

Creating Greenspace After a Flood in a Newly Zoned Medium Density Housing Area for Women With a Long-Term Mental Health Condition

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Goal 11 to "Make cities and human settlements inclusive, safe, resilient and sustainable"; target 11.7 "By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities"







EXECUTIVE SUMMARY

Lismore was severely affected by the 2022 flood. Since then many residents were made homeless, have been pushed into insecure, unsafe housing or want to move off the floodplain into better and safer homes. One response of Lismore city council was the rezoning of two new areas off the floodplain for medium density development. There were multiple parks nearby to these new medium density areas. This project brief evaluated two small interconnected parks in East Lismore for an upgrade that make the more amenable for women experiencing a long-term mental health condition to heal.

The intention to build the park for women experiencing a long-term mental health condition was considered in context of achieving Sustainable Development Goal 11.7 to creating a safer, more inclusive and accessible greenspace. During the design stage expert stakeholders were consulted to help design the park with features considering women's mental health. Each stakeholder's contribution was cost estimated then evaluated against the local council open plan strategy for 2023-2033 and the NSW government's Healthy Built Environment Checklist to assist future design.

Budgeting for the parks design and development was determined using the NSW government's 'Framework for Valuing Green Infrastructure and Public Spaces' approach to valuing the benefits of green infrastructure and future activities are provided to track progress of this project brief's implementation.

CONTEXT

In February 2022 Lismore experienced its largest flood on record, 14.4 m, which community and council took as an opportunity to build back better.

After the flood event Lismore City Council presented newly proposed medium density zones in their 'Lismore Growth and realignment Strategy 2022' to encourage further development off the floodplain (see Appendix A). These new medium-density zones are safe from the worst case probable maximum flood (19.89 m) and were broadly supported in community surveys (bangthetable, 2022; Engeny, 2022). The strategy was adopted by Lismore councillors in December 2022 and has been reviewed and conditionally endorsed by the NSW Department of Planning and Environment in June 2023. Adjacent to and within each of these newly endorsed medium density zones is publicly owned greenspace zoned 'C2 environmental conservation' (rainforest) and RE1 'public recreation' (see Appendix A).

Greenspaces can be a source of stress relief and rejuvenation for people, however only when perceived as safe (Orstad et al., 2020). Importantly, not everyone in our society experiences violent attacks at the same rate and therefore not everyone is likely to feel equally as safe. The results of Ringland et al. (2022) study show higher incident rates of violent crime for those within the disability cohort with a psychological and/or cognitive disability, are Aboriginal and between the age groups 15-49.



Developing greenspace that works for women who have a long-term mental health condition, particularly those who are flood affected and in need of housing is a step towards helping plan for safer and more inclusive public greenspace that contributes towards Sustainable Development Goal (SDG) Target 11.7.

STATEMENT OF NEED

Lismore ranks higher than the NSW median in 2022 for sexual and domestic physical assaults: 55 for Domestic Violent Assault and 25 for Sexual Offences out of 130 NSW Local Government Areas (BOSCAR, 2023a). These crimes affect proportionally more females than males; in Lismore 69% of Domestic Violent Assault and an estimated 76% of Sexual Offence victims are female (BOSCAR, 2023b). The premises type of these offences for 2022 is primarily in the residential setting; 86% of Domestic Violent Assault and 64% of Sexual Offences in Lismore occurred in the residential setting (BOSCAR, 2023b).

Women who were living on the floodplain of South Lismore and North Lismore in 2021 are much more affected by long-term mental health conditions than those in the newly zoned medium density areas (see Figure 1). When the flood happened in Feb 2022 this population of women were most affected. Developing safer greenspaces for women with a long-term mental health condition women in the new medium density areas could help those who move to the area help access the regenerative benefits of public greenspace supporting the intervention to invest in the safety of public spaces that change norms to prevent violence against women under the UN Women and Social Development Directive (2020, p.2).

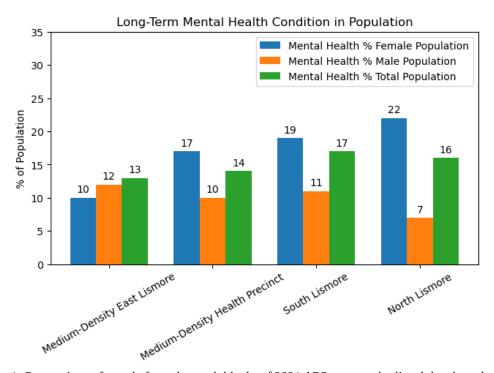


Figure 1: Proportions of people from the mesh blocks of 2021 ABS census who listed they have been told by a doctor or nurse they have a mental health condition (including depression and anxiety) which they expect to last six months or more and either recurs from time to time, is controlled by medication or is in remission. South Lismore and North Lismore are flood-affected communities.



SOLUTION IDEATION

Greenspaces were identified in the East Lismore medium density area. Each site was visited to better understand the layout of the park then afterwards two parks were selected for potential upgrading: The 14 Barham Street greenspace with passageway (Parcel Title: 29/1 11513; Area: 1975 m²) and the 145 Wyrallah Road corner park (Parcel Title 15/1 11513; Area: 645 m²).



