible in these areas given the extreme risk to life and property.'*

The application of this section would preclude future development in that part of the Site mapped as having an extreme flood risk unless the development is considered to be concessional development.

- **High risk precinct**

For the high risk precinct, Section 3.2 of the Draft Revised DCP precludes new residential development and states that (emphasis added) **'some commercial, industrial and community development may be permitted subject to assessment.'**

While the wording suggests that there could be some leeway for development in the high risk precinct, the Draft Revised DCP does not provide sufficient surety in this regard. Further, the wording of the section does not consider the ability to complete works (as per the current Site development) to manage high risk (for example building at a higher level or including a Flood Risk Management Plan given the long warning time available for evacuation).

- **Section 4 – Development Controls**

Section 4 presents development controls relative to flood risk.

Assuming that any future development of the Site would be commercial in nature, based on the proposed mapping the development controls that would be applicable to the Site include the following.

- Extreme Flood Risk: - No development.
- High Flood Risk: - Floor level as close to the Flood Planning Level (FPL). Where below the FPL, more than 25% of floor space must be above the FPL.
- A site-specific evacuation plan prepared by a suitably qualified consultant must be submitted with any DA.
- Development must have a road evacuation route to land above PMF.

With respect to the Site, the above development controls would preclude development in that part of the Site mapped as having an extreme risk and significantly constrain development (specifically floor levels) over the majority of the remainder of the Site (mapped as high risk).

In comparison, for low risk sites no development controls are proposed. Although the current development of the Site demonstrates that a low risk outcome can be achieved for the mall floor, the mapping and associated development controls in the Draft Revised DCP appear to preclude this for a new development.

Similarly, although the flood risk associated with the carparking levels can be (and currently is) appropriately managed to reduce flood risk via the Flood Procedure Plan, the specification of development controls based on the current mapping precludes such an approach for future development.

In summary, while the consideration of flood risk in relation to proposed development is appropriate, it is recommended that the Draft Revised DCP be amended to allow the site-specific consideration of flood risk and the development of design and operational solutions that appropriately manage the risk based on the type of development being contemplated.

While it is acknowledged that Section 3.7 of the Draft Revised DCP allows for the variation of the boundaries of risk precincts, this only relates to the accuracy of the modelling and does not provide the necessary flexibility to consider the flood risk associated with a particular development.

Similarly, while the Draft Revised DCP includes allowances for concessional development that includes commercial development, the Draft Revised DCP requires no increase in flood risk regarding property damage and personal safety. There is a concern that it would not be possible to include future development of the Site within the concessional development category despite the resultant risk to property damage and personal safety being managed to an acceptable degree.

Overall, the Draft Revised DCP does not provide sufficient surety in relation to the ability to complete development subject to the demonstration of acceptable flood risk.

3.3 CBD Development Exemption Precinct

The Lismore FRMP and the Draft Revised DCP contemplate a CBD development exemption precinct (refer Figure 2.8 for the extent of the precinct). The Site is not included within the precinct.

When discussing the potential for evacuation of the CBD, the Lismore FRMP notes that 'the CBD levee provides significant opportunity for evacuation of this area' (p23). As shown in Figure 3.8 of the Lismore FRMP (reproduced as Figure 3.2 below), the evacuation distance from the centre of the precinct is of the order of 1.2 – 1.8 kilometres. In comparison, the Site, which is not located in the exemption precinct, has direct access to an evacuation route (refer Section Figure 2.1 and Figure 2.2).

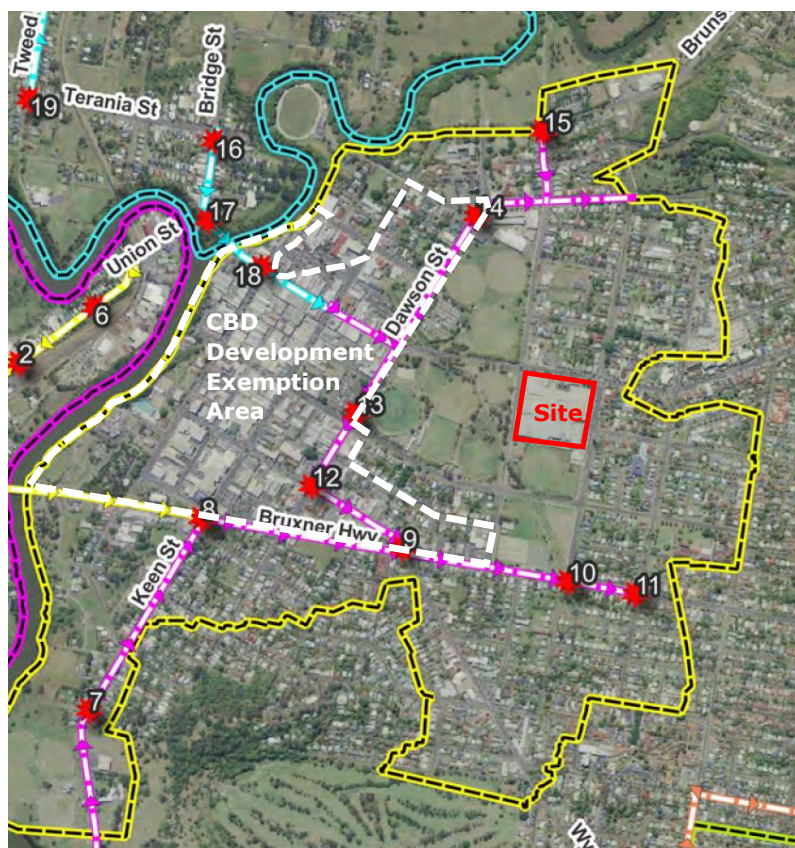


Figure 3.2 Evacuation Route (showing CBD Development Exemption Precinct)

Section 3.5 of the Draft Revised DCP indicates that residential development (with conditions) is permissible within the CBD Development Exemption Precinct 'due to CBD development having adequate evacuation routes, the limited protection afforded by the CBD levee, and the ability for dwellings such as shop-top housing to be constructed above the FPL on existing buildings'.

Section 3.5 also notes that Commercial development is permissible.

The only restriction provided in Section 3.5 is in relation to extreme flood hazard areas, where development is not permitted unless it is characterised as non-urban or concessional.

The development controls nominated in Section 4 of the Draft Revised DCP are also relaxed compared to those applied elsewhere, with floor levels on Commercial development able to be set *'as close to the FPL as practical and no lower than existing floor levels when undertaking alterations or additions.'*

It is considered that the development controls adopted in relation to the CBD Development Exemption Precinct are inconsistent with those applied in other precincts. If a flood risk is considered to either be intolerable or require certain measures (for example minimum floor levels for development) in order to provide a tolerable or acceptable risk with respect to personal safety or property damage, then it is not appropriate to arbitrarily relax the measures required within a selected area.

With reference to Figure 2.8, the hazard zoning across the CBD Development Exemption Precinct is predominantly high hazard, with areas of extreme hazard: the flood risk mapping associated with the Site is consistent with the mapping of properties within the CBD Development Exemption Precinct.

In this case, compared to the CBD Development Exemption Precinct, the Site has:

- a similar level of protection from the CBD levee;
- a similar flood warning time; and
- a superior ability to achieve evacuation.

Given this, it is considered that there is no valid reason from a flood risk perspective for different development controls to be placed on the Site compared to the CBD Development Exemption Precinct.

At a minimum, it is considered that either similar development controls as adopted for the CBD Development Exemption Precinct be applied across the remainder of Central Lismore (i.e., to include the Site), or the CBD Development Exemption Precinct is expanded to include the Site.

4 Conclusion and Recommendations

A review was undertaken with respect to the Draft Revised DCP and its supporting reports (primarily the Lismore FRMS and Lismore FRMP).

- **Lismore FRMS**

It is recommended that the modelled results for the 2022 flood event be compared to the recorded results to allow the ability of the model to replicate major flood events and predict flood levels for major and extreme flood events to be considered.

- **Draft Revised DCP**

The Draft Revised DCP uses a flood risk-based approach to the specification of development controls in areas affected by flooding.

While such a philosophy is a reasonable response to flooding, it is considered that the approach adopted in the Draft Revised DCP is overly prescriptive and that a site-specific approach to consider the compatibility of a proposed development relative to flood risk is required.

The Site provides a relevant example of the appropriateness of a site-specific study based on the nature of development and its location. The majority of the Site is classified as having either a high or extreme flood risk. However, this only relates to the ground car parking level. The floor level of the mall itself is above the current climate 1% AEP flood level and has a low flood risk. The operation of the Site in accordance with the Flood Procedure Plan demonstrates that the risk associated with the mall and the risk associated with the carparking areas can be appropriately managed.

In comparison, the development controls nominated in the Draft Revised DCP effectively preclude development in the extreme flood risk precinct and place significant development controls (particularly in relation to floor levels) on the high flood risk precinct. Further, the potential relaxations for development (such as concessional development) do not offer sufficient surety with regard to future development from a flooding perspective.

By only considering ground levels when defining flood risk, the mapping suggests a flood risk that does not correlate with and overestimates the actual flood risk associated with the existing Site or future development of the Site. In turn, unreasonable and unfair development controls are placed on the Site.

Further, the Draft Revised DCP does not give consideration to the ability to manage flood risk. In the case of the lower ground car park on the Site, due to the long warning time associated with flooding it is possible (as evidenced by the currently adopted procedures) to evacuate and close the area prior to its inundation, adequately addressing flood risk.

Consequently, it is considered that the Draft Revised DCPs use of the flood risk mapping as the basis for determining whether development is acceptable is not appropriate as it unduly constrains the potential for or precludes future development of the Site. Instead, the risk-based approach should be used as a framework for the consideration of the compatibility of a proposed development to the flood risk relevant to the use, taking into account site-specific factors such as proposed floor levels, proposed use, and the ability to evacuate and operate the development in accordance with a Flood Risk Management Plan.

- **CBD Development Exemption Precinct**

The Lismore FRMP and the Draft Revised DCP contemplate a CBD development exemption precinct (refer Figure 2.8 for the extent of the precinct). The Site is not included within the precinct.

The Draft Revised DCP offers relaxations in relation to development controls for sites within the CBD Development Exemption Precinct compared to the requirements for other precincts. It is considered that this presents an inconsistent and unreasonable and unfair approach to flood risk.

If a flood risk is considered to be intolerable or require certain measures in order to provide a tolerable or acceptable risk with respect to personal safety or property damage, then it is not appropriate to arbitrarily relax the required measures (i.e., deeming a higher flood risk to be acceptable) in a selected area.

In this case, the Site has a similar risk profile to the CBD Development Exemption Precinct and a superior ability to achieve evacuation. It is therefore considered that there is no valid reason from a flood risk perspective for different development controls to be placed on the Site compared to the CBD Development Exemption Precinct.

At a minimum, it is considered that either similar development controls as adopted for the CBD Development Exemption Precinct be applied across the remainder of Central Lismore (i.e., to include the Site), or the CBD Development Exemption Precinct is expanded to include the Site.

Attachment 2 – Nexus Planning Report

Planning Report

Draft Chapter 8 - Flood Prone Lands

Lismore Development Control Plan

Lismore City Council



Planning Report
Draft Chapter 8 - Flood Prone Lands
Lismore Development Control Plan
Lismore City Council

19 July 2023

Prepared by:
Nexus Environmental Planning Pty Ltd
PO Box 212
CONCORD NSW 2137

B3433

1. Introduction

Nexus Environmental Planning Pty Ltd has been requested by Lismore Shoppingworld Pty Ltd (**McConaghy**) through its Solicitors Colin Biggers & Paisley to prepare a Planning Report to accompany a submission to Draft Chapter 8 - Flood Prone Lands of Lismore Development Control Plan (**the draft DCP**).

The submission of McConaghy relates specifically to the Lismore Square Shopping Centre of which it is the owner. **Figure 1** shows the location of the Lismore Square Shopping Centre.



Figure 1: Location map with the Site highlighted in red. © NearMap

2. Draft Chapter 8 - Flood Prone Lands, Lismore Development Control Plan

The *Draft Lismore Floodplain Risk Management Plan - Land Use Planning and Development Control* prepared by Engeny Water Management, relevantly states as follows (see page 1):

Engeny was engaged by Lismore City Council (LCC or Council) in late 2021 to update the Lismore Floodplain Risk Management Plan (FRMP). However, due to the February and March 2022 flood events, components

of the scope have been placed temporarily on hold, however the land use planning and development control elements of the FRMP proceeded. Therefore, this document acts as an interim report to summarise recommendations regarding these elements as a separable portion of work.

This report provides flood risk advice to facilitate further land use planning and development control determinations by LCC with input from relevant stakeholder including the community. This report will be revised as feedback is provided and further planning is undertaken.

Development Control Plans provide detailed planning and design guidelines to support the planning controls in a Local Environmental Plan.

When dealing with the preparation of a Development Control Plan which provides guidelines for development of flood prone land, there are a number of processes to be undertaken to inform the content of the Development Control Plan. The Floodplain Management Process is shown in **Figure 2** which is contained in the Floodplain Development Manual 2005. Although the Floodplain Development Manual 2005 has now been replaced by the Floodplain Risk Management Manual 2023, the same basic process applies as shown in **Figure 3** which is an extract from the 2023 Manual.

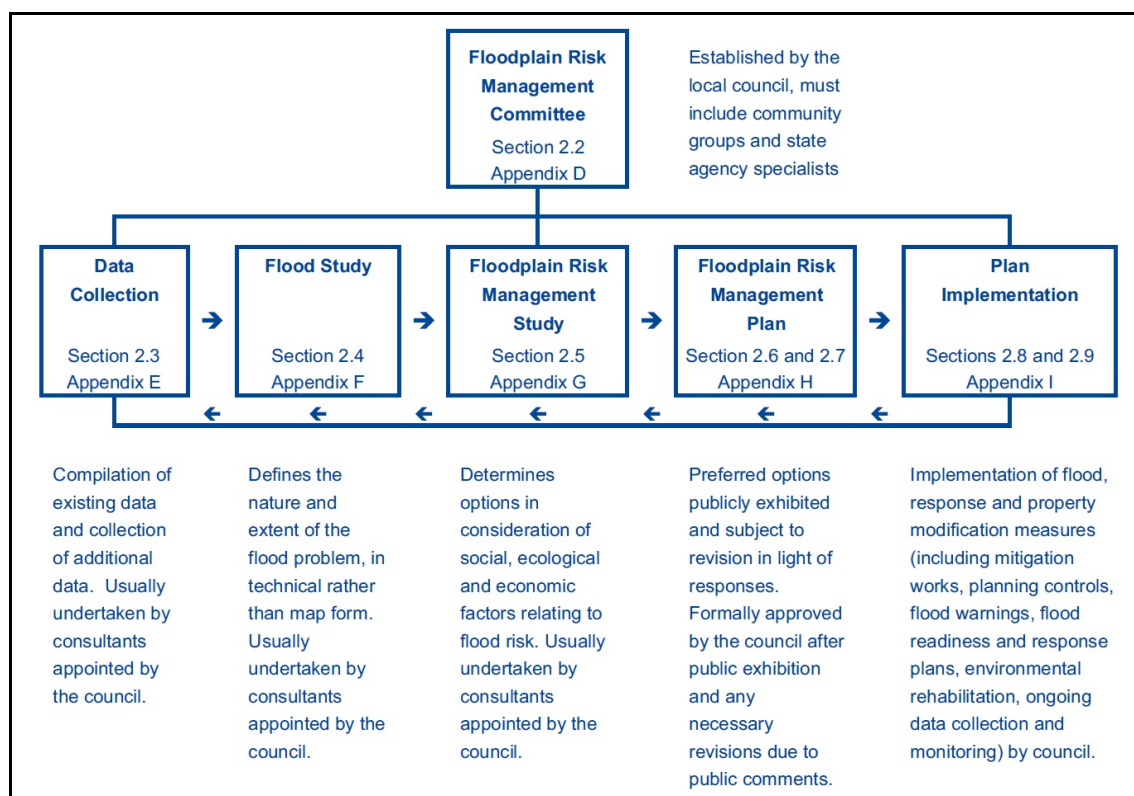


Figure 2: The Floodplain Management Process stated in the Floodplain Development Manual 2005.

