

Strategy and Assets Committee

Meeting Date: Tuesday, 20 July, 2021

Location: Council Chambers, City Administrative Centre, Bridge Road, Nowra

Attachments (Under Separate Cover)

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This document is the final version of the 'Revitalising Nowra Action Plan 2021-23'. It has been designed to be printed as an A4 landscape double sided document.

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PLACE SCORE

Suite 1, Level 5, 2-12 Foveaux Street
Surry Hills NSW 2010 Australia
www.placescore.org
ABN 19 610 823 286

KYLIE LEGGE
Director
T: +61 2 8065 7401
M: 0414 377 677
E: kylie@placescore.org



GREAT PEOPLE PLACES ARE GREAT FOR BUSINESS

For a town centre to succeed, it needs people to want to come, shop and spend time there.

This Action Plan was commissioned by the Nowra CBD Revitalisation Strategy Committee to guide investment over the next three years by both government and the private sector.

Our overarching goals are to build a positive identity and improved offer for the Nowra CBD in order to:

- Attract more customers
- Support business sustainability and growth
- Build the long term value of the area for investment

Working together we can achieve our shared vision for a vibrant, connected, people friendly Nowra CBD that is great every day for locals and welcoming to our visitors.

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INTRODUCTION

PROJECT OVERVIEW

The Nowra CBD Revitalisation Strategy Committee and Shoalhaven City Council engaged Place Score to develop this three year Action Plan to guide investment by all stakeholders in the revitalisation of the Nowra CBD. Its primary goal is to build a positive identity for the Nowra CBD through improving its offer to potential customers - both locals and visitors.

This Action Plan has been developed to guide investment in the Nowra CBD over the three years from 2021-2024. It provides clear guidance for stakeholders including the Nowra CBD Revitalisation Strategy Committee (RSC), Shoalhaven City Council (SCC) and the business community. It has been developed through an iterative process of research and engagement and reflects the ideas and priorities of both stakeholders and community.

BACKGROUND

In 2011, Shoalhaven City Council engaged Arup Pty Ltd to prepare a masterplan for Nowra CBD. This resulted in a document that was endorsed by Council in 2014 and subsequently the development of a high-level Revitalisation Action Plan and the establishment of the Nowra CBD Revitalisation Strategy Committee.

In the years since, the Committee has worked closely with Shoalhaven City Council to deliver improvements to the CBD, their responsibilities being the representatives of the wider business and resident community.

In late 2020, the Committee engaged Place Score to develop a 3-year Action Plan that will get us closer to achieving the long-term vision for Nowra CBD as defined in the masterplan document.

PROJECT OBJECTIVES

The objectives of this Action Plan are:

- Align stakeholders towards achieving the 2011 Masterplan vision
-
- Define Nowra's competitive advantage in order to attract investment
-
- Attract more customers to Nowra CBD and encourage them to stay longer and shop more
-
- Empower businesses to lead and co-invest in the future of Nowra CBD
-
- Provide a range of actions that could be delivered through collaborative partnerships



RETAIL CORE FOCUS

The area designated as Nowra CBD by the 2011 Masterplan is extensive, as such this three year Action Plan focuses on the retail core. The rationale is that by concentrating our energies and resources the benefits will be more noticeable and have a catalytic effect on the rest of the CBD.

PROCESS

The process for developing the Action Plan involved two stages - Research and Action Plan Development.

STAGE 1: RESEARCH

The aim of the research stage was to understand what is working well and what is not working well in the Nowra CBD Study Area. This research set the foundation for developing the Action Plan.

STAGE 2: ACTION PLAN DEVELOPMENT

This stage has delivered an aligned 3-year Action Plan for the Nowra CBD through a collaborative process involving inputs from the RSC, SCC Councillors and staff, stakeholders, retail and hospitality business owners and Nowra's customers.

ENGAGEMENT & RESEARCH

This Action Plan has been developed from a strong research foundation and an iterative process of engagement with stakeholders and the community.

It considers the inputs of over 1,200 participants and as such already has wide support.

The following engagement and research was undertaken:

- Desktop Review and Analysis (500+ past engagement responses)
- First Impressions Audit
- Business Audit
- Town Centre Care Factor (CF) Survey (83 engagement responses)
- Street Place Experience (PX) Assessments in 5 locations in Nowra CBD (132 engagement responses)
- Face to face workshops (37 participants)
- Online feedback survey (540 engagement responses)

Findings from the Desktop Review and Analysis, First Impressions Audit, Business Audit, Town Centre Care Factor Surveys and Street Place Experience Assessments are included in the Understanding Nowra 2021 Report. In addition, the Nowra CBD Impact Maximiser Report provides a summary of the baseline Place Score data collected for the CBD in early 2021.

Findings from the workshops and online feedback survey can be found in the Stage 2 Engagement Summary Report.



BUILDING ON OUR STRENGTHS

Nowra is the Shoalhaven local government area's largest regional centre. It contains the commercial business district (CBD) with administrative, commercial and other high order services. The CBD has a great offer of essential retail and services, a good day time hospitality offering, regional community destinations and a low vacancy rate.



FACING OUR CHALLENGES

Nowra CBD is located in a very competitive regional landscape, with customers having a choice of more than 30 centres to shop from. The CBD lacks a strong place identity and experiential offer that will make it the customers' preferred place to go to. There is currently a perception among customers that there is not much to do in the CBD.



KEY DIRECTIONS OF THE ACTION PLAN

In addition to Governance and Preparation Actions there are three Key Directions that provide the framework for the selection of actions included in this Action Plan.

Stakeholders from the RSC, SCC and the business community have provided their support to these directions. In addition, nearly 81% of over 540 community members who participated in an online feedback survey said they supported these directions.

The three Key Directions are:

1. Celebrate Nowra
2. Something for All
3. A Great Place to Hang Out

CELEBRATE NOWRA

Build a good story – Share what is working well in Nowra and develop a positive identity to improve its experience, perception and place attraction



INITIATIVES THAT HAVE BEEN WELL RECEIVED

- Event promotions through radio advertisements and competition vouchers
- CBD banners
- Heritage plaques and historical walk
- CBD Mural Trail
- Cafe Culture

BUILD & IMPROVE ON

- Convenient location and offer of essential services
- Attractive cultural amenities like cinema, regional art gallery and the library
- Proximity to the Shoalhaven River
- Old and uninviting shopfronts fail to activate the streets
- Beautiful heritage buildings by celebrating them
- Current perception of the need to work towards cleanliness and care of public spaces

SOMETHING FOR ALL

Attract more diversity and get people to stay longer – Offer more things to do for different audiences across day and night, weekdays and holidays



INITIATIVES THAT HAVE BEEN WELL RECEIVED

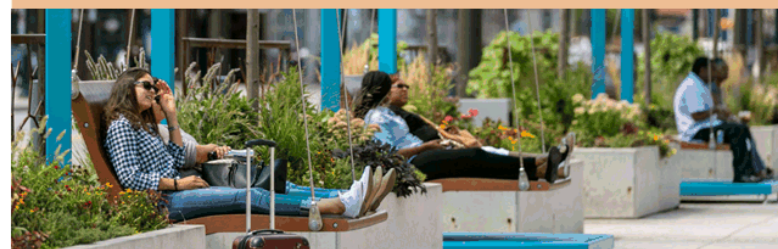
- Laneway painting event with the general public and food stalls (between library and art gallery)
- Town centre markets – DA cost assistance
- Event sponsorship – Shoalhaven Readers and Writers Festival

BUILD & IMPROVE ON

- Welcoming mainstreets with a great daytime hospitality offering
- Diverse range of stakeholders invested in the CBD
- Special deals by some businesses to attract customers
- Introduce diverse activities for different ages
- Encourage longer trading hours of businesses and outdoor trading
- Improve attributes performing lower than the National Average
- Encourage partnerships between business to help increase customers and revenue

A GREAT PLACE TO HANG OUT

Make it a walkable and stayable town - Improve the comfort and safety of Nowra CBD and make it a great place to sit, walk, stay, play and socialise



INITIATIVES THAT HAVE BEEN WELL RECEIVED

- Christmas decorations
- Street care - Footpath and streetscape upgrades, murals with anti-graffiti coating, wayfinding signage, Raised planter boxes, presence of pedestrian counters
- Grants - Facade improvement program and Access improvement program
- Junction Street fairy lights

BUILD & IMPROVE ON

- Investment in Jellybean Park and footpath upgrades along Berry Street
- Presence of seating, public toilets, water bubblers, bins
- Improve unsafe street crossing experience due to car dominance
- Safer by design principles
- Highlight artwork murals on building facades and decals on shopfronts
- Provision of comfortable, weather protected places to sit

ACTIONS OVERVIEW

This Action Plan proposes actions for investment in Nowra CBD over the next three years. The distribution of actions over three years is based on what is achievable within the existing and proposed resources and what will have the most benefit.

The focus of Year 1 will be setting up the right systems for governance and marketing, delivering upgrades to Junction Court and a program of regular events, and undertaking scoping studies for Year 2 and 3 actions. Year 1 is also the starting point for ongoing actions associated with the upkeep and greening of Nowra CBD.

Year 2 will see the continuity of many of the actions from Year 1 in addition to new programs such as fresh food markets, parklet dining and a Try Local Campaign. Delivering artworks and lighting features will be the focus of physical improvement works in this year.

In addition to ongoing projects, Year 3 will also involve the delivery of a major legacy activation project in Nowra CBD.

GOVERNANCE AND PREPARATION

- A1 Endorse the Action Plan
- A2 Preparation Work
- A11 Action Plan Impact Review

CELEBRATE NOWRA

- A3 Place Manager for the Nowra CBD
- A6 Monthly Cleaning and Maintenance Program
- A7 Create and Deliver a Marketing Plan
- A8 Social Media and Graphics Support
- A15 Try Local Campaign
- A16 Major Activation Feasibility Study & Implementation

SOMETHING FOR ALL

- A4 Surprise Saturday Program
- A9 Annual Christmas Wonderland
- A13 Monthly Fresh Food Markets
- A14 Parklet Program

A GREAT PLACE TO HANG OUT

- A5 Junction Court Revitalisation Project
- A10 Greening Nowra
- A12 Art & Light Project

The following table provides a summary of proposed actions for the three year Action Plan. There are four categories of actions; Governance and Preparation, and those aligned with the three Key Directions: Celebrating Nowra, Something for All and A Great Place to Hang Out.

	Action Name	Description	April 2021 - June 30 2022	July 2022 - June 30 2023	July 2023 - June 30 2024
A1	Endorse the Action Plan	Endorsement of the three year plan by the RSC and SCC as the primary focus for resources over the period	\$0	-	-
A2	2020-21 Preparation Work	Short term program of support prior to the recruitment of a Place Manager. It includes preparation for future activities, graphic design and supplier research	\$50,000	-	-
A3	Place Manager for the Nowra CBD	A dedicated resource to lead and coordinate the proposed activities and programs while liaising with various stakeholders for their contributions	\$100,000	\$100,000	\$100,000
A4	Surprise Saturday Program	A weekly program of family friendly activities held in Junction Court	\$75,000	\$75,000	\$75,000
A5	Junction Court Revitalisation Project	DPIE Grant funded transformation of Junction Court, Nowra	\$15,000+ DPIE Grant	-	-
A6	Monthly Cleaning and Maintenance Program	Monthly deep clean of retail core	\$25,000	\$25,000	\$25,000
A7	Create and Deliver a Marketing Plan	Place brand, logo and marketing collateral templates	\$40,000	-	-
A8	Social Media and Graphics Support	Monthly social media content delivery and tracking	\$20,000	\$20,000	\$20,000
A9	Annual Christmas Wonderland	Annual themed Christmas event to ensure repeat visitation for local families and visitors in the school summer holidays each year	\$50,000	\$50,000	\$50,000
A10	Greening Nowra	Project to soften the experience of Nowra CBD by increasing the amount and variety of planting options	\$20,000	\$20,000	\$20,000
A11	Action Plan Impact Review	Annual data collection and reporting	\$20,000	\$20,000	\$20,000
A12	Art & Light Project	Project building upon the potential of Berry Street to become Nowra CBD's night time and cultural precinct	\$15,000	\$160,000	-
A13	Monthly Fresh Food Markets	Markets in Jellybean Park potentially run on every fourth Sunday by an independent commercial enterprise	\$15,000	\$35,000	\$20,000
A14	Parklet Program	Purchase and installation of two parklets	\$5,000	\$80,000	\$15,000
A15	Try Local Campaign	A program offering rewards to customers to encourage higher and more frequent spending in Nowra CBD	-	\$20,000	\$15,000
A16	Major Activation Feasibility Study & Implementation	Feasibility studies for Community Enterprise Hub, Night-time Rock Climbing Alley, Summer Festival Hub, Egans Place Transformation Competition and Laneway Activation - followed by implementation of the most feasible idea	-	\$40,000	\$100,000
	Contingency		\$20,000	\$20,000	\$20,000
			\$470,000	\$665,000	\$480,000



ACTIONS FOR INVESTMENT

A1 ENDORSE THE ACTION PLAN

YEAR	ENDORSED MAY 2021
BUDGET	\$0

The success of this Action Plan relies on all stakeholders being aligned and committed to its delivery. The RSC and SCC as key stakeholders should endorse the three year plan as the primary focus for resources over the period.

WHY IS THIS IMPORTANT?

- If the stakeholders of Nowra CBD are not aligned around the proposed actions, the Action Plan may not be implemented as desired
- Building capacity and confidence is key to guaranteeing success

WHAT ARE THE BENEFITS?

- Agreement around the proposed actions among the stakeholders will eliminate potential barriers and help to get started with implementing the actions as soon as possible

ACTION OVERVIEW

This Action Plan has already been developed with input from SCC Councillors and council staff, the RSC, local business representatives and Nowra's community. As such it reflects the ambitions of a wide cross section of stakeholders.

KEY STEPS

This action is a Preparation Action to support the delivery of the Action Plan.

This involves two meetings to be conducted with the RSC and SCC to seek feedback and endorse this Action Plan.

April

- Delivery of Draft Action Plan for RSC & SCC Feedback

May

- Action Plan presentation meeting (online) with RSC members, SCC Councillors and council staff
- RSC and SCC endorsement of Action Plan in special meeting

"Collaborative approach whereby businesses know each other, locals & visitors to move forward positively"

BUDGETS AND TIMELINE

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22													
FY 2022 - 23													
FY 2023 - 24													

MEASURES OF SUCCESS

The successful delivery of this action can be measured as follows:



Stakeholder Alignment

- Endorsement of Action Plan in May 2021
- Commitment to Action Plan funding in May 2021

A2 2020-21 PREPARATION WORK

YEAR	2021
BUDGET	\$50,000

While this Action Plan and associated funding commences in July 2021, it is important to get started while energy is high. This action is about committing to a short term program of support prior to the recruitment of a Place Manager. It includes preparation for future activities, graphic design and supplier research.

WHY IS THIS IMPORTANT?

- Lack of resources dedicated to undertaking research for implementing the actions in the period up to the appointment of a Place Manager
- Need of an external push to eliminate perceived barriers for implementation

WHAT ARE THE BENEFITS?

- Materials required for getting started with some of the actions (e.g. the Surprise Saturday Program) will be prepared in advance
- Good starting point for a Place Manager and Nowra Activators volunteer group to take over their respective responsibilities

ACTION OVERVIEW

There are two key areas of preparation work that are included in this action:

SURPRISE SATURDAY PROGRAM

It is essential that change is seen to be happening in the centre as soon as practical. Services would include developing an initial 6-week program for delivering Surprise Saturdays in Nowra (more details about this in Action A4), identifying and liaising with associated suppliers and onboarding local businesses and volunteers. This plan will then be handed over to the RSC and SCC to deliver and manage on the ground.

GRAPHICS

This includes setting up print and social media graphic templates and communications for marketing the Surprise Saturday program. It will also include setting up an 'I Love Nowra' Facebook page, developing a 12-week communications plan and preparing the brief for ongoing social media support (for Action A8).

BUDGETS

The total budget allocation for this action is \$50,000 for an external consultancy to deliver the work. It involves the following indicative breakdown:

- \$22,000 for Research and Planning for 6 Surprise Saturdays
- \$14,000 for Communications and Graphics (3 months)
- \$14,000 for suppliers/ equipment required for 6 Surprise Saturdays

KEY STEPS

May

- Request formal proposals from consultancies
- Review proposals and select consultancy which can then proceed with the work

June

- Street Walk to sign up interested businesses
- Communications and graphics brief
- Supplier research for Surprise Saturdays
- Draft program development and online program information session
- Draft graphics and call for content

July

- Communications distribution
- Program refinement and sign off
- Confirmation of team to deliver the Surprise Saturdays on the ground
- Surprise Saturday program launch

August - Mid September

- Ongoing communications
- 6 consecutive Surprise Saturdays

A3 PLACE MANAGER FOR THE NOWRA CBD

YEAR	2021-22-23
BUDGET	\$80,000 - \$100,000/year

Engage a Place Manager whose key responsibility is the successful delivery of this Action Plan over the next three years. The Place Manager will lead and coordinate the proposed activities and programs while liaising with various Nowra CBD stakeholders for their contributions.

WHY IS THIS IMPORTANT?

- Shoalhaven City Council currently does not have a resource dedicated to Nowra CBD improvements
- There are several committees but no individual accountability

WHAT ARE THE BENEFITS?

- Effective coordination and delivery of the CBD's marketing, activities, programs and physical improvements - thus improving customer attraction and attachment
- An assured point of contact in Council for businesses of Nowra CBD
- Enhanced online presence of Nowra CBD businesses
- Attraction of potential investors in Nowra CBD

RESEARCH RATIONALE

- 'The Draft Illawarra Shoalhaven Regional Plan 2041 includes the objective 'Activate and transform Nowra City Centre'
- 'Activating the Centre' is one of the 10 focus areas of the Nowra CBD Revitalisation Strategy (2014)
- Both the workshop groups (Action Planning Workshops Feb 2021) selected this action

ACTION OVERVIEW

The Place Manager would be engaged by the SCC on behalf of the RSC to guide the delivery of this Action Plan and manage associated budgets. Their role is not to 'do' all the actions but to facilitate participation and contributions from all stakeholders.

A Place Manager will be an integral member of the Council team but will work closely with various external stakeholders including the RSC, the Business Chamber and businesses in Nowra CBD. The role will be full-time but with variable hours, including some weekend work.

Essential Criteria for a Place Manager will be negotiation skills, experience of working with community groups and delivering tactical projects.

Draft KPIs for this role include:

- To establish robust partnerships with key internal and external stakeholders
- Ensure the timely delivery of the Action Plan against allocated budgets
- To act as the first point of contact for all Nowra CBD matters
- To undertake timely research of funding opportunities through external grants, apply for relevant grants and manage related finances
- To measure performance and monitor success across various initiatives
- To coordinate and manage bookings for various public spaces in Nowra CBD

"Create and promote events which make Nowra unique"



A Place Manager will lead and coordinate various activities, programs and events in Nowra CBD

KEY STEPS

This action occurs once at the beginning of the program.

May

- Prepare position description and agree final KPIs
- SCC to manage recruitment

June

- Shortlist review by RSC & SCC panel
- Interviews
- Recommendation by SCC to RSC for appointment

July

- Appointment and onboarding



BUDGETS AND TIMELINE

The total budget allocation for this action over the three years is \$240,000-300,000. It should be noted that the final budget will be determined once the scope and job description for the position have been finalised.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0-												
FY 2021 - 22	\$80,000-\$100,000												
FY 2022 - 23	\$80,000-\$100,000												
FY 2023 - 24	\$80,000-\$100,000												

MEASURES OF SUCCESS

The successful delivery of this action can be measured as follows:



Stakeholders

- Engagement and alignment of RSC and other business stakeholders
- Participation and contribution of RSC and stakeholders to Action Plan delivery



Activity

- Delivery of planned actions according to associated budgets and timelines
- Facilitation of community led activities



Media

- Management of communications consultants
- Positive media mentions/ social media reviews

A4 'SURPRISE SATURDAY' PROGRAM

YEAR	2021-22-23
BUDGET	\$75,000/year

'Surprise Saturday' is a weekly program of family friendly activities held in Junction Court. These should be low cost, easy to deliver activities with a focus on building the perception of Nowra CBD as a place for the community to gather. People should 'know' something will always be happening, but be curious because they don't know what it might be.

WHY IS THIS IMPORTANT?

- Currently there is a lack of things to do in Nowra CBD, especially for families with children
- Customers would like to see more activities and events planned for them in Nowra CBD

WHAT ARE THE BENEFITS?

- New activities every weekend will attract families with children to Nowra CBD on a regular basis
- Better activation of open spaces in Nowra CBD
- Increased customer footfall and resultant increase in trading activity of surrounding businesses
- Improved perception of Nowra CBD

RESEARCH RATIONALE

- 'Things to do in the evening (shopping, dining, entertainment etc.)' is the #1 priority for Nowra CBD as per Place Score's engagement in Jan 2021
- 'Activating the Centre' is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Regular events in Junction Court is among the top 10 ideas of feedback survey respondents (Feb - March 2021)

ACTION OVERVIEW

Reliable, consistent, family friendly and fun should be the hallmarks of a program of Saturday morning 'surprise activities' held in Junction Court.

Each week there should be baseline activity i.e. giant games, outdoor seating etc. This action includes an initial purchase of equipment such as a street stall, giant games, chairs and tables, rolled turf, long trolley, etc. that can be built on over time.

It is recommended that a local business be given a stall space each week for free, to sell their products or services e.g. cupcakes. Events by other organisations such as the rotary BBQ, fundraising, pop-up food etc. should be encouraged.

In addition to the baseline activity there should be a surprise e.g. a face painter, community choir, jumping castle, Easter Egg hunt, sausage sizzle, family yoga etc. Safer by design principles must be adhered to in all the activities.

Support, participation and contribution from local volunteers is essential to the success of this program. As such it is recommended a Nowra Activators volunteer group be formed. This group of 'doers' may include any stakeholders committed to delivering an exciting program and committing to helping set up and supervise each Saturday.

To build on the 'surprise element' information about the special activity will only be released on Friday.



Nowra Activators will be a group of doers - people willing to work at the grassroots to achieve change

"More for kids and families to do - Saturday morning lawn games, crafts, entertainment"

KEY STEPS

This action occurs over the full three years of the program.

June (activities in this period are a part of Action A2)

- Street Walk to sign up interested businesses for first 6 Surprise Saturdays
- Prepare preliminary 6-week program overview
- Purchase baseline activity materials

July - Mid September (most of the activities in this period are a part of Action A2)

- 6 week program refinement and sign off
- Communications distribution
- Confirmation of volunteers to deliver the program on the ground
- Surprise Saturday program Launch
- Delivery of 6 consecutive Surprise Saturdays
- Place Manager, stakeholders and volunteers to build out plan for the upcoming Saturdays (potentially a 6-month plan)

Mid September onwards

- Review first 6 events and amend Program Plan as required
- Ongoing marketing and communications support



BUDGETS AND TIMELINE

The total budget allocation for this program over the three years is \$225,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	See Action A2												
FY 2021 - 22	\$75,000												
FY 2022 - 23	\$75,000												
FY 2023 - 24	\$75,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Customers

- Increase in number of people/ families who visit every weekend
- Increase in Google visitation numbers



Activity

- Minimum of 48 Surprise Saturdays per year
- Increase/ maintain the diversification of activities
- Increase in number of local business that participate



Media

- Regular promotions of upcoming events
- Facebook shares
- Instagram photos/ likes
- Positive media stories

A5

JUNCTION COURT REVITALISATION PROJECT

YEAR	2021
BUDGET	DPIE Grant + \$15,000

The Junction Court Revitalisation project aims to transform Junction Court into Nowra's soft, social, playable community heart - bringing people of all ages together through diverse regular day-night community/commercial activities. This project has received NSW DPIE's Your High Street grant funding for implementation.

WHY IS THIS IMPORTANT?

- Junction Court appears dated and is flanked by businesses that do not activate the public realm
- Mono functional, transient environment lacking places to stay
- Lack of sheltered space for group activity/interaction
- Space believed to host anti-social elements
- Current car-oriented design

WHAT ARE THE BENEFITS?

- An attractive public domain with sheltered staying spaces and diversity of activities across day/night encouraging people to stay
- Pedestrian-friendly street design
- Attraction to street activating businesses

RESEARCH RATIONALE

- Nowra CBD is perceived to perform poorly in terms of uniqueness, with attributes associated with public art, interesting visuals, unusual public space design and landmarks identified as considerations for improvement (as per Place Score's engagement, Jan 2021)
- Improving the look and visual character of Nowra CBD is identified as a priority by feedback survey respondents (Feb - March 2021)

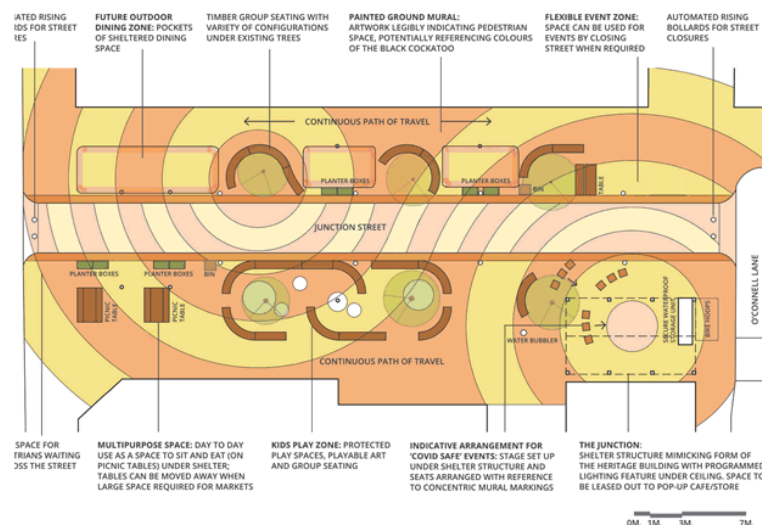
ACTION OVERVIEW

The Junction Court Revitalisation project will be undertaken using funding through the NSW DPIE Your High Street grant program. The objective behind this project is to diversify the number of uses and improve the amenity and safety of Junction Court in order to attract people to spend time and shop in town.

This project proposes pedestrian prioritisation measures aimed at shifting the current car-oriented focus of Junction Court to a human focussed place. This will include realigning the traffic lane, installation of removable bollards, tightening kerb radii and painting an artwork ground mural. The project will see the installation of infrastructure such as modular timber seating under trees, picnic tables, a protected play zone, bike parking and performance spaces. In addition to the above, the project also involves the installation of a permanent shelter for rainy day kids' activities and pop-up retail next to the heritage building, programmed artistic lighting feature under the ceiling of the proposed shelter and openable, modular, multi-canopy umbrellas in Junction Court.

The concept design will be reviewed with detailed information about Junction Court's current constraints, and developed over stages seeking approvals and feedback as necessary.

"More things to see/do e.g. open shop fronts or pop up shops.
More seating/shade"



Junction Court can be effectively transformed adopting a low-cost tactical approach

KEY STEPS

This action will be delivered before Christmas 2021.

April

- NSW DPIE grant announcements

May - June

- Site visit by Council staff and design team
- DPIE 'before' place audits
- DPIE commencement reporting
- Concept design review and identification of constraints
- Preparation of return brief prior to design amendments
- Design development by design team

July - November

- Design documentation - 50% stage
- Required approvals and consultation
- Final design amendments
- Notification to business owners
- Preparation of a staging and management plan for construction work (with plan for events and activities to be moved temporarily to other areas)
- DPIE milestone reporting

November - December

- Construction activity
- Launch of open space in mid December
- DPIE 'after' place audits and Place score 'after' Place Experience assessments
- DPIE project acquittal reporting



BUDGETS AND TIMELINE

While this action will be delivered through the DPIE grant, a budget of \$15,000 has been allocated in Year 1 to support the overall project.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	DPIE Grant												
FY 2021 - 22	\$15,000 + DPIE Grant												
FY 2022 - 23													
FY 2023 - 24													

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Place

- Increase in Place Experience Score for Junction Court
- Delivery of concept plan objectives - more places to spend time, safer and greener, etc.
- Increase in DPIE audit scores



Business

- Engagement with adjacent landowners to reactivate edges
- Aesthetic maintenance/ upgradation of shopfronts near Junction Court



Activity

- Increase in number of events/ community activities
- Reduction in anti-social behaviour
- Increase in diversity of users and length of stay

A6 MONTHLY CLEANING AND MAINTENANCE PROGRAM

YEAR	2021-22-23
BUDGET	\$25,000/year

A regular clean up and maintenance of Nowra CBD's mainstreets by a refresh crew will improve the current perception around cleanliness and contribute towards building a positive identity for Nowra CBD.

WHY IS THIS IMPORTANT?

- Nowra CBD's customers highly value cleanliness and maintenance but consider this to be negatively impacting their place experience of several mainstreets
- The perception of Nowra CBD needs to be improved and customers should feel good about visiting it

WHAT ARE THE BENEFITS?

- Improved look and feel of Nowra CBD
- Visible cleaning activity will illustrate that positive change is taking place and discourage people from littering
- Build pride among local businesses and the community
- Ensured surveillance during less crowded hours of the day

RESEARCH RATIONALE

- 'Keeping the CBD clean and maintained' is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Improving the evidence of cleanliness and maintenance are priorities for the CBD according to your community
- A regular clean-up is among the top 5 ideas of feedback survey respondents (Feb - March 2021)
- Both the workshop groups (Action Planning Workshops Feb 2021) selected this action

ACTION OVERVIEW

This action appoints a dedicated 'Refresh Crew' in the Council to undertake regular cleaning and maintenance of Nowra CBD's mainstreets.

The 'Refresh Crew' will be a highly visible team of cleaning and maintenance experts who visit Nowra CBD's mainstreets to clean, fix and to 'activate' during the less busy hours of the day every month.

What will the crew do?

- Pick up rubbish off the ground
- Clean seats/bubblers
- Tidy planters/ tree pits
- Small fixes (e.g. pavement, paint)
- Report bigger maintenance issues
- Engage with the public

This crew will bring their own cleaning equipment and tools for quick repairs.

Special cleaning and maintenance services can be organised after public events or occurrences associated with extreme weather conditions.

"A good clean up would be a good start"



A visible 'Refresh Crew' will not only help improve cleanliness but also activate Nowra CBD's mainstreets

KEY STEPS

This action occurs over the full three years of the program.

- Council's Assets/ Waste Department to nominate the Refresh Crew members
- Preparation of a calendar of monthly clean-ups
- Purchase of crew uniforms, trolley, signage and tools
- Implementation of this action over a 6-month trial period
- Review this action and its process to refine if required. Follow with further implementation over the next 2.5 years



BUDGETS AND TIMELINE

The total budget allocation for this program over the three years is \$75,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$25,000												
FY 2022 - 23	\$25,000												
FY 2023 - 24	\$25,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Customers

- Improvements in Place Experience Scores associated with cleanliness and maintenance
- Reduction in complaints to SCC

A7 CREATE AND DELIVER A MARKETING PLAN

YEAR	2021
BUDGET	\$40,000

Nowra CBD has no universal story that celebrates its strengths and attracts interest. We need a great story and a positive place brand. A marketing plan will help transform the current perception of Nowra CBD from an average town with nothing to do to a place that offers a unique experience to different audiences.

WHY IS THIS IMPORTANT?

- Customer perception of Nowra CBD is not positive
- The town lacks a destination quality which could attract visitors
- The town has limited online presence
- There is a lack of customer-targeted marketing to compete with shopping centres, online retail and regional experience towns

WHAT ARE THE BENEFITS?

- A positive place brand for Nowra CBD
- Improved attraction for new customers including tourists
- Improved attraction for new businesses and investors
- Enhanced online presence

RESEARCH RATIONALE

- 'Spreading the Word' which talks about marketing, promotion and communication is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Both the workshop groups (Action Planning Workshops Feb 2021) selected this action
- Regional and local marketing campaigns are among the top 15 ideas of feedback survey respondents (Feb - March 2021)

ACTION OVERVIEW

This action directs the development of a high level marketing plan that can tell a great story about Nowra CBD and its offer.

It should include:

- A place brand narrative and key messages that can adapt as the Action Plan is delivered and the place experience improves
- Clear actions for marketing Nowra CBD to locals and visitors including social media directions
- A simple logo and graphics pack suitable for use across a range of media
- Graphic templates for social media and printed communications

Development of the place brand and logo should adopt a collaborative process involving engagement with Nowra CBD's community, organisations and businesses. It should recognise Nowra CBD's uniqueness including its arts and growing cafe culture. The marketing plan will provide the tools to deliver the message of Nowra CBD's brand.

Any marketing for the town should be specifically geared towards the target customers. This may include articles to be shared across regional media, visitor maps and brochures, postcards, flyers, etc.

This action will guide the communications led by the Place Manager over the next three years.

"A consistent style in decorations, building facade, advertising etc. Build a recognisable brand for CBD"



People are often drawn to new places because of unique ways in which they are marketed

KEY STEPS

This action occurs once at the beginning of the program.

July

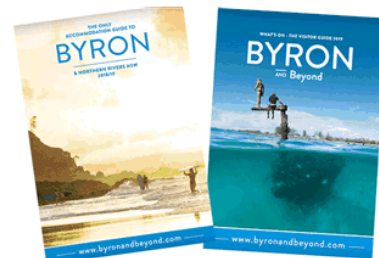
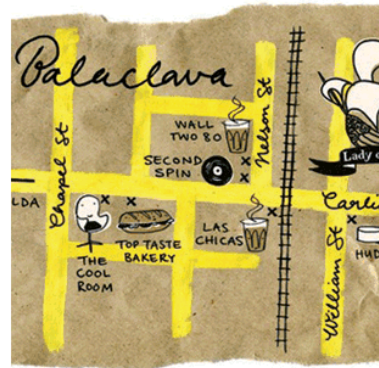
- Preparation of brief for potential consultants
- SCC to manage invited tender process

August

- Commissioned consultant to undertake required research and consultation
- Deliver a draft plan by end of the month

Mid-September

- Consultant to deliver final plan and graphics package



BUDGETS AND TIMELINE

The total budget allocation for this action over the three years is \$40,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$40,000												
FY 2022 - 23	\$0												
FY 2023 - 24	\$0												

MEASURES OF SUCCESS

The successful delivery of this action can be measured as follows:



Customers

- Increase in Net Promoter Score (based on Place Score's Place Experience Assessment Data)
- Increase in number of customers (pedestrian counts)



Business

- Increase in local businesses using Nowra CBD branding in their own communications



Media

- New Nowra CBD branding
- Updated branding and narrative to key tourism sites
- Positive media stories about Nowra

A8 SOCIAL MEDIA AND GRAPHICS SUPPORT

YEAR	2021-22-23
BUDGET	20,000/year

Engage an expert that can build out a monthly plan and content for social media and support graphic design for posters and other collateral.

WHY IS THIS IMPORTANT?

- No resource dedicated to managing communications associated with Nowra CBD revitalisation actions
- Poor online presence of Nowra CBD compared to other regional towns around Sydney

WHAT ARE THE BENEFITS?

- Making customers aware of changes happening in Nowra CBD and the activities planned for them
- Personalised communications through different forms of media will attract different types of audiences
- Potential to expand customer base
- Benefits to businesses in terms of longer trading and more revenue

RESEARCH RATIONALE

- 'Spreading the Word' which talks about marketing, promotion and communication is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Both the workshop groups (Action Planning Workshops Feb 2021) selected this action
- A dedicated Facebook page for Nowra CBD businesses is among the top 15 ideas of feedback survey respondents (Feb - March 2021)

ACTION OVERVIEW

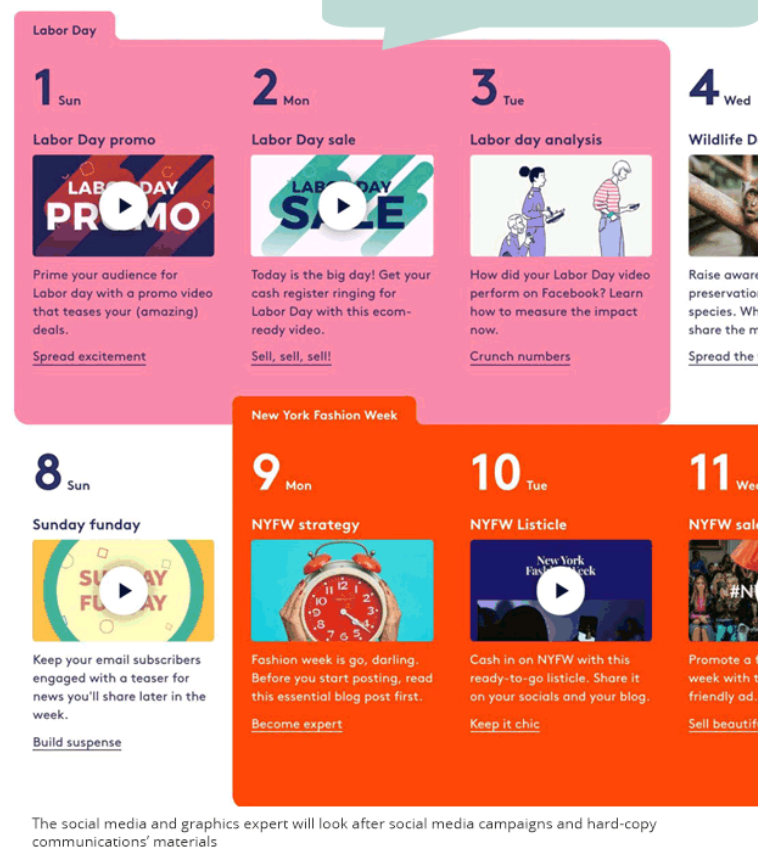
Engage a social media and graphics expert on a base retainer to engage with businesses and develop and deliver a minimum monthly content plan. The engagement should also include monthly tracking and reporting of outcomes. Additional graphic services can then be engaged as needed for specific projects.

Once developed, the marketing plan will help guide this work.

It is suggested that an external organisation be hired to provide support to the Place Manager and Council Communications team for the following items:

- Monthly meeting to understand upcoming campaigns/ activities/ programs, etc.
- Providing copy/graphics for customer-targeted communications across different media channels
- Scheduling social media campaigns
- Designing and printing hard copy collaterals aligned to different programs and activities
- Paid advertisements when required
- Monthly reporting of outcomes

"Need local marketing but not via traditional media, use Social Media"



KEY STEPS

This action occurs over the full three years of the program.

August - Mid September

- SCC/RSC to finalise brief for the proposed services (based on draft communications and graphics brief developed as a part of Action A2)
- SCC to run an invited tender to potential consultants
- Communications consultant commissioned on retainer with clear KPIs

Mid September onwards

- Prepare preliminary communications program direction based on Marketing Plan (as per Action A7) for RSC sign off
- Prepare preliminary program overview
- Monthly briefings regarding upcoming activities in Nowra CBD
- Content development and scheduling of campaigns on a regular basis
- Additional graphics support as required



BUDGETS AND TIMELINE

The total budget allocation for this action over the three years is \$60,000. Its implementation timeline is aligned with the delivery of Action A7.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$20,000												
FY 2022 - 23	\$20,000												
FY 2023 - 24	\$20,000												

MEASURES OF SUCCESS

The successful delivery of this action can be measured as follows:



Customers

- Increase in online engagement
- Increase in number of online followers
- Number of post shares



Media

- Diversity of post content
- Representation of multiple businesses
- Number of posts per week
- Timely support of activities and programs in Nowra CBD

A9 ANNUAL CHRISTMAS WONDERLAND

YEAR	2021-22-23
BUDGET	\$50,000/year

The Annual Christmas Wonderland builds on the success of the Christmas event organised by the RSC in December 2020. Annual theme changes will ensure repeat visitation for local families and visitors around Christmas and the school summer holidays each year.

WHY IS THIS IMPORTANT?

- The Christmas event in 2020 was successful and was positively spoken about by the community
- There is a desire to continue the tradition and deliver an event that attracts locals to Nowra CBD in the holiday season

WHAT ARE THE BENEFITS?

- Attract families and tourists to visit
- Support increased trading activity in the holiday period eg evenings and weekends
- Improved perception of Nowra CBD as centre of community activity

RESEARCH RATIONALE

- 'Things to do in the evening (shopping, dining, entertainment etc.)' is the #1 priority for Nowra CBD as per Place Score's engagement in Jan 2021
- 'Activating the Centre' is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Improving the 'Evidence of public events' is an improvement consideration according to your community (as per Place Score's engagement in Jan 2021)

ACTION OVERVIEW

This action proposes to deliver a differently themed experience in Junction Court every year that celebrates the summer holidays and Christmas season.

It can be delivered in partnership with a local not for profit e.g. Rotary/ RSL and should include both the display and associated activities in Junction Court and in surrounding streets. Opportunities to work with Stocklands Nowra to cross promote could be considered.

Display considerations:

- Mix of traditional and contemporary themes
- 'Instagrammable' photo opportunities
- Staff could dress to match the theme
- An experience that you can spend time in/ interact with, not just look at

With the Junction Court Revitalisation project (Action A5) being implemented by mid-December 2021, the proposed ochre and red coloured floor mural in Junction Court would be an apt setting for a beachy summer Christmas themed event.

Supporting activity ideas:

- Shopfront display competition between stores to encourage people to explore
- Petting zoo
- Face painting
- Ice cream wagon
- Evening Christmas parade, carols
- Bake sale for local charity or school, etc.



"On special occasions: Easter or Christmas... do something for the children"

Having unique interactive decorations every year will encourage visitors to keep coming back to Nowra CBD

KEY STEPS

This action repeats annually.