Figure 2: Aerial view of the two parks in the East Lismore medium density area.

The 14 Barham street park is an open space with little to no large trees and receives full sun (see Figure 3) while the 145 Wyrallah Road park have several large trees and is mostly shaded (see Figure 4). When walking around in October 2023 the 145 Wyrallah Road park was functioning as a de facto carpark. The 145 Wyrallah Road park is therefore appears not being used for its intended purpose as a recreational park. The 14 Barham street park contains some amenities like a bench for sitting down and the open space that provides space for sports games. The 14 Barham street park appeared more used by the community than the 145 Wyrallah park for recreational purposes.





Figure 3: Parcel Title: 29/1 11513; Area: 1995 m2 identified for stakeholder development to create a safer park for women with a long-term mental health issue. Image taken entering from Barham St facing Atlas St.



Figure 4: Parcel Title: 15/1 11513; Area: 645.17 m2 identified for stakeholder development to create a safer park for women with a long-term mental health issue. Image take from the corner of Wyrallah Rd and Atlas St.



Feature Evaluation for Design

Stakeholders were consulted through various prompt questions to ask their contribution on designing the park and suggesting appropriate features (see Appendix D). These identified features were then estimated for costs. Afterwards features were suggested in consideration of the following guides and strategies:

- Lismore City Council Open Space Strategy 2023-2033 Implementation Plan: LGA-wide and East Lismore Actions
- Healthy Built Environment Checklist: Chapter 7 'Open space and natural features'

Feature	Estimated Cost
Small labyrinth	Assumptions: That the labyrinth will be inlaid using recycled stones and built by volunteers, with small shrubs and grasses that attract insects and birds planted in between and donated or purchased at lower cost from community groups with cost between \$2.50-\$10 for each plants. With approximately 100 – 200 plants. Cost: Cost for the inlaid stone labyrinth is between \$1000 - \$3000, and \$250-\$2000 for the plants. Total cost \$1250 - \$5000.
Toilets	Assumptions: That the public toilet will be cleaned yearly and be a new build. Alternative is information on the nearest public toilet at Wade Park which is open during daylight hours. Potential for waterless toilets which could be cheaper. Cost: Cost is estimated between \$80-200k and 13k in maintenance costs. Total cost 80-200k + 13k yearly maintenance.
Drinking water	Assumptions: That there is a <u>water bottle refill station</u> , <u>being preferred way to accessing water</u> . Potential request broader government strategy for towns and access to refill stations. Cost: Price for <u>water refill stations \$5000</u> and <u>price for installation \$2625</u> . Total cost \$7625 + unknown yearly maintenance.
Weaving plant garden	Assumptions: That there will be between 20 – 100 plants. With an estimated cost between \$2.50-\$10 for each plant. Cost: \$50 - \$1000.
Food garden	Assumptions: That there will be 1-2 food growing garden beds of approximately 1.3 cubic meters. Soil will need to be brought in to fill the garden beds. There will need an artificial shaded area to capture water and feed a rainwater tank, and a solar pump. Installation and building of this equipment is estimated to cost between \$500 - \$1500. Solar pump for water is used. With a 1.5kW Solar panel system installed. Cost: \$70-\$150 per cubic meter of soil. \$1000 - \$1500 for the tank. \$2500 - \$4000 for the solar system. \$350 - \$700 for the garden beds. Total cost \$4560 - \$8150.



Aromatherapy garden	Assumptions: There is a local aromatherapy garden in Southern Cross University with an opportunity to propagate some of those plants. Potential to purchase seeds and sprout hardy species that don't need any care. Cost: Minimal upfront cost, but requires time and community ask around. Potentially \$100 for seeds.
Plants that support small bird and insect habitat	Assumptions: Plants that support small birds and insects can be laid around the stone labyrinth. plants. Cost: The cost of these plants is \$2.50-\$10 for each plants. With approximately 100 – 200
Indigenous story design	Assumptions: The story design can be designed into the labyrinth from a local artist for a design fee. Cost: \$150 - \$450. Paid at \$150 per design for three designs.
Sensory garden	Assumptions: Plants that support small birds and insects can be laid around the stone labyrinth and nearby garden beds. Cost: The cost of these plants is $$2.50-10 for each plants. With approximately $100-200$
Sculptures from local artists	Assumptions: Simple sculptures that embed solar lights that can be easily replaceable. Payment standards for artists are provided for public art projects of \$5000+ at a minimum of 45% - 55% of the project budget and a concept design fee of \$500 - \$1000 of a project budget. Installation could be additional, such as pouring concrete to cement the sculptures, which could take 4 bags. Cost: The project budget based on facility added value is \$8778. This would result in an estimated cost between \$4450 - \$5828. Cement installation is \$33.6. Total cost \$4484 - \$5862.
Exploratory playground for children	Assumptions: The exploratory playground can be a labyrinth with sensory plants and signs to encourage touch, with some rubber features to stand on and crawl under and over. These could be from recycled materials like old car tyres buried in the ground and giving different wavy patterns. Labour \$35 - \$50 for labour taking a day. Cost: Tyres are assumed to be free or very low cost, with one day labour. Total cost \$280 - \$400.
A paved pathway	Assumptions: That a paved pathway would be the length of the Barham park at 200m. The cost to pave a square meter ranges between \$65 - \$100. Cost: For 200m the total cost of paving would range between \$13000 - \$20000.
Soft solar lighting	Assumptions: These could be fitted into sculptures that were created from Southern Cross University as part of a lighting project to fit in <u>solar panel lights</u> based on local artist concept design. Cost: Local artist concept theme for student project \$500 - \$1000. Solar lights \$100 - \$200.
Comfortable chairs (like	Assumptions: That comfortable seating can be designed