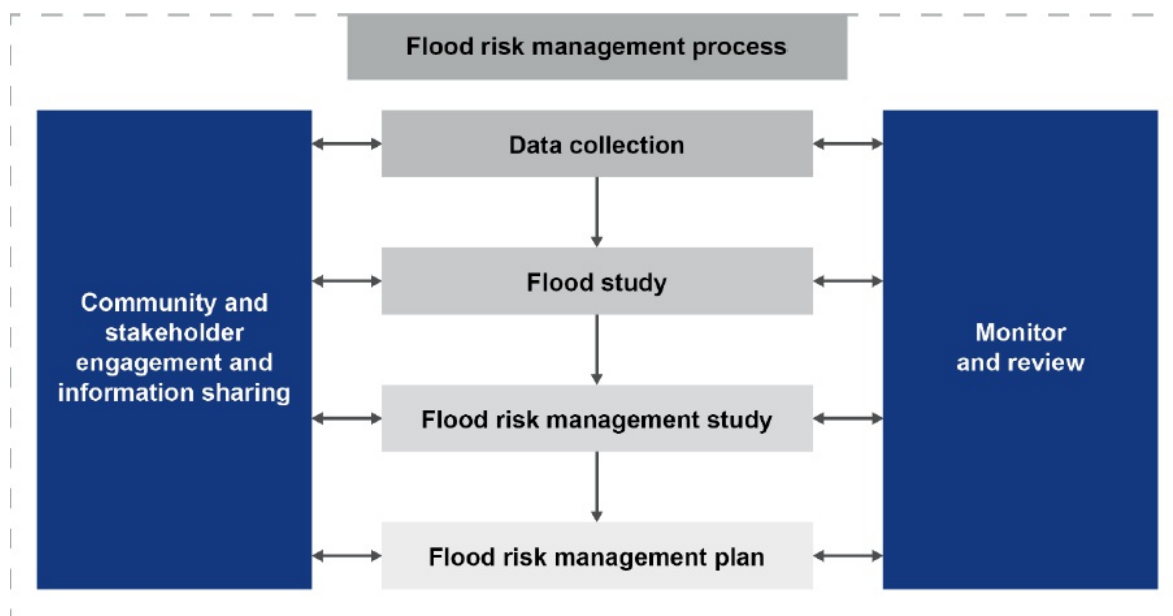


Figure 3: Extract from the Floodplain Management Manual 2023.

From **Figures 2 & 3**, it can be seen that the following stages of the process should be concluded and adopted by the Council prior to the Plan Implementation process:

- Preparation of a Flood Study.
- Preparation of a Floodplain Risk Management Study.
- Preparation and adoption of a Floodplain Risk Management Plan.

In the case of the draft DCP, it is clear that the documents which inform that draft DCP have not been either placed on public exhibition or adopted by the Council and, indeed, rely on the modification of the Lismore Local Environmental Plan 2012 (**LEP 2012**) which has also not occurred.

While the controls contained in the draft DCP may or may not be appropriate, they should not be adopted until such time as the documents which inform the proposed controls have been placed on public exhibition, submissions are considered by the Council, and the documents are adopted with or without changes by the Council. It would be both reasonable and fair to exhibit all documents for public comment so that the entire floodplain management measures can be commented upon in the exhibition process. Such a process should also include any draft Local Environmental Plan seeking to change the provisions of LEP 2012 to give effect to any proposed changes to the planning controls.

2.1 Lismore Square Shopping Centre

The Lismore Square Shopping Centre is currently identified as being within the Flood Planning Area under LEP 2012,

and is, therefore, subject to the flood related development controls in the LEP 2012.

Under the current Lismore Development Control Plan (**LDCP**), the Lismore Square Shopping Centre is marked as a "High Flood Risk Area", and is, therefore, subject to additional controls set out in the LDCP.

The Exhibition Documents for the draft DCP were placed on public exhibition on 19 June 2023, and remained on exhibition until 17 July 2023, although the Council agreed to accept McConaghy's submission by COB on 21 July 2023.

The Exhibition Documents comprise the following:

- (a) *Lismore Floodplain Risk Management Study - Final*. It is noted that this document is labelled as "Draft" and has not been either placed on public exhibition or adopted by Council.
- (b) *Lismore Floodplain Risk Management Plan - Land Use Planning and Development Control*. This document is also labelled as "Draft" and has not been either placed on public exhibition or adopted by Council.
- (c) Flood Precincts Map.
- (d) Explainer: Understanding Lismore City Council's Flood Risk Precinct Map and the NRRC's Flood Priority Map.
- (e) *Draft Revised Flood Prone Lands Development Control Plan*.
- (f) Flood Planning FAQs prepared by the Council.

Notwithstanding that Lismore Floodplain Risk Management Plan and Study documents have not been adopted by the Council, the draft DCP has been placed on public exhibition in isolation.

It is also proposed to raise the Flood Planning Level by a climate change factor, which for the Lismore Square Shopping Centre would be 500mm - 600mm.

The flood mapping in the draft Lismore Floodplain Risk Management Plan and Study documents have identified the Lismore Square Shopping Centre as being:

- Part "Extreme Hazard";
- Part "High Hazard";
- Part "Flood Fringe" and
- Part located in a "Storage Area".

Figure 4 shows how the site of the Lismore Square Shopping Centre is affected by flood hazard, and **Figure 5** shows the extent of the storage area within which the Lismore Square Shopping Centre is located and the flood fringe

within the Lismore Square Shopping Centre site.

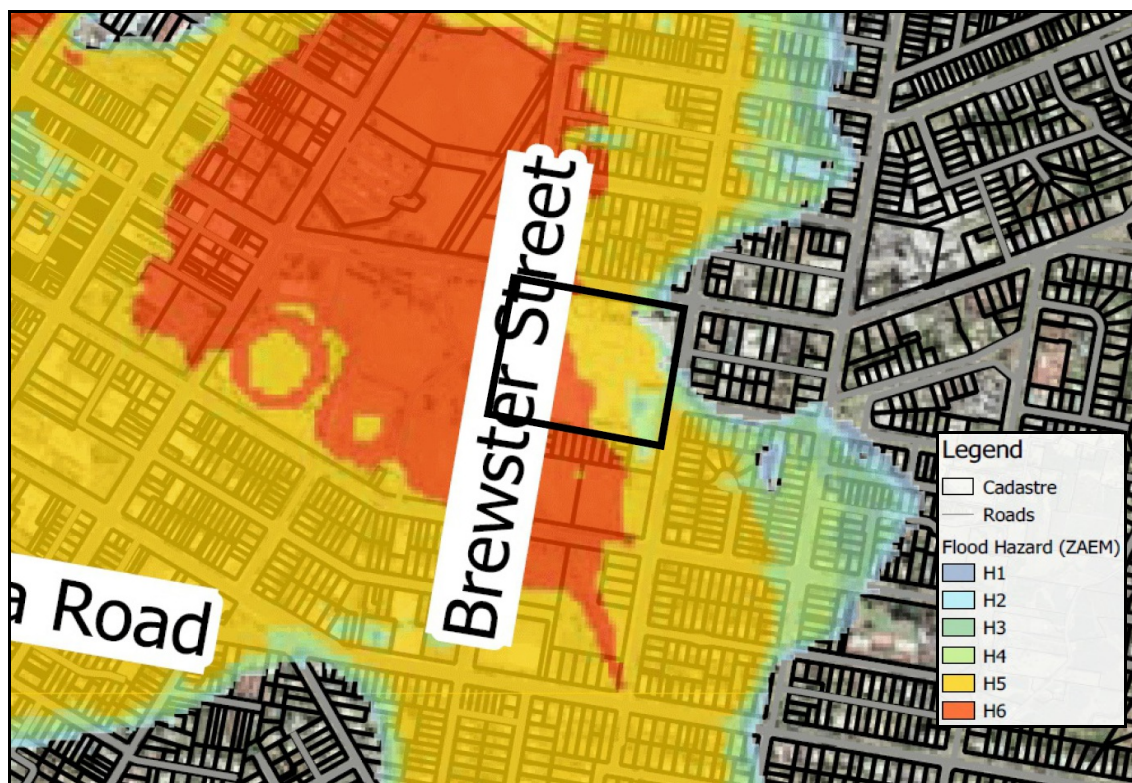


Figure 4: Extract from the Flood Hazard map with the Lismore Square Shopping Centre shown outline in black.

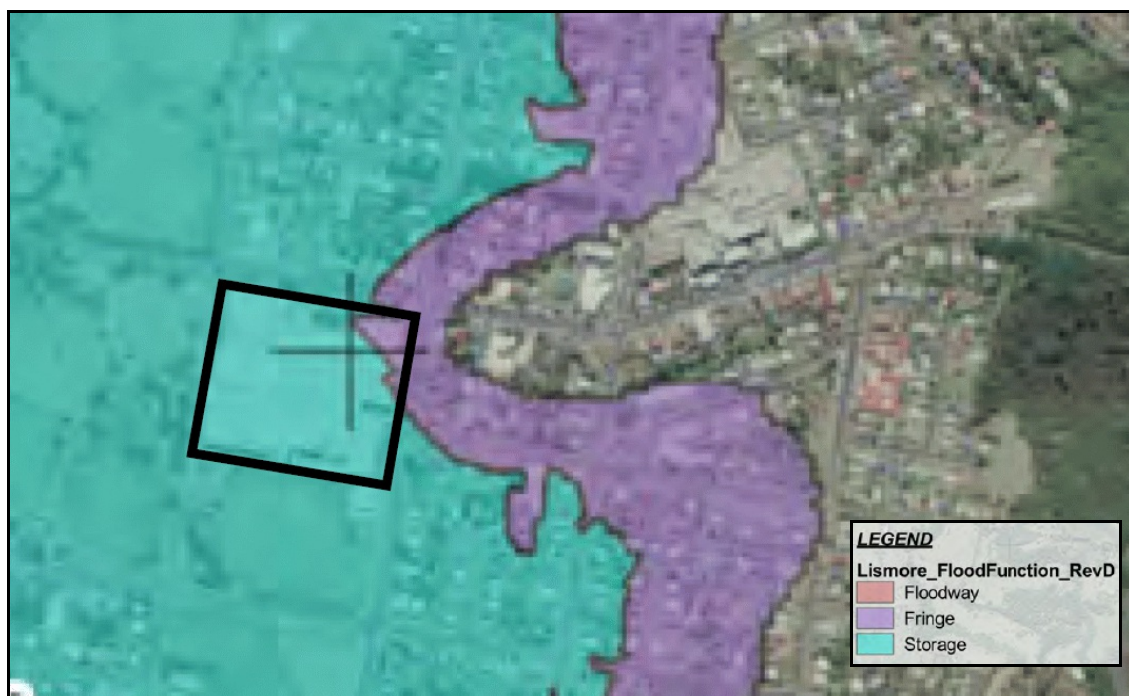


Figure 5: Extract from the Flood Function Map with the Lismore Square Shopping Centre outline in black.

Due to the Lismore Square Shopping Centre being located in a Storage Area where there is likely to be little velocity of water movement, it is reasonable to suggest that the reason behind the "Extreme" and "High" hazard classifications is the depth of flooding in the area during the 1:100 flood event.

The significant and important effects of the designation of the Lismore Square Shopping Centre under the draft DCP are:

- Commercial, industrial, and community development are unsuitable in the "Extreme Flood Risk Precinct".
- Commercial, industrial, and community development in the "High Flood Risk Precinct" will be subject to new controls relating to floor level, fill, building materials and design, structural soundness, emergency response, and management.

To give effect to the abovementioned controls, the draft DCP contains a matrix, an extract from which is provided below with regard to the "Extreme" and "High" Flood Risk Precincts.

Flood risk precinct	Land use category	Floor level	Fill	Flood Affection	Building materials and design	Structural soundness	Emergency response	Management
Extreme	Critical uses & facilities							
	Sensitive and hazardous							
	Subdivision							
	Residential							
	Commercial, industrial & community							
	Recreation & non-urban	4	3	1	1, 3, 4	2	1, 2	2
	Concessional development	1, 3, 5	3	1	1, 3, 4	2	1, 2	2, 3, 4
High	Critical uses & facilities							
	Sensitive and hazardous							
	Subdivision (except for residential)		1	2				1
	Residential							
	Commercial, industrial & community	4	1	1	1, 3, 4	2	1, 2	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	1	1, 2	2
	Concessional development	1, 3, 5	1	2	1, 3, 4	1	1, 2	2, 3, 4

Relevantly, the draft DCP states:

3.1 Extreme Risk Precinct

This is an extremely dangerous part of the floodplain due to high velocities and/or depths of floodwaters, even during relatively common floods. The extreme risk precinct applies to the deepest areas within the CBD basin, along with areas adjacent to the Wilsons River, Leycester Creek and Hollingworth Creek where the highest flow velocities exist. It includes areas subject to H5 and H6 hazards even in relatively common floods such as the 10%AEP, as well as areas subject to H6 hazards in a 5%AEP or 1%AEP flood. Generally, no new development will be permissible in these areas given the extreme risk to life and property. Some recreational and non-urban development, as well as concessional development (defined in Appendix 1), may be allowed subject to assessment.

3.2 High Risk Precinct

The high risk precinct applies to the remaining areas within the CBD basin, South Lismore, the airport and

through to Gundurimba, representing areas classified as flood storage and floodway (see Appendix 5). It also applies to the Browns Creek conveyance corridor once the CBD levee is overtopped. It is characterised by high flood depths and includes areas that would experience H6 hazard in a 0.2%AEP (1:500 probability event), a H5 hazard in the 1% or 5%AEP, or a H4 hazard in a 10%AEP. Due to significant risk to life and property in this area, no new residential development is permitted (unless within the CBD Development Precinct). Some commercial, industrial and community development may be permitted subject to assessment.

The draft DCP also contains an area defined as CBD Development Exemption Precinct which is shown in **Figure 6**.

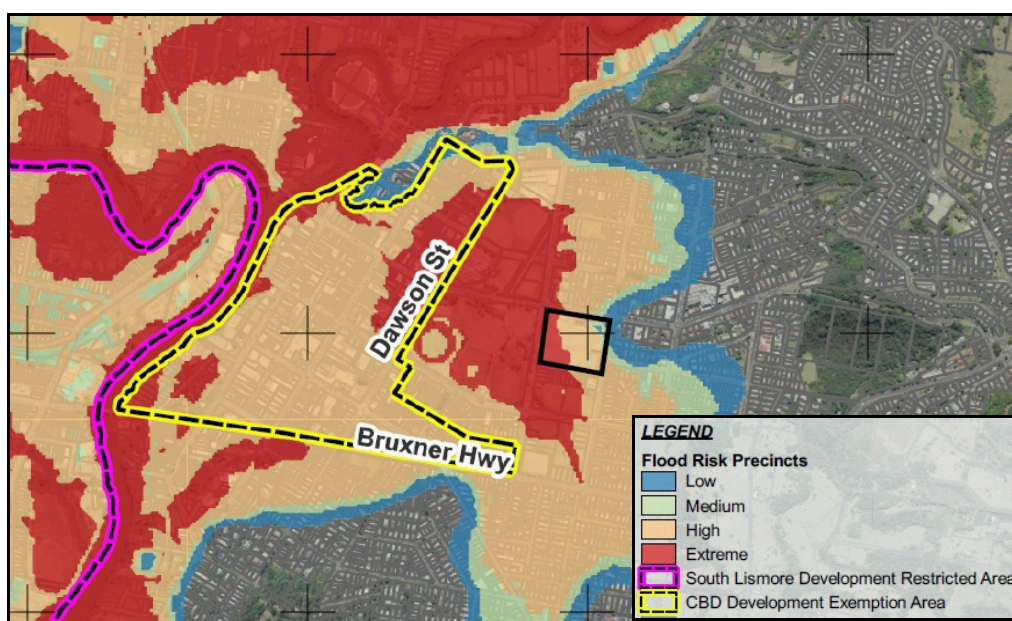


Figure 6: Extract from the flood mapping showing the location of the Lismore Square Shopping Centre outlined in black.