September

- Research into available decorations and pricing
- Determine theme, type of activities and decorations

October

- Develop program of activities and responsibilities for delivery/management with Activators group
- Develop communications and marketing materials

November

- Early distribution of communications/ promotions across regional and local media and local partners
- Booking in resources from the Activators group and the wider community who will be available to assist with setting up the installations and activities before/during Christmas

December

- Set up display for launch in mid-December
- Removal of installation



BUDGETS AND TIMELINE

The total budget allocation for this program over the three years is \$150,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$50,000												
FY 2022 - 23	\$50,000												
FY 2023 - 24	\$50,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Customers

- Number of people who visit the display each day
- Length of time customers stay in display/ centre
- Increase in business turnover



Activity

- Increase in trading days/ hours
- Increase in number of public events
- Number of business led events/ specials/ activities



Media

- Facebook shares
- Instagram photos/ likes
- Positive media stories

A10 GREENING NOWRA

YEAR	2021-22-23
BUDGET	\$20,000/year

'Greening Nowra' aims to soften the experience of Nowra CBD by increasing the amount and variety of planting options. This will not only enhance the comfort of staying in the public domain but also improve the visual character of Nowra CBD.

WHY IS THIS IMPORTANT?

- Nowra CBD has great planting along Kinghorne Street and parts of Berry and Junction Street, but this is inconsistent
- Customers perceive the condition of vegetation in Nowra CBD to be its strength but would like to see more greenery and better connection with the natural environment

WHAT ARE THE BENEFITS?

- Improved amenity and visual identity of Nowra CBD
- The environment will feel cleaner
- Enhanced physical and visual comfort will encourage longer customer stays
- Increased sense of pride for local businesses and the community
- Creation of 'Insta-worthy' moments

RESEARCH RATIONALE

- 'Elements of the natural environment' and 'Vegetation and natural elements' have been identified as priorities for improvement across the Nowra CBD as per Place Score's engagement in Jan 2021
- More greenery across Nowra CBD is the #2 idea of feedback survey respondents (Feb - March 2021)

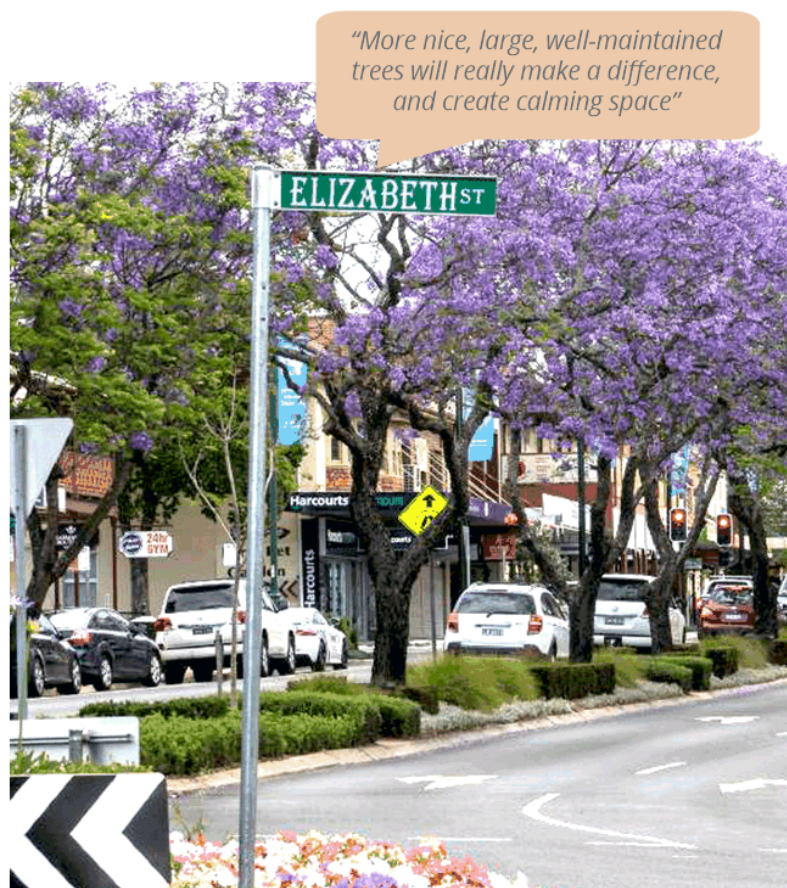
ACTION OVERVIEW

The action adds shade trees and hanging planter baskets outside shopfronts in Nowra CBD.

This program will involve two parts:

The first will see the planting of shade trees in locations identified to be suitable for planting by the Place Manager and the Council Assets team. New tree planting will be accompanied with the construction of below-ground tree management systems.

The second part of the program will see the installation of hanging planter baskets under the awnings along Junction Street. This initiative will see the involvement of local businesses. They can assist with potting and ensuring regular maintenance of plants outside their shopfronts.



Ornamental trees like Jacarandas will create instagrammable moments attracting customers to Nowra CBD

KEY STEPS

- Place Manager and Council Assets team to identify suitable locations for new tree planting and installation of hanging planter baskets in Nowra CBD based on safety/ DDA compliance
- Purchase of trees, plants, hanging planter baskets, soil and equipment required for potting
- Development of promotional marketing material for this action
- Onboarding businesses along Junction Street to participate in potting
- Organise potting day - business owners get to choose their desired plants in the basket outside their shopfront
- Construction of tree pits/ below-ground tree management systems and planting new trees by Council team
- Regular watering/ maintenance by Council team and businesses



BUDGETS AND TIMELINE

The total budget allocation for this action over the three years is \$60,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$20,000												
FY 2022 - 23	\$20,000												
FY 2023 - 24	\$20,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows



Customers

- Increase in number of people who visit
- Increase in length of time customers stay



Activity

- Increase in participation of local businesses
- Improved aesthetics of Nowra CBD
- Increase in trading



Media

- Facebook shares
- Instagram photos/ likes
- Positive media stories

A11 ACTION PLAN IMPACT REVIEW

YEAR	2021-22-23
BUDGET	\$20,000/year

Annual reviews of the impacts of the delivery of this Action Plan are essential to ensuring maximum return on investment. This action will allow for data collection and reporting against key metrics identified for each action.

WHY IS THIS IMPORTANT?

- Reviews provide an unbiased perspective on the success of the actions
- Identification of opportunities to learn and improve

WHAT ARE THE BENEFITS?

- Baseline data has already been collected for Nowra CBD in early 2021
- Comparative data will clarify the impacts of new investments made as a part of the Action Plan delivery

ACTION OVERVIEW

In Year 1 this action would include setting up a simple framework for annual review reporting that includes baseline data.

The budget allows for new Place Score data collection e.g. Junction Court 'After' Place Experience Assessment, business audit updates etc.

Social media tracking will be provided monthly from the social media consultant.

The Place Manager should ensure that simple systems are put in place to capture data regarding business participation, number of attendees at events etc.

KEY STEPS

This action is a Governance Action to support the delivery of the Action Plan.

July onwards

- Tracking of event information
- Social media data tracking

December 2021/ January 2022

- Junction Court post development PX Assessment

June 2022

- Year 1 Review Data collection

June 2023

- Year 2 Review Data collection

June 2024

- Year 3 Review Data collection

BUDGETS AND TIMELINE

The total budget allocation for this program over the three years is \$60,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$20,000												
FY 2022 - 23	\$20,000												
FY 2023 - 24	\$20,000												

MEASURES OF SUCCESS

The successful delivery of this action can be measured as follows:



Stakeholder Alignment

- Annual review completed by September each year
- Focus on metrics that can show changes over time

A12 ART AND LIGHT PROJECT

YEAR	2021-22-23
BUDGET	\$15,000 Yr 1 \$160,000 Yr 2

The art and light project builds upon the potential of Berry Street to become Nowra CBD's night time and cultural precinct. It will see the installation of artworks and lighting elements connecting night time venues and cultural destinations in the town.

WHY IS THIS IMPORTANT?

- Poor night time offering in Nowra CBD
- Several cultural destinations but lack of a cohesive thread binding them
- Perceived lack of safety at night

WHAT ARE THE BENEFITS?

- Better safety associated with walking in Nowra CBD at night
- Creation of 'Insta-worthy' moments
- Increased night time attraction for customers
- Encouragement to businesses to stay open late into the evenings

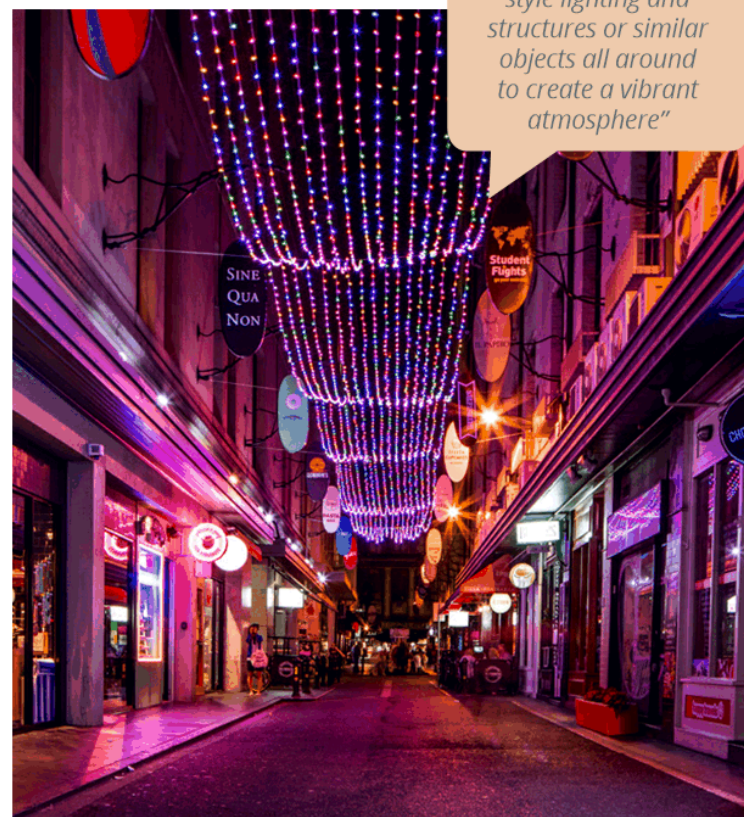
RESEARCH RATIONALE

- 'Public Art in the CBD' is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- 'Lighting up mainstreets' is the #6 idea of feedback survey respondents (Feb - March 2021)
- Nowra CBD is perceived to perform poorly in terms of uniqueness, with attributes associated with public art, landmarks etc. Identified as considerations for improvement (as per Place Score's engagement in Jan 2021)

ACTION OVERVIEW

Berry Street is home to Roxy Cinema, Shoalhaven Regional Gallery, Nowra School of Arts, Nowra Library and some night time hospitality venues. This action proposes the installation of instagrammable art and lighting elements connecting night-time destinations along Berry Street. It will also involve painting artwork murals over the existing scatter crossings at either ends of Junction Street to clearly designate pedestrian priority and enhance visual appeal.

The art and light project will engage a local artist from the Shoalhaven region to deliver a series of elements that will serve as prominent landmarks and enhance the appeal of Berry Street as a night time precinct. Lighting features along the mainstreet can be of various types - lights suspended under awnings, projections onto historic building facades and trees, lights embedded in paving, etc. This project could be built upon over time to extend into the CBD's laneways.



"With plenty of mood style lighting and structures or similar objects all around to create a vibrant atmosphere"

Instagrammable lighting features will attract people to Nowra CBD at night, improve safety and encourage businesses to stay open for longer

KEY STEPS

- Research around the idea and preparation of artist brief and EOI materials
- Invitations to local artists to participate in the project
- Preparing a shortlist of artist EOIs
- Development of concepts by shortlisted artists
- Final artist selection by a panel including Place Manager, representatives of the Committee and the art gallery
- Development of detailed design for artworks and lighting features including murals over crossings
- Preparation of a traffic management plan
- Road closures and installation of art and light features
- Project launch and promotions



BUDGETS AND TIMELINE

The total budget allocation for this action over the three years is \$175,000.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$15,000												
FY 2022 - 23	\$160,000												
FY 2023 - 24													

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Customers

- Increase in number of people who visit at night
- Increase in customer visitation time
- Increase in business turnover



Business

- Increase in trading days/ hours
- Increase in number of local business staying open till late
- High interest from artists
- Improved aesthetic along Berry Street



Media

- Facebook shares
- Instagram photos/ likes
- Positive media stories

A13 MONTHLY FRESH FOOD MARKETS

The Monthly Fresh Food Market addresses the high demand for fresh food by Nowra CBD's customers and the opportunity to showcase the Shoalhaven's fresh produce. Markets could operate in Jellybean Park and be run by an independent commercial enterprise.

YEAR	2021-22-23
BUDGET	\$15,000 Yr 1 \$35,000 Yr 2 \$20,000 Yr 3

WHY IS THIS IMPORTANT?

- The current fresh food offering in Nowra CBD is limited to indoor supermarkets
- Outdoor monthly markets were conducted in Jellybean Park a few years ago but have now stopped operations
- Customers would like to see an outdoor fresh food offering in Nowra CBD, particularly on weekends

WHAT ARE THE BENEFITS?

- Improved customer attraction to Nowra CBD on weekends
- Better activation of open spaces potentially on Sundays which are less busy compared to other days of the week
- Improved perception of Nowra CBD

RESEARCH RATIONALE

- 'Things to do in the evening (shopping, dining, entertainment etc.)' is the #1 priority for Nowra CBD as per Place Score's engagement in Jan 2021
- 'Activating the Centre' is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Fresh food markets on Sunday mornings is the #1 improvement idea of feedback survey respondents (Feb - March 2021)

ACTION OVERVIEW

The Shoalhaven region has over 65 fresh food producers. Within a 20-minute drive of Nowra CBD there are over 10 fresh food markets which run on weekends or mid-week. This demonstrates the demand for fresh food markets in the region and the opportunity to have a market within Nowra CBD itself.

Around 5 years ago, Council's Economic Development team had called out for EOIs for running markets in Jellybean Park. The link to previous EOI materials can be found [here](#). Markets were conducted every month on the fourth Saturday however ceased to operate in the years to come.

This action proposes running an EOI process towards the end of Financial Year 2021-22 to select a market operator who can run a weekend fresh food market in Nowra CBD. It is recommended that markets be held on the fourth Sunday of the month to help activate the CBD at a usually less busy time of the week; however this should be finalised after assessing interest from market operators in the wider region. The market could be set up at Jellybean Park which offers easy access to car parking, seating and amenities.

"Nowra needs a fresh food and crafts farmers market weekly on a Saturday or Sunday morning"



Markets can be operated by Shoalhaven based entities having their own insurance

KEY STEPS

- Place Manager to establish initial contact with market operators in the wider Shoalhaven region to assess interest in delivering fresh food markets in Nowra CBD
- Place Manager/Council Economic Development team to prepare collaterals for EOI process - market regulations, EOI template, program handout etc.
- Distribution of handouts/formal invitations to all market operators in the region
- Selection of market operator, contract and set up infrastructure
- Market operator to set up a website/ Facebook page for this action
- Launch/ commencement of operations
- Regular marketing and promotions



BUDGETS AND TIMELINE

The total budget allocation for this program over the three years is \$70,000. FY22/23 includes set up costs.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$15,000												
FY 2022 - 23	\$35,000												
FY 2023 - 24	\$20,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Customers

- Increase in number of people/ families who visit on weekend
- Increase in length of time customers stay in centre



Activity

- Increase in trading days/ hours for main street businesses
- Number of fresh food markets hosted
- Number of local businesses that participate



Media

- Regular promotions of upcoming markets
- Facebook shares
- Instagram photos/ likes
- Positive media stories

A14 PARKLET PROGRAM

The Parklet Program addresses the interest in outdoor seating and dining and the lack of kerbside space along some of the mainstreets. This program will involve the purchase of parklets that will be placed in rotation outside participating businesses.

YEAR	2021-22-23
BUDGET	\$5,000 Yr 1 \$80,000 Yr 2 \$15,000 Yr 3

WHY IS THIS IMPORTANT?

- Some of the hospitality businesses in Nowra CBD lack space for footpath trading and there have been additional impacts due to physical distancing requirements
- There is a lack of group seating across Nowra CBD

WHAT ARE THE BENEFITS?

- Encourage customers to stay longer and shop more in Nowra CBD
- Increased capacity to trade and seat diners while maintaining physical distancing
- More revenue for businesses
- Unique point of difference

RESEARCH RATIONALE

- 'Things to do in the evening (shopping, dining, entertainment etc.)' is the #1 priority for Nowra CBD as per Place Score's engagement in Jan 2021
- Existing outdoor dining is identified as a strength of Nowra CBD (as per Place Score's engagement in Jan 2021) and hence should be built upon
- Only 12% ground floor businesses in the Nowra CBD currently trade outdoors
- More outdoor dining spaces outside cafes and restaurants is the #3 idea of feedback survey respondents (Feb - March 2021)

ACTION OVERVIEW

This action proposes to purchase two mobile parklets to trial across different locations in Nowra CBD. The parklets will have seating, greenery and umbrellas for shade.

A call for EOIs from businesses to participate in this program is proposed at the onset of this action - and can be undertaken in Year 1. In the EOI, businesses will be required to agree with the prescribed conditions for the period of installation and maintenance of the parklets. They will also need to get approvals from adjoining business/land owners to use parking spaces for the parklet. It is suggested that each parklet be set up for a minimum of four weeks outside the participating business.

Parklets will be purchased only if there is interest from four or more businesses across the CBD. They can be sourced from People Parkers (www.peopleparkers.com).

It will be great to involve the local artist community of Nowra CBD to embellish the parklets with local artworks.

2021-22 budget includes costs associated with preparing EOI collaterals and project management

2022-23 budget includes purchase of two parklets, moving costs and artworks

2023-24 budget is allowance for moving parklets between locations.

"Outdoor dining with longer hours than at present, even for already established businesses"



Parklets can be easily purchased and set up outside participating businesses in Nowra CBD

KEY STEPS

- Place Manager to prepare collaterals for EOI process - program regulations, EOI template etc.
- Preparation of program handouts
- Distribution of handouts/Invitations to all businesses in Nowra CBD
- Selection of businesses willing to participate in the program
- Preparation of a schedule for parklet setup outside participating businesses
- Purchase of parklets
- Involvement of local artist community to embellish the parklets with customised printed artworks
- Marketing distribution across various media
- Program launch



BUDGETS AND TIMELINE

The total budget allocation for this program over the three years is \$100,000. FY22/23 includes purchase costs.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$5000												
FY 2022 - 23	\$80,000												
FY 2023 - 24	\$15,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Customers

- Increase in number of people who visit
- Increase in customer visitation time



Business

- Number of participating local businesses
- Higher demand of parklets (more than 2)
- Increase in outdoor trading

A15 'TRY LOCAL' CAMPAIGN

YEAR	2022-23
BUDGET	\$20,000 Yr 2 \$15,000 Yr 3

The 'Try Local' campaign is a program offering rewards to customers to encourage higher and more frequent spending at Nowra CBD's local businesses and hospitality venues.

WHY IS THIS IMPORTANT?

- Rotary organised a Shoalhaven LGA wide Shop Local campaign for 2 months (Oct-Nov 2020), but there is no ongoing campaign
- A consistent, long term loyalty program will ensure the CBD retains its existing customers in the face of competition from new centres and online shopping

WHAT ARE THE BENEFITS?

- Incentives to customers for higher and more frequent spending in participating stores
- Increased loyalty to Nowra CBD's businesses
- Potential attraction for new customers
- More trading and revenue for businesses

RESEARCH RATIONALE

- A 'Shop Local' campaign is among the top 5 ideas of feedback survey respondents (Feb - March 2021)
- 'Nowra Dine-Out Passport' and 'Workers Deals' which are local customer focussed campaigns were selected by both the workshop groups (Action Planning Workshops Feb 2021)

ACTION OVERVIEW

'Try Local' is a collaborative campaign managed by the Place Manager and delivered by local businesses. It will generate higher revenue for local businesses in Nowra CBD and offer incentives to its customers to shop and dine there. This will also build long term loyalty between the two stakeholders. The campaign can be conducted in various ways, two potential options are:

Option 1:

- Customers purchase over a certain amount at a specific number of participating businesses and get tokens
- On presenting a full set of tokens, customers get an assured freebie at any of the participating businesses
- All customers get a guaranteed reward

Option 2:

- Customers purchase over a certain amount at participating businesses
- Customers attach the receipt of their purchase to a form to enter a draw and drop them into voting boxes
- Monthly lucky draw to select winners for a big reward/voucher to shop locally
- The rewards associated with this option will be of higher value, but a win cannot be guaranteed for every customer

The Place Manager should consult with local businesses to finalise the best way to run this campaign in Nowra CBD.



'Try Local' campaign will be marketed with shopfront posters and online promotional materials

KEY STEPS

- Decision around the preferred way for delivering the campaign
- Street Walk by Place Manager to onboard and sign up businesses in Nowra CBD
- Preparation and distribution of posters and required materials (e.g. entry forms for draw, ballot boxes, tokens, vouchers etc) to participating businesses
- Campaign launch and advertising through online media/ shopfront posters
- Further steps as per the preferred option for delivering the campaign





BUDGETS AND TIMELINE

The total budget allocation for this program over two years is \$35,000. FY22/23 includes set up costs.

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$0												
FY 2022 - 23	\$20,000												
FY 2023 - 24	\$15,000												

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:

	Customers	<ul style="list-style-type: none"> • Number of people who participate in program • Regular rewards given out to customers
	Business	<ul style="list-style-type: none"> • High local business participation • Increase in sales

A16 MAJOR ACTIVATION FEASIBILITY STUDY & IMPLEMENTATION

YEAR	2022-23
BUDGET	\$40,000 Yr 2 \$100,000 Yr 3

Ideas for several legacy projects were developed for revitalising Nowra CBD. Each have their own costs and benefits. This action proposes further research on 4-5 ideas to understand their feasibility and recommend the preferred option for investment in the FY 2023-24.

WHY IS THIS IMPORTANT?

- Diverse inputs around some ideas from Nowra CBD's stakeholders (workshop participants) and customers (survey respondents):
 - » Stakeholders did not show much support for developing a 'Community Enterprise Hub' in a CBD vacancy, however this got great support from customers
 - » Stakeholders suggested a weeknight 'Rock Climbing' activity in the CBD, however this did not get much support from the customers

WHAT ARE THE BENEFITS?

- Thorough research of potential ideas
- Implementation of ideas that are found to be the most feasible

RESEARCH RATIONALE

- 'Things to do in the evening (shopping, dining, entertainment etc.)' is the #1 priority for Nowra CBD as per Place Score's engagement in Jan 2021
- 'Activating the Centre' is one of the 10 objectives of the Nowra CBD Revitalisation Strategy (2014)
- Ideas such as 'Summer time festival hub' and a 'Community enterprise hub' were among the top 10 ideas of feedback survey respondents (Feb - March 2021)

ACTION OVERVIEW

This action involves research around the following ideas to understand feasibility:

Community Enterprise Hub:

A shared working hub in an empty tenancy offering short term leases to entrepreneurs/ young businesses.

Night Time Rock Climbing Alley:

Activating the space next to the regional art gallery by using it for rock climbing, delivered by a private enterprise.

Summer Festival Hub:

Activating Jellybean Park and Egans Place via a commercial enterprise delivering outdoor live music, art exhibits, programs and community activities over summer.

Egans PI Transformation Competition:

A design competition focussing on the transformation of public land at Egans PI car park into a community-focussed open space/ development/ new public amenity that attracts external investment.

Nowra CBD Laneways Activation:

Activating laneways connecting main streets in the CBD with car parking areas/ bus interchange.

Research will include talking to relevant people, investigating suitable locations, working out associated costs and providing recommendations around the idea(s) to proceed with implementation.

"Do some research into how other towns have revitalised their town centres, rather than reinventing the wheel"



Summer Festival Hub is one of the options for activating Egans Place car park with community focussed events

KEY STEPS

- Place Manager to appoint a suitable external organisation for feasibility research
- Site visit and interviews with relevant stakeholders, suppliers etc. to understand their interest in delivering the ideas
- Analysis of demand, competition, potential locations and costs associated with equipment, legals and insurances for each of the ideas
- Preparing a report providing the findings of the research conducted about each idea and the recommended way forward



BUDGETS AND TIMELINE

The total budget allocation for this action over the three years is \$140,000 (this includes the funding for delivering the selected action).

	BUDGET	Q1			Q2			Q3			Q4		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY 2020 - 21	\$0												
FY 2021 - 22	\$0												
FY 2022 - 23	\$40,000												
FY 2023 - 24	\$100,000												

Time frame dependent on Selected Action

MEASURES OF SUCCESS

The successful delivery of this program can be measured as follows:



Business

- New Nowra-based business generation
- Reduced vacancy rates
- Interest from investors

REVITALISING NOWRA ACTION PLAN 2021-23 - BUDGETS AND TIMELINES, 28 MAY 2021

Actions	FY 2020-21			
	Budget	Apr-21	May-21	Jun-21
A1 Endorse the Action Plan				
A2 2020-21 Preparation Work	\$ 50,000			
A3 Place Manager for Nowra CBD			Recruitment	
A4 Surprise Saturday Program				
A5 Junction Court Revitalisation Project				
A6 Monthly Cleaning and Maintenance Program				
A7 Create and Deliver a Marketing Plan				
A8 Social Media and Graphics Support				
A9 Annual Christmas Wonderland				
A10 Greening Nowra				
A11 Action Plan Impact Review				
A12 Art and Light Project				
A13 Monthly Fresh Food Markets				
A14 Parklet Program				
A15 'Try Local' Campaign				
A16 Major Activation Feasibility Study & Implementation				
Contingency				
Total Budget	\$ 50,000			

Actions	Budget	FY 2021-22											
		Jul-21	Aug-21	Sep-21	Oct-22	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
A1 Endorse the Action Plan													
A2 2020-21 Preparation Work													
A3 Place Manager for Nowra CBD	\$ 100,000												
A4 Surprise Saturday Program	\$ 75,000												
A5 Junction Court Revitalisation Project	\$ 15,000												
A6 Monthly Cleaning and Maintenance Program	\$ 25,000												
A7 Create and Deliver a Marketing Plan	\$ 40,000												
A8 Social Media and Graphics Support	\$ 20,000												
A9 Annual Christmas Wonderland	\$ 50,000												
A10 Greening Nowra	\$ 20,000												
A11 Action Plan Impact Review	\$ 20,000												
A12 Art and Light Project	\$ 15,000												
A13 Monthly Fresh Food Markets	\$ 15,000												
A14 Parklet Program	\$ 5,000												
A15 'Try Local' Campaign													
A16 Major Activation Feasibility Study & Implementation													
Contingency	\$ 20,000												
Total Budget	\$ 420,000												

Actions	FY 2022-23													
	Budget	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	
A1 Endorse the Action Plan														
A2 2020-21 Preparation Work														
A3 Place Manager for Nowra CBD	\$ 100,000													
A4 Surprise Saturday Program	\$ 75,000													
A5 Junction Court Revitalisation Project														
A6 Monthly Cleaning and Maintenance Program	\$ 25,000													
A7 Create and Deliver a Marketing Plan														
A8 Social Media and Graphics Support	\$ 20,000													
A9 Annual Christmas Wonderland	\$ 50,000				Planning and prep		Activation							
A10 Greening Nowra	\$ 20,000													
A11 Action Plan Impact Review	\$ 20,000												Yr 2 review	
A12 Art and Light Project	\$ 160,000													
A13 Monthly Fresh Food Markets	\$ 35,000													
A14 Parklet Program	\$ 80,000													
A15 'Try Local' Campaign	\$ 20,000													
A16 Major Activation Feasibility Study & Implementation	\$ 40,000							Feasibility Research						
Contingency	\$ 20,000													
Total Budget	\$ 665,000													

Actions	FY 2023-24												
	Budget	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
A1 Endorse the Action Plan													
A2 2020-21 Preparation Work													
A3 Place Manager for Nowra CBD	\$ 100,000												
A4 Surprise Saturday Program	\$ 75,000												
A5 Junction Court Revitalisation Project													
A6 Monthly Cleaning and Maintenance Program	\$ 25,000												
A7 Create and Deliver a Marketing Plan													
A8 Social Media and Graphics Support	\$ 20,000												
A9 Annual Christmas Wonderland	\$ 50,000				Planning and prep		Activation						
A10 Greening Nowra	\$ 20,000												
A11 Action Plan Impact Review	\$ 20,000												Yr 3 review
A12 Art and Light Project													
A13 Monthly Fresh Food Markets	\$ 20,000												
A14 Parklet Program	\$ 15,000												
A15 'Try Local' Campaign	\$ 15,000												
A16 Major Activation Feasibility Study & Implementation	\$ 100,000												
Contingency	\$ 20,000												
Total Budget	\$ 480,000												

FOR MORE INFORMATION
PLEASE CONTACT PLACE SCORE

PLACESCORE.ORG
+61 (2) 8021 7027



This document is the first stage of work undertaken as a part of preparing the 'Revitalising Nowra Action Plan 2021-23'. It has been designed to be printed as an A4 landscape double sided document.

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PLACE SCORE

Suite 1, Level 5, 2-12 Foveaux Street,
Surry Hills NSW 2010 Australia
www.placescore.org
ABN 19 610 823 286

KYLIE LEGGE
Director
T: +61 2 8065 7401
M: 0414 377 677
E: kylie@placescore.org

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PROJECT OVERVIEW

Place Score has been engaged by Nowra CBD Revitalisation Strategy Committee to develop an aligned and budgeted Action Plan for the Nowra CBD Study Area. Our goal is to help deliver the Nowra CBD Urban Design Masterplan's vision through a series of smaller interventions over a three year period. This report 'Understanding Nowra 2021' is the deliverable for the first stage of the project - the research summary that will underpin the Action Plan.

In 2011, Shoalhaven City Council engaged Arup Pty Ltd to prepare a masterplan for Nowra CBD. This resulted in a document that was endorsed by Council in 2014 and subsequently the development of a high-level Revitalisation Action Plan and the establishment of the Nowra CBD Revitalisation Strategy Committee.

In the years since, the Committee has worked closely with Shoalhaven City Council to deliver improvements to the CBD, their responsibilities being the representatives of the wider business and resident community.

In late 2020, the Committee engaged Place Score to develop a 3-year Action Plan that will get us closer to achieving the long-term vision for Nowra CBD as defined in the masterplan document.

PROJECT OBJECTIVES

The objectives of the Action Plan are:

- Align stakeholders towards achieving the 2011 Masterplan vision
- Define Nowra's competitive advantage in order to attract investment
- Attract more customers to Nowra CBD and encourage them to stay longer and shop more
- Empower businesses to lead and co-invest in the future of Nowra CBD
- Provide a range of actions that could be delivered through collaborative partnerships

PROCESS

The process for developing the Action Plan involves two stages - Research and Action Plan Development.

STAGE 1: RESEARCH



The aim of the research phase is to understand what is working well and what is not working well at present in the Nowra CBD Study Area. This research will set the foundation for developing the Action Plan. The methodology adopted for conducting the research is outlined on the following page.

STAGE 2: ACTION PLAN DEVELOPMENT

This stage will see the development of an aligned 3-year Action Plan for the Nowra CBD Study Area through a collaborative process involving inputs from the Nowra CBD Revitalisation Strategy Committee, Councillors, Council staff, stakeholders, retail and hospitality business owners and Nowra's customers.

RESEARCH METHODOLOGY

Shoalhaven City Council has undertaken significant engagement as a part of developing the Nowra CBD Urban Design Masterplan in 2011. In January 2020, Council and the Nowra CBD Revitalisation Strategy Committee conducted an online survey regarding a proposed project submitted as part of the NSW DPIE's 'Your High Street' grant application.

The research undertaken by Place Score for this project (as outlined below) builds upon the engagement conducted in Nowra in the past.

Tasks	Date	Participation	Purpose
Desktop Review and Analysis	Jan 2021	n/a	To review policy documents prepared by Council and the state government and past community engagement results to understand the current state and the future aspirations for the Nowra CBD
First Impressions Audit and Business Audit	28-30 Jan 2021	n/a	To assess the existing condition of ground floor businesses including business types, operations and vacancies
Town Centre Care Factor (CF) Survey	28-30 Jan 2021	83 responses	To understand the community values via face-to-face engagement in Nowra CBD
Street Place Experience (PX) Assessments in 5 locations	28-30 Jan 2021	132 responses	To identify the attributes that contribute positively or negatively to the place experience of 5 locations in the Study Area; considering parameters such as aesthetics, sense of welcome, activities, uniqueness, and the perceived level of care. The findings of this engagement aggregated with the Care Factor results helped to determine the priorities for improving the Study Area in Nowra CBD.
<i>Future engagement</i>			
Face to face workshops	24 Feb 2021	TBC	To share the findings of research conducted in stage 1 and a preliminary list of recommendations for revitalisation. The collaborative sessions will involve refinement of proposed actions for investment over a three year period.
Online feedback survey	26 Feb - 14 March 2021	TBC	To seek feedback on potential ideas for Nowra CBD revitalisation from Nowra's customers.

REPORT STRUCTURE

This report looks at two main aspects of the Study Area in Nowra CBD - customers and offer. It articulates who the Study Area's current customers are, what its current offering is, and who the missing customers are whom we should aim to attract. The report also looks at Nowra's competitors and the reasons why they are perceived to be performing well. It concludes with an overview of the Study Area's strengths and challenges and the potential themes the Action Plan could address.

The findings of this report are backed by data collected on-site in the form of a Ground Floor Business Audit and face to face surveys with Study Area's customers and businesses.

ABOUT NOWRA CBD AND THE STUDY AREA

Nowra is Shoalhaven local government area's largest centre and contains the main commercial and business district. It provides administrative, commercial and other high order services. The Nowra CBD Revitalisation Strategy Area covers an area between the Shoalhaven River, Douglas Street, Shoalhaven Street and Stocklands Nowra Shopping Centre.

For the Action Plan, we will be focussing on the area between North Street, Worrigee Street, Berry Street and Nowra Lane since it includes the majority of the CBD businesses. By focussing on a smaller area, we will ensure that we come up with actions that are achievable within the available funding and will have the maximum impact over the next three years.

A REGIONALLY ACCESSIBLE LOCATION

- Gateway to the South Coast welcoming 5 million visitors each year (Draft Illawarra Shoalhaven Regional Plan 2041) Over 2hrs drive from Sydney & Canberra
- Over 1hrs drive from Wollongong
- Within 30 min drive from tourist places such as Jervis Bay and Kangaroo Valley

PROXIMITY TO LOCAL DESTINATIONS

- 20 min drive to the nearest beaches
- 10 min drive to Bomaderry Station
- 10 min walk to Shoalhaven River, the District Hospital and City Council
- 3 min walk to Nowra Public School

STRONG CONNECTION WITH INDIGENOUS HISTORY

- Region south of Bomaderry Creek inhabited by the Wodi-Wodi tribe of the Yuin nation prior to European arrival
- Proclaimed a town in 1857
- Name of the town derived from the Aboriginal word for "black cockatoo"
- Became a municipality in 1871, and a city in 1979

AN AGEING POPULATION WITH GENERALLY LOWER INCOMES

- In 2016, the suburb of Nowra had a population of 9,193 people (ABS, 2016)
- The population is ageing, and has a median age of 43 compared to the state average of 38
- 77.7% of people in Nowra are born in Australia
- Nowra has a higher percentage (11.6%) population of Aboriginal and/or Torres Strait Islander people compared to the state average (2.9%)
- Top three occupations of Nowra's residents are Community and Personal Service Workers (16.1%), Labourers (15.7%) and Technicians and Trades Workers (14.9%)
- People in the suburb have a lower median weekly household income of \$808 compared to the state average of \$1,486



Map showing extents of the Study Area in relation to the Nowra CBD Revitalisation Strategy Area

PRESENCE OF REGIONAL DESTINATIONS AND A GOOD MIX OF BUSINESSES

- Mix of retail, service, hospitality and commercial businesses
- 216 operational ground floor businesses in the Study Area and its immediate vicinity
- Some community assets, including: Shoalhaven Library and Shoalhaven Regional Art Gallery
- Upper storeys occupied by commercial services and some residential uses

LOW-RISE, AGEING BUILT FORM WITH HERITAGE ASSETS AND STREET ART

- Predominantly 1-3 storey buildings
- Ageing built form
- Presence of heritage buildings with unique facades:
 - » The Roxy Theatre
 - » Mechanics Institute and School of Arts
 - » The People's Emporium - Woodhill & Co
 - » Walsh's Building
 - » Former Post Office - Postman's Tavern
 - » St Andrew's Presbyterian Church
- Blank building facades, especially around large car parks embellished with murals

WALKABLE BLOCKS WITH LARGE COUNCIL OWNED ASSETS

- Range of block sizes broken up with laneways and arcades
- Extensive Council owned land within the Study Area, mostly used for car parking
- Recently developed public open space, Jellybean Park, with misting feature and toilets
- Recent footpath upgrades along Berry Street

GOOD REGIONAL BUS CONNECTIONS, HIGH CAR DEPENDENCY AND POOR PEDESTRIAN INFRASTRUCTURE

- 1055 public and 500 private car parks within the Study Area
- Pedestrian movement impacted due to lack of dedicated pedestrian crossings
- Bus interchange located in Stewart Place
- 6 bus services providing public transport connections to places such as Kangaroo Valley, Berry, Gerringong, Sussex Inlet and Ulladulla in addition to suburbs immediately around Nowra



The Study Area has a number of key destinations which draw footfall. It also has essential amenities, interesting heritage buildings and public transport stops. However, it lacks dedicated street crossing points for pedestrians.

STRATEGIC FRAMEWORK

Shoalhaven City Council and the state government have shown commitment to the improvement of Nowra CBD. The Action Plan we will be developing will sit within a wider strategic framework that includes the Urban Design Masterplan for Nowra CBD (2011-14) and the Nowra CBD Revitalisation Strategy (2014).

One of the objectives of the Action Plan is to align with and achieve the strategic directions set out in the endorsed masterplan. This summary of the various frameworks will guide the work we are doing.

URBAN DESIGN MASTERPLAN

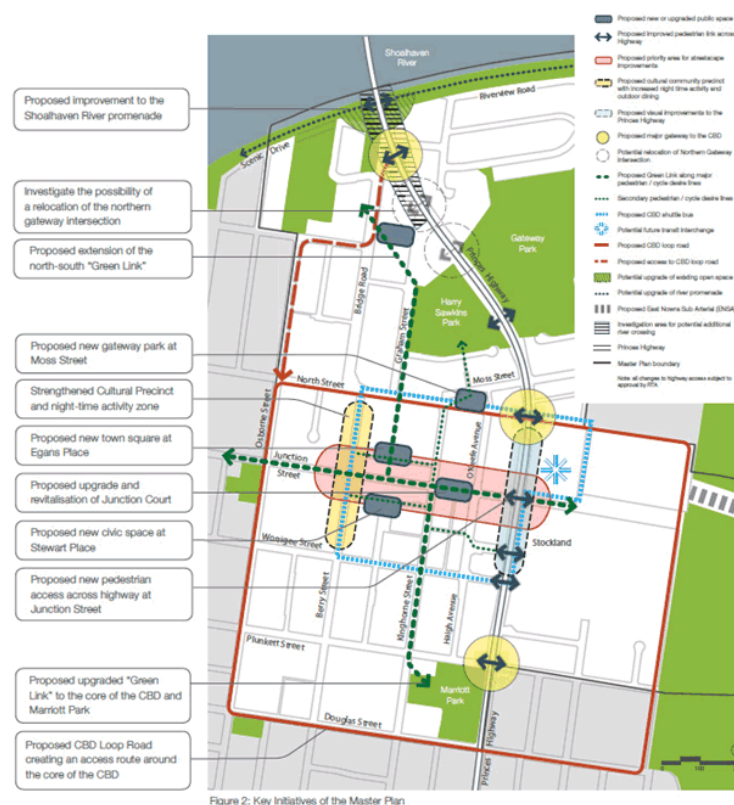
The Nowra CBD Urban Design Masterplan proposes the following vision for the CBD:

"Nowra town centre will be revitalised through greater transport access, green development and incentives which support mixed uses and higher densities. The town centre will support and attract a range of residents, workers and visitors through the provision of civic facilities, amenities and public spaces which build upon the natural setting and physical strengths of the town."

Nowra CBD Urban Design Masterplan, 2011

The masterplan provides the following principles supporting the vision:

- Connected to other places
- Multi-use CBD for everyone
- Vibrant destination
- A place with values
- Incentives (encourages investment)
- Respect for place
- People-friendly traffic and pedestrian networks
- Safety of the CBD
- Health of the river - a healthy natural environment
- Smarter building and infrastructure design
- Natural infrastructure
- Rural heritage



POLICY DIRECTIONS FOR NOWRA CBD

State and local governments are committed to the improvement of Nowra CBD. This is reflected through a review of strategic and policy documents:

GROWTH ON GROWTH (Economic Development)

Nowra and the Shoalhaven has a historically strong economy driven mostly by population growth. This direction seeks to support local industries, while developing new areas in food technology and green industry innovation. Attracting investment is a priority, building on the proximity to Canberra and Wollongong and the future Western Sydney airport.

GREENER WAYS OF GOING (Sustainable Transport)

Nowra has been balancing the tension between private vehicles and active transport for a long time. Accessibility to shopping centres and parking has dominated planning, yet the CBD also has legible streets and destinations like the river in a small walkable area. The bus loop, new pedestrian green spines and efforts to prioritise people over cars have been gaining traction as a sustainable image for the area.