hammocks, etc.)	using recycled materials by a <u>local carpenter</u> . That materials would cost for sourcing and purchasing between \$500 - \$1000. Cost: Estimated time for design and build is 8 - 36 hours at a cost of \$50 - \$120 per hour. \$400 - \$4320. Total cost \$900 - \$5320.
Soft flooring under a shaded area	Assumptions: A high quality shaded area with soft flooring that is professionally constructed, or planting of small to medium trees provide shade. About 5 – 10 trees; \$2.50-\$10 for each plants; area under trees is grass. Cost: The cost of a professionally built shade area is estimated at around \$20000. The cost of trees ranges from estimate of \$12.5 - \$100.
Food preparation area	Assumptions: That food preparation area would include a place to cut and then cook food, such as a community bbq. Alternatively is a local bbq and food preparation area Wade Park which people could be directed to if they need more amenities. The bbq also needs to be under a shaded area. Cost: The cost to install a food preparation area such as a bbq
Water feature	Assumptions: A <u>birdbath</u> filled from the rainwater tank could be provided with circulating water, connected to the solar system. Cost: Estimated cost is between \$50 - \$1300.

Lismore city council Open Space Strategy 2023 – 2023 has multiple actions with align with the two parks. One action in the strategy is to reduce mowing. The shaded park in Wyrallah Rd has little grass which means little mowing maintenance however the park of Barham street has more grass and therefore would benefit from edge areas being planted with weaving plants, aromatherapy plants, and small birds and insect attracting plants to reduce edge mowing and encourage children to interact and explore the sensory experience of plants. Indigenous knowledge is also incorporated by including weaving plants along with educational signs that teach the practice. Furthermore, In accordance with North Coast Regional 2041 plan Objective 4 the local Aboriginal Widjabul Wia-bal people will be consulted to decide to name the unnamed park of Barham street, and potentially rename the Wyrallah road park with an appropriate Aboriginal cultural name (NSW Government, 2022, p. 26). Renaming the parks and providing attracting signage would support a more welcoming and meaningful space. Unlike the Barham street park the Wyrallah Rd park has sufficient shading to place comfortable but artistic seating. This seating could be fitted with lighting to make the space more attractive at night. This would support the council action to put more seats under shade in parks.

We also evaluate the features against the checklist questions of the Healthy Building Environment Checklist to ensure we better create a safe, accessible, attractive and easy to maintain public space. Low maintenance sensory gardens with weaving plants and a labyrinth supports both passive and active recreation, encouraging learning, play and adventure. With a tyre space there is designed a fun way to jump around. Access to the park can be improved by having good signage about the park and its features, including the using Aboriginal names for the parks and providing a map to the nearest public toilet and food preparation space in Wade park so people know where to



access these public amenities. The labyrinth with soft solarlights inside sculptures designs a fun way to explore the space, whilst providing a greater sense of safety at night. Paving of the park of Barham street is likely to be too costly, however the Wyrallah road park with its gravel surface at the entrance can be made more welcoming for families and people in wheelchairs. Also concrete buffers around this park may benefit to create safety from the busy road and prevent people parking in the park. Can be improved for accessibility by ensuring amenities for people with more difficult access walking on grass are provided in the gravel area of the park on Wyrallah Rd.

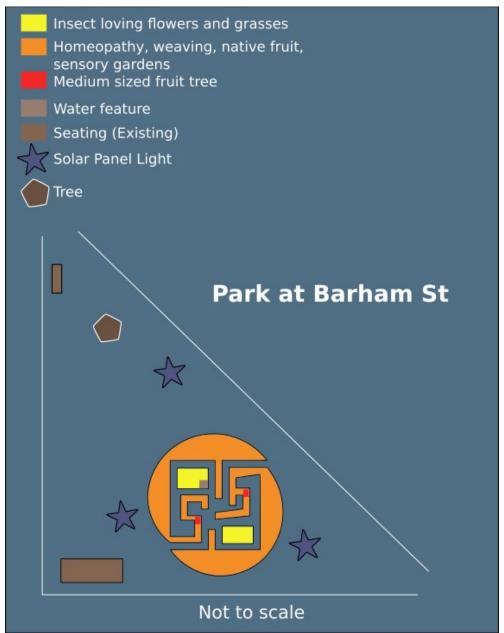


Figure 5: Aerial view example for the park of Barhams street. This is a draft design used to provide an illustrative visual and could be subject to further changes.