The draft DCP relevantly states:

3.5 CBD Development Exemption Precinct

The CBD Development Exemption Precinct applies to the Lismore CBD area, and allows for forms of residential development (shop top housing and tourist and visitor accommodation), provided that habitable floor levels are above the FPL, structural soundness is proven, a site-specific evacuation plan is prepared, and refuge is available above the PMF. This is due to CBD development having adequate Lismore Development Control Plan – Part A (applying to land to which LEP 2012 applies) Chapter 8 – Page 8 evacuation routes, the limited protection provided by the CBD levee, and the ability for dwellings such as shop-top housing to be constructed above the FPL on existing buildings. Commercial and community development is also permissible. Development in areas marked as extreme risk within the precinct will not be permitted unless it is characterised as non-urban/rural or concessional development.

The development matrix, as it relates to the CBD Development Exemption Precinct, relevantly states:

CBD Development Precinct	Critical uses & facilities							
	Sensitive and hazardous							
	Subdivision							
	Residential	1	1	1	1, 3, 4	2	1, 2, 4	
	Commercial, industrial & community	3	1	1	1, 3, 4	2	1, 2	2, 3
	Recreation & non-urban	4	1	1	1, 3, 4	2	1, 2	2
	Concessional development	1, 3	1	1	1, 3, 4	1	1, 2	2, 3, 4

The draft DCP does not provide any detail as to how the area within the CBD Development Exemption Precinct has been derived and, indeed, why that classification does not also apply to the Lismore Square Shopping Centre site when the CBD Development Exemption Precinct is made up of H5 and H6 Hazard areas similar to those which apply to most but not all of the Lismore Square Shopping Centre.

It is clearly the case that the draft controls of the draft DCP seek to prevent any further development within the "Extreme Hazard Precinct" and provide for limited modifications for development within the "High Risk Precinct" as they apply to the Lismore Square Shopping Centre.

A review of the approved plans for the Lismore Square Shopping Centre clearly shows that the floor level of the Mall of the shopping centre is at RL 12.75m which is above the 1:100 flood event.

It is also apparent that the Lismore Square Shopping Centre is located in a section of Lismore where there is adequate evacuation available from that site during any flood event. Indeed, the north-eastern corner of the site is shown as being a mixture of flood fringe and flood free in the 1:100 year flood mapping.

As noted in the Floodplain Risk Management Manual 2023,

Consistent with the policy, a merit-based approach is recommended in developing and implementing strategic planning through local strategic planning statements (LSPSs), planning instruments such as local environmental plans (LEPs), and development control plans (DCPs).

Combining the above flood impacts would suggest that there is ample reason to justify that the proposed highly restrictive development controls applying to the Lismore Square Shopping Centre have not accounted for a merit based approach as recommended in the Floodplain Risk Management Manual. Rather, a blanket planning approach has been adopted which appears to be based on Flood Hazard mapping alone.

Rather than applying a blanket set of development controls over the whole floodplain which prevent or significantly limit development, it is recommended that the Council undertake a strategic planning exercise to identify sites within the floodplain which exhibit circumstances similar to the Lismore Square Shopping Centre. It would then be possible to adopt a merit based approach to development of those sites where there is ample reason to conclude that the blanket based approach currently adopted in the draft DCP is clearly inappropriate. Once those sites have been identified, it is recommended that a separate section in Part 8 of the draft DCP identify those sites as ones where the generic controls now proposed do not apply and that further investigation should be provided as part any development application to demonstrate that the site the subject of the proposed development or modification to an existing development is suitable.

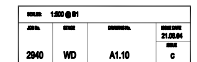
3. Conclusion

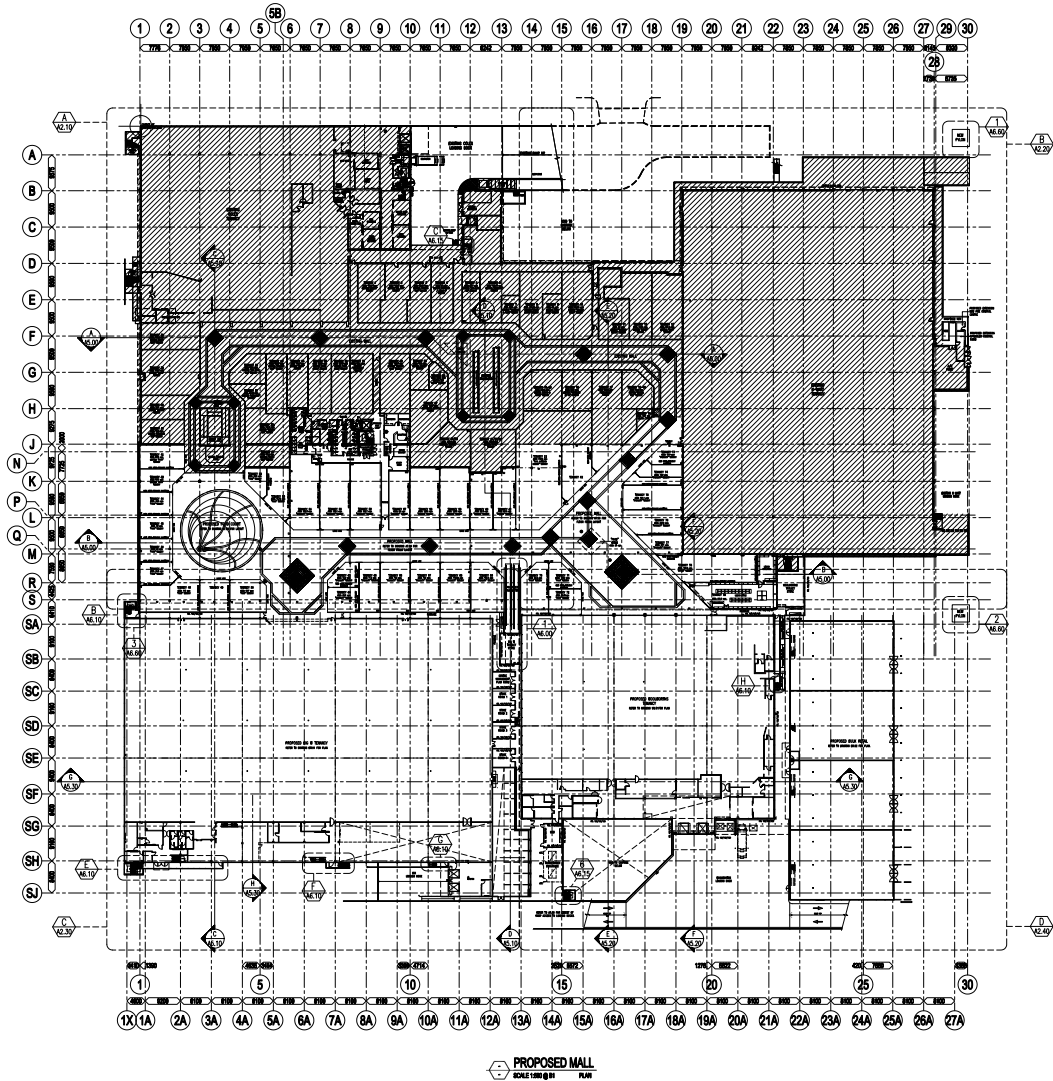
Having reviewed the *Draft Revised Flood Prone Lands Development Control Plan* and the documents exhibited with that draft document, we have concluded as follows:

1. The approach adopted by Council, where the *Draft Revised Flood Prone Lands Development Control Plan* has been placed on public exhibition in isolation and ahead of a Flood Study, a Floodplain Risk Management Study, and adoption of a Floodplain Risk Management Plan, clearly demonstrates that the exhibition of the *Draft Revised Flood Prone Lands Development Control Plan* is premature pending the exhibition and adoption of those studies and plans which would then inform the development control process once adopted by the Council.
2. It is unclear why the Lismore Square Shopping Centre site has not been included in the CBD Development Exemption Precinct when that precinct has the same Flood Hazard characteristics as the Lismore Square Shopping Centre site.
3. The *Draft Revised Flood Prone Lands Development Control Plan* has not been prepared on a merit based approach as recommended in the *Floodplain Risk Management Manual 2023*. The *Draft Revised Flood Prone Lands Development Control Plan* should address not only the Flood Hazard affecting land within the floodplain but also assess how those Flood Hazard categories affect existing development within the floodplain. A strategic planning approach should be undertaken to identify areas within the floodplain which demonstrate characteristics which would allow relaxation of the blanket controls now proposed and allow for a merit based approach to development in the floodplain.
4. Regarding the Lismore Square Shopping Centre, the *Draft Revised Flood Prone Lands Development Control Plan* has proposed a blanket approach whereby there is no potential for development on the Lismore Square Shopping Centre site in circumstances where it can be clearly identified that the Flood Hazard categories applying to that site are based on flood depth only and does not recognise:
 - that part of the shopping centre site is flood free.
 - that the occupied levels of the Lismore Square Shopping Centre are flood free in the 1:100 year flood event.
 - the ability to evacuate the Lismore Square Shopping Centre in times of flood.
 - the significant time frame which allows management of the centre to evacuate both people and vehicles.

A merit based approach to planning of the Lismore Square Shopping Centre site would not seek to prohibit development. Rather, a merit based approach would allow the proponent of a development application to provide detailed flood related data to demonstrate how any proposed development or redevelopment of that site could occur with appropriate flood related conditions of consent in place.

Attachment 3 – Lismore Square Shopping Centre Plans





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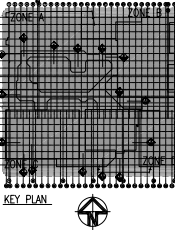
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AMENDMENTS

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03	10/01/2024	ISSUED FOR INFORMATION	EC	TF



LISMORE SHOPPING CENTRE

pdt architects

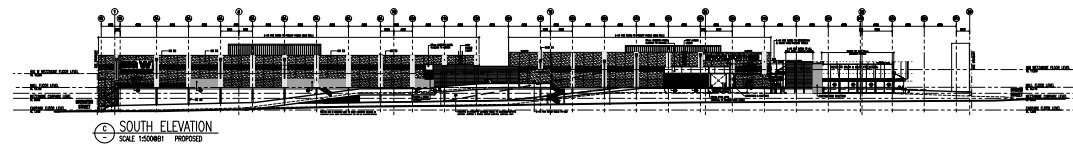
PDT Architects
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Spring Hill Fortitude Valley f 07 3232 1300
QLD 4000 pdt@pdt.com.au

QUALITY ASSURANCE
ADDRESS: 180-181
APPROVED BY: VIGI

LISMORE SHOPPINGWORLD Pty Ltd
STAGE 3 EXTENSIONS

PROPOSED SHOPPING MALL

NO.	DATE	REVISION	REVISION
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EXTERNAL FINISHES LEGEND	
COLOUR	DESCRIPTION
01	PURPLE
02	CHAMPION
03	OFF WHITE
04	BLACK
05	LIGHT GRAY
06	RED
07	CLEAN ANCOURED
08	S STEEL BRUSHED
09	H.D.G.
10	POWDER COATED S
11	POWDER COATED S

DRAWING REVIEW			
DATE	ENGINEER	ARCHITECT	OWNER

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LISMORE SHOPPING CENTRE




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QUALITY ASSURANCE
 AS/NZS 9001

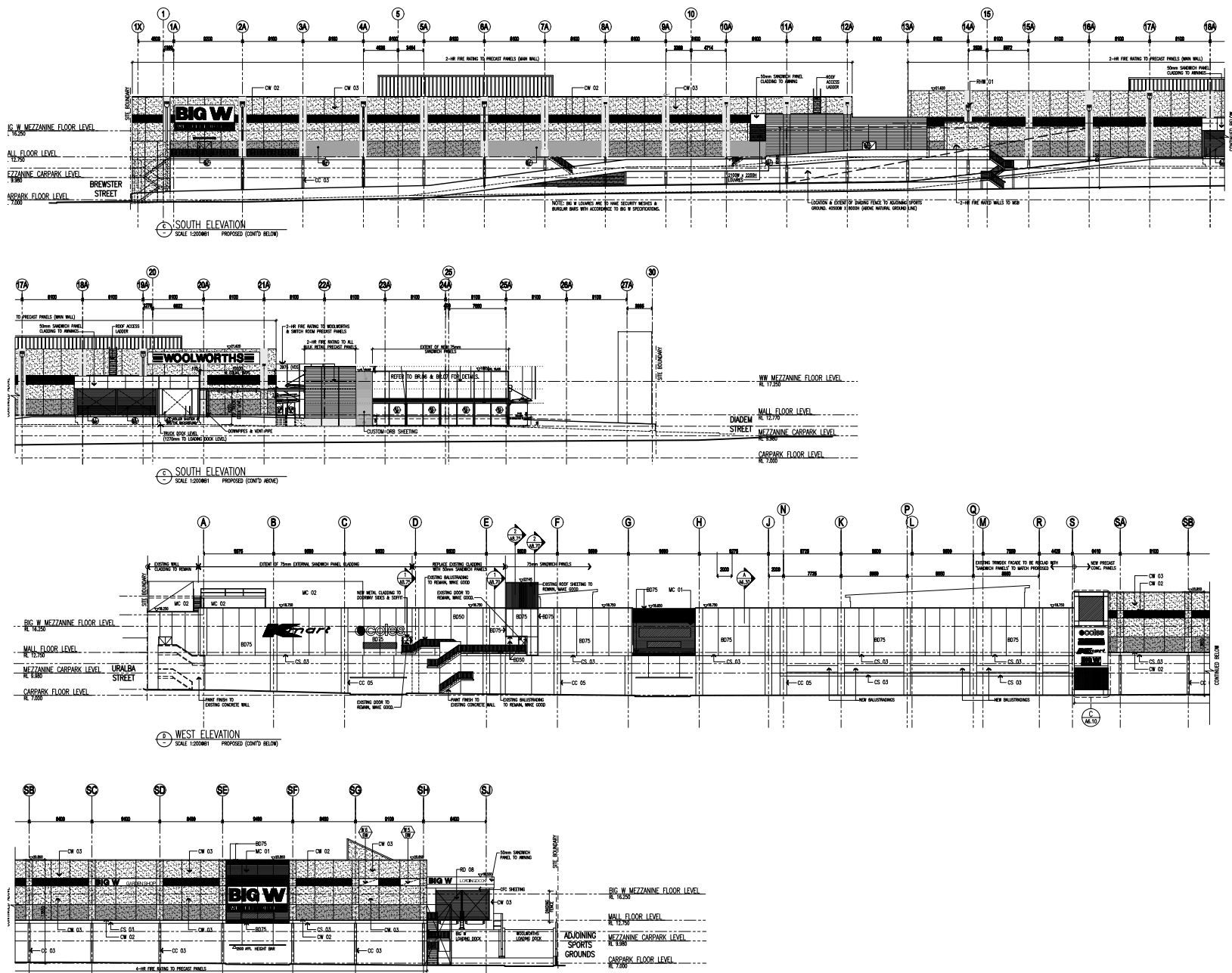


PROPOSED

LISMORE SHOPPINGWORLD STAGE 3

PROPOSED ELEVATIONS



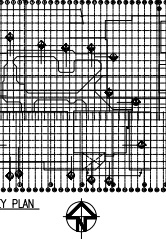


1. This document is a public exhibition drawing. It is not a contract document. It is not to be used for any purpose other than the exhibition of the proposed development. It is not to be relied upon for any purpose other than the exhibition of the proposed development.