SEEKING NEW RESIDENTS (Development Planning)

A common theme is setting up Nowra's planning systems to be ready for new development. The focus of this planning has been to attract new investment and higher density residential development in the CBD and riverfront. Careful work has been done to understand potential while ensuring building and traffic impacts are minimised and reflect the look and feel of a regional town.

BUSH RIVER RURAL (Placemaking)

The unique place attributes of Nowra, the river and its crossing and the rural/forest interface, immediately set the town apart. The northern river gateway, gridded street pattern, green open spaces and views out of and into the town create a platform for placemaking. In recent years, the idea of activation and pop-up placemaking has emerged as a way of creating vibrancy in the town centre and its streets.

HERE FOR YOU (Good Governance)

A document theme is to recommend focussed delivery of outcomes and measuring of performance. This reflects government and stakeholder aspirations to pragmatically deal with Nowra's challenges and opportunities, and to do this in a way that respects the community. Resources for delivery have been limited, yet the consistency of responses to issues shows sustained corporate knowledge over multiple political cycles.

A VIRTUOUS CYCLE (Sustainable Lifestyles)

State planning policy for the Shoalhaven and Illawarra seeks to protect the area's exceptional natural and social values. These qualities are not lost in local government documents and aspirations for sustainable living, climate resilience, community leadership and social inclusion. As Nowra grows, these are seen as positive directions for the future, rather than impediments.

BACKGROUND DOCUMENT REVIEW

The following documents were reviewed as a part of this research:

- Urban Design Masterplan for Nowra CBD (2011-14)
- Urban Design Masterplan - Supporting Documents (2011):
 - » A - Local Issues Statement
 - » B - Urban Structure Analysis
 - » C - Transport Conditions Review
 - » D - Infrastructure and Flooding Report
 - » F - Consultation Report
 - » Market Assessment Report
- Nowra CBD Revitalisation Strategy (2014)
- Nowra CBD Action Plan (2014)
- Various documents related to the planning and development of the Nowra Riverfront
- Shoalhaven 2040, Local Strategic Planning Statement (2020)
- Draft Illawarra Shoalhaven Regional Plan 2041 (2020)
- Shoalhaven 2027 Community Strategic Plan (n.d.)
- Shoalhaven City Council Economic Development Strategy 2017-2026

UNDERSTANDING NOWRA 2021

GREAT PEOPLE PLACES ARE GREAT FOR BUSINESS
OUR COMMUNITY
WHO IS COMING TO NOWRA CBD NOW?
WHO IS MISSING?
OUR PLACE STRENGTHS AND CHALLENGES
HOW DO OUR CUSTOMERS RATE OUR PLACE
GROUND FLOOR BUSINESSES 2021
POTENTIAL THEMES FOR THE ACTION PLAN

GREAT PEOPLE PLACES ARE GREAT FOR BUSINESS

For a town centre to succeed, it needs customers. For the Study Area in Nowra CBD, there are three basic types of customers:

1. The people that are shopping in our businesses - and we want more
2. The businesses themselves - and we want more
3. Capital investors, who will commit to improving CBD infrastructure

This Action Plan focusses on making the Study Area in Nowra CBD more attractive with higher levels of attachment for shoppers and businesses. As we succeed with the first two, we will attract the third group. Place attraction and attachment describe the way to do this.



Place attraction is the 'magnet' and determines the reasons why people choose one place over another. For a place to be successful, the invitation must overcome any potential barriers:

- › Psychological: Do people feel welcome here? Is there something on offer?
- › Financial: Is there alignment between people's capacity to pay and what is on offer?
- › Physical: Is it easy to get there and move around?



Place attachment is the 'stickiness' of a place, how long they will stay and how loyal they will become. It is about what is on offer both in terms of things to do as well as social or economic connections.

- › Short term attachment: How long a person will stay in a place?
- › Long term attachment: How much will a person invest in the place?



THE POWER OF IDENTITY

To make a place that people feel attracted and attached to, it is important we understand the power of identity. A strong identity helps us build a personal and communal sense that a place is resilient and reliable. A strong identity is one that is perceived as consistent across all kinds of people and all kinds of customers. Furthermore, when people love these places, they feel a sense of belonging. This belonging leads to empowerment and a desire to contribute to their surrounding environment - their place.

The towns of Berry and Byron Bay* in NSW are good examples of this.

PERCEPTION - AS IMPORTANT AS REALITY

The towns of Berry* and Byron Bay* have developed strong identities. There is a strong and consistent story told by residents, businesses and visitors. This perception of strength creates a virtual cycle of attraction and attachment. Importantly, this perception does not rely on large amounts of expensive physical infrastructure. It relies on stakeholders consistently telling the same positive story about place quality.



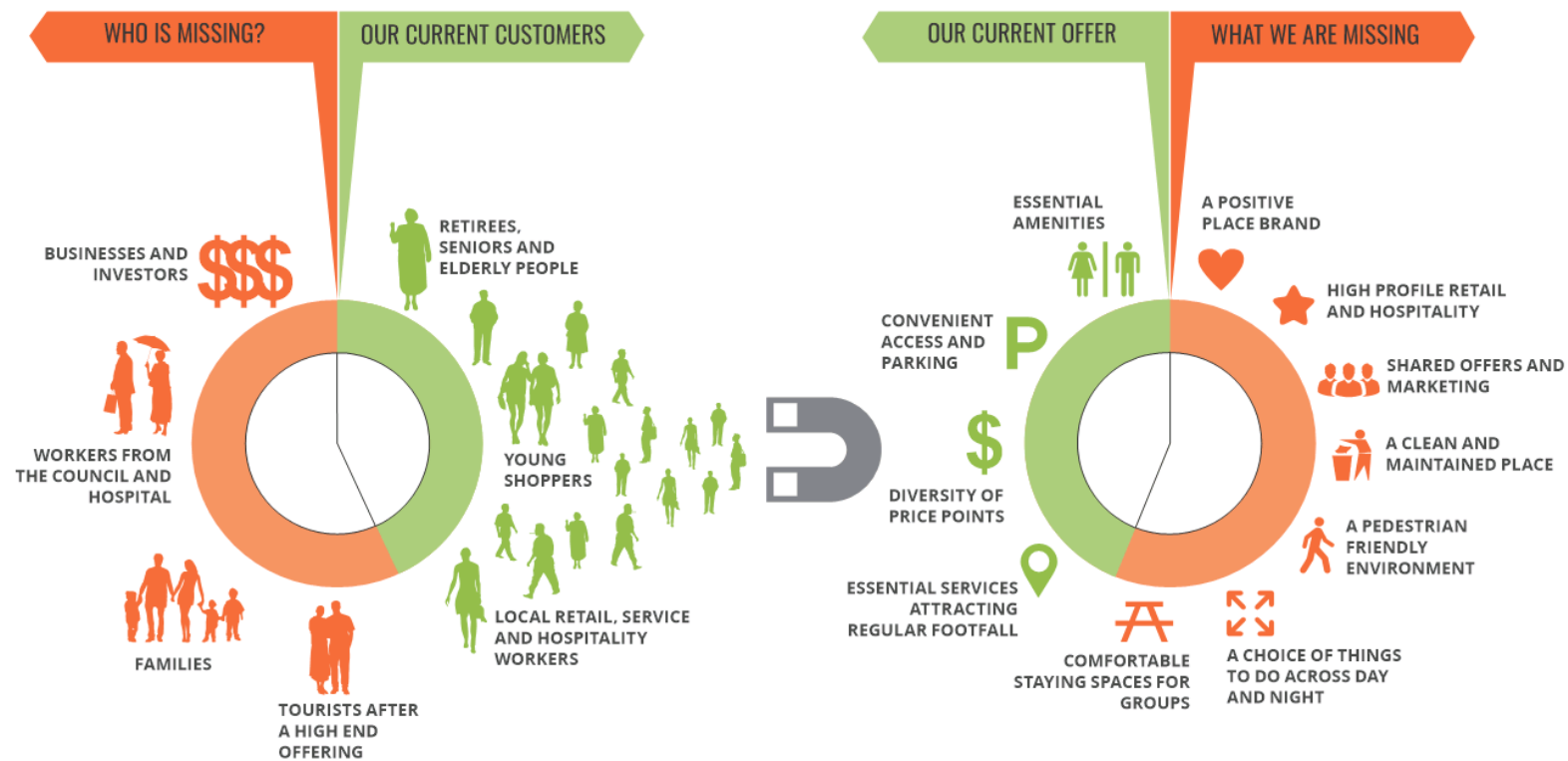
Berry (population: 3,886)

Berry is known for its rural village atmosphere, boutique shopping, local produce, fine dining and a regular schedule of markets, festivals and fairs. The town's journey of identity began in the 1980's as dairying and sawmilling reduced. Being the first rural town outside Sydney, growth shifted to tourist accommodation and the weekend housing market. This was in part due to limited land supply as the original 1912 subdivision remains the town's boundaries. Retention and restoration of heritage buildings such as the famous rotunda, helped create its unique identity as a place to experience pastoral NSW and days gone by.

Byron Bay (population: 9,246)

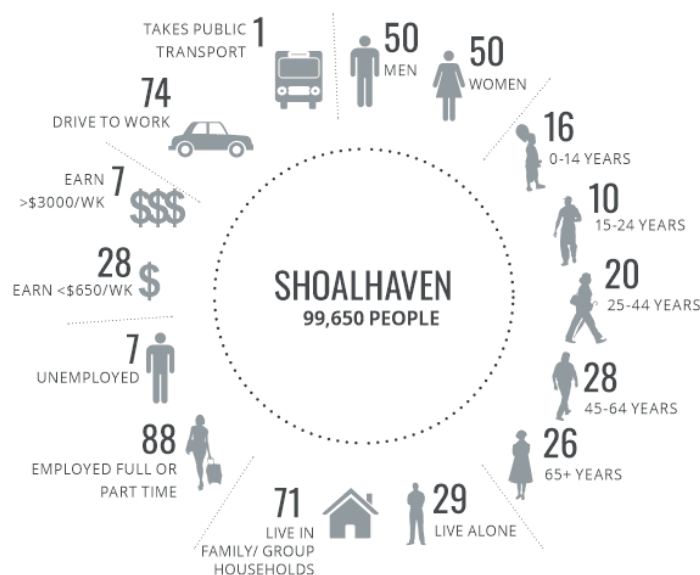
Byron Bay is world renowned for its beaches, forests, arts scene, music festivals and relaxed alternative lifestyle. The town began life as a major shipping port between Brisbane and Newcastle. As coastal shipping and whaling declined in the 1950's, the surf and protest culture of the 1960's moved in. This rejection mandate has become the town's strength. The community actively campaigns against the commercialisation seen elsewhere on the coast such as fast food outlets and Gold Coast style development. Environmental awareness and backpacker tourism have evolved into the town's mainstays of growth.

The current offering of the Study Area in Nowra CBD attracts specific types of customer groups, but there is a lot more we can offer in order to attract more customers to the centre. For a successful retail centre, it is important for the offer to match the needs, wants and values of the customers.



OUR COMMUNITY

The Shoalhaven City Council local government area has a population of 99,650 people (2016 census). Its population is older, less diverse, car dependent and has relatively lower incomes compared to the rest of the state. The population of the area is expected to grow over 24% over the next 20 years.



Breakdown of population living in the Shoalhaven local government area

WHAT IS UNIQUE ABOUT THIS COMMUNITY?

AN OLDER POPULATION

Median age of 48 compared to the state median age of 38

AUSTRALIAN BORN AND PREDOMINANTLY ENGLISH SPEAKING

79% people born in Australia; 88.5% of people only speak English at home (20% higher than the state average)

HIGHER INDIGENOUS POPULATION

5.5% Aboriginal and Torres Strait Islander people compared to the state average of 2.9%

TOP INDUSTRIES OF WORK

Top industries - Defence, Aged Care Residential Services, Hospitals, Supermarkets and Cafes & Restaurants

CAR DEPENDENT COMMUNITY

Over 74% people travel to work using a car and only 1% taking public transport

LOWER INCOME LEVELS

Personal median weekly income of \$511 compared to the state average of \$664

WHAT HAVE WE HEARD FROM THE COMMUNITY IN THE PAST?

Engagement was undertaken with Councillors, members of the Business Chamber and Nowra's community as a part of developing the Nowra CBD Urban Design Masterplan in 2011. This involved a series of workshops attended by over 100 people. It revealed issues such as:

- Competition between Stockland Nowra east of the Princes Highway and the centre to the west
- Lack of civic facilities and open space
- Disconnect between the Shoalhaven River and the CBD
- Flooding constraints
- Need to improve public perceptions of Nowra
- Need to capitalise on the tourism sector
- Need to improve community safety

In January 2021, Shoalhaven City Council and the Nowra CBD Revitalisation Strategy Committee conducted engagement for a proposed project for the DPIE 'Your High Street' grant. Over 400 people participated in an online survey, which revealed the following top three features in the respondents' desired high street:

- A variety of activities, such as restaurants, shops and services
- Wide footpaths and easy crossing points
- Appropriate traffic levels and speeds

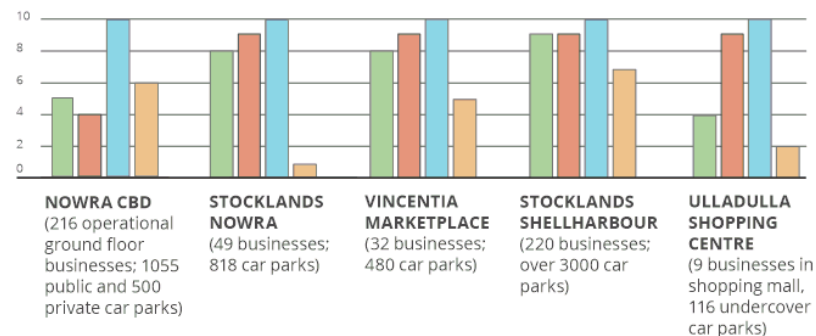
A COMPETITIVE LANDSCAPE

There are over 30 activity centres within the catchment¹ of Nowra CBD. While Nowra-Bomaderry is the regional centre, the area has other major centres such as Milton-Ulladulla, Huskisson-Vincentia, Jervis Bay-St Georges Basin, Culburra Beach, and Sussex Inlet. In addition, there are shopping centres such as Stocklands Nowra, Stocklands Shellharbour and Vincentia Marketplace.



Centres in the customer catchment of Nowra CBD¹

Below is a comparison of Nowra CBD with a few other centres in the region (Note: Data has been sourced from Google Maps/Street View/Websites of respective centres):



- Comfort
- Consistency/ perception of knowledge
- Convenience/ Parking
- Experience



Stocklands Shellharbour offers customers not just convenience but also comfort and experience



Stocklands Nowra offers customers the assurance of businesses being open and finding a place to park their cars

WHO IS COMING TO NOWRA CBD NOW?

Understanding your customers is absolutely essential to making abiding relationships, building loyalty and creating an offer and a story that reflects what matters most to them. A key objective of the Action Plan is to adopt a customer centric approach to attract more customers and encourage them to stay and shop more. At present, the Study Area in Nowra CBD primarily attracts younger and older people who live nearby, and workers from local businesses.

WHO ARE YOUR PRESENT CUSTOMERS?

Place Score conducted a site visit to Nowra between the 28th and 30th of January 2021. This period included a weekday, weekend and school holiday. The majority of customers observed in the Study Area belonged to the following groups:

- Retirees, seniors and elderly aged people
- Young adults, aged 15-24
- Workers of local retail, hospitality and service businesses

WHERE DO THEY COME FROM AND HOW?

Place Score's engagement reveals that Nowra CBD's catchment extends nearly 60 km northward (to Shellharbour) and southward (beyond Ulladulla). However, a majority of the customers are from a 6km catchment of the CBD.¹ 77% of customers come to the centre by car².

The ABS Journey to Place of Work data (2016) reveals that of all people working in Nowra, over 50% are from a local catchment comprising Nowra, North Nowra and Bomaderry.



RETIRES, SENIORS AND ELDERLY

9,000 within a 10-min drive³

THEIR NEEDS

- Comfort and safety
- Essential services
- Communications outside social media

THEIR WANTS

- Sociable environment
- Options to extend trip

THEIR VALUES⁵

Other than the below values, this group uniquely cares more about:

- Access and parking for cars
- Shopfronts and interesting visuals



YOUNG ADULTS

3,100 within a 10-min drive³

THEIR NEEDS

- Spaces to meet friends
- Affordable shopping, dining and entertainment

THEIR WANTS

- Instagrammable experiences
- Presence of other young people

THEIR VALUES⁵

Other than the below values, this group uniquely cares more about:

- Shopfronts and their condition
- Sense of welcome



LOCAL RETAIL/SERVICE/ HOSPITALITY WORKERS

Over 500 working in the Study Area⁴

THEIR NEEDS

- Coffee and Lunch options – quick and affordable, pick up/delivery
- Places to eat packed food

THEIR WANTS

- Places to pause/relax
- Drinks after work

THEIR VALUES⁵

Other than the below values, this group uniquely cares more about:

- Sense of welcome
- Opportunities to eat outdoors
- Walkability

WHAT DOES NOWRA'S AVERAGE CUSTOMER VALUE THE MOST?⁵



The presence of heritage and a great visual character



Safe, well-maintained and clean public spaces



Connection with nature and its care



Choice of things to do including outdoor dining

WHY ARE YOUR CUSTOMERS COMING NOW?

The Study Area in Nowra CBD provides administrative, commercial and other high order services to the wider region. The present day customers and workers come to the CBD primarily for shopping, dining, entertainment and work.

CUSTOMERS PERCEIVE THE FOLLOWING AS STRENGTHS¹ OF THE STUDY AREA IN NOWRA CBD...



The sense of welcome of Nowra's mainstreets



The presence of alfresco dining along Berry Street and Kinghorne Street (Btw Worrigee St and Junction St)



The well-maintained planting along Berry Street and Kinghorne Street (Btw Worrigee St and Junction St)



Sense of social safety along Berry Street

WHAT WOULD GET THEM TO STAY LONGER?

Investing in areas that your customers think are priorities for improvement will get them to visit more often and stay longer.

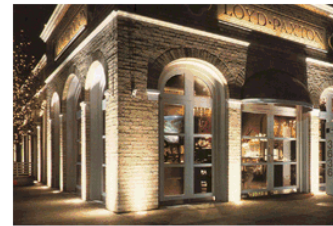
CUSTOMERS PRIORITISE¹ IMPROVEMENTS TO THE STUDY AREA IN TERMS OF...



A diverse offering of things to do across day and night



Greenery and an improved connection with nature



Enhancements to visual character and a celebration of local heritage



Cleanliness and maintenance of the public domain




WHO IS MISSING?

Of the three customer groups that we want in Nowra - shoppers, businesses and investors, it is the shoppers that provide clues to drive new business and investment. Shopper groups which are not prominent or being planned for in the Study Area in Nowra CBD include tourists seeking a 'uniquely Nowra' offer, families seeking something affordable and child friendly, and local workers from Council and the public hospital seeking 'third places' to meet and relax. The action plan will focus on attracting shoppers and businesses, which will in turn attract private and public investors.

WHO IS NOT COMING TO NOWRA CURRENTLY?

Place Score's visit to Nowra from the 28th-30th January 2021 highlighted that the following groups are not prominent in the Study Area:

- Recreational tourists coming for high end retail/hospitality offering
- Families
- Council and Hospital Staff

		
<p>RECREATIONAL TOURISTS</p> <p>5,000,000 people visit the Shoalhaven each year¹</p> <p>THEIR NEEDS</p> <ul style="list-style-type: none"> • Amenities • Up-to-date online information • Local wayfinding <p>THEIR WANTS</p> <ul style="list-style-type: none"> • Things that cannot be bought elsewhere / mementos • Stories behind local products / services 	<p>FAMILIES</p> <p>c.5,000 households with children within in a 10-min drive²</p> <p>THEIR NEEDS</p> <ul style="list-style-type: none"> • Safety • Things to do for all ages • Assurance and diversity of price point • Amenities <p>THEIR WANTS</p> <ul style="list-style-type: none"> • Things to keep kids occupied for free • Places to meet other families 	<p>COUNCIL AND HOSPITAL STAFF</p> <p>Over 1,600 workers³</p> <p>THEIR NEEDS</p> <ul style="list-style-type: none"> • Lunch options, pick up / delivery • Coffee & places for informal meetings <p>THEIR WANTS</p> <ul style="list-style-type: none"> • Places to pause / relax • Places to work which offer something special • After work socialising

WHAT DOES THE AVERAGE AUSTRALIAN VALUE THE MOST?⁴



Safe, clean and well-maintained public spaces



Presence of nature, greenery and its care



Presence of alfresco dining



Overall visual character and the celebration of heritage



Ease of walking around

WHY ARE THEY NOT COMING NOW?

The Study Area in Nowra CBD has a large number and good mix of ground floor businesses. It has car parking ranging from short-term parking along streets to all-day parking in council-owned parking lots. However it fails to offer an advantage over regional competitors, mainly due to its poor evening and weekend trading offer, lack of consistency around business opening hours, poor comfort and public domain activation.



Very few businesses in the Study Area are open during the evenings or on weekends



There is very low footfall in the evenings and on weekends after 2pm



The Study Area lacks street activating businesses that will attract and keep customers engaged



The Study Area lacks places to sit comfortably across different weather conditions and for groups to congregate

WHAT MIGHT ATTRACT OUR POTENTIAL CUSTOMERS TO OTHER CENTRES?

Despite the convenience offered by the Study Area in Nowra CBD, indoor shopping environments such as Stocklands Shellharbour are considered competitors because they offer consistency in terms of business trading hours, comfort associated with a temperature controlled environment, special deals, and a variety of things to do, including a busier, more people centric atmosphere.



Customer-targeted marketing at Stocklands Shellharbour



Stocklands Gift Card can be used at any of the participating stores in the centre

STAYING PLACES - COMMUNITY EXPERIENCE AND SHOPPING CONVENIENCE

Traditional main streets have significant advantages over indoor shopping malls. As public space, a wider range of experiences occur than what might be managed by a single shopping centre owner. These experiences can be spontaneous, such as bumping into a street performer, seeing friends al fresco, or playing in a fountain. Where public seating is provided, the main street is an easy place to stay for free, read a book or watch the passing parade. We experience main streets as 'authentic' due to a diversity and complexity of frontages and interactions. This authenticity leads to a sense of meaning and connection to place, and significantly, a higher spend per person than car based centres. In Nowra's case, Junction Street, its retail heart, is in the middle of town with good accessibility and parking - there is no convenience trade off. All the above strengths need to amplified while maintaining the convenience of the CBD.

OUR PLACE STRENGTHS AND CHALLENGES

The Study Area in Nowra CBD has a number of inherent strengths that make it an attractive place for customers. However, there are also a number of challenges that would act as a barrier for people coming to visit as well as staying for a long time. Generally we are good at offering convenience but need to improve our experiential offer.

OUR STRENGTHS...

CONVENIENT LOCATION AND PRESENCE OF COMMUNITY ASSETS AND ESSENTIAL BUSINESSES ATTRACTING FOOTFALL



WELCOMING MAINSTREETS WITH POPULAR DAYTIME RETAIL AND HOSPITALITY OFFERING



CONVENIENCE OF PARKING AND KEY AMENITIES IN THE CBD



PRESENCE OF CULTURAL ASSETS INCLUDING HERITAGE BUILDINGS AND STREET ART



OUR CHALLENGES...

AN AVERAGE TOWN IN A COMPETITIVE LANDSCAPE LACKING THE EXPERIENTIAL OFFER TO EXPAND CUSTOMER BASE



LACK OF SPECIALTY SHOPS AND NIGHT-TIME, WEEKEND AND OUTDOOR ACTIVITIES FOR DIFFERENT AUDIENCES

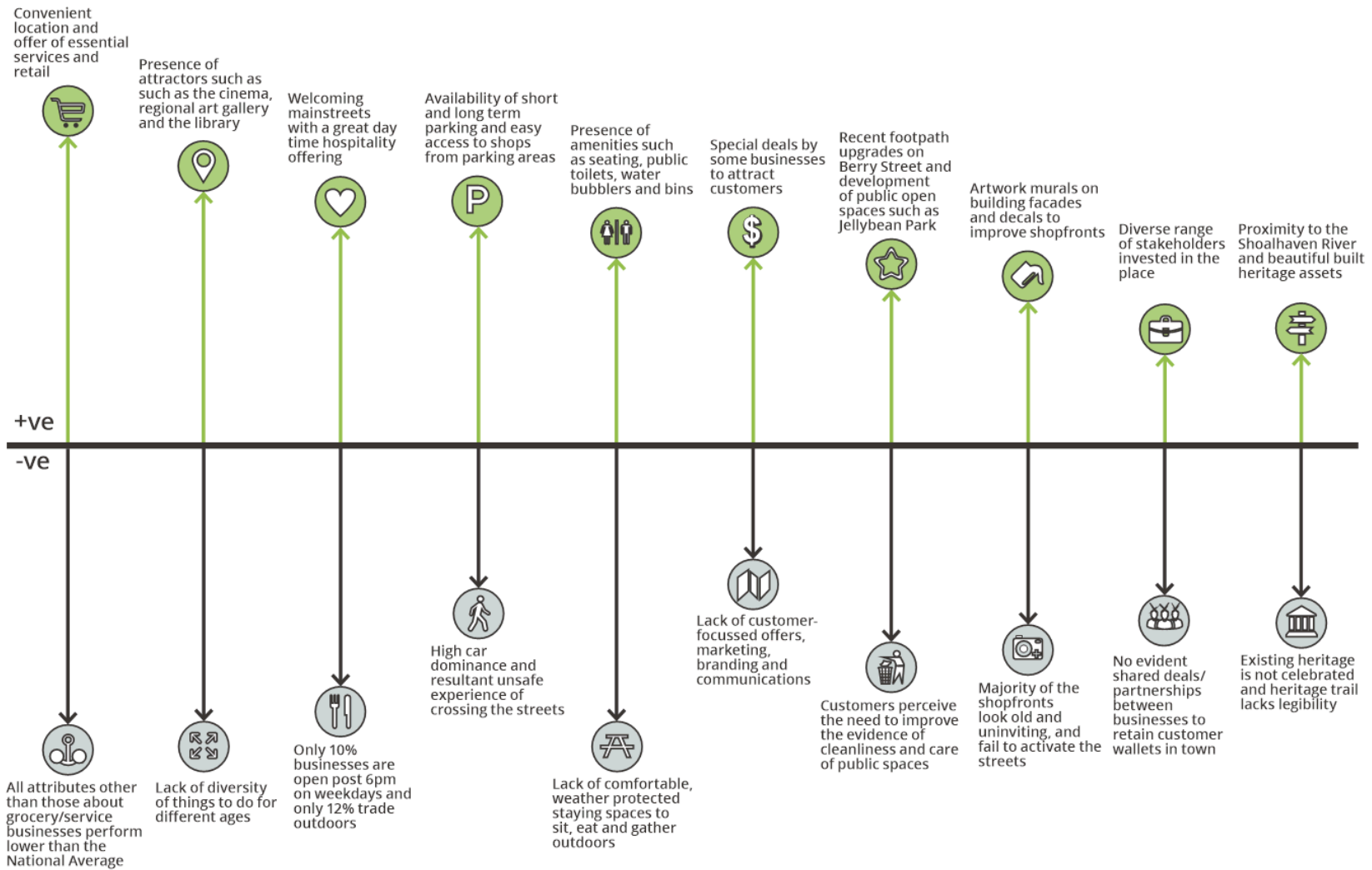


A CAR DOMINATED ENVIRONMENT LACKING GREENERY, SOFTNESS AND COMFORT FOR WALKING AND STAYING



NEED TO IMPROVE VISUAL CHARACTER AND ENHANCE EXISTING ASSETS

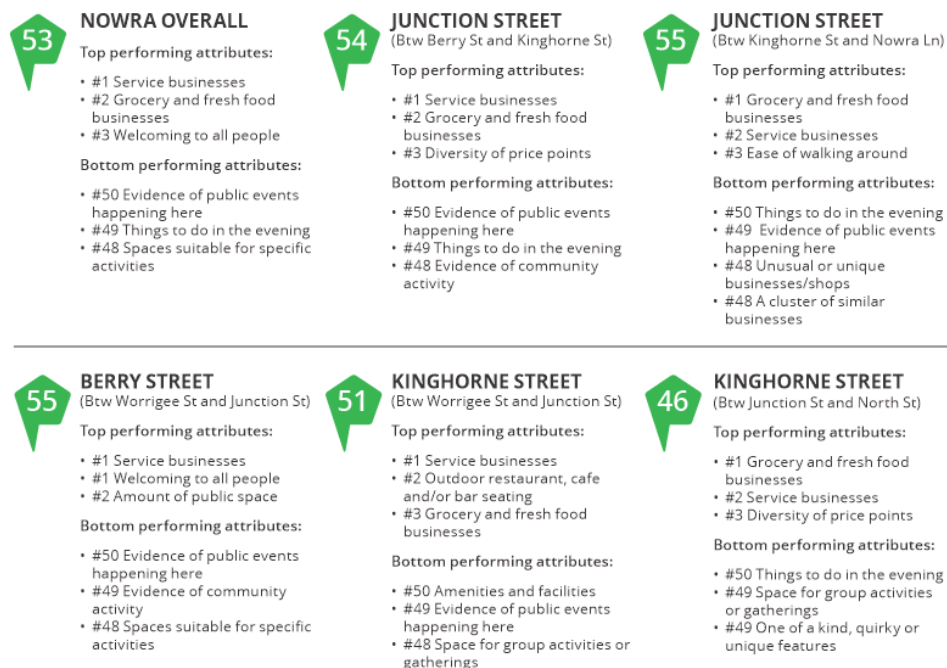




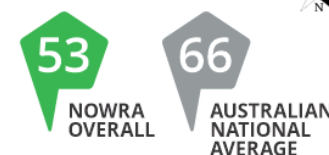
HOW DO OUR CUSTOMERS RATE OUR PLACE?

In January 2021, Place Score conducted Place Experience (PX) Assessments at 5 streets in Nowra CBD to understand their current performance. A total of 132 people participated in this engagement.

Across the 5 locations, the highest rated attributes are those associated with the streets' sense of welcome whereas the poorest rated ones are related to the choice of things to do. Nowra's mainstreets are performing 11-20 pts lower than the National Average. The only attributes that are performing higher than the National Average are those associated with the convenience of service and grocery businesses.



Study Area in Nowra CBD and PX Scores for the 5 locations

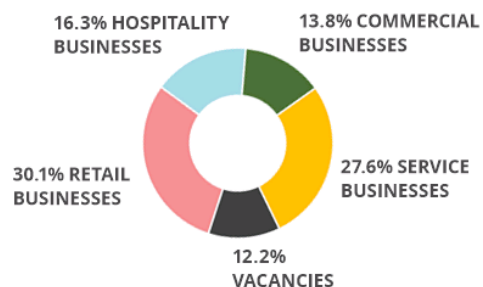


GROUND FLOOR BUSINESSES 2021

In and around the Study Area in Nowra CBD are 246 ground floor tenancies. The percentage of retail and service businesses is the highest, followed by hospitality and commercial businesses. The Study Area has an overall vacancy rate of 12.2%.

Only 10% businesses stay open after 6 pm on weekdays and over 12% have outdoor displays and/or setting for outdoor dining.

A GREAT MIX OF BUSINESSES¹..

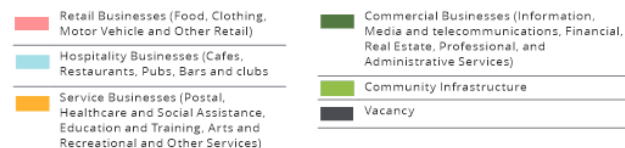


BUT POOR OUTDOOR AND NIGHT-TIME TRADING OFFER

10.1% GROUND FLOOR BUSINESSES OPEN POST 6PM ON WEEKDAYS



12.2% GROUND FLOOR BUSINESSES TRADE OUTDOORS



KEY DIRECTIONS OF THE ACTION PLAN

The Action Plan for Nowra CBD will be centred around three key directions, all of which are bound by a focus on customers as their foundation. The ultimate goal of every action will be to attract more people, get them to stay longer and spend more, and to improve business activity.

CELEBRATE NOWRA

Build a good story – Share what is working well in Nowra and develop a positive identity to improve its experience, perception and place attraction

BUILD UPON WHAT IS WORKING WELL

- Convenient location and offer of essential services and retail
- Presence of attractors such as the cinema, regional art gallery and the library
- Proximity to the Shoalhaven River and beautiful built heritage assets

IMPROVE UPON YOUR WEAKNESSES

Lack of customer-focussed offers, marketing, branding and communications

- Majority of the shopfronts look old and uninviting; fail to activate the streets
- Existing heritage is not celebrated and heritage trail lacks legibility
- Customers perceive the need to improve the evidence of cleanliness and care of public spaces

SOMETHING FOR ALL

Attract more diversity and get people to stay longer – Offer more things to do for different audiences across day and night, weekdays and holidays in Nowra CBD

BUILD UPON WHAT IS WORKING WELL

- Welcoming mainstreets with a great day time hospitality offering
- Diverse range of stakeholders invested in the place
- Special deals by some businesses to attract customers

IMPROVE UPON YOUR WEAKNESSES

- Lack of diversity of things to do for different ages
- Only 10% businesses are open post 6pm on weekdays and only 12% trade outdoors
- All attributes other than those about grocery/ service businesses perform lower than the National Average
- No evident shared deals/partnerships between businesses to retain customer wallets in town

A GREAT PLACE TO HANG OUT

Make it a walkable and stayable town - Improve the comfort and safety of Nowra CBD and make it a great place to sit, walk, stay, play and socialise

BUILD UPON WHAT IS WORKING WELL

- Investment in Jellybean Park and footpath upgrades along Berry Street
- Presence of seating, public toilets, water bubblers and bins
- Availability of over 1500 parking spots
- Artwork murals on building facades and decals on shopfronts

IMPROVE UPON YOUR WEAKNESSES

- High car dominance and resultant unsafe experience of crossing the streets
- Lack of comfortable, weather protected staying spaces to sit, eat and gather outdoors

APPENDIX A

NOWRA CBD CUSTOMER CATCHMENT
AND MODES OF TRAVEL
GROUND FLOOR BUSINESSES 2021

NOWRA CBD CUSTOMER CATCHMENT AND MODES OF TRAVEL

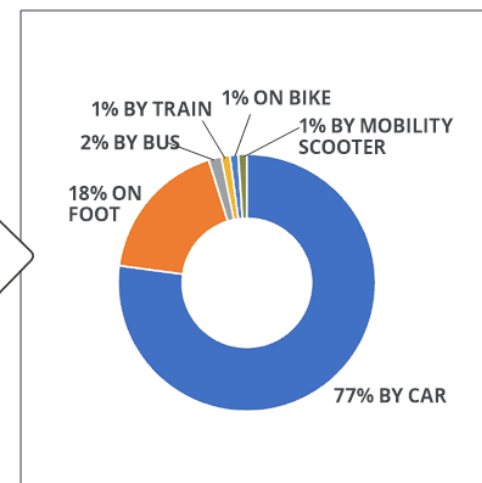
Place Score's engagement with the community in Nowra CBD collected postcodes of respondents' place of residence. This data when mapped revealed that while the catchment of Nowra extends almost 60km towards the north and south, a majority of the customers come from a 6 km local catchment. Survey responses also revealed the high percentage of people accessing the centre by car.



Postal Areas of residence of majority of Place Score survey respondents

WHERE DO NOWRA'S CUSTOMERS COME FROM?

HOW DO NOWRA'S CUSTOMERS COME TO THE CBD?



Breakdown of survey respondents' mode of travel to Nowra CBD

GROUND FLOOR BUSINESSES 2021

The below map and chart provide a detailed classification of businesses in the Study Area based on the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006.



APPENDIX B

MAXIMISE YOUR IMPACT

This Impact Maximiser Report helps you increase the impact of your place experience and community values data collected via Place Score's PX Assessment and Care Factor tools. It provides place-specific recommendations directing investment in hard and soft infrastructure that can help improve the performance of your main street.

In January 2020, Place Score conducted five PX (Place Experience) Assessments and a Care Factor (CF) survey in Nowra for Shoalhaven City Council.

Your community identified the surveyed locations in Nowra to be performing well in terms of:

- Sense of welcome
- Alfresco dining offering
- Condition of street planting

On the other hand, the following were highlighted as areas for investment:

- Improvements to the choice of things to do in the evenings
- Overall look and character, including greenery, public art and the celebration of heritage
- Cleanliness and maintainence
- Sense of safety

ABOUT THE SURVEYED STREETS IN NOWRA

All the surveyed streets in Nowra except Junction Street (btw Kinghorne St and Nowra Ln) are two-way streets. Junction Street (btw Kinghorne St and Nowra Ln) is a one-way street, part of which is a shared zone. Built form across the surveyed locations comprises predominantly one-three storied buildings with ground floor retail, service and hospitality businesses. The built form appears to be old and poorly maintained.

Most of the surveyed streets have on street car parking, public seating and awnings. There is generally a lack of dedicated pedestrian priority crossings across the area.



NOWRA OFFERS A LOW PLACE EXPERIENCE, WITH AN AVERAGE PX SCORE MUCH LOWER THAN THE 2020 NATIONAL BENCHMARK AVERAGE STREET PX OF 66/100.¹

PLACE STRENGTHS AND PRIORITIES

Your Strengths and Priorities are determined by aggregating community values against the current performance of your street.

- High CF + High PX Score = Strength
- High CF + Low PX Score = Priority
- Mid to low CF + Low PX Score = For consideration

LEGEND

- Strengths (Protect and build upon these attributes)
- Improvement Priorities (Focus on improving these attributes)
- For Consideration (Focus on improving these attributes AFTER all priorities have been addressed)

CF	STRENGTHS
10 ⁺	Welcoming to all people
10 ⁺	Outdoor restaurant, cafe and/or bar seating
7 ⁺	General condition of vegetation, street trees and other planting
CF	IMPROVEMENT PRIORITIES
4	Things to do in the evening (shopping, dining, entertainment etc.)
3	Elements of the natural environment (views, vegetation, topography, water etc.)
7 ⁺	Overall look and visual character of the area
1	Local history, heritage buildings or features
5 ⁺	Maintenance of public spaces and street furniture
2	Sense of safety (for all ages, genders, day/night etc.)
5 ⁺	Vegetation and natural elements (street trees, planting, water etc.)
7 ⁺	Cleanliness of public space
CF	FOR CONSIDERATION ²
21	Evidence of public events happening here (markets, street entertainers etc.)
15	Public art, community art, water or light feature

Notes: 1. National average sample used n=13,368 (January 2021).
2. More considerations can be found further ahead in the report.

ABOUT YOUR DATA

This section includes a summary of your Care Factor survey and Street PX Assessment data. This includes your community's values, the performance of your main streets, how it compares to other places in Australia and the strengths and priorities for your mainstreets.

Place Score offers two sophisticated data collection tools, Care Factor (CF) survey and Place Experience (PX) Assessments.

Like a 'place census', Care Factor captures what your community really values, while PX Assessments measure the community's lived place experience.

Together they help you identify what is important, how the place is performing, and what the focus of change should be. An attribute with a high CF but a low PX should be a priority for investment as it will have the most positive impact on the most amount of people.

ABOUT YOUR PLACE SCORE DATA

Two types of Place Score data have been used to develop the recommendations in this report.

Data source	n=
Town Centre Care Factor survey (CF)	83
Street Place Experience (PX)	132

Your Town Centre Care Factor (CF)

- Collected face to face between 28-30 January 2021
- 83 respondents; 43 men and 40 women

Your Street PX Assessments

- Collected face to face between 28-30 January 2021
- 132 respondents; 66 men and 66 women

To support the development of this Impact Maximiser Report Place Score has also considered census data collected for your LGA in 2016 and findings from a site visit to Nowra (28-30 Jan 2021).

THE FIVE DIMENSIONS OF GREAT PLACES

The 50 Place Score attributes have been defined as a result of extensive investigation of community, academic and commercial research to identify the factors that contribute to place experience. We group them under five key place dimensions.



LOOK & FUNCTION

The physical characteristics of the area - how it looks and works, its buildings, public space and vegetation



SENSE OF WELCOME

Whether the place is inviting to a range of people regardless of age, income, gender, ethnicity or interests



THINGS TO DO

Activities, events and the invitation to spend time in the place that might lead to a smile, a nod or even a new friend



UNIQUENESS

Things that make the area interesting, special or unique - these could be physical, social, cultural or economic aspects of the place

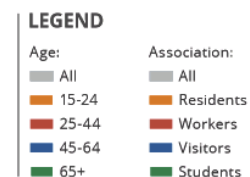


CARE

How well the area is managed, maintained and whether improvements are being made - it considers care, pride and both personal and financial investment

NOWRA'S TOP 10 CARE FACTORS

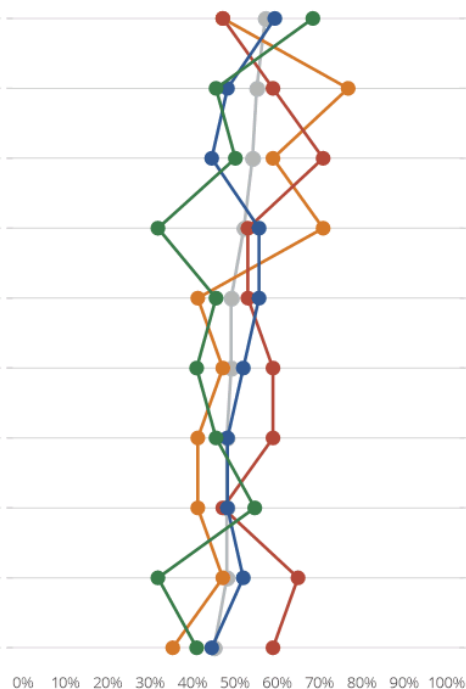
The Nowra community values the presence of heritage and a great visual character, cleanliness and maintenance of public space, presence of nature and its care, and the choice of things to do and outdoor dining in their ideal town centre.