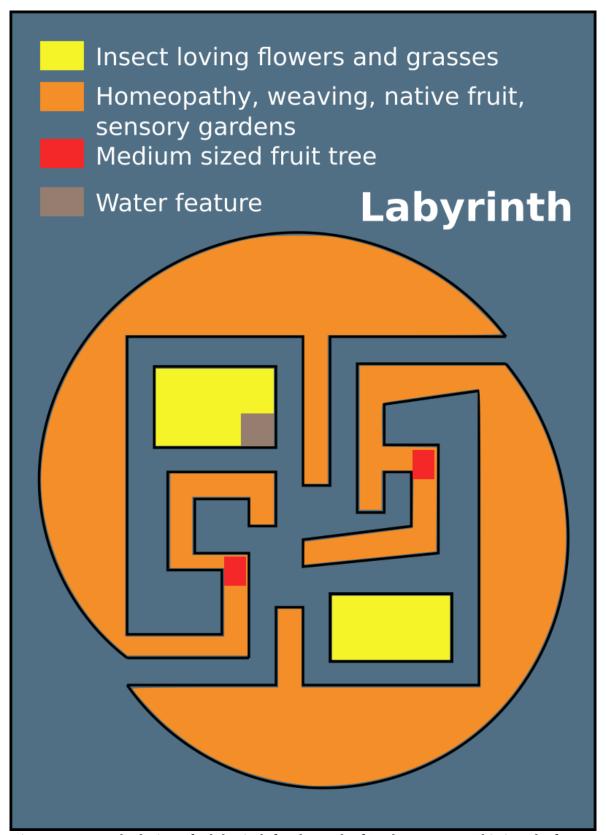


Figure 6: Example design of a labyrinth for the park of Barhams street. This is a draft design used to provide an illustrative visual and could be subject to further changes.



Overall it is determined that the features can be separated and combined into both Barhams and Wyrallah parks with the following features: Small labyrinth; Weaving plant garden; Aromatherapy garden; Plants that support small bird and insect habitat; Indigenous story design; Sensory garden; Sculptures from local artists; Exploratory playground for children; Soft solar lighting; Comfortable chairs (like hammocks, etc.) (see figure 5, 6 and 7).

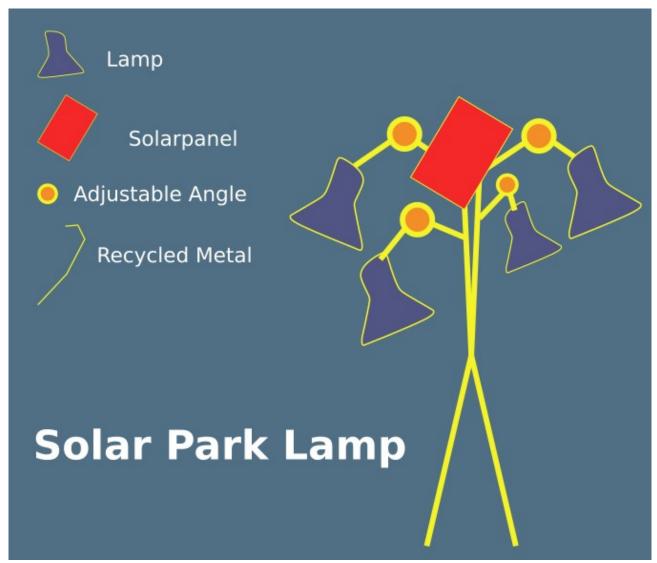


Figure 7: Example of a draft design for the solarpanel lighting with consideration of a sustainability performance measure of recycled content. This is a draft design used to provide an illustrative visual and could be subject to further changes.





ACTIVITIES

- 1. Reach out and consider stakeholder feedback for design features that could encourage neighbourhood familiarity, natural surveillance, cultural vibrancy and usage for women and children.
- 2. Use the NSW Government's (2020) Healthy Built Environment Checklist to evaluate stakeholder feedback.
- 3. Consider total costs and benefits of the potential park designs using the 'Framework for Valuing Green Infrastructure and Public Spaces'.
- 4. Request from council development compliance requirements of proposed designs through a preapplication consultation.
- 5. Propose approved compliance designs to stakeholders for any further feedback and public consultation.
- 6. Evaluate any positive response from council. If the council doesn't approve of the design then request feedback and consider alternative options.
- 7. Identify funding streams from the public and private sector to realise the construction of the park.
- 8. Assist in coordinating the construction of the park.
- 9. Followup post-construction with research over subsequent years for residents feedback.