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LISMORE SHOPPINGWORLD

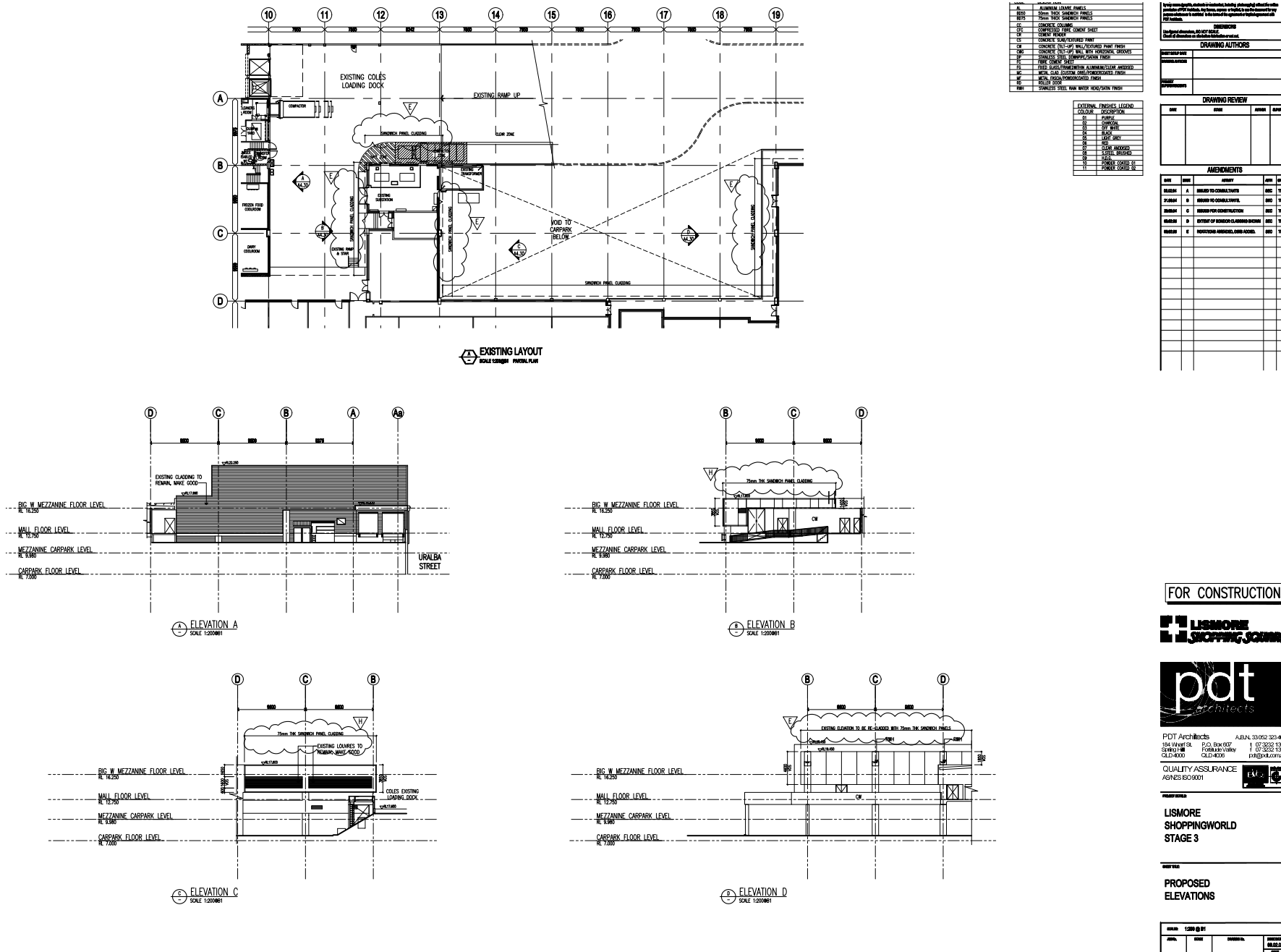
pdt architects

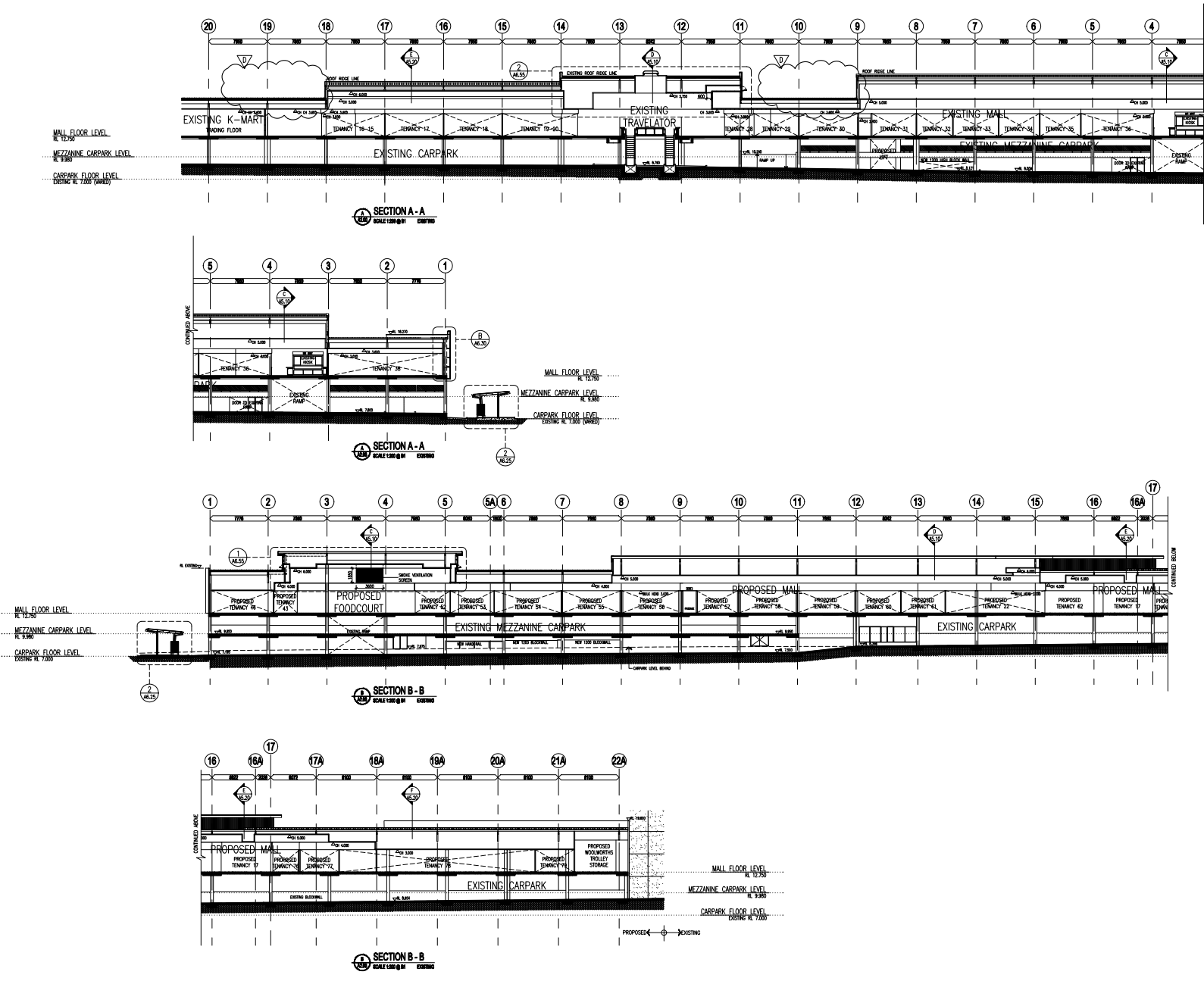
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PROPOSAL NO. 154

LISMORE SHOPPINGWORLD STAGE 3





I have prepared this drawing in accordance with the provisions of the Building Act 1993 and the Building Regulations 2006. I am a registered architect under the Building Act 1993 and the Building Regulations 2006.

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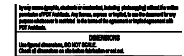


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STAGE 3 EXTENSIONS

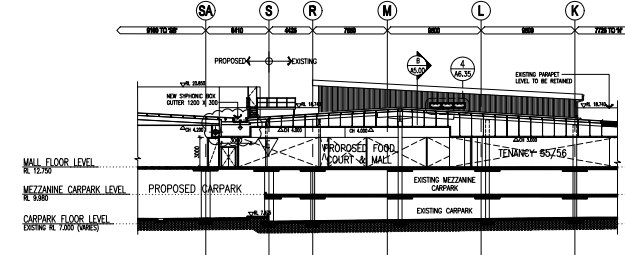
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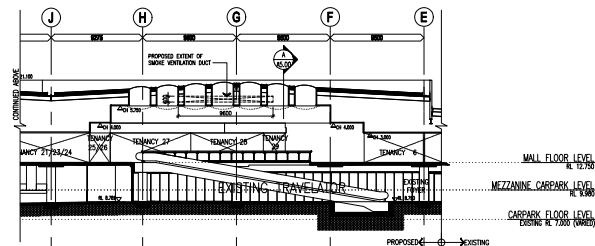
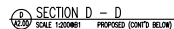
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SECTION C - C
SCALE 1:200001 PROPOSED

SECTION C1
SCALE 1:2000B1 PROPOSED



SECTION D - D

LISMORE SHOPPING SCENE



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Spring Hill Fortitude Valley f 07 3232 13
QLD 4006 QLD 4006 pdt@pdt.com

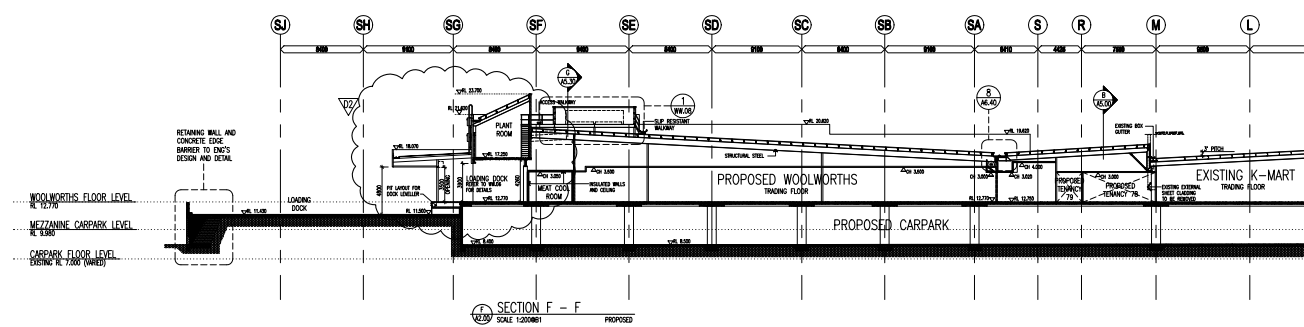
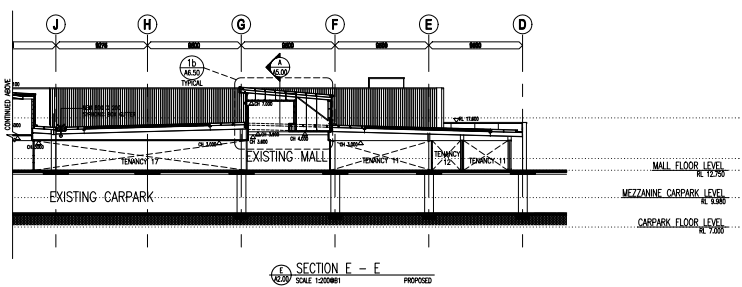
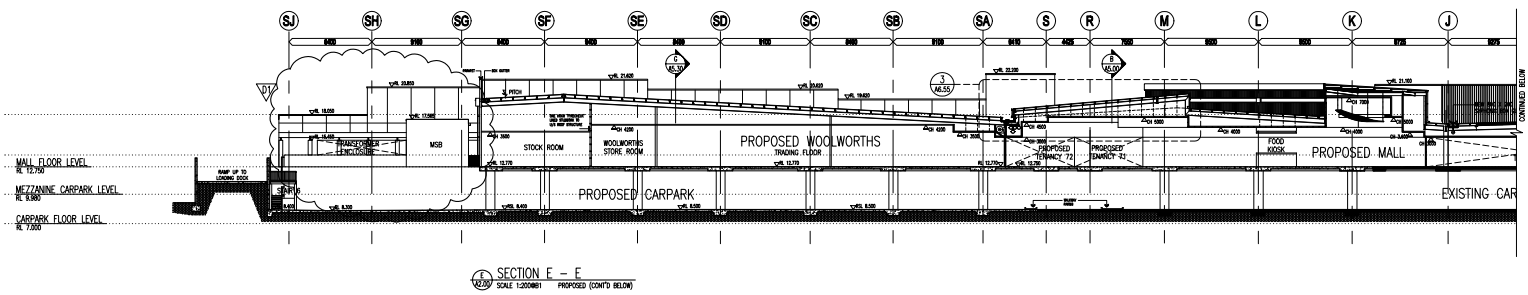
QUALITY ASSURANCE
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**LISMORE
SHOPPINGWORLD Pty Ltd
STAGE 3 EXTENSIONS**

QUESTIONS:

PROPOSED SECTIONS

SOLAR 1200 @ B1			
JOB#	DATE	EXPENSES \$	REMARKS 01.11.0



I have prepared this drawing in accordance with the provisions of the Building Act 1993 and the Building Regulations 2006. I am a registered architect and I am not aware of any circumstances that would affect the validity of this statement.			
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DRAWING REVIEW			
AMENDMENTS			
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FOR CONSTRUCTION

LISMORE

SHOPPING CENTRE

pdt

architects

PDT Architects

AJUL 33/052 323-4

154 Wharf St.

P.O. Box 607

SHAWVILLE QLD 4600

QUALITY ASSURANCE

AS/NZS ISO 9001

154 Wharf St.

P.O. Box 607

SHAWVILLE QLD 4600

QUALITY ASSURANCE

AS/NZS ISO 9001

LISMORE

SHOPPINGWORLD Pty Ltd

STAGE 3 EXTENSIONS

PROPOSED

SECTIONS

SCALE: 1:200 @ B1

DATE: 2024

REVISION: 20.02.24



Date: 17th July 2023
Our Ref: 239000

The General Manager
Lismore City Council

Dear Sir,

Re: Submission to Revised Flood Prone Lands DCP

Thank you for the opportunity to provide a submission to the Revised Development Control Plan for Flood Prone Lands. Please find below our comments relating to the planning framework proposed to be introduced within flood prone areas of Lismore:

1. We appreciate that the impacts of the 2022 floods on the local community were significant and the effects are ongoing. NDC experienced these impacts directly and, as such, we are acutely aware of the economic and social impacts of these events.
2. The introduction of the flood planning matrix is effectively introducing a new land use table which overlays (and over rules) the Local Environmental Plan. Whilst this broad approach is not uncommon, NDC wishes to raise the following matters for discussion:
 - a. Given the flood characteristics of Lismore, the majority of the lower parts of the city are mapped as either 'extreme' or 'high' flood risk precincts. This means that permissibility decisions within the matrix are particularly important – as they impact on such a large number of properties.

Decisions within the matrix regarding what uses should be permitted in these areas (and under what circumstances) need to be reviewed in a strategic context having regard to the future vision for Lismore. This strategic visioning stage appears to have been skipped in the preparation of the post 2022 Flood DCP for Lismore.

Some land use allocations particularly require further thought such as:

- Shop top housing (where people could reasonably be expected to wish to shelter in place during a flood) is proposed to be permitted in the CBD – but not a school (which can readily have measures in place to ensure that no students are on campus once a flood warning has been issued by the SES); and
- As illustrated in red outline in the plate below, the 'high risk' precinct extends over a range of properties recently rezoned R3 Medium Density as part of the Health Precinct Planning reforms. The effect of this is that the increase in residential density foreshadowed in the health precinct will not be able to occur as originally planned. It is suggested that suitable design measures are available (such as parking below and housing above) to enable residential development to occur in this area).



3. The new mapping (and associated land use permissibility matrix) has not been clearly communicated to landholders. It is our expectation that landholders throughout the flood prone areas are not aware that the extensive list of uses fitting within the 'sensitive and hazardous' categorisation are now effectively prohibited (other than the areas at the very fringes of the flood plain).
4. The DCP requires all fill to be obtained on-site. Given that the floodplain is largely flat, this presents significant challenges with respect to achieving required floor levels, grades and drainage. In this regard, we are aware that there is vacant industrial land within South Lismore which will be effectively sterilised for development under the proposed new DCP framework. We note also that fill is also required to achieve drainage and fall (rather for the purpose of raising floor levels). The current draft DCP does not readily enable this to occur and as such circumvents the flood planning controls under Clause 5.21 of the Lismore LEP.