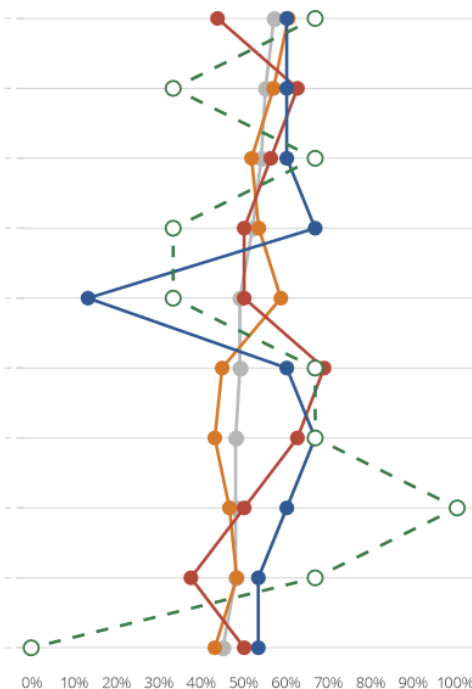
2020 TOWN CENTRE CARE FACTOR¹

RANK	ATTRIBUTE	% OF PEOPLE
#1	Local history, heritage buildings or features	57%
#2	Sense of safety (for all ages, genders, day/night etc.)	55%
#3	Elements of the natural environment (views, vegetation, topography, water etc.)	54%
#4	Things to do in the evening (shopping, dining, entertainment etc.)	52%
#5	Maintenance of public spaces and street furniture	49%
#5	Vegetation and natural elements (street trees, planting, water etc.)	49%
#7	Cleanliness of public space	48%
#7	General condition of vegetation, street trees and other planting	48%
#7	Overall look and visual character of the area	48%
#10	Outdoor restaurant, cafe and/or bar seating	45%

BY AGE



BY ASSOCIATION²



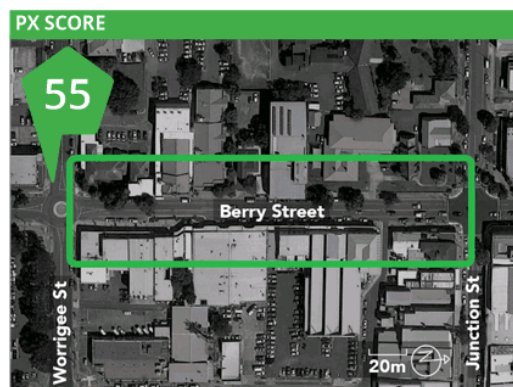
BERRY STREET PLACE EXPERIENCE

Berry Street (btw Worrige St and Junction St)

Berry Street is a two-way, north-south oriented street in the suburb of Nowra. It is flanked by 1-3 storeyed buildings which house a mix of service, hospitality and retail businesses. Along the street are key destinations such as the popular Roxy Cinema building and healthcare services. The street has on-street parking, some outdoor dining and recently upgraded footpaths.

KEY FINDINGS

- 26 people completed an on-site assessment via face-to-face surveys between 28-30 Jan 2021.
- Berry Street received a PX Score of 55/100.
- The strongest rated attribute is 'Service businesses'.
- The poorest rated attribute is 'Evidence of public events happening here'.
- Men rate 'Unusual or unique businesses/shops' 23.5% higher than women.
- Women rate 'Diversity of price points (\$ to \$\$\$)' 20.5% higher than men.
- 15-24 yrs olds rate 'Space for group activities or gatherings' 42.8% higher than 45-64 yrs olds.
- 25-44 yrs olds rate 'Landmarks, special features or meeting places' 43.9% higher than 45-64 yrs olds.
- 65+ yrs olds rate 'Cleanliness of public space' 32.5% higher than 15-24 yrs olds.
- Residents rate 'Unique mix or diversity of people in the area' 27.8% higher than students.

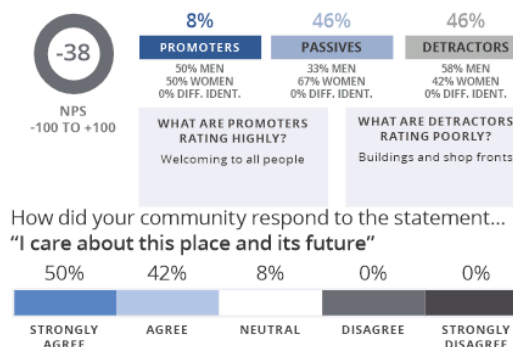


HOW DOES BERRY STREET COMPARE WITH OTHER SIMILAR PLACES?



NET PROMOTER SCORE (NPS)²

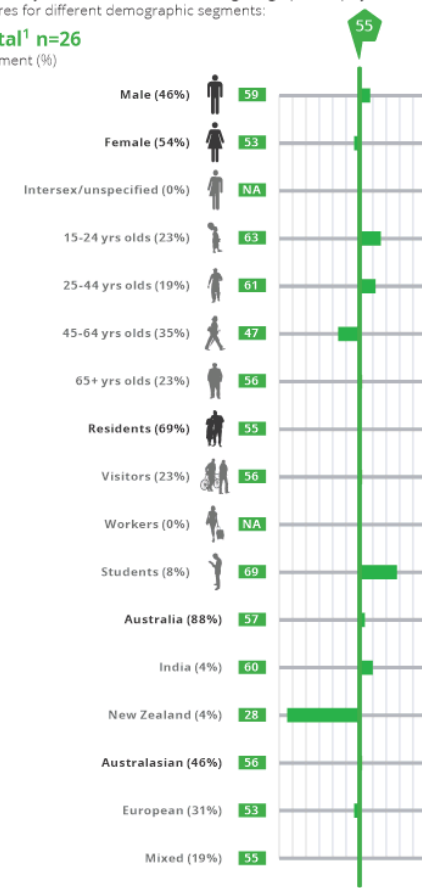
How likely is your community to recommend this place?



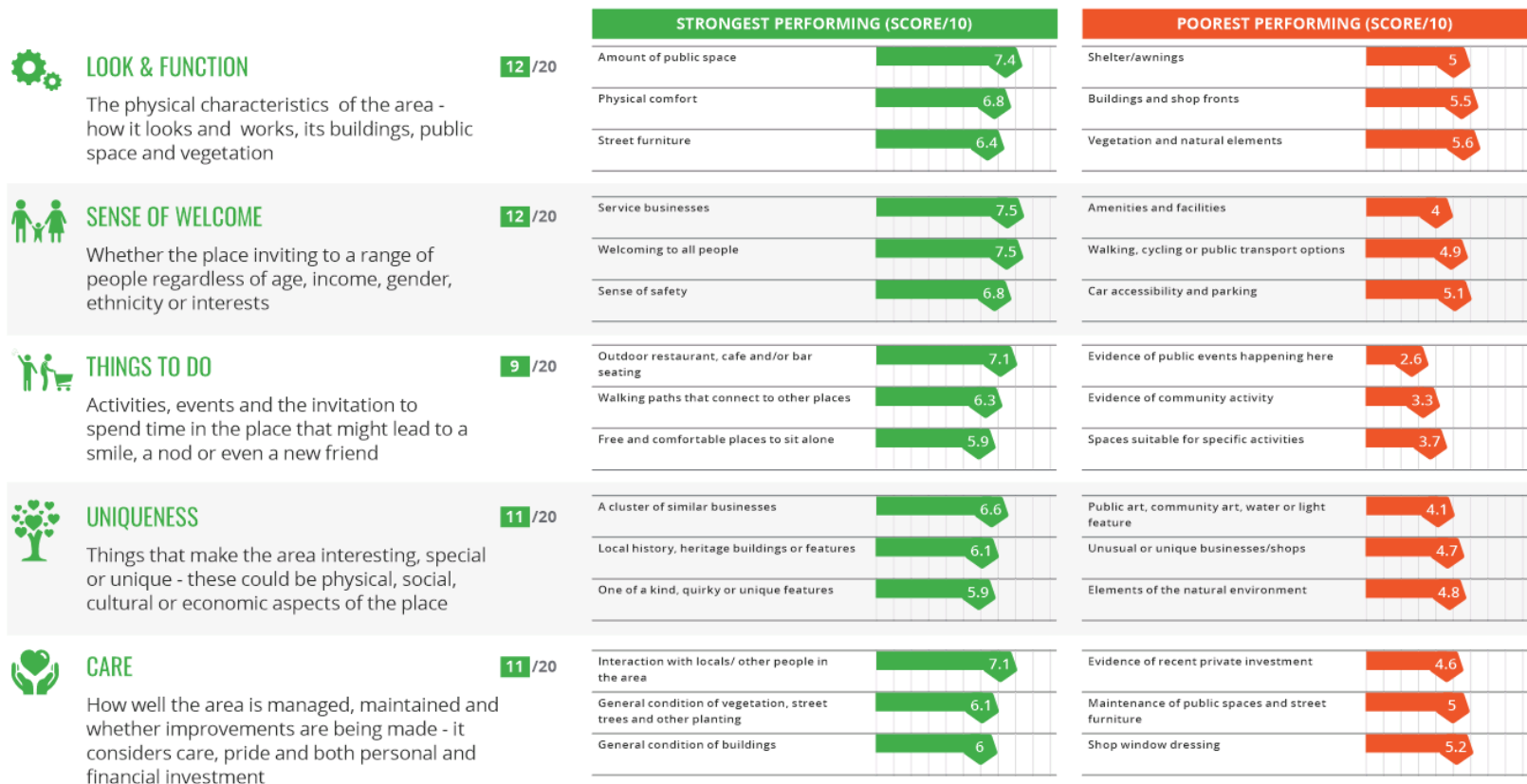
COMMUNITY GROUP PX SCORES

Groups within your community may perceive place experience differently to one another. The following infographic displays the PX Scores for different demographic segments:

Total¹ n=26
Segment (%)



A town centre's PX Score is a number between 0 and 100 which measures your community's experience of that place. Here we drill down into the individual place attributes which contribute positively and negatively to place experience. The three strongest and poorest attributes under each place dimension are listed. Each attribute score is shown as a number between 0 and 10.



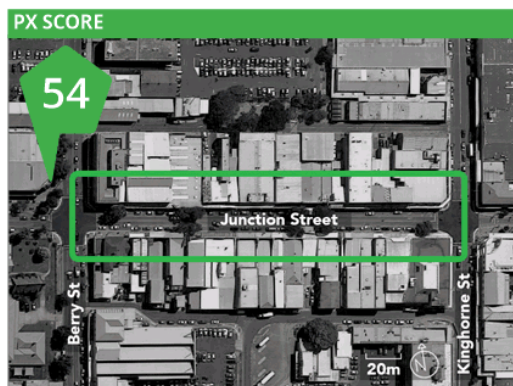
JUNCTION STREET PLACE EXPERIENCE

Junction Street (btw Berry St and Kinghorne St)

Junction Street is a two-way main street in the suburb of Nowra. It is flanked by one-two storeyed buildings with fine grain shopfronts and footpaths sheltered under awnings. The street has a mix of retail, hospitality, service and commercial businesses. It has on-street parking, a 40 km/h vehicular speed limit, public seating and connecting arcades and lanes.

KEY FINDINGS

- 25 people completed an on-site assessment via face-to-face surveys between 28-30 Jan 2021.
- Junction Street received a PX Score of 54/100.
- The strongest rated attribute is 'Service businesses'.
- The poorest rated attribute is 'Evidence of public events happening here'.
- Men rate 'Sense of safety (for all ages, genders, day/night etc.)' 37.1% higher than women.
- Women rate 'Interaction with locals/ other people in the area (smiles, customer service etc.)' 16.8% higher than men.
- 15-24 yrs olds rate 'outdoor restaurant, cafe and/or bar seating' 46.7% higher than 45-64 yrs olds.
- 65+ yrs olds rate 'physical comfort (impacts from noise, smells, temperature)' 22.3% higher than 45-64 yrs olds.
- Residents rate 'amount of public space (footpaths and public spaces)' 55% higher than students.

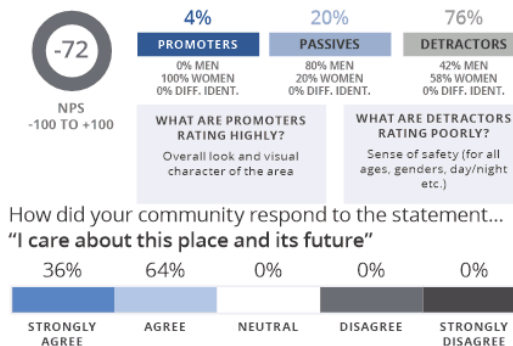


HOW DOES JUNCTION STREET COMPARE WITH OTHER SIMILAR PLACES?



NET PROMOTER SCORE (NPS)²

How likely is your community to recommend this place?



COMMUNITY GROUP PX SCORES

Groups within your community may perceive place experience differently to one another. The following infographic displays the PX Scores for different demographic segments:

Total¹ n=25
Segment (%)



A town centre's PX Score is a number between 0 and 100 which measures your community's experience of that place. Here we drill down into the individual place attributes which contribute positively and negatively to place experience. The three strongest and poorest attributes under each place dimension are listed. Each attribute score is shown as a number between 0 and 10.



JUNCTION STREET PLACE EXPERIENCE

Junction Street (btw Kinghorne St and Nowra Ln)

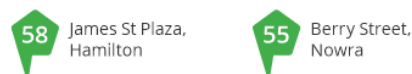
Junction Street is a one-way, east-west oriented street in the suburb of Nowra. The western part of this street between Kinghorne St and O'Connell Ln is a shared zone with a 10 km/h vehicular speed limit. This street is flanked by one-two storeyed buildings with predominantly inactive frontages. The street features trees, awnings, seating, a water bubbler and taxi rank.

KEY FINDINGS

- 25 people completed an on-site assessment via face-to-face surveys between 28-30 Jan 2021.
- Junction Street received a PX Score of 55/100.
- The strongest rated attribute is 'Grocery and fresh food businesses'.
- The poorest rated attribute is 'Things to do in the evening'.
- Men rate 'Street furniture (including benches, bins, lights etc.)' 22.3% higher than women.
- Women rate 'Businesses that reflect the local community and values' 26.3% higher than men.
- 65+ yrs olds rate 'Welcoming to all people' 45.6% higher than 45-64 yrs olds.
- People with Australasian ancestry rate 'Physical comfort (impacts from noise, smells, temperature)' 32.1% higher than people with European ancestry.
- People with Aboriginal or Torres Strait Islander ancestry rate 'Overall look and visual character of the area' 51.4% higher than people with European ancestry.

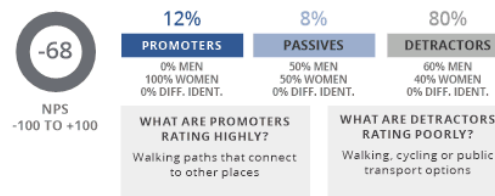


HOW DOES JUNCTION STREET COMPARE WITH OTHER SIMILAR PLACES?

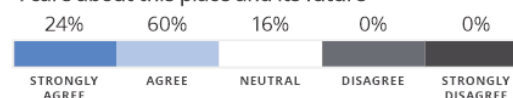


NET PROMOTER SCORE (NPS)²

How likely is your community to recommend this place?



How did your community respond to the statement...
"I care about this place and its future"



COMMUNITY GROUP PX SCORES




Groups within your community may perceive place experience differently to one another. The following infographic displays the PX Scores for different demographic segments.

Total¹ n=25

Segment (%)



A town centre's PX Score is a number between 0 and 100 which measures your community's experience of that place. Here we drill down into the individual place attributes which contribute positively and negatively to place experience. The three strongest and poorest attributes under each place dimension are listed. Each attribute score is shown as a number between 0 and 10.

		STRONGEST PERFORMING (SCORE/10)	POOREST PERFORMING (SCORE/10)
 LOOK & FUNCTION The physical characteristics of the area - how it looks and works, its buildings, public space and vegetation	12 /20	Ease of walking around 6.8	Overall look and visual character of the area 4.6
		Amount of public space 6.7	Street furniture 5.2
		Vegetation and natural elements 6.6	Buildings and shop fronts 5.6
 SENSE OF WELCOME Whether the place is inviting to a range of people regardless of age, income, gender, ethnicity or interests	12 /20	Grocery and fresh food businesses 7.7	Amenities and facilities 4.7
		Service businesses 7.6	Walking, cycling or public transport options 4.7
		Diversity of price points 6.7	Sense of safety 4.9
 THINGS TO DO Activities, events and the invitation to spend time in the place that might lead to a smile, a nod or even a new friend	10 /20	Walking paths that connect to other places 7	Things to do in the evening 3.7
		Outdoor restaurant, cafe and/or bar seating 5.5	Evidence of public events happening here 4.1
		Space for group activities or gatherings 5.2	Spaces suitable for specific activities 4.3
 UNIQUENESS Things that make the area interesting, special or unique - these could be physical, social, cultural or economic aspects of the place	10 /20	Unique mix or diversity of people in the area 5.7	Unusual or unique businesses/shops 4.2
		Local history, heritage buildings or features 5.6	A cluster of similar businesses 4.2
		Elements of the natural environment 5.6	Unusual or unique buildings or public space design 4.6
 CARE How well the area is managed, maintained and whether improvements are being made - it considers care, pride and both personal and financial investment	11 /20	General condition of vegetation, street trees and other planting 6.6	Evidence of recent private investment 4.3
		Interaction with locals/ other people in the area 6.4	Maintenance of public spaces and street furniture 4.3
		General condition of buildings 5.7	Cleanliness of public space 4.7

KINGHORNE STREET PLACE EXPERIENCE

Kinghorne Street (btw Junction St and North St)

Kinghorne Street is a two-way north-south oriented street in the suburb of Nowra. Along the street are one-two storeyed buildings with predominantly inactive frontages. The street has a mix of grocery, hospitality and service businesses, within and outside Nowra Shopping Mall. It features on street parking, a bus zone, public benches and some heritage buildings.

KEY FINDINGS

- 29 people completed an on-site assessment via face-to-face surveys between 28-30 Jan 2021.
- Kinghorne Street received a PX Score of 46/100.
- The strongest rated attribute is 'Grocery and fresh food businesses'.
- The poorest rated attribute is 'Things to do in the evening'.
- Men rate 'Diversity of price points (\$ to \$\$\$)' 14% higher than women.
- Women rate 'Free and comfortable group seating' 23.8% higher than men.
- 25-44 yrs olds rate 'Local history, heritage buildings or features' 36.6% higher than 65+ yrs olds.
- 65+ yrs olds rate 'Free and comfortable places to sit alone' 28.1% higher than 15-24 yrs olds.
- People with *Aboriginal or Torres Strait Islander* ancestry rate 'Interesting things to look at (people, shops, views etc.)' 60.6% higher than people with *European* ancestry.

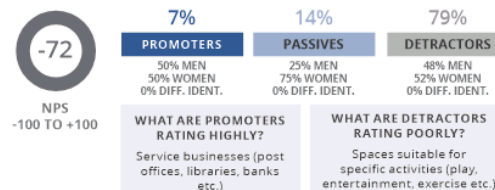


HOW DOES KINGHORNE STREET COMPARE WITH OTHER SIMILAR PLACES?

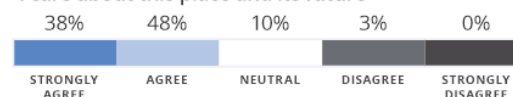


NET PROMOTER SCORE (NPS)²

How likely is your community to recommend this place?



How did your community respond to the statement...
"I care about this place and its future"



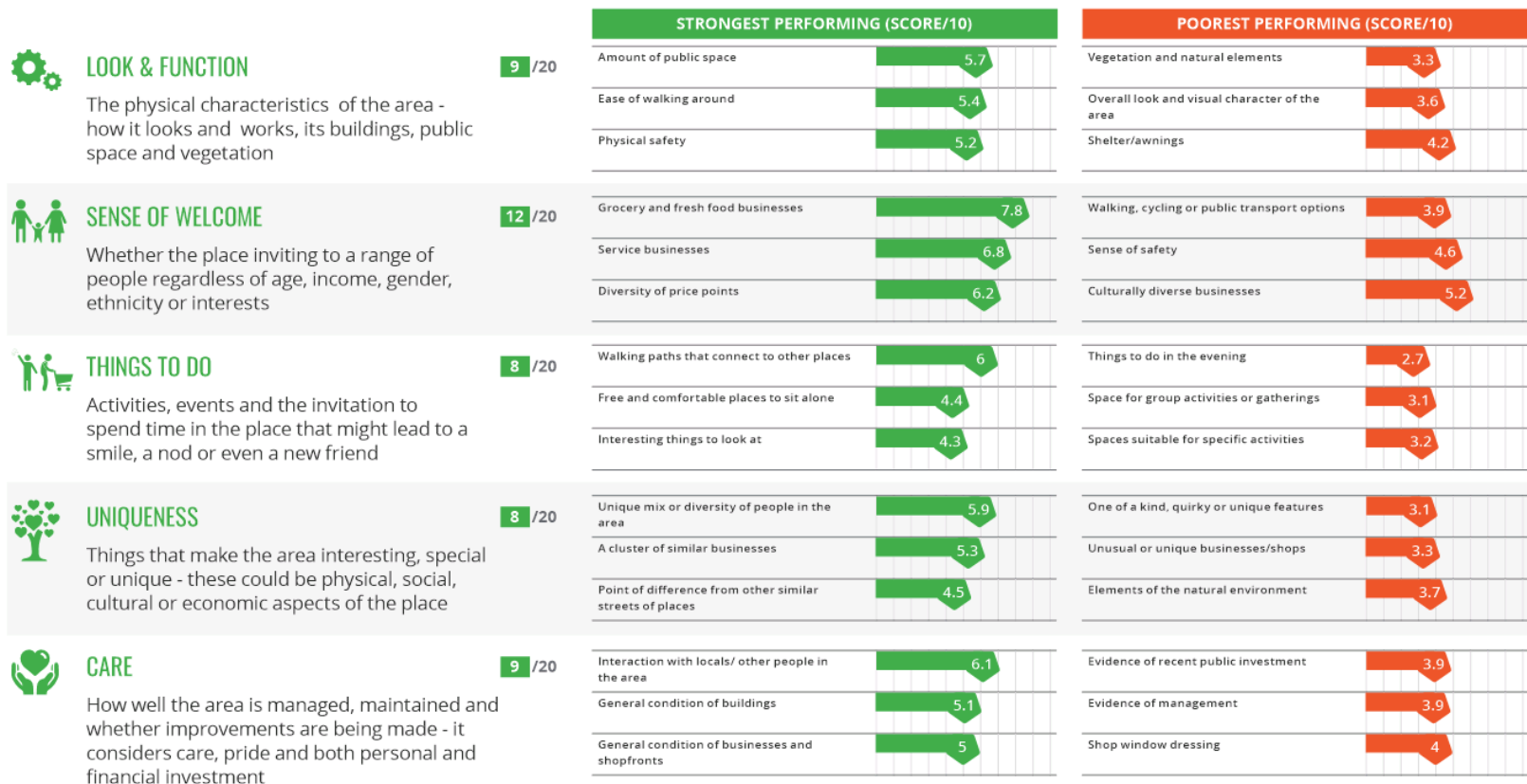
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Total¹ n=29
Segment (%)



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KINGHORNE STREET PLACE EXPERIENCE

Kinghorne Street (btw Worrigee St and Junction St)

Kinghorne Street is a two way, slightly sloping street in the suburb of Nowra. It is flanked by one-two storeyed built form housing retail, hospitality, service and commercial businesses. The street features unique flowering trees, on street parking, a bus zone, public seating and some outdoor dining.

KEY FINDINGS

- 27 people completed an on-site assessment via face-to-face surveys between 28-30 Jan 2021.
- Kinghorne Street received a PX Score of 51/100.
- The strongest rated attribute is 'Service businesses'.
- The poorest rated attribute is 'Amenities and facilities'.
- Men rate 'Things to do in the evening (shopping, dining, entertainment etc.)' 24.9% higher than women.
- Women rate 'Overall look and visual character of the area' 20% higher than men.
- 25-44 yrs olds rate 'Grocery and fresh food businesses' 33.1% higher than 65+ yrs olds.
- 45-64 yrs olds rate 'Quality of public space (footpaths and public spaces)' 18.5% higher than 15-24 yrs olds.
- Residents rate 'Walking paths that connect to other places' 47.5% higher than workers.

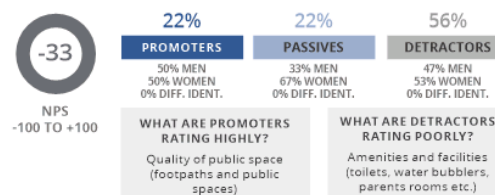


HOW DOES KINGHORNE STREET COMPARE WITH OTHER SIMILAR PLACES?



NET PROMOTER SCORE (NPS)²

How likely is your community to recommend this place?



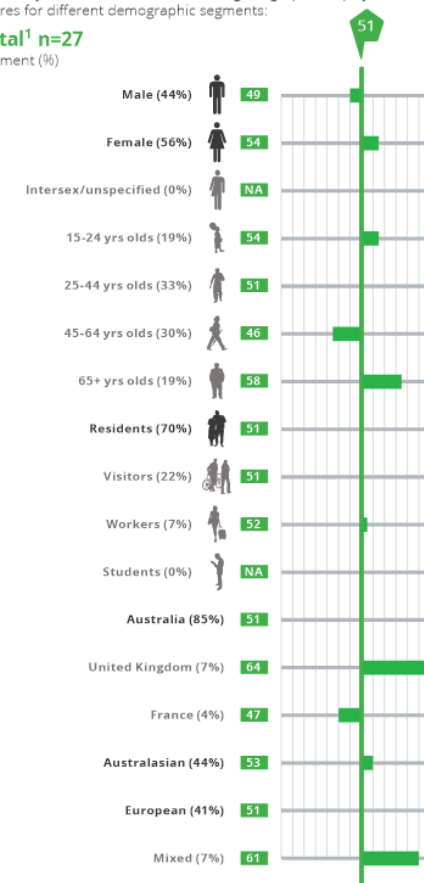
How did your community respond to the statement...
"I care about this place and its future"



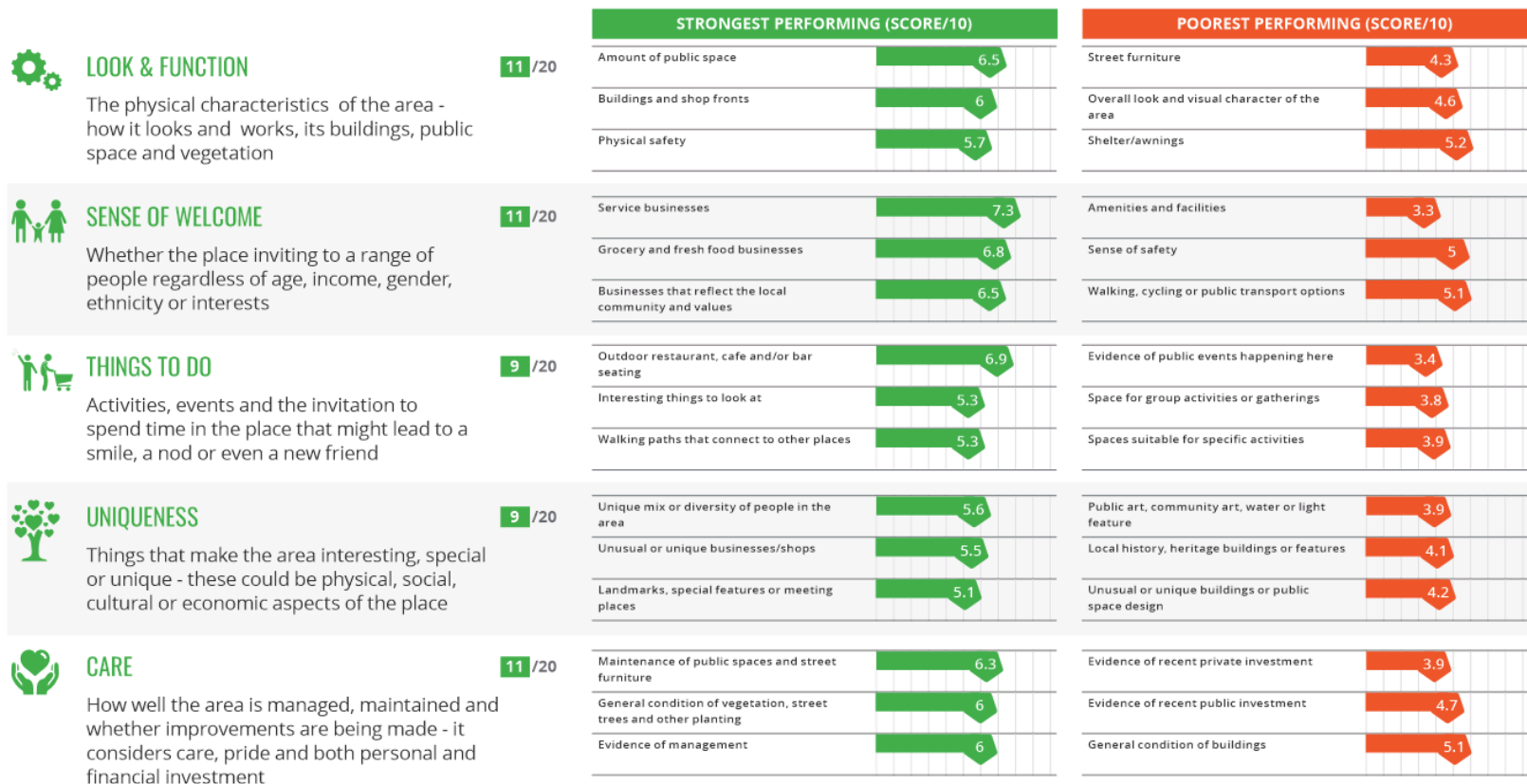
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HOW DOES NOWRA COMPARE?

Nowra is performing below the National Benchmark average.

Understanding your strengths and weaknesses compared to the National Benchmark can help you plan to build on your competitive advantage or improve areas that are under-performing.

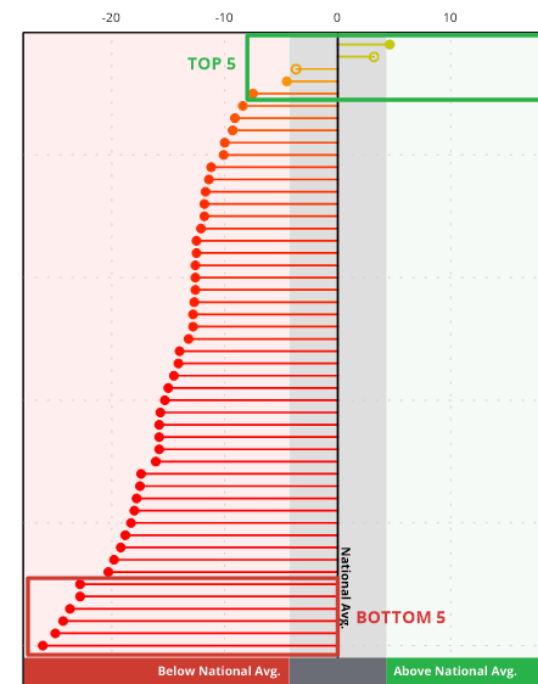
PX SCORES

- 72 Vulcan Street, Moruya, Eurobodalla Shire
- 66 National Benchmark Average
- 55 Berry Street (Btw Worrigee St and Junction St), Nowra
- 55 Junction Street (Btw Kinghorne St and Nowra Ln), Nowra
- 54 Junction Street (Btw Berry St and Kinghorne St), Nowra
- 53 Nowra Average
- 51 Kinghorne Street (Btw Worrigee St and Junction St), Nowra
- 49 Burton Street, Vincentia
- 46 Kinghorne Street (Btw Junction St and North St), Nowra

BEST AND WORST PERFORMING ATTRIBUTES

TOP 5 ATTRIBUTES COMPARED TO THE NATIONAL AVERAGE	DIFFERENCE FROM NATIONAL AVERAGE
Service businesses (post offices, libraries, banks etc.)	+4.6%
Grocery and fresh food businesses	+3.2%
Diversity of price points (\$ to \$\$\$)	-3.7%
Car accessibility and parking	-4.5%
Interaction with locals/ other people in the area (smiles, customer service etc.)	-7.5%

BOTTOM 5 ATTRIBUTES COMPARED TO THE NATIONAL AVERAGE	DIFFERENCE FROM NATIONAL AVERAGE
Evidence of public events happening here (markets, street entertainers etc.)	-26.1%
Overall look and visual character of the area	-25.0%
Spaces suitable for specific activities (play, entertainment, exercise etc.)	-24.3%
Walking, cycling or public transport options	-23.7%
Things to do in the evening (shopping, dining, entertainment etc.)	-22.8%



Average PX Scores of all 50 attributes of Nowra's surveyed streets compared with Place Score's National Benchmark

2021 PRIORITIES FOR NOWRA

(Overall)

By understanding what the local community values and how it rates your mainstreet, we can preserve what is working well and recommend the areas for impactful investment.

These tables and graph illustrate your town centre strengths, improvement priorities and secondary priorities.

STRENGTHS should be celebrated and protected.

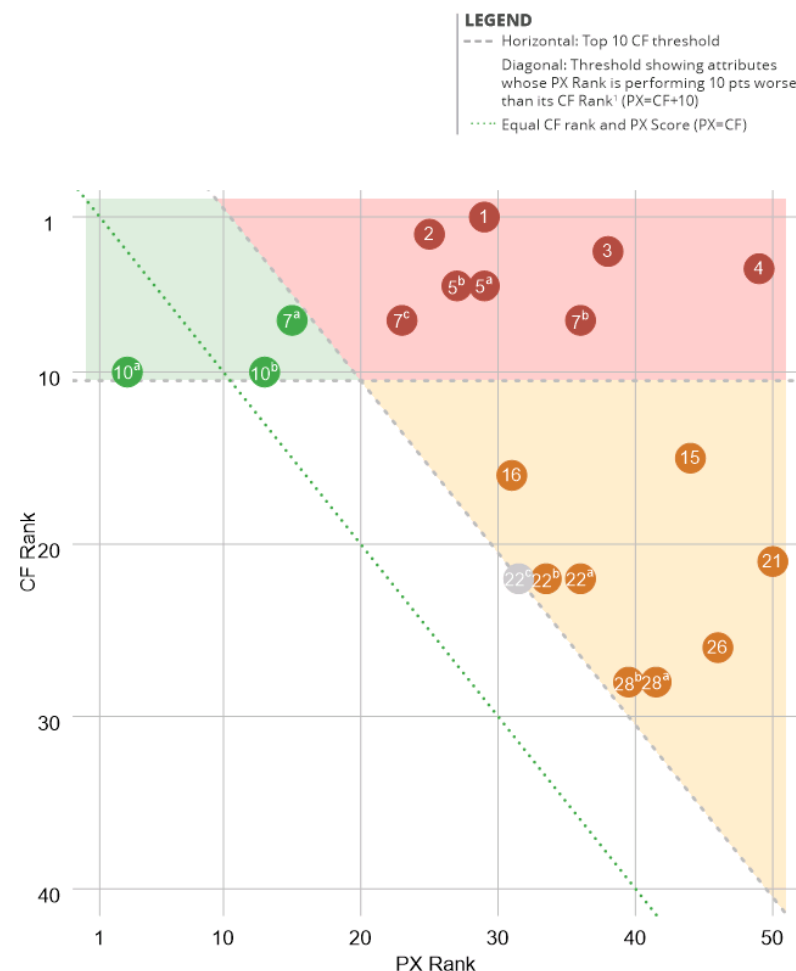
IMPROVEMENT PRIORITIES identify the aspects of your town centre that are important to people but are currently under-performing. Improving these attributes will have the most significant impact on your community.

FOR CONSIDERATION identify attributes to look-out for, they are negatively affecting your town centre and can become more significant issues if more people start caring about them.

CF	STRENGTHS
10 ^a	Welcoming to all people
10 ^b	Outdoor restaurant, cafe and/or bar seating
7 ^c	General condition of vegetation, street trees and other planting

CF	IMPROVEMENT PRIORITIES
4	Things to do in the evening (shopping, dining, entertainment etc.)
3	Elements of the natural environment (views, vegetation, topography, water etc.)
7 ^a	Overall look and visual character of the area
1	Local history, heritage buildings or features
5 ^a	Maintenance of public spaces and street furniture
2	Sense of safety (for all ages, genders, day/night etc.)
5 ^b	Vegetation and natural elements (street trees, planting, water etc.)
7 ^c	Cleanliness of public space

CF	FOR CONSIDERATION
21	Evidence of public events happening here (markets, street entertainers etc.)
15	Public art, community art, water or light feature
26	Evidence of community activity (community gardening, art, fundraising etc.)
16	Interesting things to look at (people, shops, views etc.)
22 ^a	Amenities and facilities (toilets, water bubblers, parents rooms etc.)
28 ^a	Unusual or unique businesses/shops
28 ^b	One of a kind, quirky or unique features
22 ^b	Walking, cycling or public transport options
22 ^c	Landmarks, special features or meeting places



2021 PRIORITIES FOR BERRY STREET

(Btw Worrige St and Junction St)

By understanding what the local community values and how it rates your mainstreet, we can preserve what is working well and recommend the areas for impactful investment.

These tables and graph illustrate your town centre strengths, improvement priorities and secondary priorities.

STRENGTHS should be celebrated and protected.

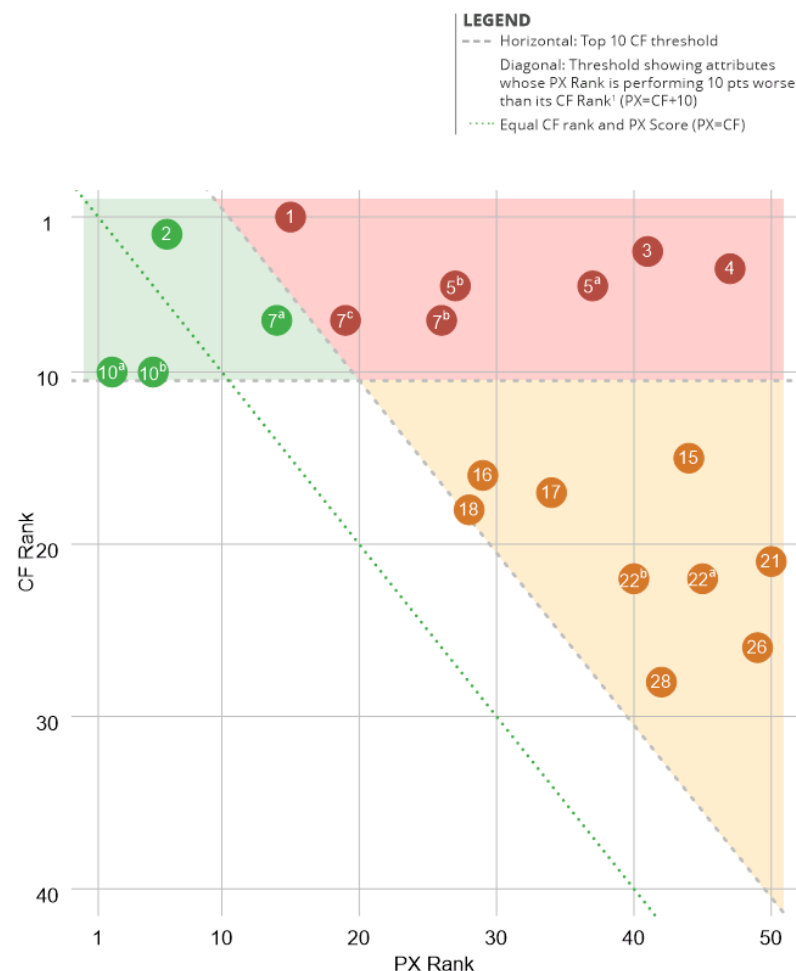
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CF	STRENGTHS
10 ^a	Welcoming to all people
10 ^b	Outdoor restaurant, cafe and/or bar seating
2	Sense of safety (for all ages, genders, day/night etc.)
7 ^a	General condition of vegetation, street trees and other planting

CF	IMPROVEMENT PRIORITIES
4	Things to do in the evening (shopping, dining, entertainment etc.)
3	Elements of the natural environment (views, vegetation, topography, water etc.)
5 ^a	Maintenance of public spaces and street furniture
5 ^b	Vegetation and natural elements (street trees, planting, water etc.)
7 ^a	Cleanliness of public space
1	Local history, heritage buildings or features
7 ^c	Overall look and visual character of the area

CF	FOR CONSIDERATION
21	Evidence of public events happening here (markets, street entertainers etc.)
15	Public art, community art, water or light feature
22 ^a	Amenities and facilities (toilets, water bubblers, parents rooms etc.)
26	Evidence of community activity (community gardening, art, fundraising etc.)
22 ^b	Walking, cycling or public transport options
17	Car accessibility and parking
28	Unusual or unique businesses/shops
16	Interesting things to look at (people, shops, views etc.)
18	Buildings and shop fronts



2021 PRIORITIES FOR JUNCTION STREET

(Btw Berry St and Kinghorne St)

By understanding what the local community values and how it rates your mainstreet, we can preserve what is working well and recommend the areas for impactful investment.