INDICATORS OF ACHIEVEMENT

Activity	Indicator of Achievement
1. Reach out and consider stakeholder feedback.	 Engaged groups that work with women who have a mental health condition. Engaged with groups from the Widjabul Wiabal people. Documented key ideas that can improve the cultural vibrancy, natural surveillance and neighbourly connection in the park.
2. Utilise NSW Government Planning Resources.	- Evaluated NSW Government: Healthy Built Environment Checklist against Stakeholder ideas
3. Evaluate park costs and benefits.	 Evaluated potential value of greenspace based on residential needs to develop baseline budget. Considered key resources covered under budget.
4. Contact with council.	- Presented project brief with council requesting feedback and a pre-consultation session.
5. Reengage with stakeholders.	 Updated project brief with council feedback and reengage with stakeholders.
6. Calculate funding needs.	Draft final quotesCalculated funding needs.Commenced communication strategy for residents.
7. Update and reengage with council.	- Updated council with resident feedback and make minor changes.
8. Prepare for construction.	Prepared financing for construction.Prepared suppliers for materials.Prepared specialised workers.
9. Construct park.	- Commenced construction of park.



DURATION AND MILESTONES

Duration	Milestone
October 2023 – December 2023	Complete preliminary stakeholder feedback and draft estimate total costs and benefits of the park.
January 2024 – February 2024	Request and present project brief during a pre- development consultation with council.
February 2024 – March 2024	Resubmit updated project brief and receive feedback from stakeholders.
April 2024 – June 2024	Commence and complete communication engagement with local residents.
June 2024 – August 2024	Redraft and finalise estimated costs before submission to council for approvals.
August 2024 – October 2024	Commence a communication campaign for funding the project.
November 2024 – December 2024	Organise construction activities.
January 2025	Commence construction activities for park.





Communications and Engagement

The target group of East Lismore residents in the new medium density area, especially those who are women to ensure communication and engagement of the population is representative.

The buy-in is needed from the local residents and the council. Ways to do this include sending out letters with a short design brief, contact details and pictures for the more elderly residents that inform the of the benefits this development will have for their amenity and enjoyment.

Local politician Janielle Saffin could provide some support for the idea being aligned with the SDGs and fully committed to helping build back better after the flood. Broader scale media outreach considering the small scale of the park is considered unnecessary and the local approach is more appropriate to engage those who are more likely affected.

However small social media campaigns in local news feeds like the Lismore App could be used to assist in encouraging support for the ideas of helping women with a long-term mental health condition through good park design, creating momentum around the town for the discussion.





Resource Assessment and Budgeting

In the representative area (Census SA1 11202124825) for the medium density area of East Lismore there are approximately 440 people and 210 households. It is expected that all households will benefit from the upgrade of the park.

Based on the additional facilities added to the park calculated from Table 5.2 of the NSW Government 'Framework for Valuing Green Infrastructure and Public Spaces' (2023, p. 27) in an urban park the total benefit per household is estimated at: Playspace \$29.3 + Lighting \$12.5. The estimated value of these facilities in the park is \$8778 AUD for 2023.

This figure provides a good approximation for spending on the park upgrades. What isn't included is the benefit of including water. It is expected that the benefit of including food could also increase the amount of amenity. The provision of water to the park should be assessed separately to the cost above, as it provides amenity that isn't considered under Table 5.2.

Key resources needed for a minimum viable design are:

- Pavers for a small labyrinth;
- Weaving plants;
- Aromatherapy plants;
- Plants that support small bird and insect habitat;
- Indigenous and council consultation;
- Sensory garden plants;
- Sculptures from local artists or students for solar lights;
- Tyres for exploratory playground for children;
- Carpenter design and quote for comfortable unique recycled public chairs





Fundraising Value Proposition

This project is designed for the achievement of the Sustainable Development Goal 11.7 to reduce sexual and physical violence through making a space more inclusive and safe. There a not many parks with ambitious beginnings to consider the broader global SDGs at a local level.

The massive displacement of people after the flood and the clear evidence that women affected by a long-term mental health condition are more likely to be affected by natural disaster makes this parks development in the new medium density zone even more suitable for addressing the positive improvement of Lismore through its intention to build back better.

Sustainable Development Solution's Network Youth Fellowship Program is an ideal platform to coordinate the design and development of this park having access to a network of global professionals whom possess invaluable knowledge, and are community leaders. This leadership is what helps make ambitious and new projects like this so well suited for SDSN and its volunteers. Without their dedication to sustainability science and research such a project brief for these parks would have been unlikely to come about, yet the importance of funding its construction to build back better cannot be understated.

Creating safe places for women, especially those affected by flood within a new medium density zone is an incredible opportunity for good.



Beneficiaries

The intention of the park to be a more inclusive and safe place in a new medium density zone for women with a long-term mental health. Women in East Lismore show lower rates of long-term mental health conditions than men, however interestingly they make up the majority of residents in the area around the park (see Figure 6). The design of a park for women to feel safe will benefit the local population who are majority women. It will also benefit women who move off the floodplain into housing developed within the medium density zone, especially those with a long-term mental health condition (see Figure 1). The park also incorporates features that stimulate children to be curios and play which can be used by mothers as a space to relax with their children. The overall impact of this park on the East Lismore community will be positive and its benefits will likely exceed the costs in terms of improved mental health and revitalising two parks for a predicted growing population of women.