Whilst we appreciate Council's desire to develop a new DCP to manage planning within the flood plain, we are strongly of the view that this needs to occur in the context of a broader strategic plan and economic recovery strategy for the City. As such, we suggest that Council:

- a. Introduce the new flood planning level incorporating climate change considerations. This will improve flood protection for all developments moving forward in the interim, noting the provisions of Cluse 5.21 of the Lismore LEP ensure flood impacts are appropriately managed in the interim; and
- b. Defer decisions regarding the flood planning matrix until Council has developed a broader strategic plan and economic recovery strategy to base sound planning decisions.

Should you have any questions regarding this matter, please do not hesitate contacting either [REDACTED] of this office.

Yours sincerely,
NEWTON DENNY CHAPELLE

[REDACTED]

Town Planner. BTP CPP.



Date: 17th July 2023

Our Ref: 09/298

General Manager
Lismore City Council
PO Box 23A
LISMORE NSW 2480

Dear Sir/Madam,

**Re: Revised Flood Prone Lands DCP
Lot 1 DP 773765– 11 Leycester Street, Lismore**

In response to Council's public exhibition of the draft revised flood prone lands DCP (being Chapter 8), please see below submission on behalf of the Diocese of Lismore.

The subject site identified as Lot 1 DP 773765 & Lot 1 DP 1112274, being land known as 11 Leycester Street & 65 Hindmarsh Street, Lismore has been allocated a flood classification of high risk which covers the majority of the land area in accordance with the exhibited draft flood prone lands DCP. Refer to **Plate 1** below.



Plate 1: Draft Flood DCP Risk Precinct

The subject site contains significant critical infrastructure, on a large land holding being approximately 1.7397 hectares in area, with scope for adaptive reuse of the existing buildings. The subject site is considered to be a significant gateway site to the CBD and maintains direct access to existing flood evacuation routes.

The proposed risk classification of the site would severely restrict redevelopment options at the site based on the current planning provisions. As depicted within **Plate 1** above, the subject site maintains the same flood classification as land to the west of Dawson Street which has been included within the 'CBD Development Exemption Precinct'. As detailed within the draft flood prone lands DCP, the 'CBD Development Exemption Precinct' allows for forms of residential development (shop top housing and tourist & visitor accommodation) subject to compliance with relevant standards.

Based on the above, it is therefore requested the subject site being 11 Leycester Street & 65 Hindmarsh Street, Lismore, be included within the 'CBD Development Exemption Precinct' to enable an adaptive reuse of a critical infrastructure located on a significant gateway site to Lismore.

Furthermore, adopting this approach to a key gateway site, allows Council to undertake the master planning and associated economic development plan for the Lismore CBD, with scope for the Flood Prone Lands Chapter of the Lismore DCP to reflect the adopted planning and economic strategic direction for the City.

We thank Council for reviewing the contents of this submission. Should you have any queries, please do not hesitate contacting [REDACTED] of this office.

Yours sincerely,

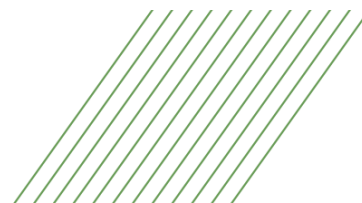
NEWTON DENNY CHAPELLE



Town Planner. BTP. CPP.



Greg Alderson
Associates



REF: GAA_20230713_LCCDRAFTFLOODDCP
YOUR REF:

13 July 2023

General Manager
Lismore City Council
PO Box 23A
LISMORE NSW 2480

RE: Submission on the Draft DCP for Flood Prone Lands

Dear Sir/Madam,

Thank you for the opportunity to provide a submission on the draft DCP for Flood Prone Lands.

We have a number of concerns regarding the DCP as detailed below. We consider that the current DCP is more suitable for Lismore as it provides more development options at this stage, when there are still a number of assessments that are still being undertaken (CSIRO) and uncertainties regarding buybacks, house raising and retrofitting opportunities from the Northern Rivers Reconstruction Corporation.

LEP

Will the LEP – Flood Planning Area (5.21(2)) be modified to be consistent with the DCP? The LEP allows for development within the areas, provided that impacts on the surrounding properties and risk is undertaken. The current DCP is more in line with the LEP, allowing for development provided that assessments are undertaken.

Is there a need now?

Is there a need now for the DCP to be amended when the flood modelling has not included the 2022 flood, and has not included any flooding mitigation works that may come from the CSIRO study that will be out in 2024–2025.

Impacts on the South Lismore Restricted Evacuation Precinct

Council has highlighted that South Lismore will have a restricted area of development due to the evacuation route of Hollingsworth Creek bridge. This has been noted also in the current DCP. However, the current DCP allows for development in these areas, provided that adequate flood assessments are undertaken.

We consider that as there are low to medium risk areas within this precinct that this is too restrictive to property owners, especially those that will not be eligible for a buy back, house raise and most likely also not retrofitting under the NRRC scheme. The evacuation routes and education should be improved to ensure people know information relating to their safety as well as improvements to flood data to inform people of risks earlier.

Alterations/additions

The 10 % increase or 30 m², whichever is smaller is very restrictive. We would encourage Council to at least allow for a development that does not increase beyond 1 equivalent tenement for a house, to therefore allow for people who cannot move from the locations (due to costs) but could afford to expand on their dwellings to do so.

CHARTERED PROFESSIONAL ENGINEERS & SCIENTISTS.

office@aldersonassociates.com.au
www.aldersonassociates.com.au

43 Main St, Clunes NSW 2480
02 6629 1552

ABN 58 594 160 789

13 July 2023

Fill

Filling for sites is restrictive. The current DCP acknowledges that if filling is required, then this should be sourced from the site, but if this cannot be done, then sourced from the preferred excavation area or from another area on the floodplain and that Council may approve fill imported from another source providing a flood impact assessment has been prepared by a suitably qualified consultant which demonstrates that the fill will have no adverse effects upon flood levels upstream or on flooding behaviour on adjacent properties.

Update Current DCP

We consider that the current DCP could be updated to include the new maps, flood data such as the 1 % AEP, heights relating to the February 2022 floods, climate change impacts and PMF and update the FPL.

Evacuation Routes

We understand that the update to the DCP is based on flood studies that were completed prior to the February 2022 floods and the draft DCP does not include the flood heights from the February 2022 floods. However, the DCP seems to be a reaction to the floods from last year, based on the evacuation routes and the proposed restriction in building areas, such as the South Lismore Restricted Evacuation Precinct. We note that the February floods caught people off guard as the information being provided by authorities was that the flood levels will be moderate flooding, midday 27 February the forecast was for flooding to peak below the 2017 floods of 11.5 m AHD, and overtop at 6 am, this was also stated again at 8pm. At 9.30 pm an evacuation order was then implemented for north, south and the CBD to leave by 5 am. What actually happened was that the levee overtopped at 2.30 am, when the majority of people were asleep, causing the widespread dramatic rescues via boats that we saw during the day. The peak of 14.4 m AHD was reached at 2 pm.

Considerations for improvements to the evacuation routes are:

- Council could be pro-active in providing information/education sessions and provide detailed maps to present the way out of town and what to watch for. For people to know what heights their house, ground, streets surrounding them are and how to read BOM data – rainfall gauges and river heights.
- Have all river heights in AHD
- Identify alternative routes/locations for evacuation ie Caniaba, Casino
- Use of road reserves (many of these are from low lying land to higher ground) – for rural people especially with livestock
- New bridge over Hollingsworth Creek – arch bridge with dual carriageways for north and south
- Updated data points – reliable flood gauge information

Strategic Planning

The Lismore Growth and Realignment Strategy 2022 mentions that Council will work with NRRC and will also have a planned or managed retreat for people in the higher risk flood plain areas.

Summary

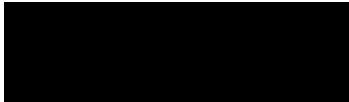
We would encourage using the existing DCP, however, with minor changes such as the updated flood height data based on the studies undertaken. The draft DCP is too restrictive development when the Lismore Growth and Realignment Strategy is still being implemented, mitigation opportunities are still being examined by the CSIRO and NRRC are still negotiating buybacks etc. We understand the importance of the draft DCP and the need to focus on the safety of people, however, the draft DCP does not consider the personal impact that this will have on people who own land (residential, commercial or industrial) by restricting development by not allowing filling, not allowing residential development and restricting the size of extensions when there are reduced opportunities for people to

13 July 2023

buy elsewhere due to costs. For people to move, they will need to sell, therefore not changing the population living in the flood plain.

Please contact this office if you have any questions.

Yours Faithfully,



Environmental Planner
Greg Alderson and Associates



4 Byfield Street
Macquarie NSW 2113
T (02) 9978 3333
hia.com.au

12 July 2023

Jon Gibbons
General Manager
Lismore City Council
PO Box 23A
Lismore NSW 2480

Dear Mr Gibbons

RE: Amendment of the Lismore Development Control Plan (DCP) – Flood Prone Lands

The Housing Industry Association (HIA) welcomes the opportunity to provide feedback in relation to the proposed amendment of the Lismore Development Control Plan relating to Flood Prone Lands. HIA acknowledges the difficulties in creating new policy for planning and development based on recent unprecedented flood events.

HIA supports both Lismore City Council and the Northern Rivers Reconstruction Authority on the creation of new policies and initiatives that will streamline the region's rebuilding efforts and ultimately ensure that residents remain safe during future flood events. While HIA fully supports the reconstruction process, the following matters related to the proposed amendments of the DCP are raised for your consideration.

1. Limitations on extensions and alterations for existing homes

Many homeowners will be faced with the difficult decision of relocating from flood prone lands or rebuilding to achieve a greater level of flood immunity.

In some flood precincts, the DCP limits extensions and alterations of existing residential development to ten per cent (10%) or 30m² of the originally approved building. Noting that relocation is not a viable option for all residents, those needing to rebuild should not be prevented from extending their existing home to meet the changing needs of their household.

HIA questions the need to restrict the gross floor area of extensions to detached houses if achieving Council's minimum floor level height. It is emphasised that these domestic renovations and additions do not constitute intensification of the existing land use or result in a greater number of households vulnerable to flooding.

HIA views this restriction on gross floor area as a further impediment on those unable to relocate and needing to rebuild.

Matters for consideration: HIA suggests that the DCP should permit extensions of detached houses in all areas if meeting Council's minimum floor level height requirements.

2. Implications of new flood modelling on home insurance premiums

HIA understands the need to mandate a flood level and minimum floor level heights to ensure residents are safe during flood events. The revised flood modelling has been based on Representative Concentration Pathway (RCP) 8.5, which is now understood by policymakers to be a 'worst-case' climate change scenario and does not consider international agreements or the NSW government's commitment for emissions reduction.

While planning for the worst-case scenario in terms of future rainfall may reduce future liability for Council, it will unfortunately mean more properties are now identified as being subject to flooding. This may result in greater home insurance costs for residents if including flood coverage.

Matters for consideration: HIA suggests a consistent national approach to climate change predictions and the impact on flood modelling is required which should consider the international commitments to reduce emissions. Alternatively, many homeowners will be unfairly subject to expensive insurance premiums for flood coverage based on worst-case modelling which is unlikely to eventuate.

3. Requirement for restriction on land title to prevent enclosure of sub-floor areas

For residential and concessional development in Medium to Extreme flood precincts, the DCP includes a requirement to place a restriction on the land title that sub-floor areas are not to be enclosed. This restriction is proposed to apply when habitable floor areas are elevated above the finished ground level by more than one point five metres (1.5m).

As other provisions in the DCP require any enclosure below the flood planning level to have openings for water conveyance, HIA assumes that this restriction is to avoid homeowners unlawfully enclosing sub-floor areas and creating floor space below the flood planning level.

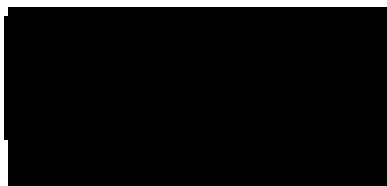
Matters for consideration: In consideration of existing provisions in flood prone areas relating to the creation of habitable and non-habitable spaces, the requirement to register further restrictions on the land title appears an unreasonable imposition on industry.

HIA also fails to understand the reference to one point five metres (1.5m) when the National Construction Code has a minimum floor to ceiling height for non-habitable spaces of two point one metres (2.1m).

HIA looks forward to working collaboratively with you and other key stakeholders during the update of the Development Control Plan. If any assistance is required in relation to this submission, please do not hesitate to contact HIA Assistant Director of Planning & Development, Sam Heckel on 07 3021 8825.

Yours sincerely

HOUSING INDUSTRY ASSOCIATION LIMITED



Regional Executive Director

HIA is Australia's only national industry association representing the residential building industry. HIA represents some 60,000 member businesses nationally. HIA members construct over 85 percent of the nation's new housing stock annually. In NSW alone we represent over 20,000 members.

[REDACTED]

Lismore City Council,
/- General manager,
P.O. Box 23 A
Lismore NSW 2480

Ref: my property 140 Union Street
South Lismore NSW 2480

your letter 14th June, 2023 Update to Lismore
City Councils Flood Prone Lands Dev. Control Plan/DC

Dear Sir,

Thank you for your invitation to provide
feedback to your letter of 14th June 2023 Flood Prone
Lands Development Control Plan (DCP).

We find this Flood Prone Lands D.C.P.
all very bewildering & confusing. We are of
advanced years, I'm 76 yrs and my husband
will be 80 yrs. next year.

We don't understand flood planning
levels/numbers and their consequences. We need
to be enlightened about Councils updating of its
~~up~~ risk precincts to align with a revised Flood-
plain Risk Management Plan.

We would also like to be kept informed
please.

yours faithfully,

[REDACTED]

From: [REDACTED]
Sent: Monday, 17 July 2023 2:15 PM
To: Records
Cc: 'RSL BALLINA'
Subject: "Submission to Public Exhibition of Draft Flood Prone Lands DCP".

CAUTION: This email was sent from outside our organisation. Be cautious, particularly with links and attachments unless you recognise the sender and know the content is safe.

The General Manager
Lismore City Council
PO Box 23A
Lismore NSW 2480
Council@lismore.nsw.gov.au

17th July 2023

Attention: Planning Services

Submission in Respect of Draft Flood Prone Lands Development Control Plan (DCP) currently on Public Exhibition

I am the owner of Lot 2 in DP 1231054 at 122 Caniaba Street, South Lismore, and I wish to make this submission regarding the Draft Flood Prone Lands Development Control Plan (DCP) from Lismore City Council as currently on public exhibition.

I have received Development Consent 5.2017.399.1 originally approved on 29/05/2018 with a subsequent modification approved on 18 June 2020, which provides for the filling of the site to the current required flood level and to facilitate a proposed industrial development of the land.

I note that the Draft DCP proposes to establish new development controls and standards relating to required finished (filled) heights within the floodplain, hydrological assessments and required building floor levels. If adopted these new standards will not be met by Development Consent 5.2017.399.1, potentially rendering the consent unable to be achieved without substantial modification. I am expecting that the Council does not intend to make the Draft DCP, if adopted, retrospective for existing lawful consents as approved under the current flood policy and controls.

I request that the Draft DCP be amended so as to specifically provide for:

a) When a property has two (2) risk precinct areas covering the site that the relevant risk precinct applicable for that site and associated development in terms of the DCP be determined to be that precinct which is of the largest extent over that property (rather than automatically determined to be that of the greater risk precinct) so that properties are not disadvantaged when a very small section of a higher risk precinct would restrict development over the site as a whole even though

most other parts of the site which are to be developed have a lower risk precinct and more potential for development. This would be a more logical and fairer approach to allowing development in the floodplain.

The current wording to the DCP '*where two or more flood risk precincts apply to a development, the highest flood risk category controls will apply*' creates significant and practical complications for future development with a prime example being my Development Consent 5.2017.399.1 in which it would appear that a very small section of the site is mapped as extreme risk, but the substantial majority of the site is mapped as high risk. As such, applying the extreme risk precinct would allow for no new development at all, rather than subject to certain controls under a high risk precinct scenario.

b) I would request consideration for my existing DA Consent to be allowed to progress on a "Concessional Basis" without application of the proposed new fill levels. This would provide certainty to the existing Consent in that existing approved fill levels can remain without the need for further filling of the site just to comply with a later imposed DCP Control. The expectation of the existing consent is such that the land is to be filled to the approved level and then proceed to industrial use without the need for further fill works. Industrial uses on the approved site, such as sheds, factories, warehouses, hard stand areas and the like, should be exempt from the fill provisions of the proposed DCP on this particular site.