These tables and graph illustrate your town centre strengths, improvement priorities and secondary priorities.

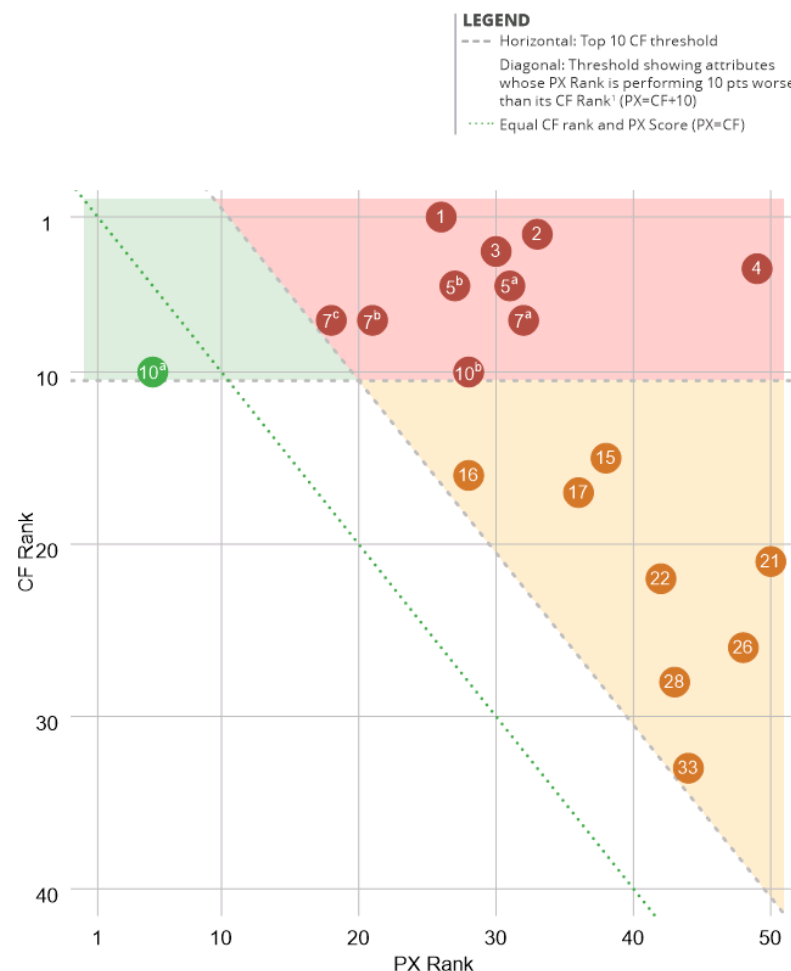
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FOR CONSIDERATION identify attributes to look-out for, they are negatively affecting your town centre and can become more significant issues if more people start caring about them.

CF	STRENGTHS
10 ^a	Welcoming to all people

CF	IMPROVEMENT PRIORITIES
4	Things to do in the evening (shopping, dining, entertainment etc.)
2	Sense of safety (for all ages, genders, day/night etc.)
3	Elements of the natural environment (views, vegetation, topography, water etc.)
5 ^a	Vegetation and natural elements (street trees, planting, water etc.)
7 ^a	Overall look and visual character of the area
1	Local history, heritage buildings or features
5 ^a	Maintenance of public spaces and street furniture
10 ^a	Outdoor restaurant, cafe and/or bar seating
7 ^a	General condition of vegetation, street trees and other planting
7 ^a	Cleanliness of public space
CF	FOR CONSIDERATION
21	Evidence of public events happening here (markets, street entertainers etc.)
15	Public art, community art, water or light feature
26	Evidence of community activity (community gardening, art, fundraising etc.)
22	Landmarks, special features or meeting places
17	Car accessibility and parking
28	One of a kind, quirky or unique features
16	Interesting things to look at (people, shops, views etc.)
33	Evidence of recent public investment (new planting, paving, street furniture etc.)



2021 PRIORITIES FOR JUNCTION STREET

(Btw Kinghorne St and Nowra Ln)

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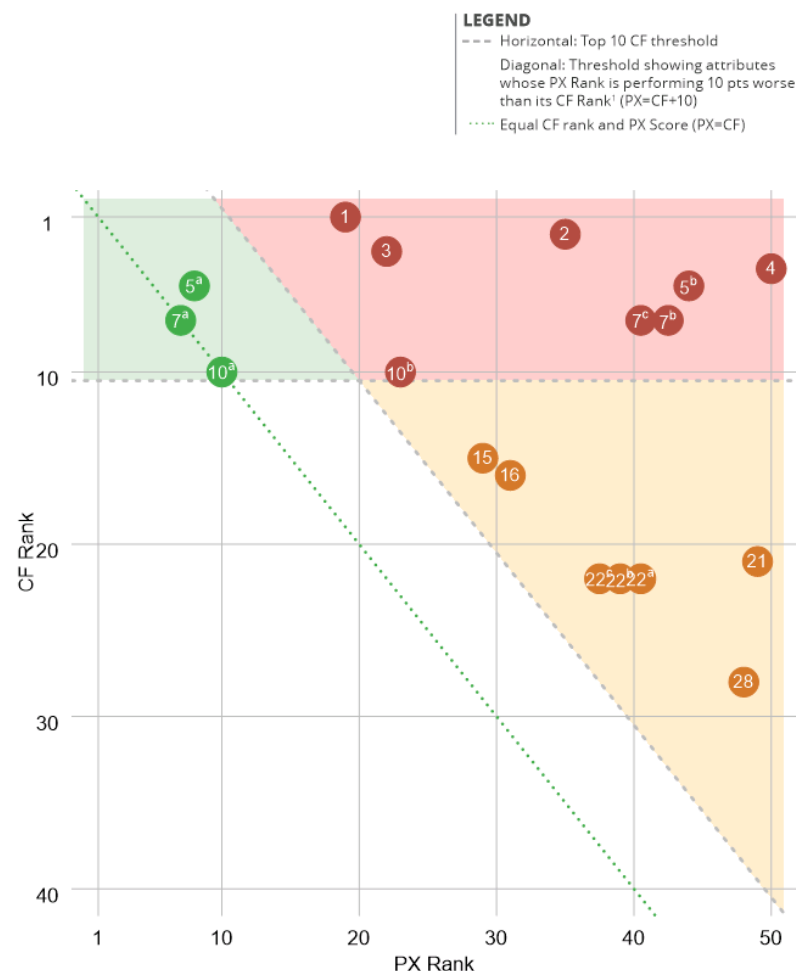
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7 ^a	General condition of vegetation, street trees and other planting
5 ^a	Vegetation and natural elements (street trees, planting, water etc.)

CF	IMPROVEMENT PRIORITIES
4	Things to do in the evening (shopping, dining, entertainment etc.)
5 ^a	Maintenance of public spaces and street furniture
7 ^a	Overall look and visual character of the area
7 ^a	Cleanliness of public space
2	Sense of safety (for all ages, genders, day/night etc.)
3	Elements of the natural environment (views, vegetation, topography, water etc.)
1	Local history, heritage buildings or features
10 ^a	Outdoor restaurant, cafe and/or bar seating

CF	FOR CONSIDERATION
21	Evidence of public events happening here (markets, street entertainers etc.)
28	Unusual or unique businesses/shops
22 ^a	Landmarks, special features or meeting places
22 ^a	Amenities and facilities (toilets, water bubblers, parents rooms etc.)
22 ^a	Walking, cycling or public transport options
16	Interesting things to look at (people, shops, views etc.)
15	Public art, community art, water or light feature



2021 PRIORITIES FOR KINGHORNE STREET

(Btw Junction St and North St)

By understanding what the local community values and how it rates your mainstreet, we can preserve what is working well and recommend the areas for impactful investment.

These tables and graph illustrate your town centre strengths, improvement priorities and secondary priorities.

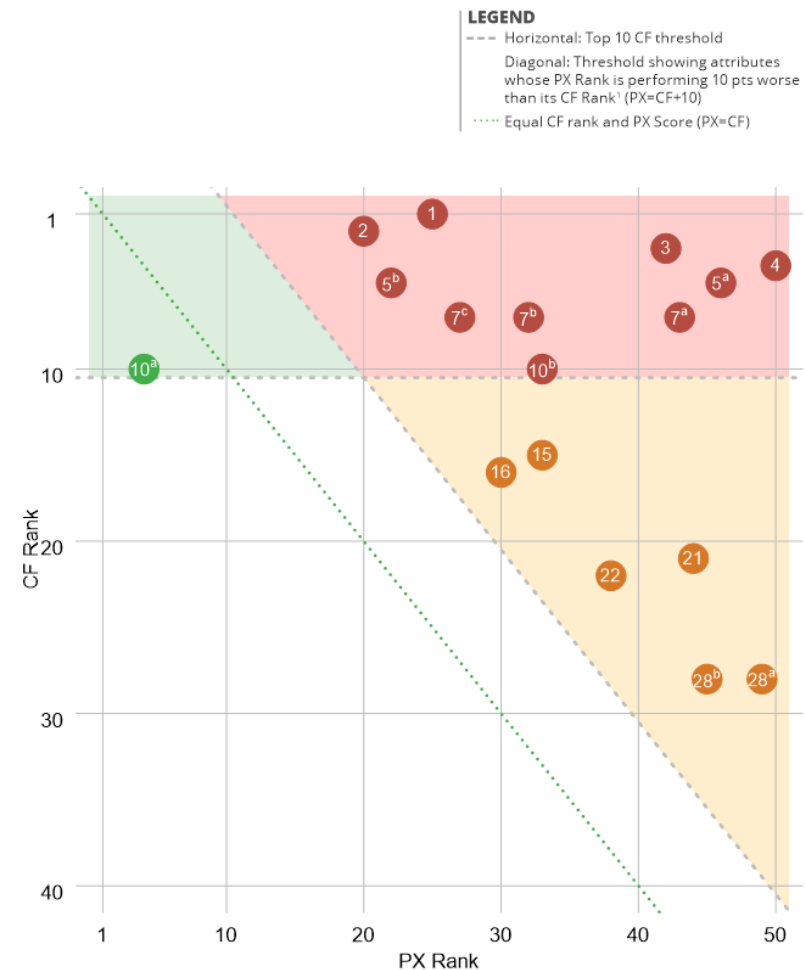
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CF	STRENGTHS
10 ^a	Welcoming to all people

CF	IMPROVEMENT PRIORITIES
4	Things to do in the evening (shopping, dining, entertainment etc.)
5 ^a	Vegetation and natural elements (street trees, planting, water etc.)
3	Elements of the natural environment (views, vegetation, topography, water etc.)
7 ^a	Overall look and visual character of the area
7 ^a	General condition of vegetation, street trees and other planting
1	Local history, heritage buildings or features
10 ^b	Outdoor restaurant, cafe and/or bar seating
7 ^a	Cleanliness of public space
2	Sense of safety (for all ages, genders, day/night etc.)
5 ^a	Maintenance of public spaces and street furniture
CF	FOR CONSIDERATION
21	Evidence of public events happening here (markets, street entertainers etc.)
28 ^a	One of a kind, quirky or unique features
15	Public art, community art, water or light feature
28 ^a	Unusual or unique businesses/shops
22	Walking, cycling or public transport options
16	Interesting things to look at (people, shops, views etc.)



2021 PRIORITIES FOR KINGHORNE STREET

(Btw Worrigeer St and Junction St)

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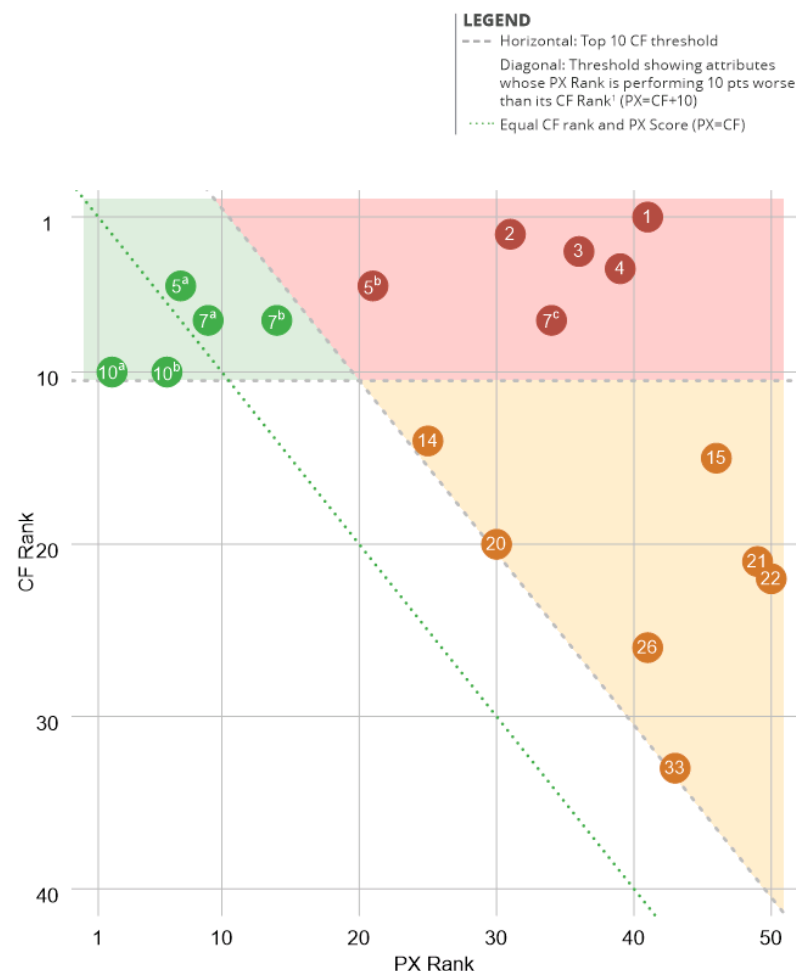
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10 ^b	Welcoming to all people
7 ^a	General condition of vegetation, street trees and other planting
5 ^a	Maintenance of public spaces and street furniture
7 ^a	Cleanliness of public space

CF	IMPROVEMENT PRIORITIES
1	Local history, heritage buildings or features
4	Things to do in the evening (shopping, dining, entertainment etc.)
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7 ^a	Overall look and visual character of the area
5 ^a	Vegetation and natural elements (street trees, planting, water etc.)

CF	FOR CONSIDERATION
15	Public art, community art, water or light feature
22	Amenities and facilities (toilets, water bubblers, parents rooms etc.)
21	Evidence of public events happening here (markets, street entertainers etc.)
26	Evidence of community activity (community gardening, art, fundraising etc.)
14	Walking paths that connect to other places
33	Free and comfortable places to sit alone
20	General condition of buildings



FOR MORE INFORMATION
PLEASE CONTACT PLACE SCORE

PLACESCORE.ORG
+61 (2) 8021 7027



**NOWRA CBD REVITALISATION
ACTION PLAN 2021-2023**
STAGE 2 ENGAGEMENT SUMMARY REPORT

V1 24.03.2021

SA21.142 - Attachment 3

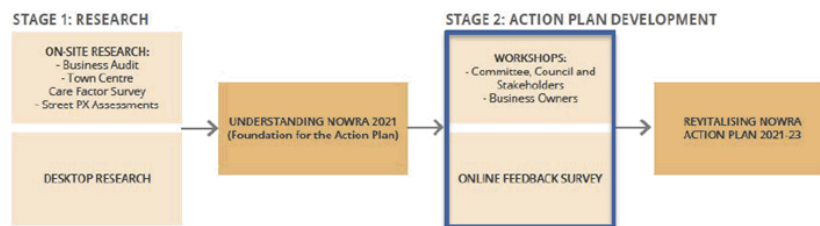
INTRODUCTION

PROJECT OVERVIEW

Place Score has been engaged by the Nowra CBD Revitalisation Strategy Committee to develop an aligned and budgeted Action Plan for Nowra CBD. The goal is to help deliver the Nowra CBD Urban Design Masterplan's vision through a series of smaller interventions over a three year period.

As a part of developing the Action Plan, Place Score engaged with almost 800 people associated with Nowra over two stages between January and March 2021. The stage 1 engagement conducted in January 2021 focussed on understanding the performance of mainstreets in the CBD and the community's aspirations and priorities for improvement. The findings of stage 1 engagement are included in the 'Understanding Nowra 2021' report.

The stage 2 engagement conducted in February – March 2021 focussed on seeking ideas for revitalisation that would have the most benefit for customers and businesses in the Nowra CBD over the next three years. This included workshops with the Nowra CBD Revitalisation Strategy Committee, Shoalhaven City Councillors, council staff, invited stakeholders and the CBD retail and hospitality businesses as well as an online feedback survey for the wider community. This report summarises the inputs and feedback collected during the Stage 2 engagement.



Two-stage process for developing the Nowra CBD Revitalisation Action Plan 2021-23

NOWRA REVITALISATION WORKSHOPS

Place Score conducted two workshops in Nowra on the 24th of February 2021. The first workshop was with members of the Nowra CBD Revitalisation Strategy Committee, Shoalhaven City Councillors, council staff and invited stakeholders, whereas the second one was with retail and hospitality business owners in the CBD.



Following are the participation details of these workshops:

Engagement	Date	Participation
Workshop 1	24 th Feb 2021	20
Workshop 2	24 th Feb 2021	17

24 Feb 2021 – Workshop 1 Attendees (n=20):

Name	Affiliations
[REDACTED]	Mayor, Shoalhaven City Council
[REDACTED]	Councillor, Shoalhaven City Council
[REDACTED]	Councillor, Shoalhaven City Council
[REDACTED]	Councillor, Shoalhaven City Council
[REDACTED]	Councillor, Shoalhaven City Council
[REDACTED]	Councillor, Shoalhaven City Council
[REDACTED]	Councillor, Shoalhaven City Council
[REDACTED]	Nowra CBD Revitalisation Strategy Committee
[REDACTED]	Nowra CBD Revitalisation Strategy Committee
[REDACTED]	Nowra CBD Revitalisation Strategy Committee
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council
[REDACTED]	Staff, Shoalhaven City Council

24 Feb 2021 – Workshop 2 Attendees (n=17):

Name	Affiliations (Business Name)
[REDACTED]	Pony The Label
[REDACTED]	Blooms Pharmacy
[REDACTED]	Decadence Cakes
[REDACTED]	Meraki Home & You
[REDACTED]	Kate English Designs
[REDACTED]	Eli Horses
[REDACTED]	(Not provided)
[REDACTED]	Hit n Run Coffee Shop & Roasters
[REDACTED]	Hit n Run Coffee Shop & Roasters
[REDACTED]	Sturgiss Newsagency
[REDACTED]	Sturgiss Newsagency
[REDACTED]	Comfort Shoes
[REDACTED]	Good Games Nowra
[REDACTED]	Good Games Nowra
[REDACTED]	Valentino's For Men
[REDACTED]	Dymocks Nowra
[REDACTED]	Scruples

At the workshops, Place Score presented the key findings from the research and engagement conducted during stage 1 of the project. Place Score also presented three key directions for CBD revitalisation along with a long list of potential actions for revitalisation. The three key directions are:

- Celebrate Nowra
- Something for All
- A Great Place to Hang Out

Both the workshop sessions were conducted in a similar way. Following are the activities conducted at each session:

Activity	Purpose	How it was conducted
Strengths and Challenges of Nowra CBD	To understand whether there were any gaps in the research in terms of strengths and challenges of the CBD	Individual activity – each participant wrote strengths and challenges of Nowra CBD on post-it notes
Prioritisation and Development of Actions	To understand which actions are seen as a priority by the workshop participants and to seek new ideas for CBD revitalisation	Group activity – groups were allocated to each of the three Key Directions. Each group prioritised actions specific to that direction.

NOWRA CBD REVITALISATION ACTIONS – FEEDBACK SURVEY

Place Score conducted a survey with Nowra's associates seeking feedback on the Key Directions and potential actions for revitalisation developed through the workshops. Respondents were also asked to provide new ideas for revitalisation. The survey was conducted between 26th February and 14th March 2021. 540 people shared their inputs in the same.

Following are the details of survey participation:

	Percentage
Completed surveys	73.00%
Partial surveys	27.00%

	Participation
Gender	
Male	26%
Female	73.60%
Intersex, Indeterminate or Unspecified	0.40%
Age	
Under 18	1.00%
18-24	5.20%
25-34	17.50%
35-44	19.00%
45-54	17.30%
55-64	20.20%
65-74	16.50%
75+	3.30%
Household type	
Single person household	12.20%
Family Household	84.00%
Group Household	3.70%
Association with Nowra CBD	
Local resident	82.80%
Landowner	20.10%
Business owner	10.40%
Employee	18.50%
Visitor	9.50%
Other	3.30%
No association with Nowra CBD	1.50%

Business owners and employees who participated in the survey were asked to provide their business/ organisation name if willing. Following are their responses:

- Black Pepper
- Think Tank Business Services
- Woolworths
- Meraki Home & You
- Decadence Cakes Gifts & Treats
- Jumbunna Children's Centre
- State Government Department
- The Deli on Kinghorne
- South Coast Medical Service Aboriginal Corp
- One Agency Elite Property Group
- Nowra community centre
- North Nowra Public School
- South Coast Brides
- Commonwealth Bank Nowra
- BJ Communications
- Shoalhaven Fine Art and Framing
- Kelmc Artworks Face & Body Art
- Hit n Run Coffee
- Hearing Australia
- Nowra Emergency Plumbing
- Leslie & Thompson: Shoalhaven Surveyors
- Kate English Designs
- Shoalhaven Hospital
- Solomon Motor Group
- Comfort Shoes
- Dymocks Nowra
- Pony the Label
- Blooms The Chemist
- NSW Community Health Centre
- Aquatique
- Sturgiss-Newsagency
- CartridgeFIX
- Marriage Celebrant in Jervis Bay
- Tapitallee Lodges, Tapitallee
- Murphy Family Funerals
- Caresouth
- Bonza Beads
- Anglicare
- Gallery 14
- Simply Shutters and Blinds
- NSW Transport Logistics
- Anne Bonny's Locker
- Ty Beanie Boo

KEY ENGAGEMENT FINDINGS

The engagement conducted by Place Score in February – March 2021 revealed that Nowra CBD's customers, stakeholders and decision makers would like to see more activities in the town for locals on a regular basis and a comfortable experience of shopping and staying.

KEY STRENGTHS AND CHALLENGES OF NOWRA CBD

The following emerged as the key strengths of Nowra CBD based on the inputs from workshop participants:

- Great location, community destinations and open spaces that have the potential to attract customers
- Buildings with character and public art
- Some unique businesses and a welcoming and friendly day time environment
- Growing population and increasing investment in the town

The following emerged as the key challenges of Nowra CBD based on the inputs from workshop participants:

- Lack of a strong identity and connection with natural assets and Indigenous culture
- Lack of night-time, weekend and outdoor dining offering, specialty shops and events
- Car-dominated public domain lacking amenities for walking and staying places
- Perception of poor safety due to the presence of anti-social activities on the mainstreets
- Limited residential development in the CBD

PRIORITISATION OF ACTIONS

The following table illustrates the actions selected by workshop participants to be invested in over the next three years along with indicative budgets. Please note that the inputs from Nowra CBD's customers collected through the online survey (n=540) take precedence over the inputs collected during the workshops (n=37). Also note that the budgets in the following table have been amended in the Action Plan after further research.



Action	Budget	Group 1			Total/ action	Group 2			Total
		Year 1	Year 2	Year 3		Year 1	Year 2	Year 3	
Celebrate Nowra									
A Place Manager for Nowra CBD	\$80,000	✓	✓	✓	\$240,000	✓	✓	✓	\$240,000
Nowra Activators	\$20,000	✓	✓	✓	\$60,000	✓			\$20,000
A Branding and Marketing Strategy (one time) + Yearly Social Media support	\$42,000	✓			\$42,000	✓	✓	✓	\$66,000
Workers' Deals	\$5,000		✓		\$5,000	✓	✓		\$10,000
Nowra Dine-Out Passport	\$5,000		✓		\$5,000			✓	\$5,000
Egans Place Renewal Competition	\$50,000			✓	\$50,000				
Shopping Bags	\$30,000					✓			\$30,000
Something for All									
Night Time Rock Climbing Alley	\$50,000 (EOI Yr 1)	✓	✓	✓	\$50,000		✓	✓	\$50,000
Town Camp for Kids	\$25,000	✓	✓	✓	\$75,000				
Light Up Nowra and Murals	\$80,000	✓	✓	✓	\$240,000		✓		\$80,000
Christmas Wonderland	\$50,000		✓		\$50,000		✓	✓	\$100,000
Junction Court – Quick Wins	\$200,000	✓ (Inflatables, Street Food Festival, Geo Cache)			\$200,000	✓			\$200,000
Summer Festival Hub	\$200,000			✓	\$200,000				
A Great Place to Hang Out									
Clean Up Nowra	\$60,000	✓	✓	✓	\$180,000			✓	\$60,000
Art Crossing	\$100,000		✓	✓ (60K only for First Nations Murals)	\$160,000	✓			\$100,000
A Sittable Nowra	\$30,000	✓			\$30,000		✓		\$30,000
Greening Nowra	\$50,000					✓			\$50,000
Parklet Pilots	\$60,000					✓			\$60,000
Celebrate Our Heritage	\$80,000							✓	\$80,000
Overall Total		\$587,000	\$425,000	\$575,000	\$1,587,000	\$587,000	\$307,000	\$287,000	\$1,181,000



The following table illustrates the actions included in the feedback survey and the level of support from respondents. Actions with over 35% support have been highlighted:

Action	Support
Celebrate Nowra	
#5 A Shop Local campaign	57.30%
#12 A marketing campaign across local media (newspapers, radio, TV etc.) to attract locals	40.90%
#13 A marketing campaign across regional online media (e.g. Time Out Sydney) to attract tourists	39.80%
#14 A dedicated Facebook page for Nowra CBD businesses	38.00%
#15 A Dinner Passport (e.g. eat at all participating restaurants and get one free meal)	37.50%
#16 A monthly booklet/newsletter of offers/specials/events	37.20%
#22 Cross business promotions on social media	24.80%
#23 Workers' special breakfast/lunch deals advertised online/through shopfront posters	21.90%
#25 A unique logo for Nowra CBD	20.10%
#28 Business to business mentoring and support	16.10%
Something for All	
#1 Fresh food markets on Sunday mornings	73.00%
#7 Regular events in Junction Court	49.90%
#8 A summer-time festival hub (temporary transformation of a part of Egans Place car park into a place for events, art exhibits, festivals, etc.)	46.80%
#10 A hub for young entrepreneurs/ start-up businesses in a vacant shop	44.20%
#11 Art and cultural programs – art walks, paint and sip classes, guided heritage tours etc.	43.40%
#18 Longer business trading hours on weekends	35.20%
#19 School holiday activities for kids in the CBD	34.20%
#21 Christmas Wonderland activation (one time event)	28.00%
#26 Weekday Night-time rock climbing in the city (potentially next to the Art Gallery)	18.80%
#29 Tourism-focussed long weekend programs	15.90%
#29 Adult learning programs	15.90%
#31 Games and pizza nights	7.50%
A Great Place to Hang Out	
#2 More greenery across the CBD	65.10%
#3 More outdoor dining spaces outside cafes and restaurants	64.40%
#4 A regular clean-up crew to maintain Nowra CBD public spaces	62.80%
#6 Lighting up Nowra's mainstreets (starting with Berry Street)	54.60%
#9 Junction Court makeover (e.g. addition of group seating, shelter, lighting, etc.)	45.40%
#17 Lighting up heritage building facades	35.40%
#20 More free public seating for groups (e.g. seats facing each other, picnic tables etc)	28.50%
#24 Parklet program (temporary transformation of a couple of car parking spots outside cafes into spaces to sit and dine)	20.30%
#27 Painted artwork crossings at either ends of Junction Street	17.20%
#30 Murals on shopfronts	15.10%

ENGAGEMENT FINDINGS

WORKSHOP 1:

ACTIVITY#1 STRENGTHS AND CHALLENGES

Workshop participants provided the following inputs regarding the strengths and challenges of Nowra CBD:

Strengths	Challenges
<p><i>Physical assets:</i></p> <ol style="list-style-type: none"> 1. Proximity to the river/natural places (4) 2. Emerging developments (2) 3. Art Deco architecture/ Wonderful old building frontages/ Heritage Buildings (2) 4. Large open spaces within the CBD which could be used for multiple uses (2) 5. Areas for clustering (2) 6. Public Art 7. New housing in the CBD surrounds – increasing customer base 8. Art Gallery 9. Library 10. Sufficient car parking 11. Good looking streets 12. Lighting and safety <p><i>Businesses and Community:</i></p> <ol style="list-style-type: none"> 1. Boutique independents (high street shopping) (3) 2. Cafes (3) 3. Accommodation (City Motel, Country Motor Inn, AirBnbs) (3) 4. Engagement with multicultural groups (2) 5. Large population of workers during the day 6. Dining experience 7. Passionate business owners with young families who can spread the message 8. Willingness/ energy to fix it now <p><i>Activities:</i></p> <ol style="list-style-type: none"> 1. Buskers in Junction St and Jellybean Park 2. Events 	<p><i>Identity and Governance:</i></p> <ol style="list-style-type: none"> 1. Hard to find Indigenous heritage/culture 2. Need to uncover the faces of Nowra – who we are 3. Need for local community champions to drive activation 4. Need for positive talk 5. No link between natural resources of Shoalhaven and Nowra CBD 6. Library and arts centre needs to better connect 7. Lack of online information/ directory of CBD businesses listings 8. Beauty of built form is hidden <p><i>Business and activity offering:</i></p> <ol style="list-style-type: none"> 1. Lack of urban density/ (shop-top/ apartment living) (5) 2. Lack of conference facilities, hotels and accommodation (4) 3. Lack of night-time economy (3) 4. Lack of diverse shops 5. Lack of upscale areas for dining 6. No eat street 7. Limited opportunity for interest group buyers, i.e. no specialty shops (specialty food, fresh food outside supermarkets, deli, organic food market, nursery/ tree change shops) 8. No regional food market 9. Easier to take food away than stay and eat 10. Lack of events 11. Poor customer service <p><i>Environment:</i></p> <ol style="list-style-type: none"> 1. Through traffic along Princes Highway (4)

<p>3. Art trail</p> <p><i>Others:</i></p> <ol style="list-style-type: none"> 1. Public Services 2. Local produce 3. Urban Density 4. Opportunity for greening/ Jacarandas in Spring 	<ol style="list-style-type: none"> 2. Dominance of car parks 3. Lack of cleanliness of mainstreets 4. No meeting places 5. Street trees being hacked <p><i>Community:</i></p> <ol style="list-style-type: none"> 1. Lack of inclusivity for people with a disability (2) 2. Drug and alcohol problem – antisocial behaviour (2) 3. Perceptions of crime/ unsafe area 4. Loitering of homeless people/ undesirables 5. Entrenched property ownerships and their attitudes
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ACTIVITY#2 PRIORITISATION AND DEVELOPMENT OF ACTIONS

Workshop participants were divided into three groups for prioritising actions for improvement of the CBD over the next three years. Following are the inputs of each group:

Group 1 – Celebrate Nowra

Year	Action	Potential Benefits, Challenges and Measures of Success	Budget
1	A Place Manager for Nowra CBD	<ul style="list-style-type: none"> - This will attract business, investors and retailers. - Nowra will benefit as the manager's focus will be to co-ordinate CBD's marketing, activities and events. - The challenge will be managing numerous stakeholders. - Success can be measured by tracking investments, activity, vacancy rates, business confidence and follow up surveys. 	\$80,000
	A Branding and Marketing Strategy + Social Media support	<ul style="list-style-type: none"> - This will attract tourists, locals, visitors – families and friends. - It will improve wayfinding, signage, advertising, management and uplift the aesthetic of the overall area. - Challenges include buy in, numerous and varying opinions and lack of branding/marketing knowledge. - Success can be measured by an increase in visitors and local activities. 	\$30,000 + \$12,000 for Social Media Support
	Nowra Activators (Group to collaborate with	<ul style="list-style-type: none"> - This will attract a mix of communities, business owners and landlords. 	\$20,000

	Rotary & Shoalhaven Business Chamber, Apex and Lions to spread the message)	<ul style="list-style-type: none"> - It will contribute towards Nowra's positive energy and enthusiasm. - Challenge would be the lack of interest to participate in this group. - Success can be measured by the longevity of the group along with the implementation and success of activities. 	
Budget for Year 1			\$142,000
2	A Place Manager for Nowra CBD	(Similar as above)	\$80,000
	Workers' Deals	<ul style="list-style-type: none"> - This will attract workers as well as their family and friends. - The challenge will be to get businesses to invest towards night time trading. - Success can be measured by the increase in day and night time trading activity 	\$5,000
	Nowra Dine-Out Passport	<ul style="list-style-type: none"> - This will attract current families, couples and middle aged people. - The challenge will be to get business to invest towards night time trading. - Success can be measured by the increase in day and night time activity, along with the number of free meals sent out. 	\$5,000
	Nowra Activators	(Similar as above)	\$20,000
Budget for Year 2			\$110,000
3	A Place Manager for Nowra CBD	(Similar as above)	\$80,000
	Egans Place Renewal Competition	<ul style="list-style-type: none"> - This will attract investors and developers to Nowra CBD. - Challenges include cost of the project and community perception (people do not want reduced number of car parks). - Success can be measured through applications, approvals and construction of the project. 	\$50,000
	Nowra Activators	(Similar as above)	\$20,000
Budget for Year 3			\$150,000

Group 2 – Something for All

Year	Action	Potential Benefits, Challenges and Measures of Success	Budget
1	Night-time Rock Climbing Alley	<ul style="list-style-type: none"> - This will attract the rock climbing community within and outside of Nowra. - It will benefit the CBD with increased foot traffic. - The main challenges will include finding investors for this, and the initial take up. 	\$50,000
	Town Camp for Kids	<ul style="list-style-type: none"> - This will attract children and families to the CBD. 	\$25,000

		<ul style="list-style-type: none"> - It will benefit Nowra CBD with an increased foot traffic. - Challenges will include finding ideal locations and activities for parents/guardians while they wait. 	
	Junction Court – Quick Wins (Inflatables, Street Food Festival, Geo Cache)	<ul style="list-style-type: none"> - This will attract people from different backgrounds. - The inflatables will allow for families to spend more day time at Junction Court. Street Food will help establish a food culture/cuisine to Nowra CBD. While Geocache will attract more footfall and generate business. - The challenges faced by every activity are different. Geocache may become too popular, while inflatables may get boring for the kids and will require a ticket fee. Simultaneously, the street market can generate too much competition. - Success can be measured by the monetary spending, number people and businesses in the area. 	\$200,000 (\$50,000 for inflatables, street food negligible cost, geo cache as per cost to business)
Budget for Year 1			\$275,000
2	Light Up Nowra	(No comments provided)	\$80,000
	Night-time Rock Climbing Alley	(Similar as above)	\$0
	Town Camp for Kids	(Similar as above)	\$25,000
	Christmas Wonderland	(No comments provided)	\$50,000
Budget for Year 2			\$155,000
3	Summer Festival Hub	(No comments provided)	\$200,000
	Night-time Rock Climbing Alley	(Similar as above)	\$0
	Town Camp for Kids	(Similar as above)	\$25,000
Budget for Year 3			\$225,000

Group 3 – A Great Place to Hang Out

Year	Action	Potential Benefits, Challenges and Measures of Success	Budget
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1	Clean Up Nowra	<ul style="list-style-type: none"> - This will improve the CBD's aesthetics, pride and talkability. It will also help in keeping the CBD and its shops clean. - The main challenge would be to engage the landlords towards cleanliness and waste management. - Success can be measured by the changing perception of the CBD, change in business behaviour, waste management and cleanliness of the city. 	\$60,000
	Light Up Nowra and Murals	<ul style="list-style-type: none"> - This will attract people to the CBD at night and benefit businesses. - It will help highlight buildings of heritage significance through lighting. - The action is susceptible to vandalism and may not look as impressive in the summer months. - Success can be measured by the change in night time activity, business in the CBD and the number of young people in the area. 	\$80,000
	A Sittable Nowra	<ul style="list-style-type: none"> - This will attract people of every age and background. - It will allow people to spend more time and hence increase their visits, thus helping businesses. - Maintenance of the street furniture will be the biggest challenge. - Success can be measured by the increase in footfall, business and time spent in the CBD. 	\$30,000
Budget for Year 1			\$170,000
1	Clean Up Nowra	(Similar as above)	\$60,000
	Art Crossing and Murals focussed on Indigenous Art	<ul style="list-style-type: none"> - This will attract tourists and Indigenous people. - This will benefit Nowra CBD by increasing its diversity and establishing the presence of its Indigenous culture, thereby generating more tourism. - The success can be measured by increased footfall, higher tourism and indigenous businesses. 	\$100,000
	Light Up Nowra	(Similar as above)	\$80,000
Budget for Year 2			\$240,000
3	Clean Up Nowra	(Similar as above)	\$60,000
	Art Crossing and Murals focussed on Indigenous Art	(Similar as above)	\$60,000
	Light Up Nowra	(Similar as above)	\$80,000
Budget for Year 3			\$200,000

WORKSHOP 2 ACTIVITIES

ACTIVITY#1 STRENGTHS AND CHALLENGES

Workshop participants provided the following inputs regarding the strengths and challenges of Nowra CBD:

Strengths	Challenges
<p><i>Physical assets:</i></p> <ol style="list-style-type: none"> 1. Some great buildings with historical character, e.g. bank, medical centre (3) 2. Lovely artworks on walls (2) 3. Nice parks – e.g., Henry Sawkins, Marriott etc. 4. Easy to walk around (flat terrain) (2) 5. Nice sized CBD – not too crowded (2) 6. Pretty town 7. South Coast – great area 8. Part of the tourist highway from Sydney 9. Close to Sydney tourists that go to Jervis Bay holiday areas – have to go through Nowra <p><i>Businesses and Community:</i></p> <ol style="list-style-type: none"> 1. Friendly locals who want to support small local businesses (6) 2. Some really well-run businesses (5) 3. Great day-time coffee shop culture (3) 4. Long term retailers 5. Great customers 6. Good community support 7. More boutique shops popping up <p><i>Others:</i></p> <ol style="list-style-type: none"> 1. Increasing population, new families (3) 2. Allocation of money towards Nowra 3. Recent positive advertising for the Shoalhaven 	<p><i>Identity and Governance:</i></p> <ol style="list-style-type: none"> 1. Safety/Crime – unsafe to walk around even in daytime (7) 2. No cohesion or knowing what's happening (2) 3. Doesn't have a good reputation 4. Need of policing 5. Rents are high <p><i>Business and activity offering:</i></p> <ol style="list-style-type: none"> 1. Need to improve retail and food mix (4) 2. Needs to become an experience town (2) 3. Needs riverfront development (2) 4. Dead on weekends (2) 5. Scruffy run-down businesses 6. Lack of night time activities 7. Lack of family friendly spaces/ play 8. Need better balance of shops 9. Vacant shops <p><i>Environment:</i></p> <ol style="list-style-type: none"> 1. Need longer parking on mainstreet – not 30mins/far away from shops (5) 2. Need to clean up town/not good condition/graffiti (4) 3. Scattered town/ town split in 3 (2) 4. Need a bigger and better playground i.e., Albury 5. Big areas in town are outdated 6. Nothing eye catching from highway to entice in 7. Need more greenery 8. No historic buildings 9. Need visual enhancements 10. Big empty space in the middle 11. Poor pedestrian access 12. Poor public transport to and within 13. Lack of bike amenities

	Community: <ol style="list-style-type: none"> 1. Jellybean park full of people doing drugs/ drunkards 2. Massive traffic flows in Holiday season annoy locals
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ACTIVITY#2 PRIORITISATION AND DEVELOPMENT OF ACTIONS

Workshop participants were divided into three groups for prioritising actions for improvement of the CBD over the next three years. Following are the inputs of each group:

Group 1 – Celebrate Nowra

Year	Action	Potential Benefits, Challenges and Measures of Success	Budget
1	A Place Manager for Nowra	<ul style="list-style-type: none"> - This action will attract locals and business owners. - It will benefit the CBD as there will one point of contact. - The main challenge will be managing different opinions. - The cohesive growth of business will act as a success of this action. 	\$80,000
	Nowra Activators		\$20,000
	A Branding and Marketing Strategy + Social media support	<ul style="list-style-type: none"> - This will attract investors and customers. - It will benefit Nowra CBD as it will enhance its online presence and attract new customers. - Main challenges include getting people on board. - Success can be measured with a positive business growth and a happier customer experience. 	\$30,000 for the strategy + \$12,000 for social media support + \$30,000 for bags, banners. Etc.
	Workers' Deals	<ul style="list-style-type: none"> - This will attract more workers to dine in the CBD. - More customers will generate a higher turnover. - Success can be measured with monetary changes (higher spending) and increased employment opportunities. 	\$5,000
Budget for Year 1			\$177,000
2	A Place Manager for Nowra	(Similar as above)	\$80,000
	Social media support	(Similar as above)	\$12,000
	Workers Deals	(Similar as above)	\$5,000

Budget for Year 2			\$97,000
3	A Place Manager for Nowra	(Similar as above)	\$80,000
	Social media support	(Similar as above)	\$12,000
	Nowra Dine-Out Passport	<ul style="list-style-type: none"> - This will attract people wanting a night time dine out experience. - This action will benefit businesses and customers and generate more employment opportunities - The main challenge is the concern of businesses about getting enough customers at night. - The measure of success will be the increased footfall and more businesses staying open till late in the night. 	\$5,000
Budget for Year 3			\$97,000

Group 2 – Something for All

Year	Action	Potential Benefits, Challenges and Measures of Success	Budget
1	Junction Court – Quick Wins	<ul style="list-style-type: none"> - This will attract people from all ages and backgrounds, for instance, families, workers and seniors. - This will benefit businesses and the community. - The challenges include initiating the action at the right time (December) and protecting it from vandalism/social issues. - Success can be measured by seeing Junction Court being used and enjoyed by the community. Its social media presence, e.g. hashtags, posts, can also contribute to its success. 	\$200,000
Budget for Year 1			\$200,000
2	Night-time Rock Climbing Alley	<ul style="list-style-type: none"> - It will attract all age groups. - It will benefit Nowra CBD by generating more business and adding to the night time activity. - The main challenge will include keeping it safe from vandalism. - Its success can be measured through the amount of business it will generate and its social media presence. 	\$50,000
	Christmas Wonderland	<ul style="list-style-type: none"> - This will attract regular customers and families. - This will benefit Nowra CBD as it will generate a higher footfall, boost business and improve its perception. 	\$50,000

		<ul style="list-style-type: none"> - The challenges for this action are its coordination and communications. - Success can be measured with the difference in visitation compared to previous years. 	
Budget for Year 2			\$100,000
3	Night-time Rock Climbing Alley (Private)	(Similar as above)	\$0
	Christmas Wonderland	(Similar as above)	\$50,000
Budget for Year 3			\$50,000

Group 3 – A Great Place to Hang Out

Year	Action	Potential Benefits, Challenges and Measures of Success	Budget
1	Art Crossings	<ul style="list-style-type: none"> - This will attract families and kids. - It will uplift the experience of Nowra CBD by adding more colour, thereby encouraging people to spend more time. - The temporary closure of streets to enable the action will pose as its challenge. - The success of this action will be based on a safer pedestrian commute and a better CBD experience. 	\$100,000
	Greening Nowra	<ul style="list-style-type: none"> - This will attract people of various ages. - It will benefit the CBD by improving its aesthetic appearance, thereby attracting more people and businesses. 	\$50,000
	Parklets Pilots	<ul style="list-style-type: none"> - It will attract tourists and families. - This will benefit Nowra CBD by improving its perception. - The main challenge will be the reduced parking spaces, especially during holiday season. - Improved signage and trialled parklet spaces will be its measure of success. 	\$60,000
Budget for Year 1			\$210,000
2	Light Up Nowra	<ul style="list-style-type: none"> - This will attract people during night. - The main benefit will be an improved night time economy. 	\$80,000
	A Sittable Town	<ul style="list-style-type: none"> - This will attract people of all ages and backgrounds. - It will enable to stick around for longer, thus benefiting the businesses of Nowra CBD. 	\$30,000

		- Ability to find and provide all weather seating will be a challenge.	
Budget for Year 2			\$110,000
3	Clean Up Nowra	- This will attract families and tourists. - It will make the CBD experience a much more pleasant one.	\$60,000
	Celebrate our Heritage	- This will attract tourists and families.	\$80,000
Budget for Year 3			\$140,000

NOWRA CBD REVITALISATION ACTIONS – FEEDBACK SURVEY

#1 FEEDBACK ON KEY DIRECTIONS

Survey respondents provided the following response to the key directions for the improvement of Nowra CBD:

Option	Response
I think the Key Directions are great	80.60%
I have some feedback on the Key Directions	19.40%

Participants who shared feedback on the Key Directions provided the following additional inputs:

<p>Celebrate Nowra</p> <ul style="list-style-type: none"> - Improve the town's identity - Make Nowra the gateway to the south (3), and not just a town by-passed by traffic
<p>Something for All</p> <ol style="list-style-type: none"> 1. More Shopping Options (19) <ul style="list-style-type: none"> - Better brands, specialty shops etc. (7) - Improved local economy/ shopping centre - Monthly markets 2. Activity Diversity (15) <ul style="list-style-type: none"> - Night life (3) - Weekend activities (2) - Activities for locals not tourists (2) - Offer something new that Nowra does not have (non-hospitality businesses) - Alfresco dining - Children activities like face painting etc. - Things to do for families - Indoor activities - Disabled-friendly activities 3. Activate vacancies (14) <ul style="list-style-type: none"> - Retain business owners, attract them to empty shops (10) - More public investment in local assets, private investor rents are too high 4. Homes in the CBD (3) 5. Introduce new businesses (3) <ul style="list-style-type: none"> - hospital expansion (2) - Increase employment opportunities 6. Add riverside activities (2)
<p>A Great Place to Hang Out</p> <ol style="list-style-type: none"> 1. Improve personal and physical safety (11) <ul style="list-style-type: none"> - More policing to ensure safety from antisocial behaviours and crime (10) - Main crossing is unsafe 2. Cleanliness (7) <ul style="list-style-type: none"> - Better maintenance after rains (2) - Well-maintained look (2) - Reduce graffiti, rubbish

3. Build upon existing arts, heritage and culture (7)
 - Encourage and educate people about Aboriginal heritage (2)
 - Celebrate Nowra's heritage
 - Arts
4. More convenient parking (5)
 - Use the current empty lots/ parking lands to make multi-level car parks (2)
 - More and longer parking
 - Disabled parking
5. More shade and tree canopy (4)
6. Frequent Buses/Public Transport (2)
7. Add flexible spaces
8. Pedestrian-oriented improvements:
 - Close Junction St btw Berry St and Kinghorne St to create pedestrian mall (e.g. Lyon St in Melbourne)
 - Improved shop frontages
 - Vibrant ambience

#2 FEEDBACK ON REVITALISATION ACTIONS

The survey included a set of actions under each of the three Key Directions. Survey respondents were asked to choose their top 5 actions in every category and/or add their own ideas.