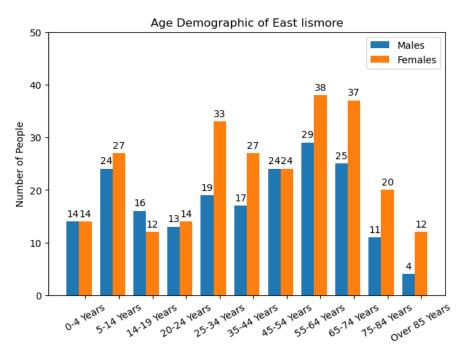


Figure 8: Gender demographic for population of mesh block overlaying East Lismore from ABS Census 2021.





REFERENCES

bangthetable. (2022). Have Your Say on Growth and Housing - Survey Response Report [Unpublished survey]

BOCSAR. (2023a, March, 3). Ranking Dataset [Dataset]. https://www.bocsar.nsw.gov.au/Documents/Datasets/LgaRankings_27_Offences.xlsx

BOCSAR. (2023b). NSW Local Government Area excel crime tables – Lismore [Dataset]. https://www.bocsar.nsw.gov.au/Documents/lga/lismorelga.xlsx

OpenAI. (2023). ChatGPT (September 25 Version) [Large Language Model]. https://chat.openai.com/chat

Edwards, J. R., Gotschall, J. W., Clougherty, J. E., & Schinasi, L. H. (2023). Associations of greenspace use and proximity with self-reported physical and mental health outcomes during the COVID-19 pandemic. *PLOS ONE*, *18*(3), e0280837. https://doi.org/10.1371/journal.pone.0280837

Engeny. (2022, December). Lismore Floodplain Risk Management Plan – Land Use Planning and Development Control [Unpublished report].

Green Building Council of Australia. (2023a, June, 13). Nature Category: Green Star Communities v2 Draft Credits Consultation. https://gbca-web.s3.amazonaws.com/media/documents/nature-category---draft-for-consultation.pdf

NSW Government. (2020). Healthy Built Environment Checklist. https://www.health.nsw.gov.au/urbanhealth/Publications/healthy-built-enviro-check.pdf

NSW Government. (December, 2022). North Coast Regional Plan 2041. https://www.planning.nsw.gov.au/sites/default/files/2023-03/north-coast-regional-plan-2041.pdf

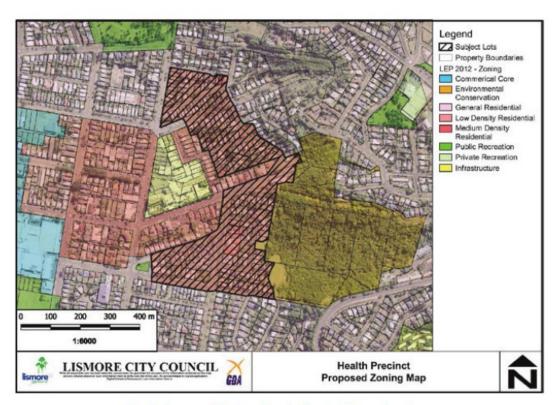
Orstad, S. L., Szuhany, K., Tamura, K., Thorpe, L. E., & Jay, M. (2020). Park Proximity and Use for Physical Activity among Urban Residents: Associations with Mental Health. *International Journal of Environmental Research and Public Health*, 17(13), 4885. https://doi.org/10.3390/ijerph17134885

Ringland, C., Boiteux, S, & Poynton, S. (2022). The victimisation of people with disability in NSW: Results from the National Disability Data Asset pilot. *Crime and Justice Bulletin*, 252.

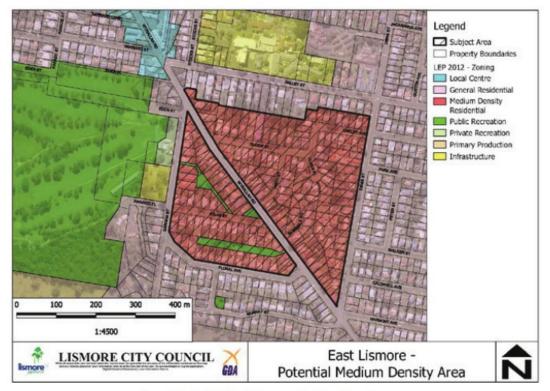
UN Women and Social Development Direct (2020) Environments Made Safe, RESPECT: Preventing Violence against Women Strategy Summary.



APPENDIX A



Map 5: Proposed Medium Density Precinct Expansion Area.



Map 6: Potential East Lismore Medium Density area.





APPENDIX B

Green Space One



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Figure 9 Greenspace One Perimeter: 453 meters; Greenspace One Area: 3781 meters squared; Greenspace One Length: 210 meters; Greenspace One Width: 18 meters





Green Space Two



Figure 10 Greenspace Two a) Perimeter: 159 meters; Greenspace Two a) Area: 1064 meters squared; Greenspace Two b) Perimeter: 157 meters; Greenspace Two b) Area: 1013 meters squared





APPENDIX C

OpenAI (2023)

Prompt:

I am tasked with designing a park. The park has a perimeter of 159 meters and an area of 1064 m2. The most representative demographics of the population are 5-14 years, 25-34 years and 55-74 and females. If the purpose of the park is to be a space for women with a long-term mental health condition what are some ideas for developing the space to encourage use of the park?