If my land is filled in accordance with the current DA consent and further DA's had been lodged, and approved, for industrial use buildings prior to the exhibition of the new DCP, then the status of the site would remain unaffected by the new DCP, and the new DCP fill levels couldn't be applied retrospectively to development consents.

I believe that Council can provide a concession to my site as it has a current DA Consent for filling which has been undertaken at considerable cost and on the expectation of furthering the industrial use of the newly filled site. The consequence of now having to increase the lot fill to comply with the new DCP are significant and seriously jeopardises the future use of the site. The imposition of the new fill levels on an already approved and filled site has significant implications on the economic growth of Lismore in providing employment generating industries and the associated social and economic cost implications over loss of jobs and services to the community.

I respectfully request that Council provide a concession to the approved development site as the work and expenditure undertaken to date has been made in good faith under the existing consent conditions and the site should be permitted to proceed to industrial use.

I am happy to discuss this matter with you as required and look forward to your favourable consideration of this submission and request.

Regards





From: [REDACTED]
Sent: Sunday, 16 July 2023 11:33 AM
To: Records [REDACTED]
Subject: Re dcp and aep floor heights propose changes

CAUTION: This email was sent from outside our organisation. Be cautious, particularly with links and attachments unless you recognise the sender and know the content is safe.

To whom it may concern

I am writing in regards to councils dcp aep proposed changes

I have raised my house in 2018 above the 1974 flood height floor level

I had 1.2 m come inside my home in the 2022 massive flood

I like the idear of preposed changes

If ever permitted I would like to raise my house out of that flood to

I would wish to have it engineer more and add a mezzanine floor for structural support with extra bracings

Please work with people who wish to raise their houses higher around the lismore cbd

I love my home and the local area

House been in family for 100 years

a buy back doesn't suit everyone

We are close to shops and town and I'm close to my work

I don't think raise of a house another meter would look to out of place if done correctly

Please consider a way of working with people who wish to stay in the area

I do worry about another flood but if I ever went higher my mind would be at ease

Any questions or comments

Please.reply

Thanks in advance

Yours trulv

[REDACTED]

From: [REDACTED]
Sent: Friday, 14 July 2023 3:00 PM
To: Records
Subject: Submission; Public Exhibition - Revised Flood Prone Lands DCP

CAUTION: This email was sent from outside our organisation. Be cautious, particularly with links and attachments unless you recognise the sender and know the content is safe.

Attention: Mr Cameron Jewell

I do not agree with the proposed changes to DCP 8 for flood prone lands, as this will devalue properties and severely restrict future developments in the designated risk precincts. Council have not provided an overall picture of what the future of these flood prone areas will look like. These proposed changes are adding further stress and uncertainty to an already overwhelmed community.

I own a property at Terania Street, North Lismore. The land is vacant and is zoned E1 Local Centre.

After owning and maintaining the property for many years, I had decided to develop the land and was in the design stage prior to the flood. After considering various options, the only economically feasible option was to build two shops on the ground level and two shop top residential units on the first floor which would have been above the flood planning level. I was hoping this development would suit North Lismore and a person who wanted to operate a business and live on the premises.

In your proposed DCP 8, the land would be within the High Flood Risk Precinct which states:-

Due to significant risk to life and property in this area, no new residential development is permitted (unless within the CBD Development Precinct). Some commercial, industrial and community development may be permitted subject to assessment.

I have been paying rates on this vacant property for many years with the expectation of either developing or selling this property in the future. The proposed DCP 8 will make our property at Terania Street, North Lismore unviable for development and unsaleable. This DCP will not just devalue our property, it will make the property a liability due to the ongoing costs of rates and maintenance with no hope of future development.

There may be developments that could fit the zoning and comply with the proposed DCP 8 if Council gave approval, but the reality is, it would be unlikely to achieve an economically viable development that would meet Councils rules and be suited to this property in North Lismore. As residents leave North Lismore due to the home buyback scheme, the demand for commercial developments in North Lismore will dwindle.

Council cannot expect property owners to continue paying rates for land when Council changes planning rules which makes a parcel of land unviable to develop.

I understand Council will say this is not their problem, but if Council want to remove residential property and residents from the flood plain, then they need to establish and fund a buyback scheme as part of implementing this proposed DCP 8.

Regards



From: [REDACTED]
Sent: Wednesday, 5 July 2023 8:16 AM
To: Records
Subject: LCC DCP

CAUTION: This email was sent from outside our organisation. Be cautious, particularly with links and attachments unless you recognise the sender and know the content is safe.

I am writing to contribute my ideas on LCC's DCP.

I think we should be depopulating the flood plain entirely, including all council buildings. Yes, the 28/2/22 flood should absolutely be included in draft flood planning levels. If we, as businesses, schools or households, can not obtain insurance how can it be any other way?

Having stood in rapidly rising floodwaters on my carport roof pre-dawn, simultaneously clutching my small children and the eaves of my home while waiting in hope of a boat rescue, I firmly believe that MY OWN home should be depopulated and therefore, to me, it is impossible to think of any development occurring at my North Street address. On 28/2/22 the floodwater continued to rise until it was well over my head in the upstairs living area (4.6m inundation). The NRRC may not acknowledge that I cannot continue to live here, but LCC should protect us from any thought that there's a future in it.

Sincerely,

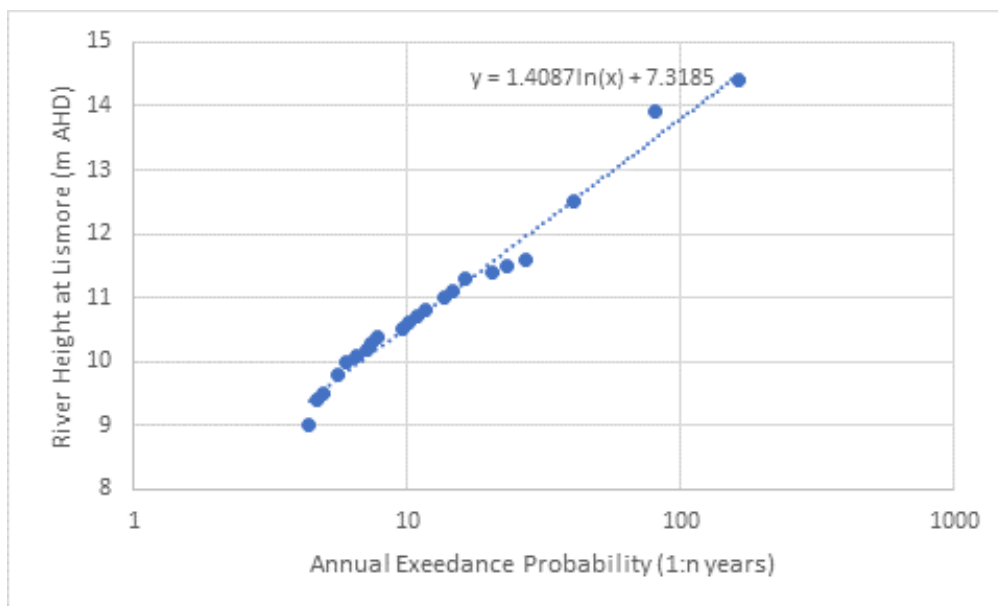
[REDACTED]

Submission regarding Revised Flood Prone Lands DCP

The role of a DCP is to guide development in a way that leads to a better Lismore, by supporting community aspirations for a safer, more inclusive community that is economically and socially vibrant. The document currently open for feedback deals only with new development on flood-prone lands – the area that forms the heart and soul of Lismore - but this draft DCP falls short of these goals, as it creates an exemption for the CBD and invites minimal change. This is irresponsible, as the threat of floods in Lismore is real, and will increase with climate change. The DCP needs to be realistic about flood risks, and avoid wishful thinking that 2022 was 'extraordinary' and can be disregarded.

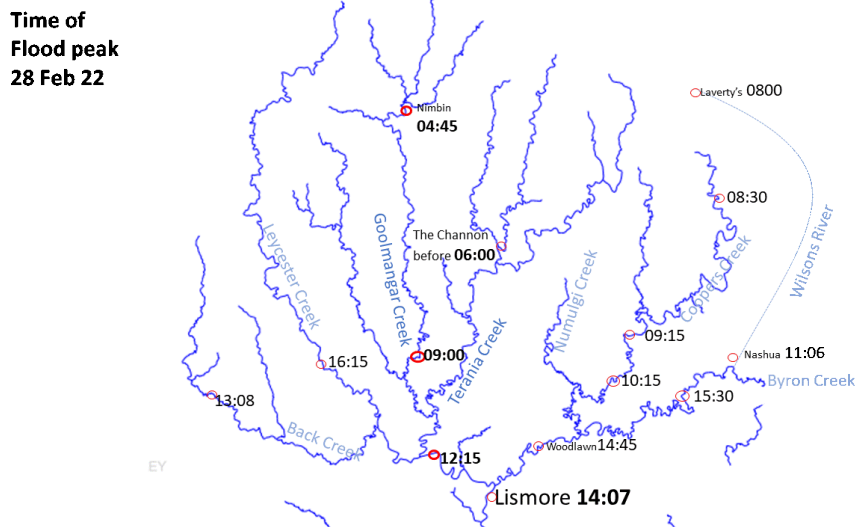
Many buildings in Lismore still show evidence of the real risk and impact of floods, risks that have been ever-present since first settlement. Contemporary articles in the *Northern Star* and the *Sydney Morning Herald* report that only a few hilltop houses – all near the present Anglican Church – were spared during the 1870 flood, consistent with aboriginal oral history that 'Cathedral Hill' (Dawson Street) is prone to flooding (as we rediscovered in February 2022).

A graph of flood heights recorded since 1861 shows that the flood of February 2022 flood was not an anomaly, but is consistent with the long-term trend, and that the potential recurrence is more frequent than 1:200 (greater than 0.5%). Obviously, this trend is entirely empirical, but it is widely regarded as "the best method" (<https://www.chiefscientist.qld.gov.au/publications/understanding-floods/chances-of-a-flood>) where long-term records exist. The probable maximum flood (PMF) is assumed to be higher than 1:10,000 (<https://www.ses.nsw.gov.au/media/2650/glossary.pdf>) and this graph would imply that floods exceeding 20m AHD may be possible in Lismore.



It is also instructive to consider this simple map (below) showing the timing of flood peaks in the several tributaries upstream of Lismore during the February 2022 flood. It is evident that Leicester Creek peaked before Wilson River, and in turn, that Goolmangar and Terania Creeks peaked before Back Creek and the upper Leicester; and that Coopers Creek peaked well before the upper Wilson. Clearly, peak flows into Lismore came successively, not simultaneously. Had the rainfall pattern been

slightly different and created the peaks that arrived simultaneously, the flooding in Lismore could have been much worse.



Together, these images reveal that the February 2022 flood was not exceptional, and that the rainfall pattern was such that Lismore luckily avoided a much greater flood. These images challenge the notion that the February 2022 flood was a 1:10,000 event, and that the probable maximum flood (PMF) is 16.55m (Lismore Floodplain Risk Management Plan, Table 6.2).

Engeny provide some insightful details about their estimates of AEP and PMF in the Lismore Floodplain Risk Management Study, but it appears that the largest flood they considered was the 2017 flood, not the record-breaking February 2022 flood. Engeny used a standard method to estimate probable maximum precipitation (PMP) and indicated a 24-hour rainfall intensity of 1210mm – but rainfall near the head of Terania Creek exceeded 930mm in 18 hours during the night of 27-28 February 2022 (recorded by Ken Chelsworth who read and emptied his gauge twice during the night, noting that it was overflowing), pro-rata, greater than the theoretical PMP. The standard procedure for estimating PMP notes a problem with limited data and places great emphasis on a “phenomenal” storm which recorded 520mm rainfall (less than half of that observed in Terania) (<http://www.bom.gov.au/water/designRainfalls/document/GSDM.pdf> Table A3.8), so it is unfortunate that Engeny did not validate their findings with data from the February 2022 flood in which this rainfall was exceeded.

The DCP is vague about the ‘climate change factor’. Page 5 of the DCP proposes a flood planning level (FPL) that is 1%AEP plus a 500-600mm climate change factor, plus 500mm freeboard. Given that climate change is expected to increase rainfall intensity by 20% by 2090 (DCP, p.4), it is essential to increase the DFE accordingly. However, since an increase in rainfall will have a greater impact where the floodway is narrow (eg Gundurimba), it would seem logical to account for climate change by adjusting the specified AEP (for example, from 1%AEP to 0.1%AEP) rather than using a constant 500mm increase across the entire catchment.

The Insurance Council of Australia recently warned that we “must consider flood risk beyond the 100-year flood event as well as projected changes driven by climate change” (https://insurancecouncil.com.au/wp-content/uploads/2022/05/2202May_Flooding-and-Future-Risks_final.pdf). It is useful to put 1%AEP into context: it means that during a 40-year residence, there is a 33% chance of experiencing at least one flood exceeding that height. For many people,

that is an unacceptable level of risk, so Lismore should consider whether 1%AEP (or even 0.1%AEP) is sufficient as we plan for the future.

Appendix 4 (DCP, p.18) also shows a climate change afflux that is smaller in Leycester Creek than in Wilson River, which seems contrary to the observation that Leycester Creek dominates flood flows (FRMS, p.4). It also highlights some areas in green, denoted ">0", which seems inconsistent with the legend – should green denote *approximately 0*, rather than *greater than zero*? This should be clarified in the DCP.

These limitations detract from the reliability of the DCP, and given the importance of the DCP for the safety of our community, it seems appropriate either to ask Engeny to validate their work against data from the 2022 flood, or to await the findings of the CSIRO study. In particular, Engeny estimates the 1%AEP level at Lismore to be 12.47m AHD (FRMS Table 4.5), which appears conservative relative to other evidence, and warrants further clarification. Without such validation, the DCP seems unfit for purpose.

Key points:

Estimates of AEP and PMF should be revised to include data from the 2022 floods.


The DCP proposes a flood planning level (FPL) that is 1%AEP plus modest adjustments for climate change and freeboard, despite warnings by the Insurance Council of Australia. The FPL directly influences future risks faced by the Lismore community, and Council should canvass the community's appetite for risk.