For the actions regarding 'Celebrating Nowra', survey respondents chose the following actions. These are listed in order of priority:

Action	Support
A Shop Local campaign	57.30%
A marketing campaign across local media (newspapers, radio, TV etc.) to attract locals	40.90%
A marketing campaign across regional online media (e.g. Time Out Sydney) to attract tourists	39.80%
A dedicated Facebook page for Nowra CBD businesses	38.00%
A Dinner Passport (e.g. eat at all participating restaurants and get one free meal)	37.50%
A monthly booklet/newsletter of offers/specials/events	37.20%
Cross business promotions on social media	24.80%
Workers' special breakfast/lunch deals advertised online/through shopfront posters	21.90%
A unique logo for Nowra CBD	20.10%
Other ideas	19.8%
Business to business mentoring and support	16.10%

Survey respondents provided additional comments aligned with this Key Direction. These have been categorised by the type of investment:

- | |
|---|
| Branding and Marketing (10) <ul style="list-style-type: none"> - Better emphasis on 'gateway/feeling of entry' (4) |
|---|

<ul style="list-style-type: none"> - Acknowledgment of traditional owners of land – bring out the Aboriginal presence - Brand Nowra as a clean and safe CBD - Use Youtube to promote the existing business - Market locally developed products - Promote Tourism
Information and Advertising (5) <ul style="list-style-type: none"> - Advertise for events in Nowra (2) with parking information - Online information offering real time information - Brochures of events/activities - Create an asset map – build on existing socio-cultural resources
Mentoring and Collaboration (4) <ul style="list-style-type: none"> - Business mentoring (3) - Collaborative growth
Customer-specific deals (4) <ul style="list-style-type: none"> - More activities for retirees, e.g. breakfast deals for seniors (2) - Local shops get discount cards for cafes - Something during lunch time for workers

For the actions regarding offering 'Something for All', survey respondents chose the following actions. These are listed in order of priority:

Action	Support
Fresh food markets on Sunday mornings	73.00%
Regular events in Junction Court	49.90%
A summer-time festival hub (temporary transformation of a part of Egans Place car park into a place for events, art exhibits, festivals, etc.)	46.80%
A hub for young entrepreneurs/ start-up businesses in a vacant shop	44.20%
Art and cultural programs – art walks, paint and sip classes, guided heritage tours etc.	43.40%
Longer business trading hours on weekends	35.20%
School holiday activities for kids in the CBD	34.20%
Christmas Wonderland activation (one time event)	28.00%
Other ideas	19.8%
Weekday Night-time rock climbing in the city (potentially next to the Art Gallery)	18.80%
Tourism-focussed long weekend programs	15.90%
Adult learning programs	15.90%
Games and pizza nights	7.50%

Survey respondents provided additional comments aligned with this Key Direction. These have been categorised by the type of investment:

Retail, Hospitality and Entertainment (92) <ul style="list-style-type: none"> - Diversity of shopping for all ages and locals - Longer trading hours - Quality shops - Bars - Outdoor eating

<ul style="list-style-type: none"> - Movie theatre - Use rooftops and balconies for activation
Events, performances and community activities (55) <ul style="list-style-type: none"> - Family friendly activities (14) – park/ enclosed spaces/ youth activities - Aboriginal Cultural activities and knowledge sharing – build community (4) - Library and regional gallery to host exhibitions/ Open art gallery (3) highlighting Indigenous Yuin Nation craftsmen/artists of the region - Community Garden (2) - Centre for mothers with young children to connect, feed etc. (2) - Hub for local art - Well maintained tourist attraction (big) park - Dog Park - Art competition for painting murals - Stage for performances by school bands, musicians - Flash mobs - Block Party - Events such as Navy Freedom of Entry, motocross, marathons etc. - Games arcade/skating rink
Activating vacancies (30) <ul style="list-style-type: none"> - Offer reasonable rents (12) - Free short-term pop-up shops for not-for-profit orgs (3) - Pop up ethnic stores in vacant shops (2) - Can act as spaces for exhibitions – for artists e.g. RENEW Australia/Wollongong - Can act as parent rooms
Incentive programs to attract businesses to Nowra (17)
Pop up food and markets (16) <ul style="list-style-type: none"> - Friday markets, local markets – locally grown stuff - Food trucks once a week
Night-time activities (13) <ul style="list-style-type: none"> - Berry St becomes eat street with a cinema

For the actions regarding creating 'A Great Place to Hang Out', survey respondents chose the following actions. These are listed in order of priority:

Action	Support
More greenery across the CBD	65.10%
More outdoor dining spaces outside cafes and restaurants	64.40%
A regular clean-up crew to maintain Nowra CBD public spaces	62.80%
Lighting up Nowra's mainstreets (starting with Berry Street)	54.60%
Junction Court makeover (e.g. addition of group seating, shelter, lighting, etc.)	45.40%
Lighting up heritage building facades	35.40%
More free public seating for groups (e.g. seats facing each other, picnic tables etc)	28.50%
Other ideas	21.8%
Parklet program (temporary transformation of a couple of car parking spots outside cafes into spaces to sit and dine)	20.30%
Painted artwork crossings at either ends of Junction Street	17.20%
Murals on shopfronts	15.10%

Survey respondents provided additional comments aligned with this Key Direction. These have been categorised by the type of investment:

<p>Safety (32)</p> <ul style="list-style-type: none"> - Police presence and CCTVs (18) - Measures to protect from antisocial behaviours (people drinking alcohol/ consuming drugs etc.) (8)
<p>Improving pedestrian accessibility (26)</p> <ul style="list-style-type: none"> - Wider footpaths - Make a mall between Kinghorne St and Berry St, and make attractive pedestrian/cycle links in the CBD - Convert the entire CBD square bound by Berry, Junction and Kinghorne St into a semi-mall similar to lower Junction mall - Close Junction St – wider walkways and entertainment, restaurants, 'al fresco', space for markets (16) - More pedestrian crossings (6) (North St from Aussie pub, across Princess Highway, etc.) - Accessibility for wheelchairs/ disabled friendliness
<p>Parking (17)</p> <ul style="list-style-type: none"> - Car park stations - Multi storey car parks - All day parking for employees - Lesser parking restrictions - Shaded parking
<p>Face Lift of the CBD including shopfront and signage improvements (14)</p> <ul style="list-style-type: none"> - Modernise 70's signage on Egans Lane - Transform vacant shop fronts - Attractive way finding (2) - Shopfront display competition - Visual Guides, coloured travel laneways etc (2)
<p>Amenities (17)</p> <ul style="list-style-type: none"> - Smoke free public zones (8) - Public Toilets (6) - Bus Shelters - Urban Cooling strategies (shade etc) - Sheltered seating

Below are some other ideas provided by survey respondents that are beyond the scope of the Action Plan:

Land Use and Transport Planning measures

- Better connectivity outside the CBD
- Rezoning to allow multi storey dwellings in CBD (7)
- Better access for traffic travelling south on the highway (3)
- Better mental health facilities
- Alfresco accommodation in CBD
- Hop on Hop off bus

Activities outside the identified focus area for the Action Plan

- River festival
- Focus on Civic precinct and the Shoalhaven River (once the new bridge is complete)
- Cafes and restaurants
- Food trucks

Long term strategy

- 10-year strategy guided by the DPIE SEPP on placemaking

Architecture
Interior Design
Landscape Architecture
Planning
Urban Design

Australia
China
Hong Kong
Singapore
United Kingdom

BOMADERRY / NOWRA REGIONAL SPORTS & COMMUNITY PRECINCT

DESIGN REPORT



Front cover image: Bomaderry, Shoalhaven NSW
Photography by SIX Maps

Contact
Glenn Scott, Principal
gscott@hasselstudio.com
Iain Bucknell, Senior Architect
ibucknell@hasselstudio.com

HASSELL
Level 2
Pier 6/9, 23 Hickson Road
Sydney NSW
Australia 2000
T +61 2 9101 2000
hasselstudio.com
@HASSELL_Studio
HASSELL Limited
ABN 24 007 711 435

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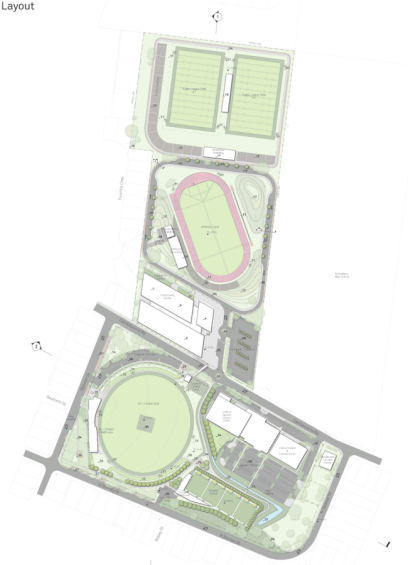
00 Introduction
Existing Precinct Layout



iv Romaderry / Nowra Regional Sports & Community Precinct
Community Pavilion

- LEGEND
- ..01 Amenity Building
 - ..02 Car Parking
 - ..03 Dirt Pedestrian Path
 - ..04 Existing Residences
 - ..05 Olympics Pool
 - ..06 Heated Pool

00 Introduction
Proposed Precinct Layout



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- LEGEND
- ..01 New Roundabout
Camdenwarr Road
 - ..02 Pedestrian Overpass
Camdenwarr Road
 - ..03 Community Centre Drop-Off
 - ..04 Shared Pedestrian / Cycle Zone Path Network
 - ..05 New Roundabout
Internal Road
 - ..06 One-way loop road
Clockwise direction
 - ..07 Parking
65 Carparking Spaces
(Approx. 144 cars)
 - ..08 Parking
Perpendicular Carparking Spaces
(Approx. 414 cars)
 - ..09 Cricket Pitch
 - ..10 Pedestrian Entry Gates
 - ..11 Light Tower
 - ..12 Spectator Grass Mounding
 - ..13 Spectator Terrace Seating
 - ..14 Overflow Parking Area
 - ..15 Shoalhaven Community Centre
 - a. Cafe Clubrooms
 - b. Lounge/Clubhouse
 - c. Gymnasium
 - d. Aquatic Centre
 - e. Outdoor Playground
 - ..16 Basketball Centre Vehicular Access
Camdenwarr Road
 - ..17 Rugby League Viewing Platform
 - ..18 Temporary Grandstand Seating
1000 Seats
 - ..19 Gate Access
Rugby League Crescent
 - ..20 Pavilion
 - ..21 Long/High Jump
 - ..22 Landscape Swale
 - ..23 Detention Basin
 - ..24 Bridge
 - ..25 Underground Tank
 - ..26 Rest & Gathering Area
 - ..27 Service & Emergency Vehicle Access
 - ..28 Flat Warm Up Areas



01

01 Research
City of Shoalhaven

The City of Shoalhaven

The City of Shoalhaven is located in New South Wales, Australia. The south-eastern coastal region is approximately 2 hours away from Sydney and the majority of its suburbs is situated around Nowra, Jervis Bay, Ulladulla and Sussex Inlet.

As a coastal region, the area sits along approximately 109 kilometres of coastline which holds the Shoalhaven River and numerous beaches. Shoalhaven has a population of 92,866 residents (2017 Census) over 453,063 hectares of land.

History
The traditional custodians of the Shoalhaven region are the Tharawal (Dharawal) People. While the local indigenous population have inhabited the area for centuries, European settlement began in 1797 when George Bass explored the area. A British naval surgeon and explorer, George Bass is credited to naming the region.

The area soon became noted as a point of origin for resources such as timber, wool, wheat and fresh produce, which was shipped to Sydney from Jervis Bay.

Aside from its produce, Shoalhaven has since become a tourist destination point for foreigners and locals due to its richness in lakes, beaches and preserved natural environments.



8 Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion

01 Research
The Site - Bomaderry

History

Bomaderry is a town in The City of Shoalhaven established in 1892 as the result of a subdivision of Shoalhaven Estate. The development of the town began after the extension of the railway into Bomaderry in 1893.

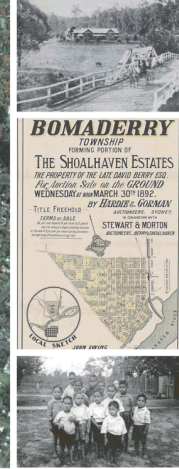
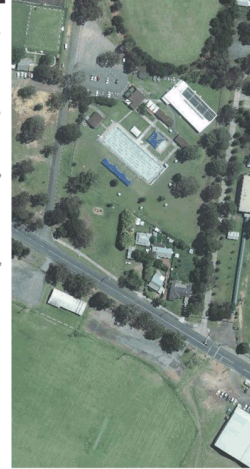
Since the opening of the town, Bomaderry became the home to several new factories and processing plants such as the Shoalhaven Paper Mill, Messrs Denham Bros. Bacon and Ham Factory and the Nowra Co-Op Dairy Company. This became a source of income for many locals and sustained the local economy for many years.

The Site
The Site is located in the heart of Bomaderry. Sitting to the west of Bomaderry High School, the proposed community pavilion will act as the centre for the Shoalhaven Regional Sports & Community Precinct.

Bomaderry's Indigenous History
Currently, Bomaderry's 6,023 people population is 7.3% Aboriginal and Torres Strait Islander. This percentage is 2.6% higher than the state average 4.7% in regional NSW.

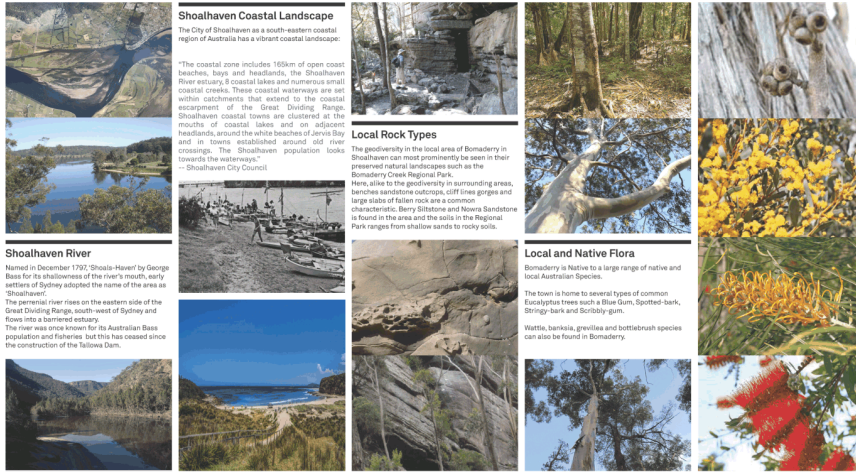
Aside from the original indigenous population in the Shoalhaven area prior to European settlement, this increased percentage is suggested to be due to several factors. One of these factors was the establishment of the Bomaderry Aboriginal Children's Home, also known as United Aborigines Mission Home. Opened on May 24, 1906, the home was built for Aboriginal children taken from their families around NSW as part of the Federal Government's Aboriginal welfare policy.

Closed in 1988, many of these displaced children whom had stayed at the Bomaderry establishment for over a decade remained in the area to establish roots.



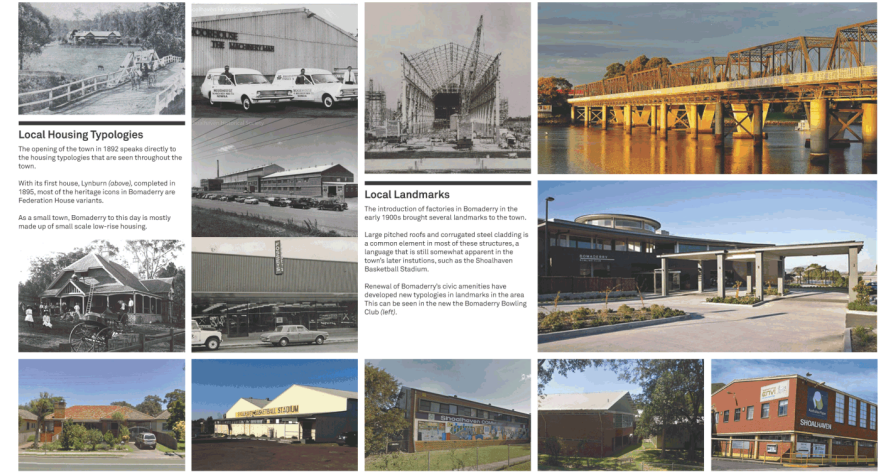
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01 Research
Local Environment



10 Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion

01 Research
Local Built Typologies



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01 Research
 Site Area



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Bomaderry / Nowra Regional Sports & Community Precinct
 Community Pavilion



01 View from Camdenwarrig Rd
 Photography by Google
 02 View from Camdenwarrig Rd
 Photography by Google
 03 View from Precinct
 Photography by Google
 04 Shoalhaven Basketball Stadium
 Photography by Google
 05 Bomaderry Aquatic Centre
 Photography by Google
 06 Bomaderry Aquatic Centre
 Photography by Google

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02

02 Precedents
Materiality - Timber



16 Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion



16 Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion



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02 Precedents
Materiality - Timber



18 Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion

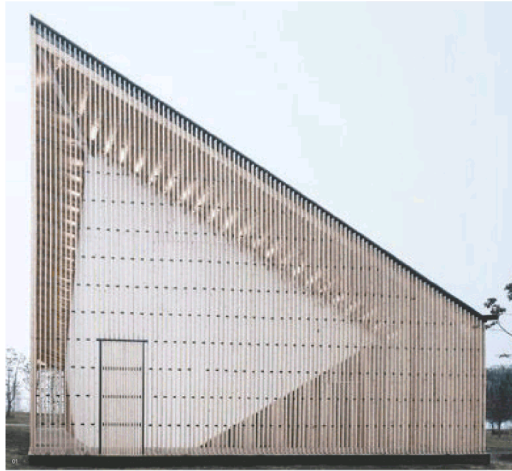


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02 Precedents
Form - Roofscapes



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Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion



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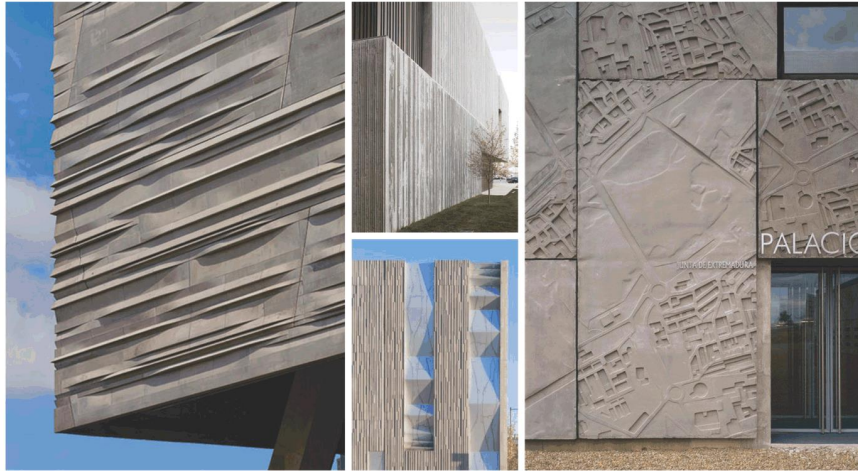
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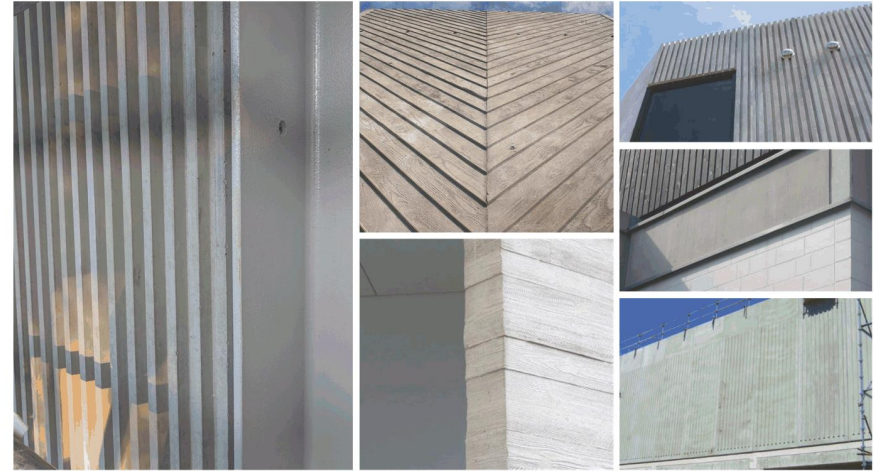
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02 Precedents
Materiality - Precast



22
Bomaderry / Nowra Regional Sports & Community Precinct
Community Pavilion

02 Precedents
Materiality - Precast : Reckli



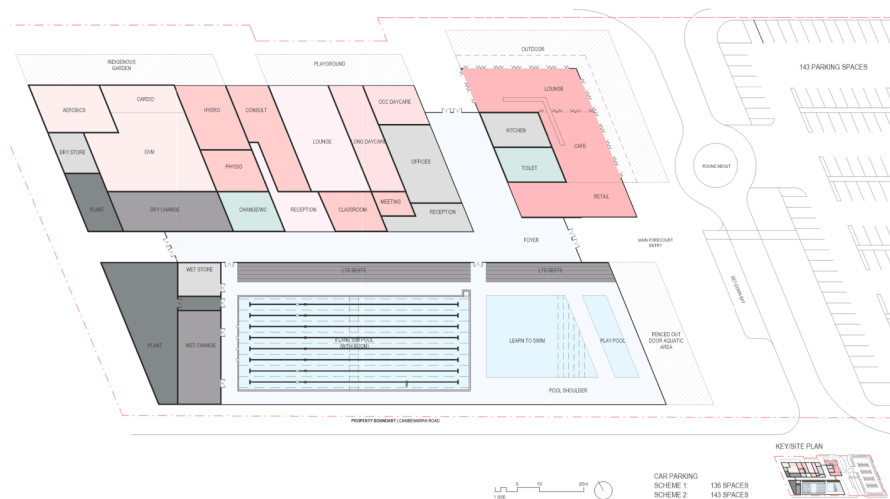
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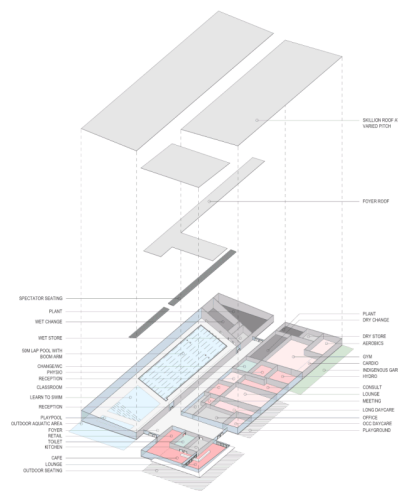
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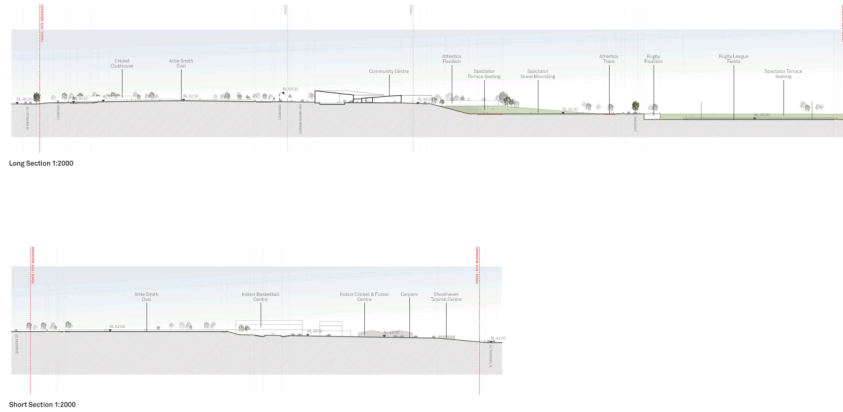
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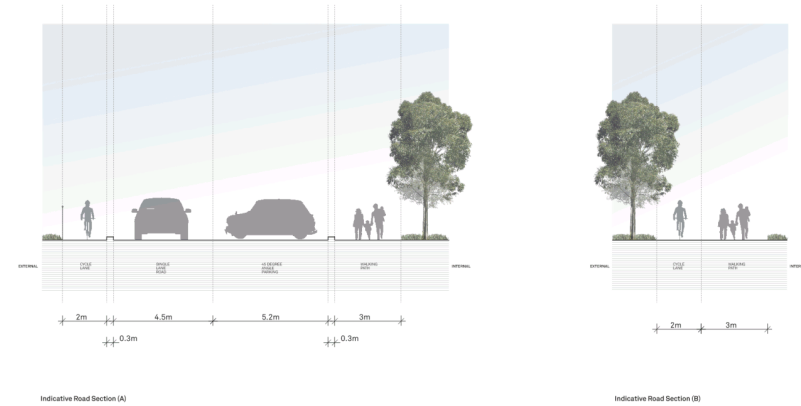
03 Design
Exploded Axonometric



0 Design
 Long & Short Site Sections



03 Design
 Indicative Road Sections



03 Design

Comparative Area Schedule

Service	Class	Days	Start	End	Area of Class, Sq Yds	Area of Site, Sq Yds
ADULT	12:00-1:00	1	12:00	1:00	1,000	1,000
ADULT	1:00-2:00	1	1:00	2:00	1,000	1,000
ADULT	2:00-3:00	1	2:00	3:00	1,000	1,000
ADULT	3:00-4:00	1	3:00	4:00	1,000	1,000
ADULT	4:00-5:00	1	4:00	5:00	1,000	1,000
ADULT	5:00-6:00	1	5:00	6:00	1,000	1,000
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Australia

Adelaide
HASSELL
Level 1
82 Waymouth Street
Adelaide SA
Australia 5000
T +61 8 8220 5000
E adelaide@hassellstudio.com

Brisbane
HASSELL
36 Warry Street
Fortitude Valley QLD
Australia 4006
T +61 7 3914 4000
E brisbane@hassellstudio.com

Melbourne
HASSELL
61 Little Collins Street
Melbourne VIC
Australia 3000
T +61 3 8102 3000
E melbourne@hassellstudio.com

Perth
HASSELL
Level 1
Commonwealth Bank Building
242 Murray Street
Perth WA
Australia 6000
T +61 8 6477 6000
E perth@hassellstudio.com

Sydney
HASSELL
Level 2
Pier 8/9, 23 Hickson Road
Sydney NSW
Australia 2000
T +61 2 9101 2000
E sydney@hassellstudio.com

China

Beijing
HASSELL
Suite 308-B011 Building A
Beijing Fortune Centre
7 Middle Dong San Huan Road
Chaoyang District
Beijing 100026 China
T +8610 5126 6908
E beijing@hassellstudio.com

Hong Kong
HASSELL
22F, 169 Electric Road
North Point Hong Kong
T +852 2552 9098
E hongkong@hassellstudio.com

Shanghai
HASSELL
12F base 45 Caoxi North Road
Xuhui District
Shanghai 200030 China
T +8621 5467 9333
E shanghai@hassellstudio.com

South East Asia

Singapore
HASSELL
33 Tras Street #02-01
078973 Singapore
T +65 6224 4688
E singapore@hassellstudio.com

United Kingdom

Cardiff
HASSELL
Level 4 James William House
9 Museum Place
Cardiff CF10 3BD United Kingdom
T +44 29 2072 9071
E cardiff@hassellstudio.com

London
HASSELL
Level 2 Morelands
17 – 21 Old Street
Clerkenwell
London EC1V 9HL United Kingdom
T +44 20 7490 7669
E london@hassellstudio.com

**UNDERSTAND ALZHEIMER'S
SUPPORT AUSTRALIA**

CREATING DEMENTIA-FRIENDLY COMMUNITIES: A TOOLKIT FOR LOCAL GOVERNMENT



SA21.168 - Attachment 1

About Alzheimer's Australia Vic

Alzheimer's Australia Vic is committed to the prevention of dementia, while valuing and supporting people living with dementia.

As the charity and peak body for people with dementia, their families and carers in Victoria, we engage in a wide range of activities, including education, support, advocacy and information.

We support people living with dementia, their families and carers to manage the daily challenges that dementia brings. We work with care staff to deliver best practice in dementia care. We work in partnership with others to increase awareness about dementia, reduce stigma and support with dementia, their families and carers to live well and continue doing what they love.

Acknowledgements

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Development of the toolkit involved a collaborative process, including trialling of content and tools by councils and other key stakeholders, including people living with dementia.

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A CONSUMER'S STORY – MAXINE



Although it might feel like it initially, a diagnosis of dementia is not the end. Speaking from personal experience, life goes on. There are no magic pills to cure dementia, but I've found ways to continue living a good life – an active, meaningful life. I've accepted that I have dementia but I don't let that define me. I feel it's important to maintain my roles as much as possible, as a partner, a friend, a volunteer and a member of my local community. Being actively involved makes me feel better about myself and what I can do. There are some things I can't do anymore on my own, but I can usually participate in some way with the right support.

In my working life I was a physiotherapist. I loved helping people with their rehabilitation after an injury or illness. It was very difficult when I had to retire earlier than expected. A couple of years ago my partner Graeme and I found a place where I can volunteer and use my skills and knowledge as a physiotherapist. I help to run a gentle exercise group for older people with dementia in my local area. I get a lot of satisfaction from helping others in my community to maintain their health.

I am thrilled to have the opportunity to introduce Creating Dementia-friendly Communities: A Toolkit for Local Government. The publication provides councils with the information they need to lead dementia-friendly communities – places where people living with dementia are supported to live a high quality of life with meaning, purpose and value.

As a consumer of dementia-related community services, I'd like to advocate for services that do things with us rather than for us. I want to be engaged, enabled and empowered to maintain my valued roles and activities in daily life. I encourage councils to continue reading this toolkit to consider how services may be adapted and improved to better meet the needs of people living with dementia.

Maxine Thompson

Maxine is a consumer advocate living with Posterior Cortical Atrophy, which is a form of younger-onset Alzheimer's disease. Maxine is a member of the national Alzheimer's Australia Dementia Advisory Committee and Younger Onset Dementia Reference Group at Alzheimer's Australia Vic.

EXECUTIVE SUMMARY

People living with dementia often report that a diagnosis is life-changing, not only because of the day to day symptoms they experience but because of changes in the way that people perceive or treat them. This has implications for the way that they, their families and carers participate and interact with their own local communities.

Activities that we take for granted, such as going for a coffee in our favourite local café, doing grocery shopping or banking, paying our council rates or using local community facilities can become complex and challenging for people with dementia. Indeed, a recent survey highlighted that nervousness about becoming lost, difficulty in speaking to shop staff and social isolation are common. As one person put it, “it’s like (people) think I no longer count and I am not a person anymore”.

And yet, in the words of another individual, “a person living with dementia ... has as much to contribute to society as the next person”. This is why the idea of dementia-friendly communities is so important.

Councils play a key role in ensuring that local communities are vibrant, inclusive and supportive of all citizens. Indeed, many councils are already instrumental in improving disability access and making local communities age-friendly, and the concepts outlined here are a logical extension of this work. This toolkit is designed for all those in local government who make our communities easier places in which to live well. If you set policies, plan and build infrastructure, or deliver services that have a tangible impact on how the

community operates, you can make small (or big) changes that can make a real difference to the lives of people living with dementia, their families and carers.

There is no one way to create a dementia-friendly community and this toolkit is not intended to be prescriptive. Most important is the desire to explore and implement change, whether this is in the short term or longer-term, in a number of small ways or in a more systematic, council-wide way. In order to do so there are three core change management approaches that should be considered by councils who want to explore what dementia-friendly might mean in their community:

1. Identify a champion/number of champions.
2. Consult with people who have dementia and their families/carers about what is important to them.
3. Identify tangible, achievable actions that can be implemented in the short term as well as considering longer-term initiatives.

To support these steps, the toolkit provides information, resources and guidance for building on existing infrastructure, systems and services in order to make communities more inclusive. The content reflects the lessons learned from dementia-friendly initiatives across Australia and draws on international experience.

The toolkit has also been informed by wide-ranging collaborations with council staff representing more than half of all Victorian councils, as well as other representatives of local councils and consumers.



Why a toolkit for local government?

Councils need to know how they can build on what they already have to ensure they can support dementia-friendly initiatives across their communities.

Guy Walter
Macedon Ranges Shire Council



INTRODUCTION

The policy context

The National Framework for Action on Dementia 2015–2019 identified the need to develop dementia-friendly communities in Australia in order to build awareness, acceptance and understanding of dementia in the community. These principles of inclusion are grounded in the international work undertaken by the World Health Organisation on age-friendly cities and are echoed in this state's Age Friendly Victoria Declaration as well as many other policy frameworks that draw on universal design principles.

With 96,789 Victorians living with dementia in 2016, and with governments and community members agreeing that living in the community for as long as possible is desirable, there is a pressing need to equip our communities to understand and support everyone, no matter how diverse their needs.

What is dementia?

Dementia is the name given to the set of symptoms that are caused by brain disease. Dementia affects the way the brain is able to work and it can affect thinking, behaviour and the ability to perform everyday tasks.

Most people with dementia are older, but it is important to remember that not all older people get dementia. It is not a normal part of ageing. Although dementia is more common after the age of 65 years, it can affect anyone regardless of age, gender, culture, income or education.

Dementia is a progressive disease with mild symptoms in the early stages that generally worsen over time. Dementia affects everyone differently and symptoms are not always obvious.

There are many different types and forms of dementia but the most common causes are Alzheimer's disease, Vascular dementia, Lewy body disease and Fronto Temporal Lobar Degeneration.

At present there is no definitive prevention or cure for most forms of dementia, though support from families, friends, services and the broader community has been shown to make a positive difference to the quality of life of someone with the condition.



How does dementia affect people?

Because dementia can affect the way that someone thinks, feels and behaves, the symptoms of the disease can significantly impact the way they operate within and relate to their local community.

Some common symptoms include:

- progressive and frequent memory loss
- confusion, such as disorientation with time and place
- personality changes
- apathy and withdrawal
- problems with communication
- loss of self confidence.

Although the above are common symptoms, each individual's experience of dementia is unique, which is why taking a person-centred approach is so important.

A recent survey of people with dementia highlighted that:



Alzheimer's Australia 2014, Living with dementia in the community: challenges and opportunities.

How does dementia impact local communities?

There are more than 353,800 Australians living with dementia and an estimated 1.2 million people involved in the care of a person with dementia. Dementia is the second leading cause of death in Australia and there is no cure. Without a medical breakthrough, the number of people with dementia in this country is expected to be more than 400,000 in less than five years.

The majority of people with dementia live in the community. This means that every council in Australia will come into contact with people who have dementia, their families or carers, whether these individuals are paying rates, having their rubbish collected, working in local business or using council services.

And with dementia set to become the third greatest source of health spending within two decades, there are many benefits for councils that take the lead on effective, targeted strategies to support all elements of the community in a sustainable way.

Councils that review and build on existing policies and services, maximise strategic partnerships and work in collaboration with members of their community can help mitigate pressure on their services, stimulate new or better service systems and embed universal design principles into longer-term planning.

Changing Minds Beechworth: A municipality taking action



From the outset, Indigo Shire council saw the benefits of a dementia-friendly Beechworth. Not only is Indigo Shire a key member of the Health Consortium that has driven the initiative (along with the three health services in the region), but the council has made a commitment to becoming a dementia-friendly organisation in its own right.

The Changing Minds Beechworth alliance and project of the same name ('Changing our minds about people whose minds are changing') has garnered support across all elements of the community, and Indigo Shire council is in the thick of the action. The work of the alliance has enjoyed the support of senior council staff and initiatives continue to be referenced in the current council plan, supported by councillors and reported on at executive management level.