Answer:

Designing a park that caters to the needs of women with long-term mental health conditions is a thoughtful and important endeavor. To create a welcoming and therapeutic environment, consider the following ideas for developing the park:

1. Accessibility and Inclusivity:

- Ensure the park is wheelchair accessible and has paved paths for easy navigation.
- Install ramps, handrails, and accessible seating areas.
- Incorporate sensory-friendly elements, such as quiet zones and tactile surfaces.

2. Natural Elements:

- Create a serene environment with plenty of greenery, trees, and flowering plants.
- Incorporate water features like ponds or fountains for a calming effect.
- Use natural materials for benches and walkways.

3. Seating and Rest Areas:

- Provide comfortable seating options throughout the park, including benches, swings, and shaded areas.
 - Consider installing hammocks or reclining chairs for relaxation.
 - Design secluded areas for solitude or group spaces for social interaction.

4. Therapeutic Gardens:

- Develop specific therapeutic gardens, such as a sensory garden with fragrant plants and herbs.
- Incorporate a meditation or mindfulness garden with peaceful statues or features.
- Create a labyrinth for walking meditation.

5. Art and Creativity:

- Display sculptures, art installations, or murals created by local artists.
- Set up an outdoor art studio with supplies for painting or crafting.
- Host art therapy workshops or classes.

6. Exercise and Movement:

- Include low-impact fitness stations or yoga areas with open spaces for exercise.
- Design walking or jogging trails with varying levels of difficulty.
- Install outdoor fitness equipment tailored to different fitness levels.

7. Safety and Security:

- Ensure good lighting for evening use.
- Install security cameras and have regular park patrols.
- Create a safe and welcoming atmosphere to reduce anxiety.

8. Community Engagement:





- Organize regular events, such as nature walks, support groups, or relaxation classes.
- Encourage local women's mental health organizations to host meetings or workshops in the park.
 - Provide a community bulletin board for information on mental health resources.

9. Sensory Elements:

- Consider wind chimes, soothing music stations, or bird feeders to engage the senses positively.
- Plant fragrant flowers and herbs like lavender, rosemary, or chamomile.
- Offer sensory-friendly play equipment for children.

10. Privacy and Tranquility:

- Use natural landscaping and hedges to create secluded areas.
- Add noise-reducing features to minimize external disturbances.
- Foster a sense of privacy and security for visitors.

11. Educational Signage:

- Include informative signs about the benefits of nature on mental health.
- Offer information on local mental health resources and support services.

12. Feedback and Involvement:

- Encourage input from the target demographic during the design and development stages.
- Continuously gather feedback to make improvements.

13. Community Partnerships:

- Collaborate with mental health organizations, local schools, and healthcare providers to promote park usage and mental health support.

By incorporating these elements into the park's design, you can create a therapeutic and inclusive space that encourages women with long-term mental health conditions to visit, unwind, and find solace in nature and community.





APPENDIX D

Doug Blythe - Goonellabah Tucki Landcare Inc. President

Notes from phone call with Doug Blythe, Goonellabah Tucki Landcare Inc President, on the 15/10/2023 from 7:00-8:00 PM:

- Doug: The aspect of women's mental health needs a women's mental health professional, comprehensive consultation with women and a woman landscape architect who would have an interest in woman's mental health.
- Doug: Doug is able to help with the selection of plants for the area with the woman landscape architect.
- Abrisham: Plants could be edible bush tucker plants.
- Doug: Exercise activities could also be encouraged using equipment, for example a
 labyrinth that people can walk around. I was involved in the labyrinth design and
 construction for the Lismore Rainforest Botanic Gardens. You can walk something like 200
 meters in a 10 meter by 10 meter block. They have the added benefit of being very cheap.
- Abrisham: It could an Indigenous Wildlife labyrinth.
- Doug: Surfaced pathways through the park would also benefit women with strollers who want to walk through the park.
- Doug: Lighting is not a good idea for these parks because its expensive, can get vandalised. These spaces should be parks that are used during the day.
- Abrisham: They could have a gate with a sign that says these parks are for day time use only, with times to discourage people from using the park at night.
- Doug: You could however have temporary events in the space with temporary lighting but you wouldn't want permanent lighting especially for Greenspace 2 a). Greenspace 2 b) being on an intersection between two roads could have a light, however the street light would likely be enough.
- Doug: Greenspace 1 not having a walk through would benefit from the council purchasing a dilapidated house at the end of the park and then turning that into a community centre to create a walkway through the park.
- Abrisham: In the council survey (bangthetable, 2022) support for the medium density area
 was given by one resident on the condition that the council and NSW government improved
 the infrastructure offered to residents within these areas.