Project Report

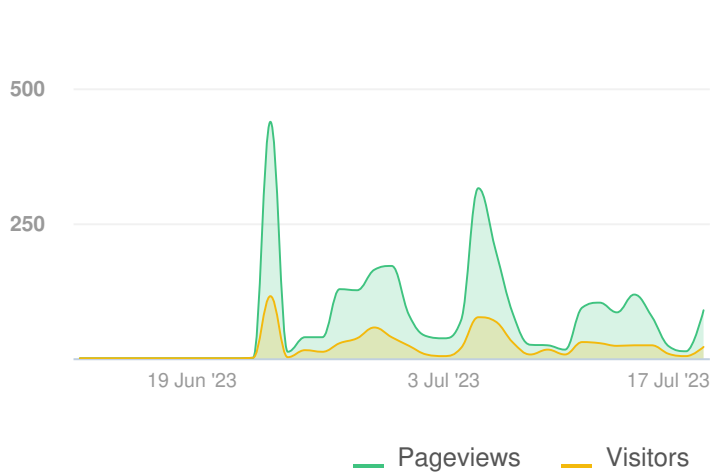
11 June 2023 - 17 July 2023

Your Say Lismore

Public Exhibition - Revised Flood Prone Lands DCP



Visitors Summary

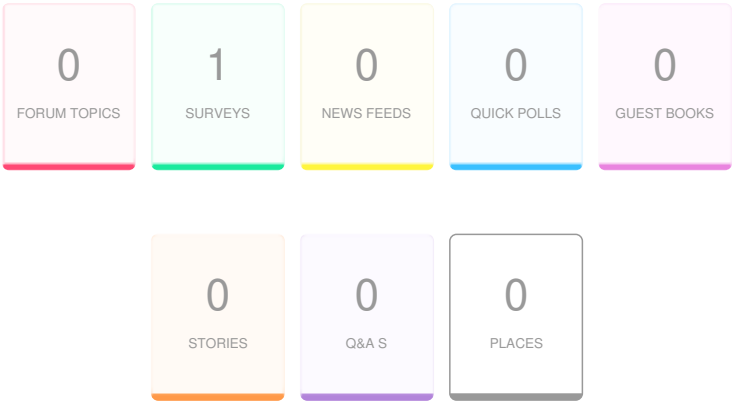


Highlights

TOTAL VISITS	959	MAX VISITORS PER DAY	115
NEW REGISTRATIONS	1	ENGAGED VISITORS	37
		INFORMED VISITORS	367
		AWARE VISITORS	571

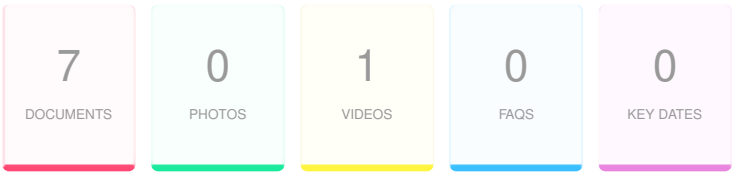
Aware Participants	571	Engaged Participants				37
Aware Actions Performed	Participants	Engaged Actions Performed	Registered	Unverified	Anonymous	
Visited a Project or Tool Page	571					
Informed Participants	367	Contributed on Forums	0	0	0	
Informed Actions Performed	Participants	Participated in Surveys	0	0	37	
Viewed a video	8	Contributed to Newsfeeds	0	0	0	
Viewed a photo	0	Participated in Quick Polls	0	0	0	
Downloaded a document	331	Posted on Guestbooks	0	0	0	
Visited the Key Dates page	17	Contributed to Stories	0	0	0	
Visited an FAQ list Page	0	Asked Questions	0	0	0	
Visited Instagram Page	0	Placed Pins on Places	0	0	0	
Visited Multiple Project Pages	262	Contributed to Ideas	0	0	0	
Contributed to a tool (engaged)	37					

ENGAGEMENT TOOLS SUMMARY



Tool Type	Engagement Tool Name	Tool Status	Visitors	Contributors		
				Registered	Unverified	Anonymous
Survey Tool	SUBMISSION - Revised Flood Prone Lands DCP	Archived	62	0	0	37

INFORMATION WIDGET SUMMARY



Widget Type	Engagement Tool Name	Visitors	Views/Downloads
Document	Flood Precincts Map	185	272
Document	Draft Revised Flood Prone Lands DCP for exhibition	154	210
Document	Council and NRRC mapping - explainer	99	145
Document	Draft Lismore Floodplain Risk Management Plan – Interim report	47	60
Document	Lismore Floodplain Risk Management Study - Final	42	53
Document	Frequently asked questions	27	32
Document	Flood Planning Terminology Guide	13	17
Key Dates	Key Date	17	18
Video	Understanding the DCP	8	8

ENGAGEMENT TOOL: SURVEY TOOL

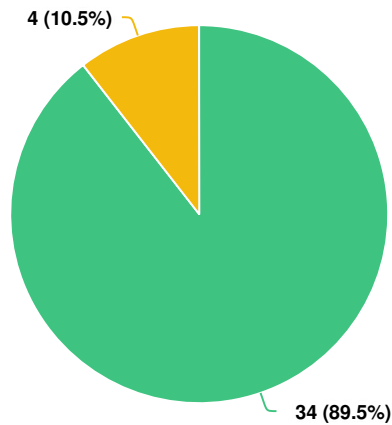
SUBMISSION - Revised Flood Prone Lands DCP

Visitors 62

Contributors 37

CONTRIBUTIONS 38

Do you live or work in the Lismore LGA?



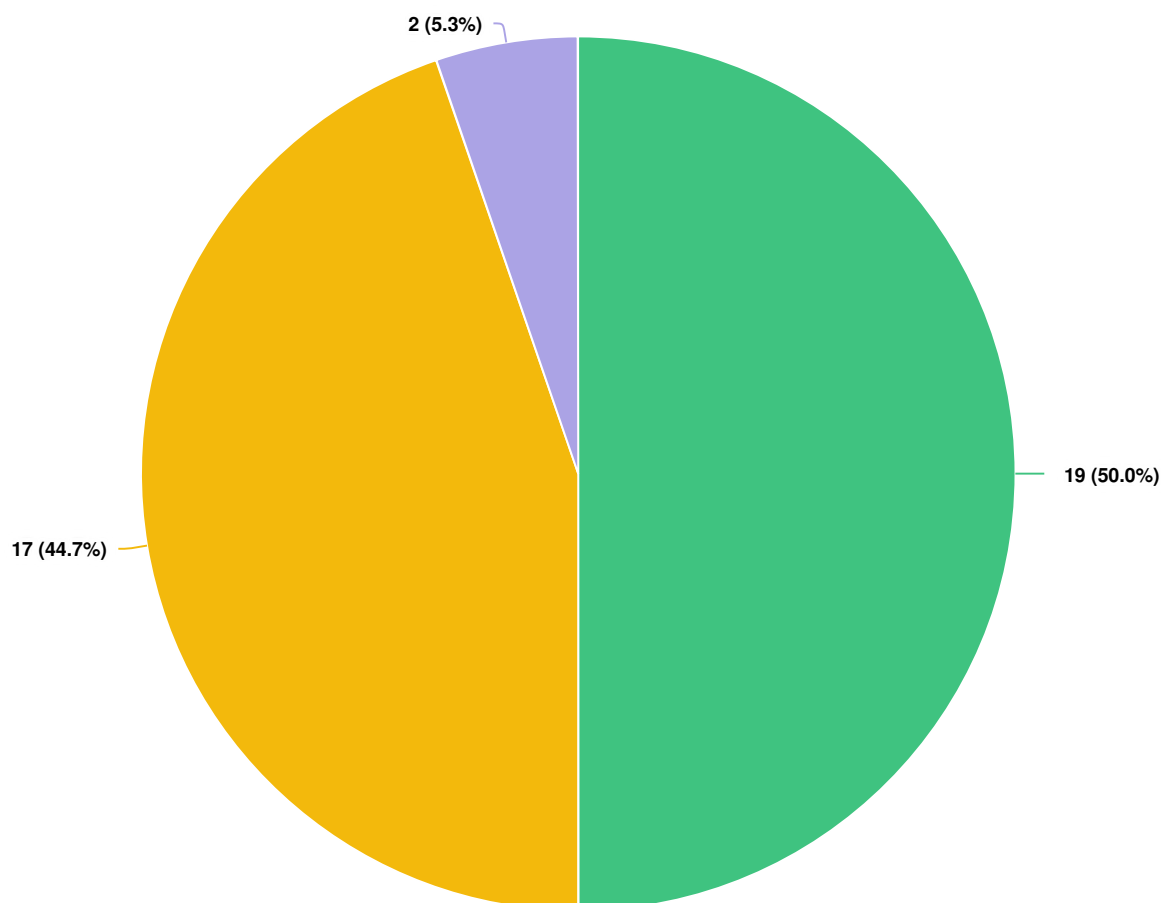
Question options

☒ Yes ☐ No

Mandatory Question (38 response(s))

Question type: Radio Button Question

Do you own or are you a tenant in property you consider flood prone? [Click on WaterRIDE link to confirm]

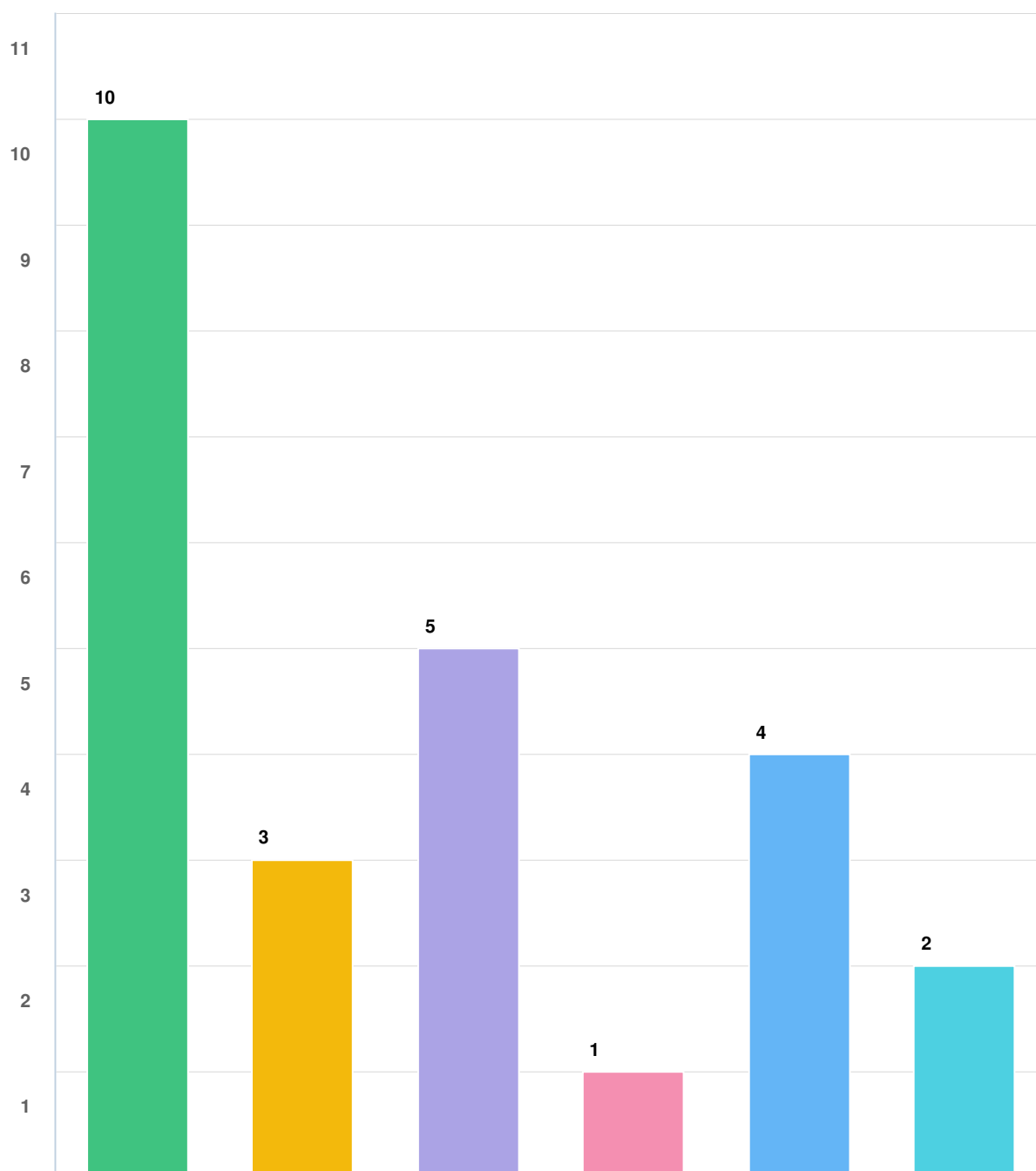
**Question options**

☒ Yes ☐ No ☐ Not sure

Mandatory Question (38 response(s))

Question type: Radio Button Question

What type/s of properties (tick all that apply)



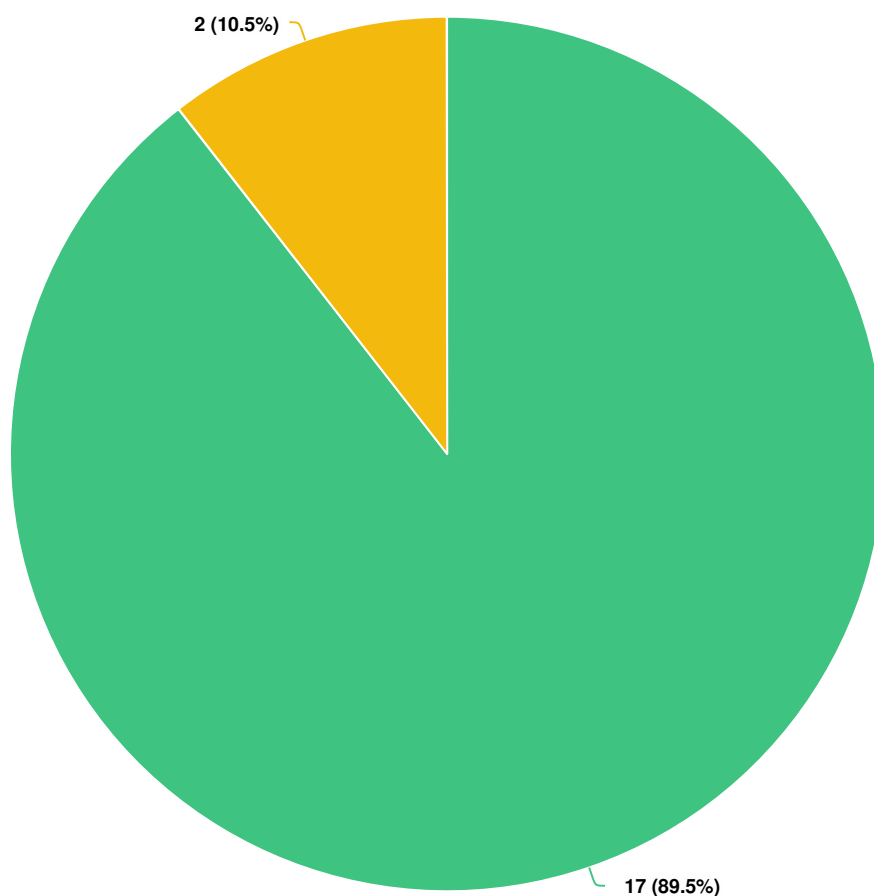
Question options

- Residential (owner-occupier) ● Residential (tenant) ● Residential (investment property)
● Commercial (owner-occupier) ● Commercial (investment property) ● Industrial (investment property)

Mandatory Question (19 response(s))

Question type: Checkbox Question

Have you ever experienced flood damage to your property or business?



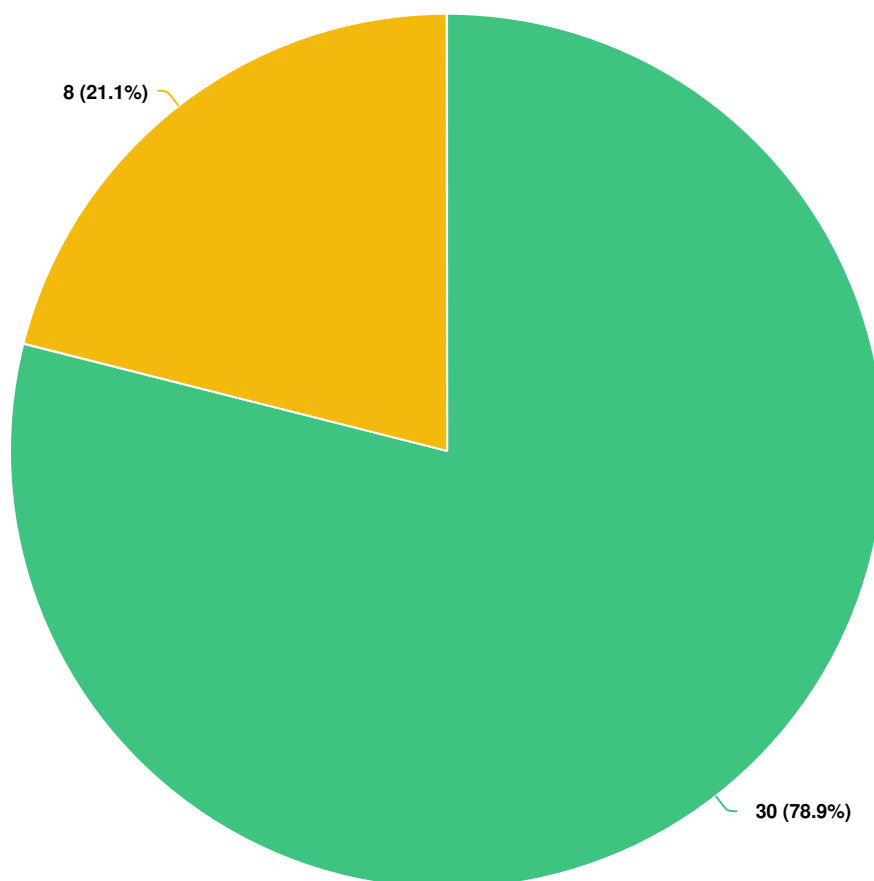
Question options

● Yes ● No

Mandatory Question (19 response(s))

Question type: Radio Button Question

Do you believe that Council should increase its flood planning level?