The council has overseen the rollout of education and awareness initiatives to its teams, with a particular focus on front line customer services staff. The Home and Community Care team formed its own working group to identify training needs and their training schedule includes a range

of free or low-cost education sessions, including the Virtual Dementia Experience™ offered by Alzheimer's Australia Vic and a problem solving approach to challenging behaviours.

A wide range of initiatives has been implemented, with more planned. Indigo Shire council staff were photographed as part of a photo journal exhibition which was hosted in the main street of Beechworth. Children's books that explored memory loss and inter-generational relationships were read during 'reading time' at municipal libraries across the shire. And council-owned movie equipment was made available for public screenings of contemporary films about dementia.

In addition, staff at the Beechworth Library teamed up with the Changing Minds Beechworth alliance to incorporate dementia-friendly design principles into the refurbishment of the library. This focus on the physical environment extended to the upgrade of public toilet facilities and there are plans to review the accessibility of other public amenities as part of longer-term planning.

How will this toolkit help local government?

The toolkit is divided into three key sections, which are intended to explore the different ways that councils can lead dementia-friendly principles in a gradual, progressive way.

The initial steps may be small and require minimal investment or they may involve a more broad-scale review of council functions. The impetus for driving change might come from anyone: a senior executive, a customer relations officer, an Active and Healthy Ageing Adviser, a planner, or a person delivering Home and Community Care services.

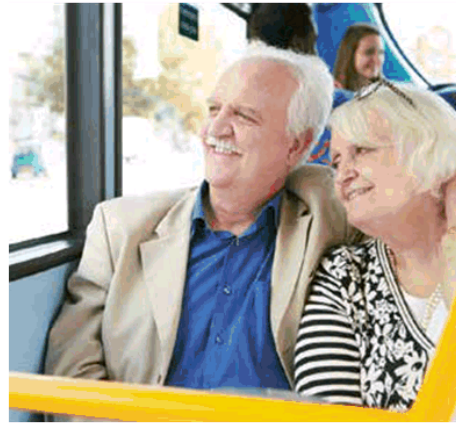
The important thing is that any change, no matter how small, can make a significant difference in the life of someone living with dementia, their family and carers. And even small changes have a way of building momentum.

The first section of the toolkit explores some of the ways in which councils can build on existing frameworks to explore what it means to be dementia-friendly.

The second section relates to the change management process and the ways in which any level of council can drive change. The examples provided span a range of initiatives with varying levels of complexity, cost and resourcing.

The third section provides practical tools and templates for councils to use in planning and implementing their own dementia-friendly initiatives.

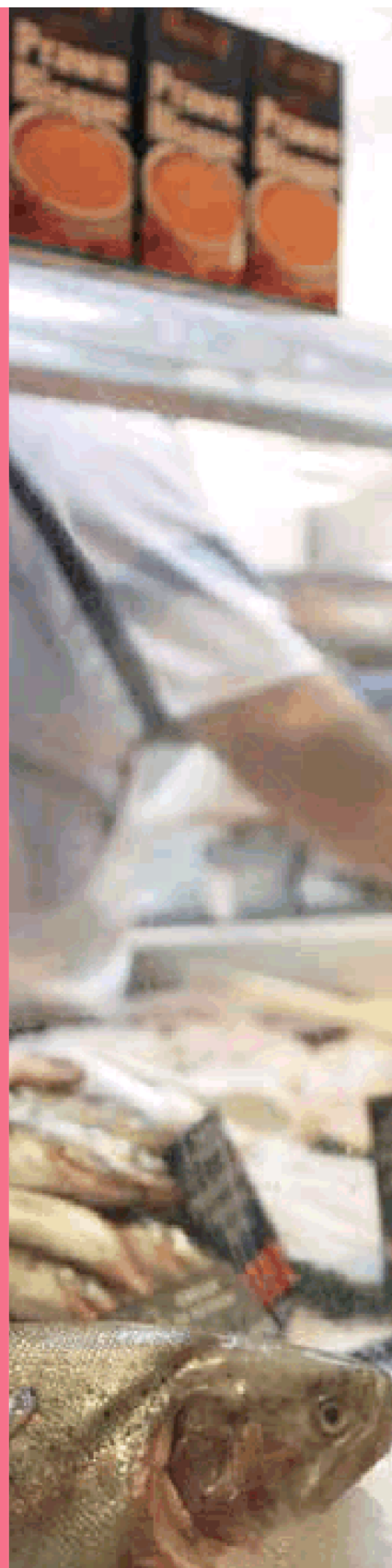
The practical suggestions and checklists are compiled from evidence-based practices and approaches in communities around the world. The information, examples and resources included are intended to complement community strengths and adapt to local contexts and needs.





We belong to a walking group and play indoor bowls at the local community centre. After bowls we enjoy a cup of tea and a biscuit which the council generously organises for the group each week. It keeps us active and it is great for our minds."

Bundoora residents





SA21.168 - Attachment 1

What is a dementia-friendly community?

An inclusive community

In its broadest sense, a dementia-friendly community is a place in which a person with dementia is supported to live a high quality life with meaning, purpose and value. This broad principle of inclusion is not unique to dementia-friendly communities and at its heart it is about a local community (and a council) being able to support people with diverse capabilities. Ultimately, a dementia-friendly community will be friendly for everyone.

People living with dementia have described their priority areas as:

1. Increasing community awareness and understanding about dementia
2. Improving access to social activities and opportunities for engagement including volunteering
3. Employment opportunities or support to remain employed
4. Access to appropriate health and care services to support them to continue to live at home for as long as possible
5. Access to affordable and convenient transportation options
6. Improved physical environments including appropriate signage, lighting and colours¹

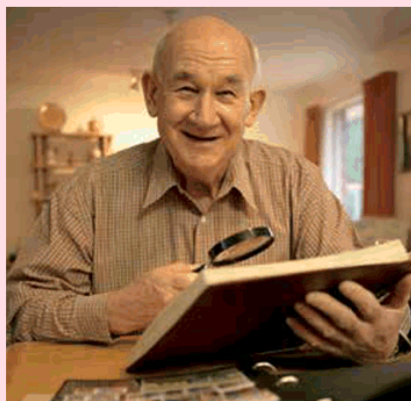
The dementia-friendly model

There is no single, ideal model of a dementia-friendly community. No two suburbs or towns are alike. Councils will have strategic priorities and plans specific to their region that will shape how they respond to local needs. The sorts of initiatives that take priority will inevitably reflect:

- The needs or preferences identified by people living with dementia in a given community.
- The characteristics of the community itself (for instance, metropolitan; regional; range of cultures reflected; age demographic).
- The availability and nature of existing supports and services and the ways in which these could be improved or expanded.

National and international experience shows us that successful dementia-friendly communities typically include some of the following key elements:

- Consultation with people with dementia as well as with the broader population of the local community, service providers, businesses and council staff.
- Targeted awareness training or education about dementia for council staff and/or the local community.
- Establishment of a local alliance of individuals willing to champion change. Alliance members



Jack's story

In 2013 Jack was diagnosed with vascular dementia and Alzheimer's disease at the age of 69. Jack and his wife left their 30 acre farm where they had lived most of their lives and moved into the local town. Jack has joined the local Lions club where they hold meetings and events at the municipal library. The library staff understand Jack's condition and keep his diary up to date as well as ensuring he has written information on upcoming meetings and events. In addition, the staff watch out for Jack after the meeting until his wife picks him up. They ensure there is a quiet space for him to sit if he is feeling overwhelmed. It is this key support from municipal library staff that is contributing to the ability of Jack and his wife to stay engaged and active.

¹ Alzheimer's Australia 2014. Living with dementia in the community: challenges and opportunities. Available at www.fightdementia.org.au/files/DementiaFriendlySurvey_Final_web.pdf, accessed November 2015.

would ideally include council staff and possibly specific service providers, businesses or passionate individuals in the community.

- Creation and implementation of an action plan (or series of organisational action plans), with achievable, measureable goals for change, regardless of whether that change is small and specific or big and systemic.

The nature of these action plans will very much depend on the people that create them and the parts of council that support or facilitate them. There may be a focus on the physical environment; there may be momentum to change or increase local services; education or awareness training may be a priority; or there may be interest in embedding dementia into policy and planning frameworks.

The role of councils

Councils that look at dementia strategically and positively are not only able to mitigate pressure on their services but facilitate other innovative ways for people living with dementia to contribute to their community and in turn feel more valued and included.

But how does a council begin to explore dementia-friendly communities in an effective, sustainable way?

Councils already have a range of frameworks, organisational structures and resources through which they support the physical, social, cognitive and sensory needs of their populations. Councils also have links to important stakeholder groups that can provide support and advice on dementia and access to people living with dementia.



Consider, for example:

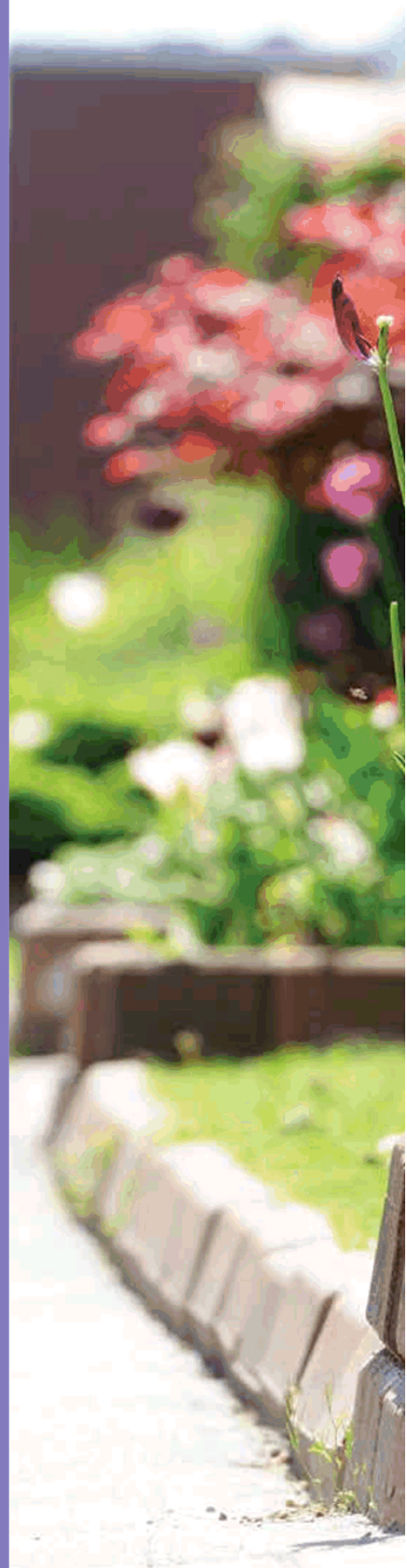
- the role that Victorian Active and Healthy Ageing Advisers might play in supporting dementia-friendly principles in the community.
- the way in which councils are responding to the report on loneliness and social isolation produced by the Commissioner for Senior Victorians.² If ageing is everyone's business, how are councils making sure that dementia is everyone's business?
- signing up to the Victorian Age-Friendly Declaration initiative and considering the needs of people living with dementia as you encourage positive ageing and boost good health, security and community participation for Victorian seniors.
- how existing local government action plans and initiatives might be adapted or expanded to include a focus on dementia.
- the mechanisms for community engagement that councils already utilise and whether these provide appropriate access to the views of people living with dementia.
- the role that specialist services and peak body organisations, like Alzheimer's Australia Vic, can play in providing support and advice for dementia-friendly initiatives.
- how a focus on universal design can be embedded into existing strategic and implementation plans, regardless of department or function.
- how the power of volunteers could be harnessed to support councils in facilitating and implementing change.
- what tools and resources councils have access to and how these might be disseminated across council.

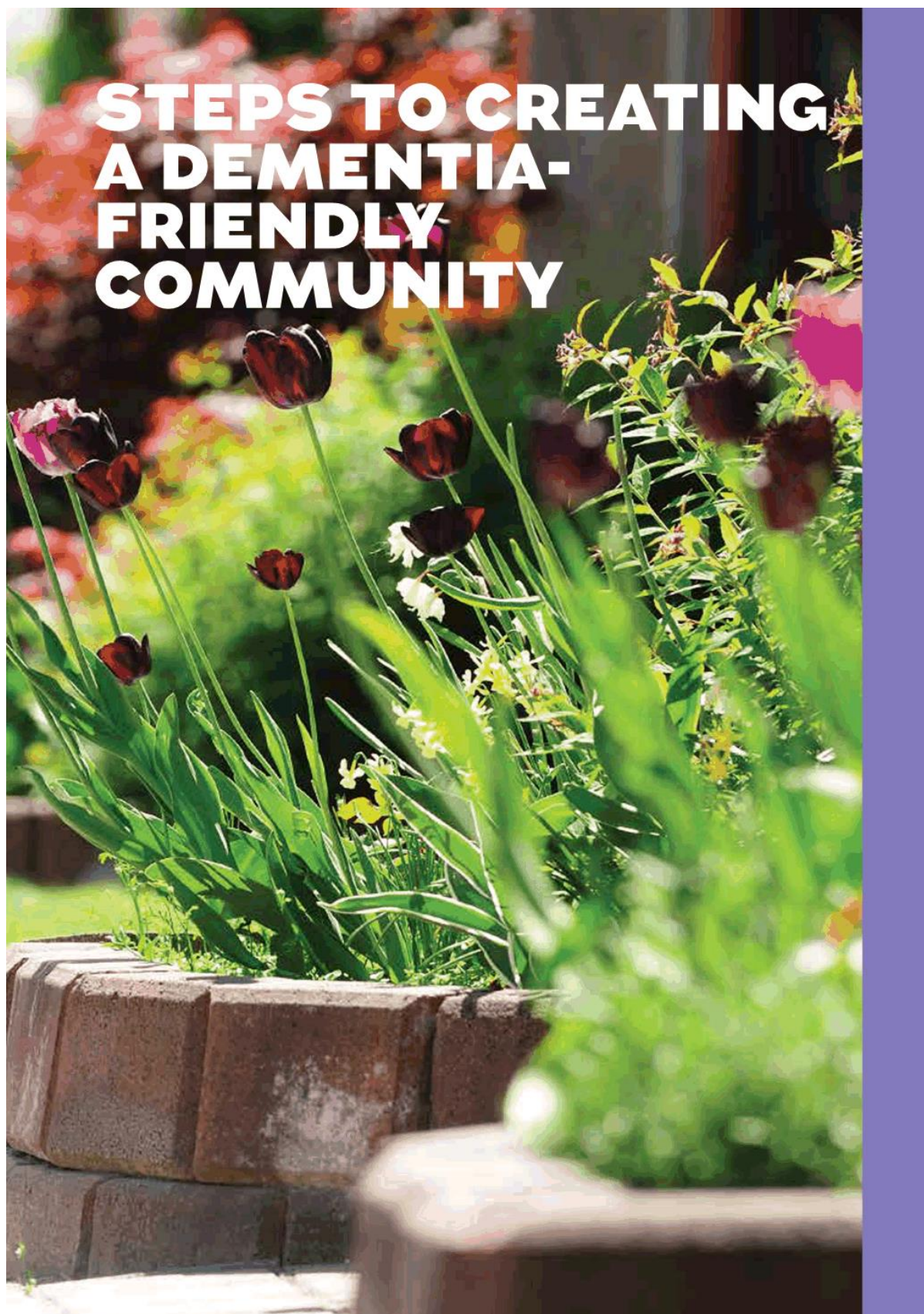
2. Commissioner for Senior Victorians 2016. Ageing is everyone's business: a report on isolation and loneliness among senior Victorians. Available at www.seniorsonline.vic.gov.au/services-information/commissioner-for-senior-victorians, accessed May 2016.



People living with dementia, their families and carers often say to us, 'nothing about us without us'. This sentiment is at the very heart of dementia-friendly communities and it is exciting to see the multiple ways that councils are supporting this kind of inclusiveness.

Dr Kaele Stokes,
Strategic Projects Manager,
Alzheimer's Australia Vic





Three steps to creating a dementia-friendly community

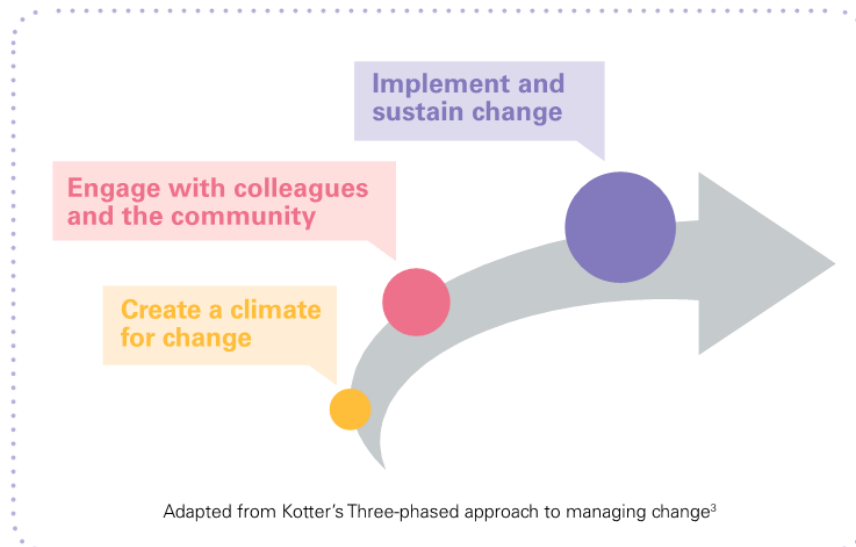
As the level of government closest to communities, local councils play a critical role in making environments healthy, safe and inclusive. Councils understand the needs of their communities and are influencers and catalysts for change.

The change management framework outlined in this section of the toolkit provides councils with a simple process for considering how to scope and implement dementia-friendly principles, both at a council level and in the broader community.

The most important thing is to remember that any step, no matter how small, is incredibly significant. Dementia-friendly communities do not happen overnight, but all it takes is one council representative to take a first step in order to generate momentum.

The three stages outlined below are intended to help councils determine what their first actions might look like and how they can be sustained. They are not intended to be prescriptive, nor are they a comprehensive list of what councils can or should do. Instead, they are designed to provide a series of options, or conversation-starters.

Initiatives may originate as short-term, cost-neutral (or low-cost) ideas that leverage off existing structures. They may focus on medium-term projects or initiatives that require some resourcing. Or they may have a focus on longer-term, 'future-proofing' of council functions and community services.



3. www.kotterinternational.com/the-8-step-process-for-leading-change, accessed May 2016.

1. CREATE A CLIMATE FOR CHANGE

The first step is to find a champion in council, regardless of department or level of seniority.

The foundation of a dementia-friendly council may be as simple as reviewing existing policies and frameworks for references to dementia or asking for dementia to be added as a standing item to departmental meetings.

The important thing is to start the conversation, take stock of where council is at in regards to supporting people living with dementia, their families and carers, and people with diverse needs more broadly.

Consider the benefits to council of being proactive in the short-term and how measures can be embedded into longer-term planning.

2. ENGAGE WITH COLLEAGUES AND THE COMMUNITY

The next step is engagement with others at council and with the broader community.

Talk to colleagues at council to build momentum or interest in dementia-friendly principles.

Talk to people living with dementia, their families and carers about what is important to them and how they can connect meaningfully with their council and community.

Seek support from consumer organisations such as Council on the Ageing, Alzheimer's Australia Vic and Carers Victoria, who can facilitate access to people living with dementia, their families and carers.

3. IMPLEMENT AND SUSTAIN CHANGE

The third step is to take action, whether that action is small or big, cost-neutral or requiring some investment. Recognise that even relatively small changes can make a significant difference to a person living with dementia.

The first step may be the creation of a local dementia alliance within or across council, or you may consider facilitating the establishment of a community alliance which can be supported by council. Alternatively, look at how an awareness of dementia-specific initiatives can be embedded into existing departmental working groups.

Come up with some tangible, achievable action items that sit in a separate dementia action plan or within existing council agendas.

1. CREATE A CLIMATE FOR CHANGE

SHORTER-TERM

Find a champion or champions within council

- Look to your existing council committees or working groups as a possible starting point
- Consider a nomination process for interested candidates
- Allocate a champion within every department or council function

Understand the local context

- Obtain the dementia prevalence data for your local area from the Alzheimer's Australia Vic website
- Review existing council reports, plans or strategies for dementia data (for example, number of direct clients with dementia)
- Map existing groups and services across the municipality that have a direct role in supporting people living with dementia, their families and carers
- Assess which existing areas of council programs might integrate a focus on dementia into current activities or frameworks (for example, active and healthy ageing, social inclusion, health and wellbeing, accessibility functions)
- Identify key community stakeholders and organisations that can help you plan your next steps (and support your activities)

LONGER-TERM

Embed the role of dementia-friendly champion into core aspects of council functions

- Include references to supporting inclusiveness in position descriptions
- Add dementia or community inclusion more broadly as a standing item on working group agendas/terms of reference (for example, Municipal Health and Wellbeing plans; active and healthy ageing plans)
- Make reference to dementia in council plans and report on initiatives to executives on a regular basis

Generate awareness of the local context

- Refer to the principles of dementia-friendly communities in cross-council newsletters, community newsletters and online forums
- Look at ways of featuring or showcasing dementia-friendly initiatives in public forums
- Build on council collections of resources and information on dementia (for example, books and journals on dementia in the municipal library; risk reduction information at local sports clubs and community centres).



Making a start

If you are a council representative who is interested in how the role of council can support people living with dementia, their families and carers, consider putting yourself forward as a dementia champion. Change can start anywhere in council and on any scale. It may be as simple as starting a conversation with colleagues.



2. ENGAGE WITH COLLEAGUES AND THE COMMUNITY

SHORTER-TERM

Consult with colleagues and generate support

- Workshop what dementia-friendly might look like in your council and/or in your departments
- Host a discussion with key council staff, the mayor and/or councillors to garner support for a broader consideration of dementia-friendly principles
- Explore how volunteers and community stakeholders can support council in key initiatives or consultations
- Identify goals that are achievable in the short-term and within existing council structures

Consult with people living with dementia, their families and carers

- Seek guidance from peak bodies like Council on the Ageing or Alzheimer's Australia Vic on consultation mechanisms
- Look at the accessibility of your usual consultation and engagement processes, and ask whether the voices of people living with dementia are being heard
- Consider establishing new or separate engagement processes for people living with dementia if existing mechanisms are not suitable (for example, consider undertaking one-on-one consultations, community surveys, or phone interviews)
- Consider the language you use in relation to dementia and avoid terms that stigmatise (for example, avoid the term 'sufferer' or 'victim')
- Ask people living with dementia to audit specific areas of council or council facilities for accessibility and appropriateness

LONGER-TERM

Aim for council-wide buy-in

- Create terms of reference for a council-wide local dementia alliance
- Identify longer-term goals that can be embedded into practices
- Make information about dementia available to staff as part of induction processes
- Celebrate specific milestones or achievements through cross-council communications and seek new champions
- Appoint a community development worker with a specific focus on the inclusion of people with diverse needs

Make consultation with members of the community with diverse needs normal practice

- Always include people living with dementia and/or their carers on formal advisory groups, reference groups and steering committees
- Develop formal performance indicators around consumer engagement, including feedback and review mechanisms
- Put out regular calls for community volunteers or dementia-friendly champions
- Facilitate the establishment of a community-based local dementia alliance and support them to meet in council facilities
- Include people with diverse needs on interview panels for positions relating to community engagement
- Download language guidelines from Alzheimer's Australia and distribute a copy to every council department



Tips for communicating with people living with dementia

DON'T

- Try to hurry people
- Argue or take a condescending tone
- Ask questions that rely on a person's memory
- Use negative body language and facial expressions

DO

- Listen carefully and make eye contact
- Allow plenty of time for a response
- Keep sentences short and simple
- Avoid competing noises such as television or radio
- Use orienting names or concepts where possible, such as "Your partner X" or "Your local council, Y"

Inclusive Manningham: A dementia- friendly city



The Inclusive Manningham project grew out of council's commitment to support the wellbeing and social connectedness of people living in the community. The Council's Healthy City plan and Ageing Well strategy promote mental wellbeing, participation and engagement as priorities, with dementia representing a key focus area.

Manningham councillors and council staff recognised the increasing number of residents affected by dementia (Manningham has the third fastest growth rate of dementia in the eastern metropolitan region) and saw the opportunity to align a project on dementia-friendly communities with broader council priorities. Manningham identified a suite of existing programs through which it could make a difference, including social support programs, cultural seniors programs, carer support groups, and more.

The key goals of Manningham City Council were to:

- Establish a local dementia alliance, with council and community representatives
- Engage with key stakeholders to raise the profile of dementia in the community and improve community awareness
- Survey the community to explore their understanding of dementia and what an inclusive community might look like
- Develop specific, achievable actions in the short- and long-term (such as education and information provision)
- Seek funding to support the sustainability and expansion of the project

Although the project is still in progress, a formal launch in 2015 was attended by the Mayor of Manningham and members of the community; a local dementia alliance has been established; an action plan has been agreed and a number of initiatives are underway.

3. IMPLEMENT AND SUSTAIN CHANGE

SHORTER-TERM

Consider small, short-term, cost-neutral or low-cost initiatives to increase awareness

- Access free or low-cost existing tools and services to educate council staff about dementia (for example, the 'Understanding Dementia' Massive Open Online Course by the Wicking Dementia Research and Education Centre, Alzheimer's Australia Vic's online learning or the Virtual Dementia Experience™)
- Circulate existing, available tools and resources to all council staff and encourage them to consider how they might put them into practice
- Tap into free community education delivered through Alzheimer's Australia Vic or consider making a small investment in tailored education for council staff
- Develop a dementia action plan and provide it to your Alzheimer's Australia representative in order to receive formal recognition of your dementia-friendly status

Take small steps to embed dementia-friendly principles into council functions

- Review council plans, strategies or frameworks for references to dementia and update policy frameworks and action items accordingly
- Ensure you have a formal review process for measuring progress
- Review HR policies and procedures to ensure there are flexible work arrangements for employees diagnosed with dementia or caring for someone living with dementia
- Review written and website information to make sure it is accessible (and consult with people living with dementia on its appropriateness)
- Consider an award or recognition process for council staff or community members who lead or contribute to dementia-friendly initiatives

LONGER-TERM

Consider longer-term initiatives that require resourcing to increase awareness

- Work in partnership with local businesses, community groups or sports clubs to support the social engagement of people living with dementia (for example, promote the use of Seniors Card discounts, explore volunteer roles or create buddy programs)
- Embed universal design principles into town planning and governance frameworks, or planned refurbishment or new buildings (for example, the height of curbs, the availability of seating, green spaces, wayfinding, signage and amenities that are dementia-friendly)
- Seek funding to undertake substantial dementia-friendly initiatives within council
- Allocate seeding grants to community groups or local businesses who want to work towards becoming dementia-friendly
- Roll out regular council-wide education about dementia, including information specific to particular departments or council functions

Take more systemic steps to embed dementia-friendly principles into your council and the community

- Develop exit strategies for an employee diagnosed with dementia, including consideration of volunteering roles
- Plan new services and supports as part of strategic and budgeting functions (for example, hosting a dementia-specific café, or buddying, peer support or mentoring programs)
- Consider the capacity of councils to provide services that directly engage people living with dementia (for example, active and healthy ageing groups; library programs; activity groups)
- Pursue formal partnerships or Memorandums of Understanding with community groups and organisations that wish to consider dementia-friendly initiatives (for example sports clubs, Probus, Lion's Club or RSL clubs)
- Host community sessions about dementia-friendly communities

Dementia-friendly environments in the City of Melbourne

Kathleen Syme Library and Community Centre Activity Room



The City of Melbourne, in partnership with Alzheimer's Australia Vic, has been working to make the Kathleen Syme Library and Community Centre more dementia-friendly.

Utilising dementia-friendly design principles in the planned activity rooms, access areas and toilets has improved access and participation for people with dementia.

The changes have included:

- Flooring that is a contrasting colour to the furniture and walls
- Well-lit transition from entrance to the activity room
- Room signage that includes colour contrast text and symbols
- Acoustic ceiling tiles to absorb sound within the interior
- A non-patterned floor covering
- Colour contrast between placemats, table and crockery
- High quality lighting to limit dark shadows
- A coloured toilet seat that contrasts with the toilet
- A sensory garden with scented plants with tactile foliage and flowers



Tips for the physical environment

- Use unambiguous seating design (for example, chairs should look like chairs)
- Use high-contrast design features (for example, in a public restroom consider different-coloured toilet seats, distinctive buttons for flushing and signage on the inside of the exit door to differentiate it from a toilet cubicle door)
- Avoid sudden changes in light level since shadows can be confusing
- Use clear signage that allows for line of sight orientation, and which uses words and pictures
- Consider inclusion of 'quiet spaces' in refurbishments and new buildings

Dementia is all of council's business

The most successful dementia-friendly initiatives are achieved when all levels of council take a shared approach to supporting people with diverse needs. But this does not mean that a cross-council approach is the only way to start exploring dementia-friendly communities.

The impetus for change can come from any individual and from any council department or function. The below table demonstrates some of the ways in which different parts of a council can begin the journey towards dementia-friendliness.

Department	Why?	How?
Corporate Services <ul style="list-style-type: none"> • Customer service • Public relations and communication • Human resources 	<p>You have regular contact with people with dementia and are able to be responsive to their needs.</p> <p>You are in a position to facilitate change within council, both in terms of how councils operate and how you meet the needs of the community.</p>	<ul style="list-style-type: none"> – Become the change champion for your council. Bring key internal and external stakeholders together – Suggest that customer service staff undertake training on how to communicate well with people with dementia – Review your council reception areas for dementia-friendly design principles and make recommendations for small but significant changes or upgrades – Ensure that human resources policies support employees with dementia or families and carers of people living with dementia
Facilities and Infrastructure <ul style="list-style-type: none"> • Parks and recreation • Community facilities • Emergency management services • Libraries • Local laws • Roads, footpaths, traffic management • Public spaces • Community transport 	<p>Public spaces, parks and gardens are fundamental components of how people in the community interact, socialise and maintain wellbeing.</p> <p>Embedding simple strategies and awareness of universal principles in design, review and maintenance can significantly impact the lives of people with dementia.</p> <p>Planners can ensure universal design principles are embedded in new and revised guidelines and that they inform planned and future activities.</p>	<ul style="list-style-type: none"> – Ask urban designers to consult with people with dementia and their carers on the design of public outdoor and indoor spaces – Ensure that Municipal Emergency Management Plans and Community Safety Plans take into account the needs of people with dementia – Talk to libraries about building up their collections on dementia and how to live a positive life following a diagnosis – Ensure that planning frameworks address universal design principles and that a plan for implementation is clear – Review public facilities to ensure they are accessible and easy to navigate – Source information on dementia-friendly design principles from organisations like Alzheimer's Australia Vic and embed into planning frameworks, including Road Management and Road Safety Plans

Department	Why?	How?
Facilities and Infrastructure (continued)	Road infrastructure and community transport are fundamental aspects of social engagement and independence for people with dementia.	<ul style="list-style-type: none"> – Ensure that all new and upgrade public works embed universal design principles. For example: <ul style="list-style-type: none"> • Seats in public spaces have a plain design and are easily recognised as chairs • Signs that use bright primary contrasting colours with easily recognisable pictures to reinforce the location • Public amenities which are dementia-friendly in design and signposting – Support community bus drivers to undertake training to understand the needs of people with dementia – Apply for state or federal funding to undertake larger-scale initiatives
Health and Community Services <ul style="list-style-type: none"> • Aged and disability • Cultural • Youth and family • Health 	<p>You may already have contact with people living with dementia and are informed about their needs.</p> <p>Simple changes to current services or identification of service gaps could lead to opportunities to streamline or economise current services.</p>	<ul style="list-style-type: none"> – Support service staff and volunteers to undertake free or targeted training to better understand the needs of people with dementia – Consider the development of council programs that address the specific needs of people with younger onset dementia (aged under 65 years), given this form of dementia appears at an earlier stage of life when people are likely to be more physically and socially active and programs for older people may not be appropriate – Make communities aware of dementia resources for people from culturally and linguistically diverse backgrounds – Consider whether health and wellbeing frameworks are inclusive of people living with dementia – Review current services and supports, and consider how service improvements can be achieved in a cost effective way (for example, using volunteers)

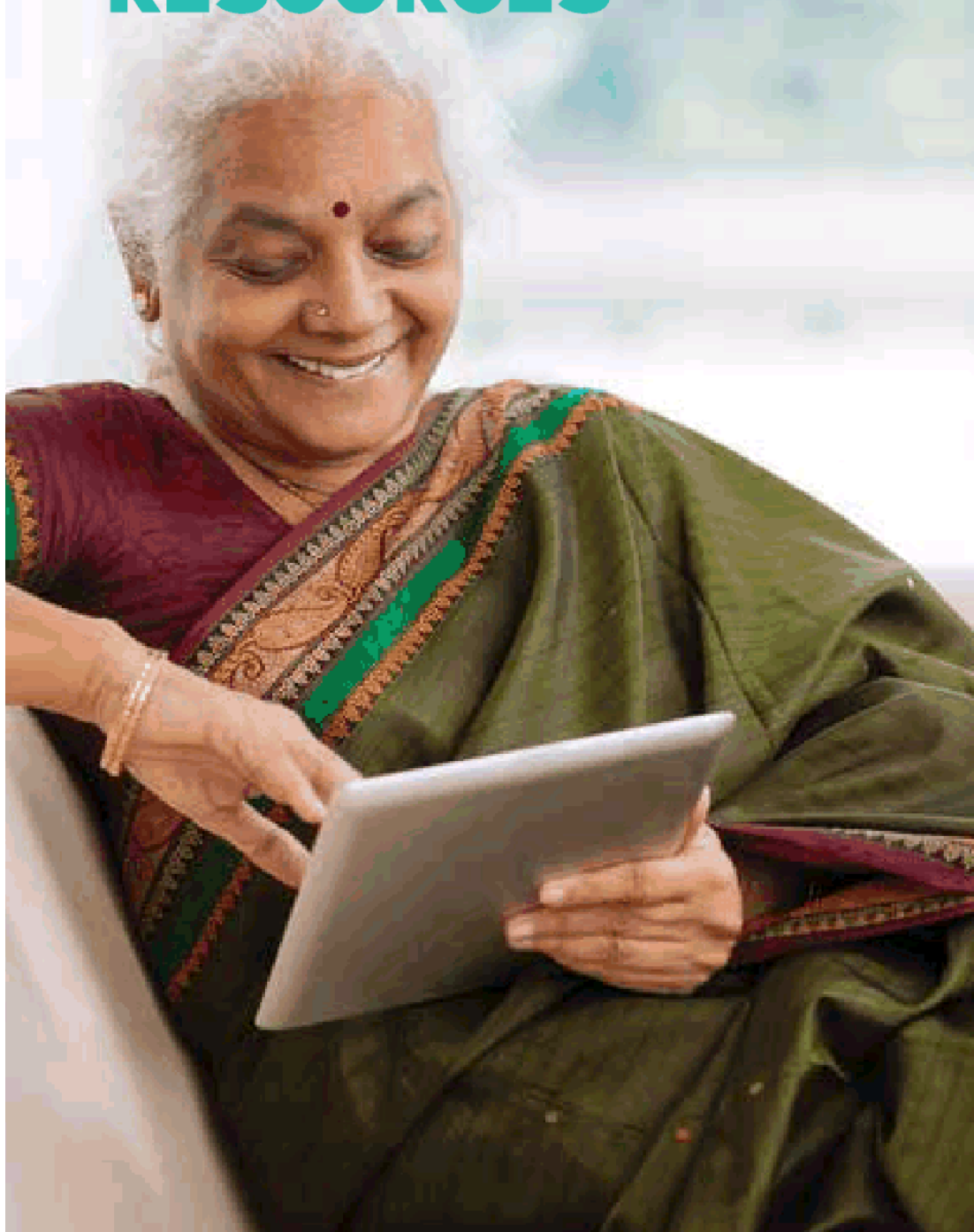


The toolkit and tools make it easier for councils to embrace change and the tools will help guide and commit us to dementia-friendly activities

Council Worker



TEMPLATES AND ADDITIONAL RESOURCES



SA21.168 - Attachment 1

TEMPLATES

Dementia-friendly community survey

Use or adapt this survey to find out what people with dementia do in your area, what facilities they use, and what helps or hinders them.

Survey for businesses

Use or adapt this survey to help identify businesses that want to be more dementia-friendly and those wanting to be involved in a local dementia alliance.

Expression of Interest – local dementia alliance

Use or adapt this expression of interest to help you to identify and invite interested and suitable parties.

Local Dementia Alliance – terms of reference

Use or adapt these terms of reference to set out the working arrangements for your local dementia alliance group, outline the committee purpose, decision making role, chair and secretariat membership, and meeting schedule.

Action Plan template

Use or adapt this action plan template to define the actions of your council's department, whole-of-council and/or the local dementia alliance, clarify what resources are required, outline the timelines for activities to be completed and record progress of the group.

Briefing note for service providers and businesses

Use or adapt this briefing note to help local businesses understand why it is important to be more dementia-friendly and provide simple steps to help them achieve it.

Engagement strategies for people living with dementia

Use this guide as a starting point for considering the different ways to engage with people living with dementia and to find out what a dementia-friendly community means to them.

Physical environments checklist

Use this checklist as basic guidance on things to consider in making physical environments easier for people living with dementia.

Social engagement checklist

Use this checklist to help identify ways in which people with dementia can meaningfully contribute to and participate in everyday activities.

DEMENTIA-FRIENDLY COMMUNITY SURVEY

«Town/Municipality» Dementia-friendly survey – Community members

A dementia-friendly community is a place in which people living with dementia are supported to live a high quality of life with meaning, purpose and value. We want to find out how dementia-friendly «town/municipality» and the surrounding area is and what could be done to make it more dementia-friendly. With the support of the community people with dementia can continue to do many of the things they love.

The information from this survey will be used to make «town/municipality» more dementia-friendly.

1. In a typical week do you live?

- ☐ On your own
- ☐ With your family carer
- ☐ With someone who is not your carer
- ☐ In a care home
- ☐ Other, please specify:

2. How often do you get out of the house?

- ☐ Most days
- ☐ Every couple of days
- ☐ A few times per month
- ☐ Less than once a month
- ☐ Don't know

3. What do you do in your local area (please mark all that apply to you)

- | | |
|---|---|
| <input type="checkbox"/> Shopping or errands | <input type="checkbox"/> Sporting events |
| <input type="checkbox"/> Eating out | <input type="checkbox"/> Hobby group |
| <input type="checkbox"/> Playing sports such as lawn bowls, tennis | <input type="checkbox"/> I don't do anything in my local area |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Visiting parks | <input type="text"/> |
| <input type="checkbox"/> Support or planned activity group | |
| <input type="checkbox"/> Gardening | |
| <input type="checkbox"/> Dancing or music groups | |
| <input type="checkbox"/> Card or board games | |
| <input type="checkbox"/> Attending a place of worship | |
| <input type="checkbox"/> Visiting the library | |
| <input type="checkbox"/> Movie, concert, theatre or other performance | |
| <input type="checkbox"/> Museum or art gallery | |
| <input type="checkbox"/> Community groups such as Probus or Lions | |

4. What helps you to do these things?

- ☐ Good transport
- ☐ Good physical accessibility
- ☐ Support from family and friends
- ☐ Support from businesses or services
- ☐ Plenty of signs to help me find my way around town
- ☐ Feeling welcome
- ☐ Other, please specify:

5. What makes it more difficult for you to do these things?

- ☐ Decreasing physical health
- ☐ Difficulties with physical mobility
- ☐ Lack of transport
- ☐ Lack of support from family, carers and friends
- ☐ Lack of support from businesses or services
- ☐ Lack of confidence
- ☐ Worry about getting lost
- ☐ Worry about becoming confused
- ☐ The things I enjoy are not available
- ☐ Feeling unwelcome
- ☐ Not wanting to be a burden to others
- ☐ Other, please specify:

6. Are there things that keep you from going out and doing things like shopping, errands and eating out that you previously did? (Please mark all that apply)

	Yes	No
Difficulty communicating with staff at stores	<input type="checkbox"/>	<input type="checkbox"/>
Not enough support from family, friends or carers to assist me to do those things	<input type="checkbox"/>	<input type="checkbox"/>
Concern about getting lost or confused	<input type="checkbox"/>	<input type="checkbox"/>
No appropriate services available nearby	<input type="checkbox"/>	<input type="checkbox"/>
People seem to feel awkward or tense around me when I go out because of my diagnosis	<input type="checkbox"/>	<input type="checkbox"/>
I prefer to stay at home	<input type="checkbox"/>	<input type="checkbox"/>
Other health problems keep me from going out	<input type="checkbox"/>	<input type="checkbox"/>

Other: please describe:

7. Do you wish you had more social contact with people in the community?

- ☐ Yes
☐ No
☐ Unsure

8. What do you think could be done to make the «town/municipality» community more dementia-friendly?

9. As part of the dementia-friendly «town/municipality» project there will be a local dementia alliance made up of people in the community and organisations who are interested in helping to make «town/municipality» more dementia-friendly.

Would you be interested in joining a local dementia alliance?

- ☐ Yes
☐ No
☐ Unsure

Name _____

Email _____

SURVEY FOR BUSINESSES

«Town/Municipality» Dementia-friendly survey – Businesses

A dementia-friendly community is a place in which people living with dementia are supported to live a high quality of life with meaning, purpose and value. We want to find out how dementia-friendly «town/ municipality» and the surrounding area is and what could be done to make it more dementia-friendly. With the support of the community, and of businesses and organisations like yours, people with dementia can continue to do many of the things they love.