Sian Hromek – Senior Researcher Indigenous Specialist Services at WSP

Email communication received on the 27/10/2023 in response to questions sent on the 16/10/2023.

Here are my responses to the questions:

How would you approach the landscape design for women with a mental health issue in such a small space?

- I would start by finding women who will be using the park and ask them what they would like to see and access in such a space. Some of the types of activities could be:
- a place to sit in the sun and enjoy nature, peace and quiet and feel safe and welcome. Access to shade, water and amenities are important for people to be able to use the park for more than an hour or so.
- a place to get your hands dirty and garden. The purpose of the gardens could be for- food, flowers, aromatherapy, habitat for animals. Women could get active by helping to set up





and maintain gardens. Fresh food is also good for health and well being.

• a place to interact with others and feel connected. Very important for health and well being, for Indigenous women who wish to maintain cultural practices such as weaving, a place with shade, seats, water, toilets and plants that can be collected and used for weaving.

How would you incorporate local Indigenous design elements into the space (Doug and I brainstormed a labyrinth of local wildlife)?

- I would seek guidance from local Indigenous people to see what they would like to offer.
- There may be a story that relates to the area that could have elements included into the design.
- There may be significant plants and animals that they share that can be celebrated and included.
- Enhancing habitat to support local more than human species is a good way to connect with Country. Plants that support insects, birds and provide shelter.

What types of plants (Doug Blythe from Landcare has offered his assistance, and I suggested potentially bushtucker type plants) would you think to put into this space?

- The types of plants will depend on the activities that women want that emerge from consultation.
- For habitat enhancement using local species that support small invertebrates eg. butterfly
 attracting species, nectar bearing plants (avoiding large grevillea species- they attract
 aggressive noisy miners and wattlebirds), to attract small birds include bushes that provide
 shelter (eg 'forest rambler' grevillea), include safe fresh water source for drinking and
 bathing.
- For a weaving garden there are a variety of local and introduced species that we use to weave. If you are interested in this option then I can share a list with you.
- For a sensory garden then include plants that have a variety of flowers, scents and textures..

Nathaniel Hunter - Bachelor of Neuroscience Student

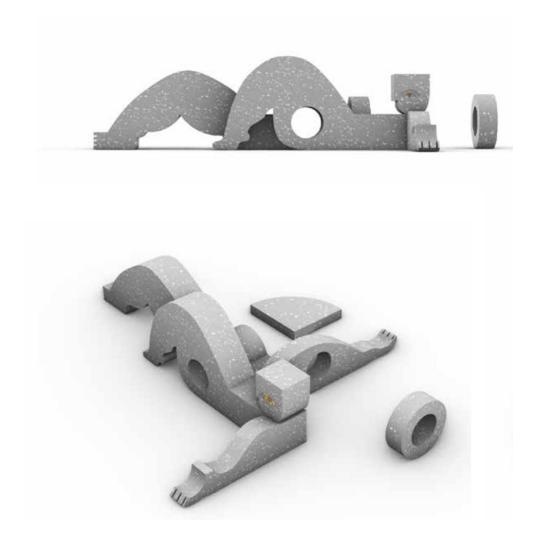
Email communication received on the 08/11/2023 in response to questions sent on the 26/10/2023.

"As far as neuroscience goes, the research clearly points to community and acceptance as precursors to improved mental health. Any place that encourages people to get together in a healthy way is a good start. A park dedicated to mental health might be asking to be vandalised, so including multi-group capability might be a good idea - ie an unusual children's playground, hidden garden, water features, that encourage different people in different parts of the area. Many women have children, and so enabling them to visit a calming area with their kids might be an idea. In other words, not a huge playground with slides and stuff, but an exploratory one.

My school is trialling a play sculpture that's based on a women's body, by artist Dr Sanne Mestrom. Looks like a calming and slightly feminine object to me."







<u>Crystal Whitney – Domestic Violence Case Worker at WUNH</u>

Email communication received on the 1/12/2023 in response to questions sent on the 9/11/2023.

"What elements do you think would make a nice place in a park for women who are experiencing long-term mental health conditions and feeling unsafe?

- Soft Solar lights that come on automatically in the evening. Fairy lights or similar.
- Tactile, interactive sculptures.
- Shaded area with softer flooring (preferably not rubber because this retains a lot of heat) for exercise or yoga.
- Basic area for food preparation (stainless steel, easy to clean)
- Fragrant plants, food plants, native plants, community garden style.
- Ability to plug into or Bluetooth music to installed speakers.
- Bird baths to encourage birds.
- Tranquility was a word that popped up.
- · Comfy chairs to sit in, hammocks.
- Water features.

How do you think we could engage with affected women in a safe and ethical way to encourage the design of the park in this newly zoned Medium Density Area?





- Small water play area for young children it gets very hot in Lismore.
- Weaving circle area that is shaded.
- Minimise the use of concrete.
- Hedging around the perimeter to create privacy from other properties.
- Fencing at site B as next to a busy road.
- Local artist Alana Hickling may be interested in creating some artwork for the space."