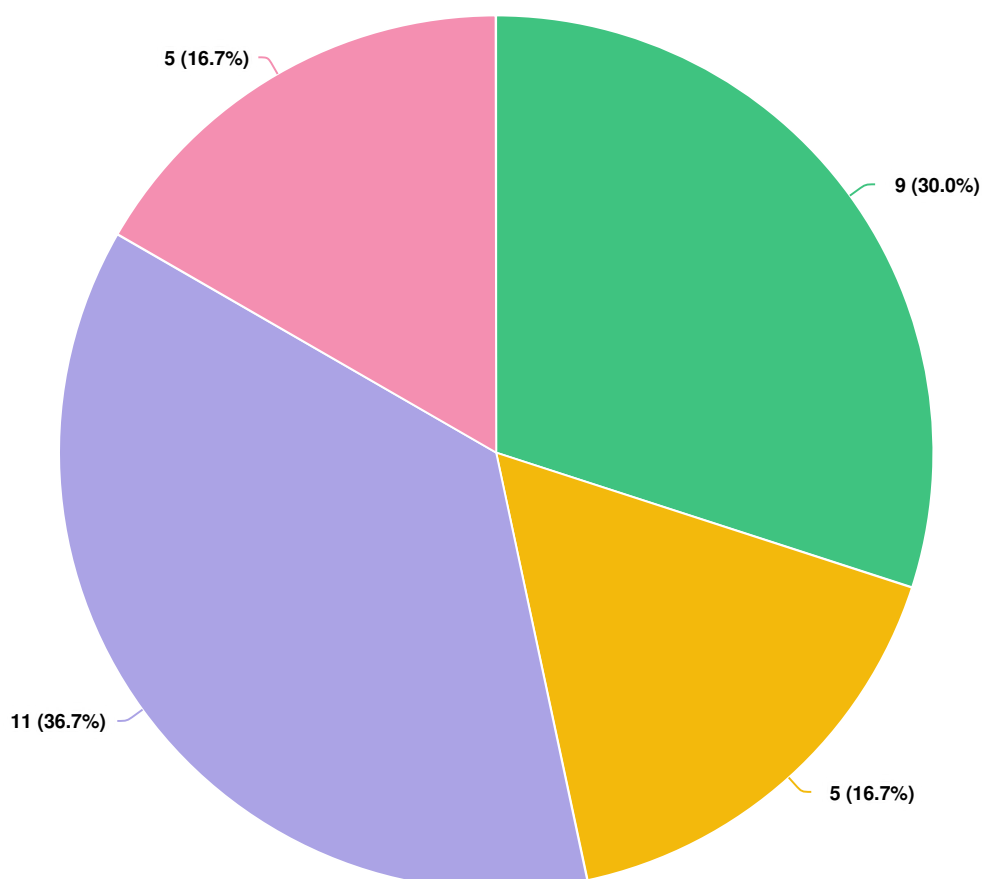
Question options

● Yes ● No

Mandatory Question (38 response(s))

Question type: Radio Button Question

What do you think the new flood planning level should be?

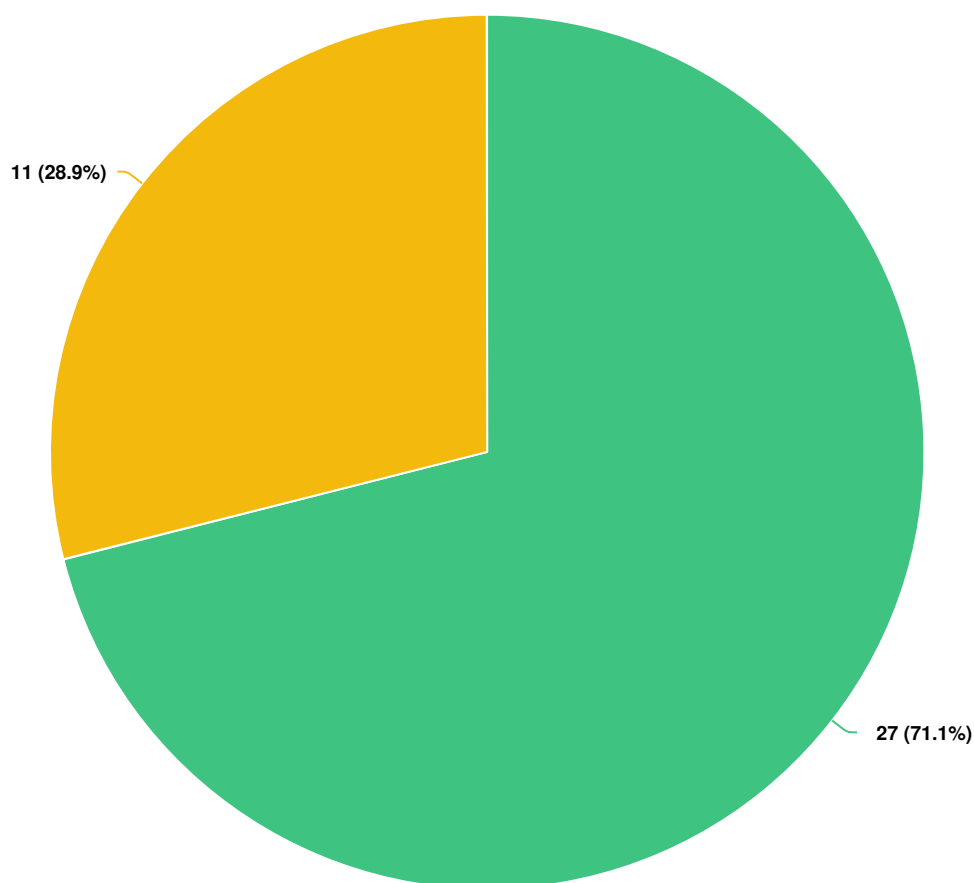
**Question options**

- The current flood planning level (1%AEP + 500mm freeboard) plus a worst-case climate change safety factor (Council staff preferred option, equivalent to 1 in 500 probability)
- The February 2022 flood event
- The Probable Maximum Flood (PMF) event (largest conceivable flood)
- Other (please specify)

Mandatory Question (30 response(s))

Question type: Radio Button Question

Do you agree with the red zone restrictions?



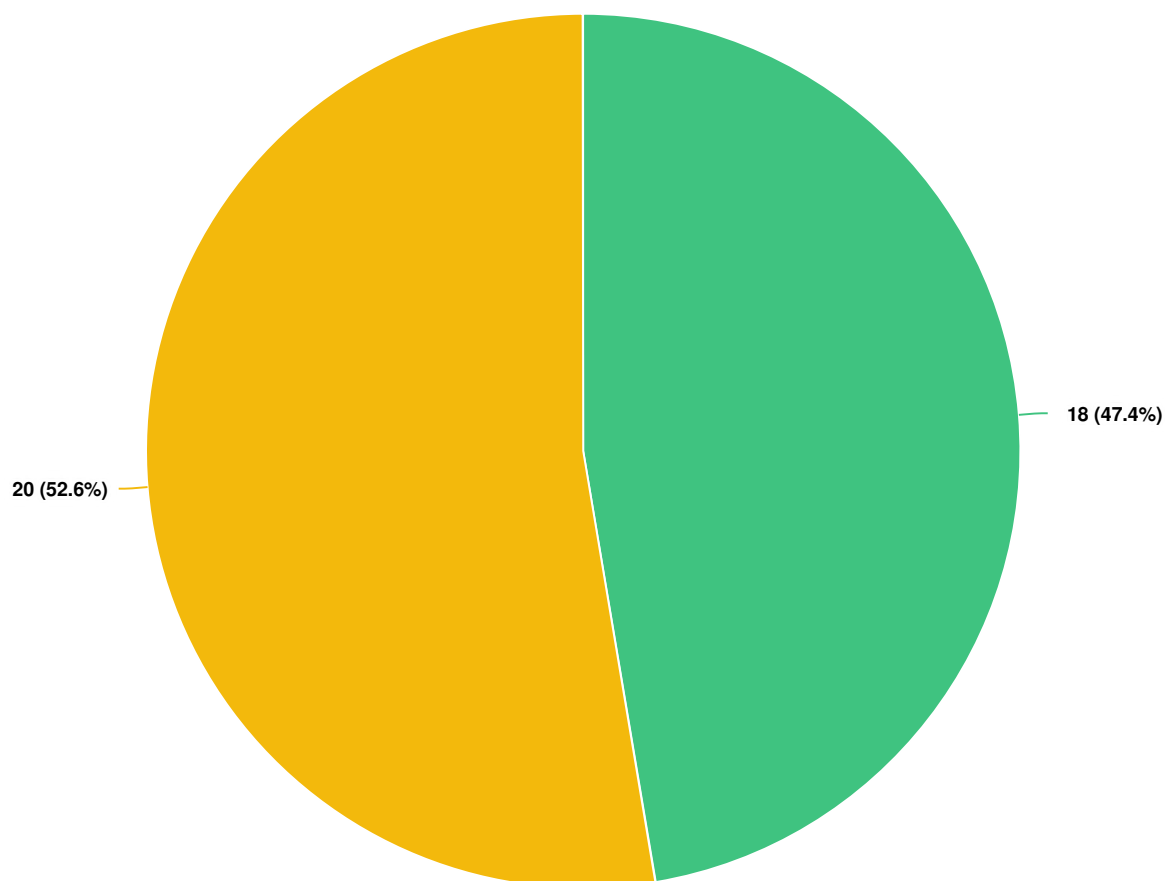
Question options

● Yes ● No

Mandatory Question (38 response(s))

Question type: Radio Button Question

Do you agree with the orange zone restrictions?



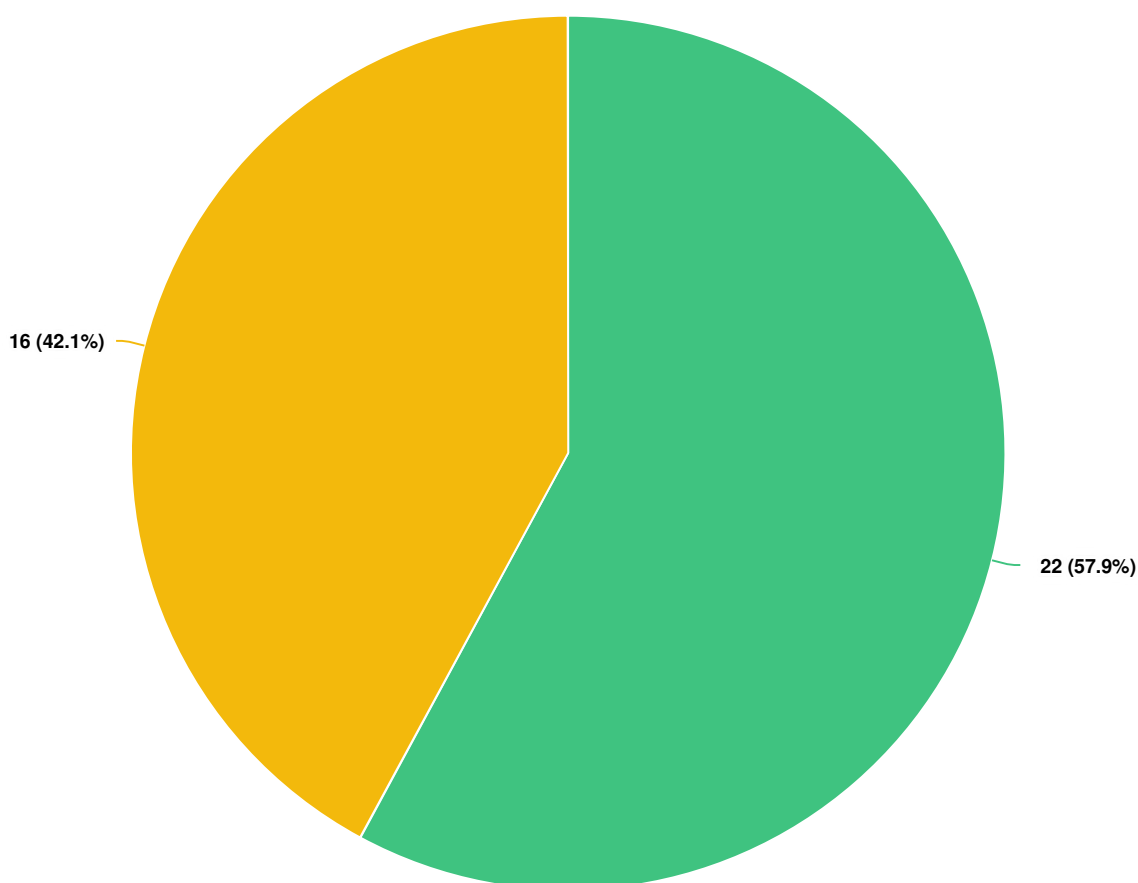
Question options

☒ Yes ☐ No

Mandatory Question (38 response(s))

Question type: Radio Button Question

Do you agree with the South Lismore restrictions?



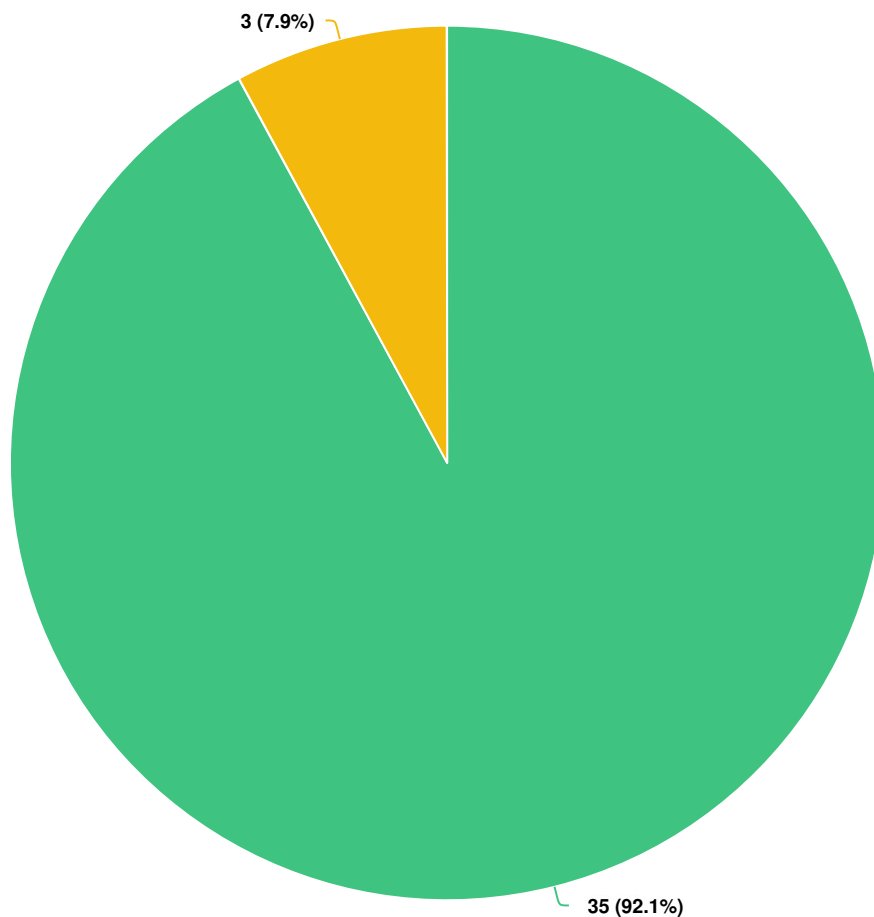
Question options

● Yes ● No

Mandatory Question (38 response(s))

Question type: Radio Button Question

Are there any changes you'd like to see to the DCP?



Question options

☒ Yes ☐ No

Mandatory Question (38 response(s))

Question type: Radio Button Question