The information from this survey will be used to make «town/municipality» more dementia-friendly.

1. Please indicate the type of your organisation

- ☐ Retail
- ☐ Pharmacy
- ☐ School
- ☐ Transport
- ☐ Food and beverage
- ☐ Finance
- ☐ Emergency services
- ☐ Community service
- ☐ Travel agency
- ☐ Other (please specify):

2. Please tick the box which best describes how much you agree or disagree with the following statements:

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	N/A
Our business has customers with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our business will benefit if we support people with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our staff know how to support people with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our staff know how to communicate with people with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I know where to go for resources to train our staff in supporting people with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Please indicate whether you have done or would consider doing the following to move towards this business being dementia-friendly:

	Have done	Would consider doing	Would not consider doing
Learning to better assist people with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Committing to supporting people with dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supporting staff in dementia awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviewing our physical environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviewing information we provide to the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Involving people with dementia in these changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning to review our level of dementia-friendliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. As part of the dementia-friendly «town/municipality» project there will be a Local dementia alliance made up of people in the community and organisations who are interested in helping to make «town/municipality» more dementia-friendly.

Would you be interested in joining a local Dementia Alliance?

- ☐ Yes
☐ No
☐ Unsure

5. If you would like to receive information on how your business could support people in the community living with dementia or join a «town/municipality» dementia alliance, please provide your details:

Name _____

Email _____

EXPRESSION OF INTEREST - LOCAL DEMENTIA ALLIANCE

<Insert title of your Initiative>:

Local Dementia Alliance nomination form

«town/municipality» is delivering a new initiative aiming to improve the quality of life of people living with dementia, their families and carers by facilitating a community that is dementia-friendly.

One of the early initiatives of this project is the formation of a «town/municipality» local dementia alliance to inform and guide the development of a local work plan and play an advisory role in the future implementation of the project.

We are seeking nominations from interested parties to be involved in «town/municipality» local dementia alliance. Nominations will be accepted from residents with dementia, carers, community organisations, sporting clubs, local businesses, service clubs, places of worship and other bodies interested in creating a more inclusive municipality.

The alliance is anticipated to meet on a <add frequency> basis for the planning and early implementation phases of the project between <insert timeline>. A review by the committee will determine the ongoing schedule.

The first meeting has been scheduled for <Insert Time and Date>.

If you have any queries please contact <Contact Name, telephone number and email>

Name _____ Telephone _____

Email _____

I am interested in being involved as a:

- ☐ community representative
☐ organisational representative

Name: _____

Organisation (if organisation representative): _____

Address: _____

_____ Post Code: _____

Phone: _____ Mobile: _____

Occupation: _____

Nominated by:

- ☐ Self
☐ Organisation
☐ Other _____

Experience

List any experience or expertise with dementia.

List any previous experience on a local government network or committee.

Reasons for applying:

What do you hope to achieve by being a member of the «town/municipality» local dementia alliance?

Availability:

Meetings will be held <add frequency> from <insert timeline>. Are you able to commit to this requirement?

☐ Yes

☐ No

Authority:

If appointed to the local dementia alliance, I authorise disclosure of my name and, if appropriate, the name of my organisation.

Signature: _____ Date: _____

Return completed forms by <insert date> to

<insert return address>

LOCAL DEMENTIA ALLIANCE – TERMS OF REFERENCE

<Initiative Name> Local Dementia Alliance terms of reference

Introduction

Through a collaboration with key stakeholders, «town/municipality» is making a genuine commitment to improve the quality of life of its diverse community and to be more inclusive.

The local dementia alliance is a coalition of local businesses, groups, organisations, and individuals, including people with dementia.

The local dementia alliance will inform and guide the <initiative name> through the development, implementation and monitoring of a local action plan. It will also support the ongoing sustainability of this initiative into the future for «town/municipality».

The local dementia alliance will operate to support the development of a dementia-friendly community by raising awareness of issues faced by local people with dementia and taking actions to improve the lives of people with dementia and their carers.

The alliance will focus on the inclusion of people living with dementia and their carers who live, work, or have a connection to «town/municipality».

Responsibilities

The local dementia alliance is responsible for taking actions to enhance the lives of people living with dementia by:

- Providing advice on and developing the «town/municipality» dementia-friendly action plan.
- Sharing information and exploring opportunities to champion this issue as a collective.
- Identifying opportunities for improving the lives of people living with dementia and their carers.
- Partnering with and/or leading potential initiatives that result from the action plan.
- Advocating for the needs of people living with dementia and their carers to the broader community.

Decision making

The decision making role of the alliance is limited to advising and making recommendations for actions and activities that support the <initiative name>.

Membership

The alliance will consist of up to <number> members. Membership is voluntary and may include residents and representatives of organisations that provide services to «town/municipality».

The appointment of members that will form an alliance will occur through an expression of interest process and appointments will be for a period of <number> years. Nominees may be interviewed by council.

Meetings

- The chair will be selected from the group and will chair for one year.
- The chair will be responsible for the preparation, distribution and storage of the local dementia alliance agenda and meeting minutes.
- Distribution of minutes will be by post or email as chosen by participants.
- Apologies should be sent to the chair.
- Meeting frequency will be <monthly/bi-monthly>. Meetings will be held at <insert, meeting location>.
- Decisions will be made by consensus wherever possible. If there is difference of opinion, the majority vote will determine the decision.

Code of behaviour

The local dementia alliance is a voluntary community group. Members commit to ensuring respectful behaviour between members and/or their respective organisations at any meetings or events associated with the «town/municipality».

This includes:

- Representing the alliance in a positive and respectful way within the community
- Making use of members contact details for business purposes only, or related matters relevant to the work of the alliance
- Being committed to the principles of dementia-friendly communities

Contact

For more information regarding the local dementia alliance or the wider «town/municipality» dementia-friendly community initiative please contact: <insert contact name and details>.

ACTION PLAN TEMPLATE

This dementia-friendly action plan will be planned and reviewed by the local dementia alliance.
Please list one to two action items for each essential principle.

Who we are	Description of the council department, organisation or business, including key stakeholders, numbers of employed staff and location of business operations.		
Our commitment to being dementia-friendly	What is the vision of the council, organisation or business for being dementia-friendly? Provide details of how being dementia-friendly relates to your council, organisation or business.		
Our dementia-friendly action plan	Explain who has been involved in the development of this plan.		
Essential principle	People with dementia are involved in the process of becoming dementia-friendly Possible action: People with dementia are represented on the local dementia alliance.		
Action	Responsibility	Timeline	Progress
List the possible actions that could be taken to achieve this aim	Who will be responsible	When will this action be completed by	Progress to date
1.			
2.			

Essential principle	Commitment Possible action: Becoming a dementia-friendly organisation is discussed by senior executives and elected representatives.		
Action	Responsibility	Timeline	Progress
Essential principle	Up-skilling staff Possible action: Dementia awareness education and training is provided to staff.		
Action	Responsibility	Timeline	Progress

Essential principle	Review of the physical environment Possible action: The dementia-friendly audit tool is utilised to review the physical environment.		
Action	Responsibility	Timeline	Progress
Essential principle	Business documentation Possible action: A small working group is established to review business forms and documentation to incorporate dementia-friendly concepts.		
Action	Responsibility	Timeline	Progress
Essential principle	Review and continuous improvement Possible strategy: Dementia-friendly status is incorporated into yearly review processes.		
Action	Responsibility	Timeline	Progress

BRIEFING NOTE FOR SERVICE PROVIDERS AND BUSINESSES

Why does my service/business need to be dementia-friendly? – a briefing note for local service providers and businesses

There are currently almost 97,000 people living with dementia in Victoria. As the population ages, this number will increase.

Dementia causes a progressive decline in a person's mental functioning, affecting everything they do. It is a social and health condition, not just an aged care issue.

Dementia can happen to anyone and affects the whole family of the person with the disease.

The majority of people with dementia live in their own homes in the community. This means that

many of the people using your service will have dementia. You can become more dementia-friendly by making it easier for people with dementia to use your service and by supporting staff to serve them more effectively.

There is no easy way for you to tell if a person has dementia. Some people with dementia will ask for help while others may prefer to keep their diagnosis private and some may not have received a diagnosis.

What can you do?

Approach	Strategy
Ask people with dementia what it is like to use your business.	Find out what is working well and where improvements can be made; people with dementia and their carers are the experts.
Equip staff to understand and better assist people with dementia.	Provide staff training about dementia. Alzheimer's Australia has some useful Help Sheets at: fightdementia.org.au/about-dementia/resources/help-sheets
Where appropriate, get to know the person's carers.	This may be essential when important transactions are involved.
Look out for people in difficulty.	When people have problems handling money, don't rush them. Ask if you can help to count out the right money.
Make buildings easier for people with dementia to navigate.	Place signs at key decision points. Reduce noise and where possible provide quiet places. Make sure the lighting is bright enough for people to see clearly.
Provide written information that is clear and easy to understand.	Keep language simple, avoid jargon. Present information one piece at a time. Use at least 12 point font size, but 14 point is better.

ENGAGEMENT STRATEGIES FOR PEOPLE LIVING WITH DEMENTIA

The idea of making our communities better places to live for people with dementia is something a lot of people are interested in. The most important stakeholders in this process, of course, are people living with dementia, their families and carers.

Listening to the voices of people with dementia about their needs and preferences ought to be at

the heart of creating a dementia-friendly community and is the best way of understanding the experience of life with dementia.

Sometimes engagement strategies need to be tailored to the abilities of participants. Some suggested strategies are outlined below.

Talking to people one-to-one

Losing the ability to communicate can be one of the most frustrating and difficult problems for people with dementia and their carers. As the illness progresses, a person with dementia may find it more and more difficult to express themselves clearly and to understand what others say. Talking to people one-to-one may allow you to meet their particular needs.

Talking to groups of people

Group discussions may have advantages over individual interviews by reducing pressure on people to respond, providing mutual support and the opportunity for shared experiences to trigger memory and help people to articulate their own thoughts. Working in established groups where people know and feel comfortable with each other can help to find out the views and opinions of people with dementia.
It may be easier for many people with dementia to think about ideas and proposals themselves in a facilitated group in their own time, and then convey their responses.

Asking people if they would like to fill out a survey

Many people with dementia are able to fill out a survey on their own, whereas some may need assistance or prompting. The survey on page 29 is designed to help people to have their say on what a dementia-friendly community means to them.

Taking a walk with people to see how they experience their community

People at different stages of the illness have much to offer during a walk around their community. This can be a very effective way of finding out how people with dementia experience their local environment and identify ways in which to support local facilities to become more dementia-friendly. Never assume that people with more advanced dementia cannot enjoy this process or have nothing to offer.

PHYSICAL ENVIRONMENTS CHECKLIST

Small changes can make a big difference. For many people with dementia the environment (both indoor and outdoor) can have a significant impact on their ability to continue to access everyday activities such as shopping, banking or using public transport.

This checklist gives a range of design recommendations to help improve the quality of life of people with dementia in the outdoor and indoor environments.

Outdoor Environments	
Provide acoustic barriers, such as planting and fencing, to reduce background noise.	
Use clear, large signage for toilets and other public spaces.	
Provide obvious and easy access to shaded areas, with adequate seating.	
Provide seating that looks like seating, such as a wooden bench rather than more abstract designs.	
Provide adequate parking with easy access to parks, libraries or public facilities.	
Ensure ground level changes are clearly marked and well-lit, with handrails and non-slip, non-glare surfaces.	
Ensure clear visibility from top step to bottom.	
Provide sensory stimulation in gardens and parks by using different colours, scents, textures and sounds.	
Ensure main paths are wide enough for two users to walk or use wheelchairs.	
Ensure entry and exit signs are clear and obvious.	
Avoid structures such as pergolas that cast shadows, which may be interpreted as depth changes by people living with dementia.	
Ensure undercover areas in parklands are provided for accessibility in all weather conditions.	
Utilise visual landmarks are in place to assist way finding such as garden beds, murals, water fountains or features.	
Ensure bus shelters are enclosed and have adequate seating.	
Ensure signs have large graphics and symbols in clear colour contrast to the background, preferably dark colouring on a light background.	
Avoid bright light and deep shadows.	

Indoor Environments

Ensure indoor spaces have good lighting with natural light sources.

Minimise loud noises like music or announcements.

Provide quiet spaces with adequate seating for people with dementia.

Allow for shading where required through the use of window treatments like external sun shading, curtains and blinds.

Ensure all manually operated entry doors/gates are easily operated with lever handles or push plates.

Ensure all glass doors are clearly marked.

Ensure level changes are clearly marked and well lit with handrails and non-slip, non-glare surfaces.

Provide obvious hot and cold indicators on water taps.

Use contrasting colours for floors, walls and furnishings.

Avoid bold patterns on carpets, wall paper and floor coverings as these might cause perceptual problems. Plain walls and curtains are recommended.

Use changes in texture or colour of floor coverings to indicate potential hazards.

Use colour contrast to differentiate between toilet seats, toilet bowls and floor.
Use uniform signage for male and female toilets.

Choose furniture colours that clearly contrast with the colour of the carpet and walls.

Use simple signage giving clear and essential information.

Fix signage to walls at eye level (around 1400–1700mm above floor level where possible).

Create straight and direct layouts to destinations, with limited changes in direction.

Provide quiet spaces for anyone who might be feeling anxious or confused.

Provide obvious and clear entry and exit signs.

SOCIAL ENGAGEMENT CHECKLIST

Dementia can have a profound impact on people's social lives. Many people wish for more social contact with others in the community.

Social Engagement	
Include people with dementia in community initiatives and projects, giving them the opportunity to provide their input and feedback.	
Hold community events and activities at convenient times to enable full participation, for example during the day for people with dementia who are not working.	
Provide a calendar that outlines dates for the events, community programs, etc. This helps maintain orientation.	
Ensure information about community events and activities is readily available, including details regarding accessibility of facilities and transportation options.	
Review the language used in promotional materials. Use plain language, include all demographics and have a clear message.	
Provide affordable community transportation options for people with dementia and their carers.	
Ensure venues for community events and activities are conveniently located, accessible, well-lit and easily reached by public transport.	
Support people at an increased risk of social isolation to remain engaged with their community, including people living alone and other marginalised populations.	
Recognise people with dementia for their past and ongoing contributions to their community.	
Promote volunteering opportunities offered by communities, businesses and organisations to increase social engagement.	
Promote training and education opportunities for people with dementia.	
Provide and promote flexible and appropriately paid opportunities for people with dementia to assist them to continue working, or become employed.	
Ensure adequate support is provided by training and education institutions to people with dementia undertaking further study.	
Adapt workplaces and work practices to meet the physical and cognitive needs of people with dementia.	

ADDITIONAL RESOURCES

Resources for people with dementia and their carers

1. **Living well with dementia website**
livingwellwithdementia.org.au
2. **Alzheimer's Australia Vic's online dementia support for people living with dementia, their families and carers**
helpwithdementia.org.au
3. **Alzheimer's Australia Vic services**
vic.fightdementia.org.au/vic/support-and-services/services-and-programs-we-provide
4. **Dementia Alliance International**
dementiaallianceinternational.org/

Resources to raise awareness

5. **A range of Help Sheets, available in more than 30 languages, which provide advice, common sense approaches and practical strategies on the issues most commonly raised about dementia**
fightdementia.org.au
6. **A series of videos where people can learn about what dementia is, who gets it and some of its most common forms, including signs and symptoms**
helpwithdementia.org.au/
7. **Is it dementia? – a training resource for recognising the signs of dementia**
isitdementia.com.au
8. **Victorian dementia prevalence data**
vic.fightdementia.org.au/vic/research-and-publications/dementia-statistics-for-victoria
9. **Alzheimer's Australia Vic library – provides access to quality dementia related consumer health information and resources.**
vic.fightdementia.org.au/vic/support-and-services/library

Resources for communities

10. **First Steps to Becoming a Dementia-friendly Australia – examples that have been undertaken around Australia**
fightdementia.org.au/files/First_Steps_web.pdf

11. **Dementia Enabling Environment Principles**
enablingenvironments.com.au

12. **Department of Health and Human Services dementia-friendly environments**
health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments/

13. **Living well, longer. Dementia-friendly communities and organisations.**
globalchallenges.uow.edu.au/living/UOW164773.html

14. **Universal design principles for sports and recreation**
sport.vic.gov.au/design-for-everyone-guide/overview-of-universal-design

15. **Alzheimer's Australia dementia-friendly resources**
vic.fightdementia.org.au/national/campaigns/dementia-friendly-communities/resources

16. **World Health Organisation's Age-friendly Cities**
who.int/ageing/age-friendly-world/en/

Resources for councils and organisations

17. **A toolkit for businesses who want to become dementia-friendly**
fightdementia.org.au/sites/default/files/Business_toolkit.pdf

18. **Creating a dementia-friendly work place: a practical guide for employers**
alzheimers.org.uk/site/scripts/documents_info.php?documentID=2963

19. **Alzheimer's Australia Vic education and training**
vic.fightdementia.org.au/vic/education-and-consulting/education-and-training

20. **Uniting Age Well – Dementia-friendly social support checklist**
unitingagewell.org/Documents/Dementia%20friendly%20social%20support%20checklist.pdf

NATIONAL DEMENTIA HELPLINE 1800 100 500
FIGHTDEMENTIA.ORG.AU/VIC

UNDERSTAND ALZHEIMER'S
EDUCATE AUSTRALIA



SA21.171 - Attachment 1

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1. Introduction

1.1 The proposal

Shoalhaven Water proposes to construct a new reservoir and associated interconnection works at the Bendeela Water Treatment Plant (WTP), located at Jacks Corner Road, Kangaroo Valley (refer to Figure 1.1) (the proposal). The proposal is required to increase the holding capacity of the existing WTP to achieve the required chlorine contact times for water disinfection and secure the water supply for Kangaroo Valley. The proposal would be a concrete reservoir designed to have a minimum capacity of 0.5 megalitres with a top water level of 185.11 metres Australian Height Datum (AHD) to match the existing Bendeela reservoir. The proposal would also include the relocation of existing water services to a nearby WaterNSW camping ground and the replacement of existing site fencing with new high security fencing around the perimeter of the new reservoir site.

For the purposes of this REF, the following definitions are used:

- The 'proposal' or 'proposal site' - refers to the construction of the new Bendeela Reservoir, associated interconnection works and the area required for the construction of the proposal, including construction vehicle access. It includes the construction footprint, site compound, stockpile sites and any areas that would be disturbed (refer to Figure 1.1).
- The 'study area' refers to the proposal site and any additional areas which are likely to be affected by the proposal, either directly or indirectly. Generally, the study area includes the area up to 500 metres from the proposal site.
- The 'locality' refers to the area within a 10 kilometre radius of the proposal.

1.2 Purpose of this report

This review of environmental factors (REF) has been prepared by GHD Pty Ltd (GHD) on behalf of Shoalhaven Water to assess the potential environmental impacts of the proposal. For the purposes of the proposal, Shoalhaven Water is the proponent and determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of the REF is to describe the proposal, to document the likely impacts of the proposal on the environment, and to detail mitigation measures to be implemented as part of the proposal.

The proposal has been assessed in the context of clause 228 of the Environmental Planning and Assessment Regulation 2000, the *Biodiversity Conservation Act 2016* (BC Act), Biodiversity Conservation Regulation 2017, the *Fisheries Management Act 1994* (FM Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In doing so, the REF helps to fulfil the requirements of section 5.5 of the EP&A Act that Shoalhaven Water examine and take into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity.

The findings of the REF would be considered when assessing:

- Whether the proposal is likely to have a significant impact on the environment and require an Environmental Impact Statement to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.1 of the EP&A Act.
- The significance of any impact on threatened species as defined by the BC Act and/or FM Act in section 1.7 of the EP&A Act and therefore the requirement for a Species Impact Statement.

- The potential for the proposal to significantly impact on a matter of national environmental significance or Commonwealth land and the need to make a referral to the Australian Government Department of Agriculture, Water and the Environment (DAWE) for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

1.3 Scope and limitations

This report has been prepared by GHD for Shoalhaven Water and may only be used and relied on by Shoalhaven Water for the purpose agreed between GHD and the Shoalhaven Water as set out in section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Shoalhaven Water arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 1.4 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Shoalhaven Water and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

1.4 Assumptions

Assumptions made by GHD when undertaking services and preparing the REF include (but are not limited to):

- The impact footprint of the proposal would be limited to the area as presented in Figure 1.1 and described in section 3
- The safeguards and management measures detailed in section 7 would be implemented.



2. Need and options considered

2.1 Need for the proposal

The Bendeela WTP was commissioned in 1993 and uses a microfiltration system to improve water quality for the residents and businesses within Kangaroo Valley to whom it provides water. The facility processes up to 1.5 million litres of water each day, with the membrane technology eliminating the need to add chemicals during the treatment process. In order to supply the water demands of the growing population in the region, a new reservoir and associated interconnection works are required. This would enable the appropriate chlorine contact times for water disinfection to be met to further service the area. The existing reservoir currently has issues with the chlorine contact times being achieved.

The need to make the water supply system more robust and secure the water supply for Kangaroo Valley was highlighted during the January 2020 bushfires.

The objective of the project is to increase the supply capability and improve the chlorine contact time for water disinfection at the Bendeela WTP and secure the water supply in the Kangaroo Valley area.

2.2 Alternatives and options considered

The options for the proposal include the following:

- The do-nothing option – This involves leaving the WTP with its existing infrastructure and not constructing the new reservoir and associated interconnection works. This option would not enable the facility to achieve appropriate chlorine contact times for water disinfection to make the supply system more robust and secure the water supply for Kangaroo Valley. This option was therefore discounted.
- Construction of a new reservoir (the proposal) – This option involves upgrading the Bendeela WTP by constructing a new reservoir and associated interconnection works. This option is the preferred option as it meets the objective of securing the water supply in the Kangaroo Valley area through improving the chlorine contact time for water disinfection at the Bendeela WTP.

2.3 Preferred option

The preferred option meets the project objective by increasing the supply capability of the Bendeela WTP through improving chlorine contact time for water disinfection and construction of a new reservoir. This option includes construction of associated interconnection works, the relocation of existing water services to a nearby WaterNSW camping ground and replacing existing perimeter fencing with new high security fencing around the new reservoir site.

3. Description of the proposal

3.1 The proposal

Shoalhaven Water proposes to construct a new reservoir at the Bendeela WTP located at Jacks Corner Road, Kangaroo Valley (refer to Figure 1.1), to improve the chlorine contact time for water disinfection and secure the water supply for the Kangaroo Valley area.

Key features of the proposal include:

- Construction of a 0.5 megalitre capacity concrete reservoir
- Relocation of existing water services to WaterNSW camping ground
- Replacement of existing perimeter fencing with new high security fencing around the new reservoir site
- Diversion of existing stormwater drains through the site via a dedicated, rock lined open drainage channel
- Installation of a concrete drainage apron surrounding the perimeter of the site to capture and divert roof and surface runoff to the new open drainage channel
- Construction of new concrete pathways to connect new facilities to existing concrete pathways
- Installation of new sample lines.

A schematic plan of the pipe layout for the proposal, showing the proposed new reservoir and existing infrastructure of the WTP, prepared by Shoalhaven Water is shown in Figure 3.1.

A temporary site compound and stockpile site would be established adjacent to the proposal site along Jacks Corner Road on Shoalhaven Water owned land (refer to Figure 1.1).

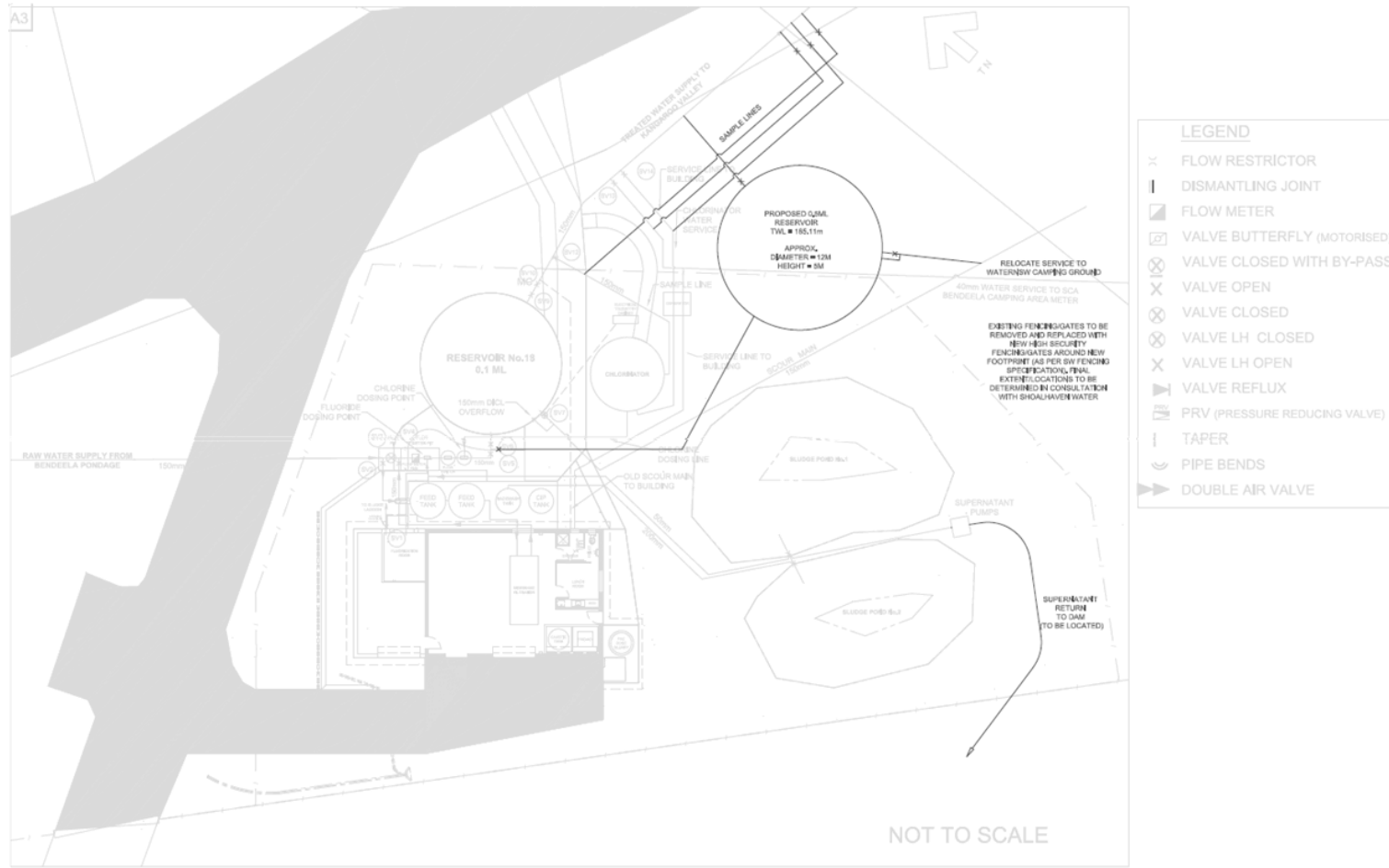
It is anticipated that construction of the proposal would commence in August or September 2021 and take three to four months to complete. Shoalhaven Water would manage the construction process.

3.2 Design

The following design criteria was used to develop the proposal:

- Minimum capacity of reservoir to be 0.5 megalitres
- Dimensions of reservoir to be 12 metres in diameter and five metres high
- Top water level (TWL) of the reservoir to match the existing 185.11 metres (AHD) of the Bendeela reservoir
- Reservoir to feature a sealed side hatch for personnel/equipment entry to facilitate regular maintenance/cleaning
- Provision of an internal access vertical ladder with no cage
- Maintenance of required chlorine Contact Time (CT) via a floor mounted supply inlet and/or the installation of a baffle curtain
- Installation of a level transmitter off the scour pipe
- Connection of a pressure manifold to existing telemetry cabinet.

Figure 3.1: Proposed reservoir and pipe layout



3.3 Construction activities

3.3.1 Work methodology

Construction would be undertaken by Shoalhaven Water in accordance with a construction environmental management plan. Pre-construction activities would include:

- Establish work site boundaries (physical delineation where appropriate)
- Installation of environmental control measure and erosion and sediment controls, including clean-water diversions where required (in accordance with the CEMP)
- Identification and retention of native vegetation where required
- Set up stockpile site for storing materials
- Establishment of site compound including toilet facilities.

Construction activities

Construction activities would include:

- Removal of vegetation and stripping of topsoil where reservoir would be constructed, and associated interconnection works and drainage alterations would occur
- General earthworks to achieve the required levels for construction of the reservoir
- Installation of the reservoir tank supplied as a proprietary item
- Construction of new drainage channel, including placement of rock material within the open drainage channel
- Construction of new concrete pathways, including surface levelling
- Realignment existing site pipework where required
- Connection of pipework to reservoir and reservoir to existing water network, including meters, sensors and other electrical requirements
- Testing of new reservoir tank to ensure it is operational
- Replacement of existing perimeter fencing with new high security fencing around the new reservoir site
- Site clean-up and rehabilitation, including
 - Removing excess material from stockpile site
 - Removing temporary stockpile site
 - Revegetating disturbed areas
 - Removing temporary erosion and sedimentation controls, following stabilisation of disturbed areas.

Construction hours

It is anticipated that the proposal would typically be completed within the normal construction working hours:

- Monday to Friday: 7am to 6pm
- Saturday: 8am to 1pm
- Sunday and public holidays: no work.

Plant and equipment

Plant and equipment needed for the proposal would include:

- Excavator
- Roller
- Grader.

3.3.2 Earthworks

Earthworks required for the proposal would include the areas to be excavated for the construction of the reservoir, the new paths and drainage structures. The total volume of earthworks would be determined during the detailed design stage.

There is not expected to be an excess of fill from construction activities with the cut and fill balance expected to be equal if the existing ground is suitable to form a base for the reservoir. This would be determined following the geotechnical investigation.

3.3.3 Materials

Materials and quantities required for the construction of the proposal would be determined during the detailed design stage.

3.3.4 Construction traffic management

Vehicle movements

The proposal would generate a number of heavy vehicle movements through the transport of machinery, fuel, general provisions and materials. The majority of vehicle movements would be for machinery access and the transport of materials to the site.

Heavy vehicle movements would primarily be confined to within the proposal site and generally remain on site until completion of the proposal. Light vehicles would be required to transport staff to and from the proposal site. Light vehicles would also be used in various roles on site, including small deliveries.

Traffic management

Construction vehicles would adhere to the posted speed limits and truck movements restricted to designated roadways. The proposal is unlikely to require traffic management during construction.

Construction access

Construction access to the proposal site would be via Jacks Corner Road, from the east from Kangaroo Valley, via Moss Vale Road and Bendeela Road.

3.4 Compound and stockpile site

A temporary site compound and stockpile site would be established adjacent to the proposal site along Jacks Corner Road on previously cleared Shoalhaven Water owned land (refer to Figure 1.1).

The facilities at the compound site would include general amenities (meal room, toilets, etc.), secure bunded areas for the storage of fuels and chemicals and designated parking and waste management areas. A site office will be established if required.

The stockpile site, required for storing construction materials, would be located:

- In an area not prone to flash flooding and more than 40 metres from a watercourse

- In a previously disturbed area that does not require the clearing of native vegetation
- In plain view of the public to deter theft and illegal dumping
- Outside the drip line of trees and on level ground wherever possible.

The stockpile site would be temporary and would be rehabilitated following completion of construction (to a condition similar to that prior to construction).

3.5 Public utility adjustment

No public utility adjustment would be required for the proposal. Existing pipework to be realigned to accommodate the new reservoir and drainage channel are Shoalhaven Water assets.

3.6 Property acquisition

Construction of the proposal would take place within Shoalhaven Water owned land. No land acquisition would be required for the proposal.

4. Statutory and planning framework

4.1 Environmental Planning and Assessment Act 1979

The EP&A Act and its associated regulations provide the framework for assessing environmental impacts and determination of developments and activities in NSW. As the proposal does not require development consent, it is subject to the requirements of Part 5 of the EP&A Act.

Section 5.5 imposes a duty on a determining authority to ‘...examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity’.

The factors that need to be taken into account when considering the likely impact of an activity on the environment are provided in Clause 228 of the Regulation. A summary of the results of the assessment of the proposal in accordance with the Clause 228 factors is provided in Appendix A.

Section 5.7 requires that, if an activity is likely to have a significant impact on the environment, the determining authority shall not carry out or approve an activity unless it has considered an environmental impact statement (EIS) in respect of the activity.

Section 6 of this REF assesses the potential impacts of the proposal on the environment. As the proposal is unlikely to result in significant impacts, and does not meet the definitions of State significant development or infrastructure under the *State Environmental Planning Policy (State and Regional Development) 2011* (refer Section 4.2) an EIS is not required.

4.2 State Environmental Planning Policies

4.2.1 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) aims to facilitate the effective delivery of infrastructure across the State. Infrastructure SEPP clarifies the consent arrangements for certain infrastructure projects.

Clause 125(1) of the ISEPP states that development for the purpose of water reticulation systems may be carried out by or on behalf of a public authority without consent on any land. Therefore, the proposal at the Bendeela WTP is permitted without consent.

4.3 Local planning instruments

4.3.1 Shoalhaven Local Environmental Plan 2014

The provisions of the Shoalhaven Local Environmental Plan 2014 (Shoalhaven LEP) do not apply to the proposal due to the application of the ISEPP. Nevertheless, consideration is given below to the provision of the Shoalhaven LEP.

The proposal is located within land zones as SP2 – Infrastructure land use. Water supply systems are permitted with consent within this land use zone. However, as the proposal is subject to the ISEPP, it is permitted without consent. The proposal would not alter the current land use, which is zoned as water supply system according to the land zoning map.

4.4 Other relevant state legislation

4.4.1 Local Government Act 1993

The *Local Government Act 1993* provides the legal framework by which local authorities are able to function. The Act also provides direction to local governments in undertaking their service functions, including the provision of sewer and water works treatment.

Under section 60 of the *Local Government Act 1993*, a council can only construct or extend water treatment works with the approval of the Minister for Water, Property and Housing. As the proposal is for the extension of a water treatment plant, approval under section 60 is required. This approval will need to be obtained through the Department of Industry – Lands and Water.

4.4.2 Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) establishes, amongst other things, the procedures for issuing of licences for environmental protection on aspects such as waste, air, water and noise pollution control. The owner or occupier of premises engaged in scheduled activities is required to hold an environment protection licence and comply with the conditions of that licence.

The proposal would not involve any scheduled activities listed under Schedule 1 of the POEO Act, therefore an application for an environment protection licence is not required.

With appropriate erosion and sediment controls implemented, the proposal is unlikely to cause water pollution. Therefore, an environment protection licence under the POEO Act is not required.

The POEO Act creates a number of pollution offences. If a 'pollution incident' were to occur during the proposal causing or threatening 'material harm' to the environment, Shoalhaven Water would be obliged to notify the NSW Environment Protection Authority (EPA) immediately.

4.4.3 Water Management Act 2000

The *Water Management Act 2000* controls the carrying out of activities in or near water sources in NSW, the extraction and use of water and the construction of works such as dams and weirs. 'Water sources' are defined as a river, lake, estuary, place where water occurs naturally on or below the surface of the ground or NSW coastal waters.

If a 'controlled activity' is proposed on 'waterfront land', an approval is required under the *Water Management Act 2000* (section 91E). Under the *Water Management Act 2000*, 'waterfront land' is defined as land within 40 metres of a river, lake, estuary or shoreline.

Under section 344(1) of the *Water Management Act 2000*, it is an offence to carry out a controlled activity without a controlled activity approval. However, section 39A(1) of the *Water Management (General) Regulation 2004* exempts local councils from section 344 (1)(a) of the *Water Management Act 2000* in relation to all controlled activities that they carry out in, on or under waterfront land.

The proposal would occur on waterfront land adjacent to Bendeela Pondage (see Figure 1.1). Shoalhaven Water is exempt from the need to obtain a controlled activity approval for the proposal.

4.4.4 Fisheries Management Act 1994

The *Fisheries Management Act 1994* (FM Act) aims to conserve, develop and share the fishery resources of the State for the benefit of present and future generations including conserving fish stocks and fish habitat and promoting ecologically sustainable development.

The FM Act requires an assessment of whether threatened species of fish and aquatic vegetation, populations or ecological communities are likely to be affected by the proposal. If a significant impact on a threatened species, population or ecological community is likely, a species impact statement must be completed and consultation with the NSW Department of Primary Industries (Fishing and Aquaculture) is required.

The FM Act lists key threatening processes under Schedule 6 that are likely to impact on watercourses and threatened biota, including degradation of native riparian vegetation along NSW watercourses, and installation and operation of in-stream structures and other mechanisms that alter natural flow regimes of rivers and streams.

The proposal is located adjacent to Bendeela Pondage, which is identified as Key Fish Habitat. However, the proposal would not involve any work within the pondage or other drainage lines identified as Key Fish Habitat. The site does not drain into the pondage, which is unlikely to be impacted by the proposal.

The FM Act requires a permit for certain work including dredging, reclamation or work that blocks fish passage. The proposal would not involve work in any waterways identified as Key Fish Habitat, and is therefore unlikely to require a permit under the FM Act.

4.4.5 National Park and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NPW Act) provides the basis for legal protection and management of Aboriginal sites within NSW, and for the management of National Parks estate.

Section 90 of the NPW Act specifies that the Director-General may issue an Aboriginal heritage impact permit in relation to a specified Aboriginal object, place, land, activity or person, or specified types or classes of these. An Aboriginal heritage impact permit may be issued subject to conditions, or unconditionally.

Aboriginal heritage impact permits must be obtained before the commencement of any project that would, or would be likely to, impact on Aboriginal objects or places.

This REF concludes that the proposal would be unlikely to have a significant effect on an Aboriginal object or place (see section 6.7). An Aboriginal heritage impact permit would therefore not be required for the proposal.

4.4.6 Biodiversity Conservation Act 2016

The aim of the *Biodiversity Conservation Act 2016* (BC Act) is to conserve biodiversity and deliver ecologically sustainable development through a market-based approach particularly for higher risk projects. Ecological outcomes for lower risk projects would be achieved through self-assessment of risk. The market based approach would have a regional and state focus rather than a local focus on biodiversity.

The BC Act lists a number of threatened species, populations and ecological communities to be considered when deciding whether there is likely to be a significant impact on threatened biota or their habitats. If a species of flora or fauna listed in the BC Act is identified, a review must be carried out of the factors set out to establish if there is likely to be a significant impact on that species, population, ecological community or habitat. If any of these could be impacted by the proposal, an assessment of significance that addresses the requirements of section 1.7 of the EP&A Act must be completed to determine the significance of the impact.

The potential for impacts on ecology has been considered in section 6.2. The assessment concludes that the proposal would be unlikely to have a significant impact on any threatened species, populations or ecological communities listed under the BC Act. A species impact statement is therefore not required.

4.4.7 Biosecurity Act 2015

The *Biosecurity Act 2015* reforms the management of pests, diseases, weeds and contaminants in NSW. For local government, the Biosecurity Act repeals the *Noxious Weeds Act 1993* which established local councils (or in some areas, county councils) as Local Control Authorities (LCAs).

The *Biosecurity Act 2015* and its subordinate legislation came into effect on 1 July 2017. As part of the management of weed species, all plants are regulated with a 'general biosecurity duty' to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.

4.4.8 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) is concerned with all aspects of heritage conservation ranging from basic protection against indiscriminate damage and demolition of buildings and sites, through to restoration and enhancement.

Heritage places and items of particular importance to the people of NSW are listed on the State Heritage Register. Only those heritage items that are of State significance are listed on the State Heritage Register. Approval under Section 60 of the Heritage Act may be required for impacts to a listed heritage item.

None of the items listed on the State Heritage Register are present within the study area.

4.5 Commonwealth legislation

4.5.1 Environment Protection and Biodiversity Conservation Act 1999

Under the EPBC Act a referral to the Australian Government is required for proposed actions that have the potential to significantly impact on matters of national environmental significance or the environment of Commonwealth land. The impacts of the proposal on matters of national environmental significance are considered in chapter 6 and Appendix A of this REF.

This REF finds that the proposal is unlikely to have a significant impact on any matters of national environmental significance. Accordingly, the proposal has not been referred to the Australian Government Department of Agriculture, Water and the Environment (DAWE).

4.6 Confirmation of statutory position

An assessment of the relevant statutory planning instruments has concluded that the proposal can be assessed under Part 5 of the EP&A Act, by Shoalhaven Water as the proponent and determining authority.

5. Consultation

5.1 Infrastructure SEPP consultation

Clauses 13 to 16 of the Infrastructure SEPP outline the consultation requirements for development without consent with councils and specific public authorities. Due to the application of Clause 17(1) Shoalhaven Water is not required to undertake consultation in Clause 13 to 15 as these clauses require consultation with council.

The proposal does not trigger consultation requirements in Clause 16, therefore, formal Infrastructure SEPP consultation is not required.

5.2 Government agency consultation

Due to the location of the proposal in the existing WTP site, it is considered unlikely to require government consultation. As the proposal does not require any works that are likely to impact on Key Fish Habitat under the FM Act, consultation with the Department of Primary Industries – Fisheries is not required. The proposal is located adjacent to Bendeela Pondage, which WaterNSW is the responsible authority for. Due to the works being restricted to land within the existing WTP boundary owned by Shoalhaven Water, the position of the proposal site lower than the pondage itself and the site draining away from the pondage to the south-east, it is unlikely to impact the pondage. Therefore, consultation with WaterNSW is not required.

5.3 Public exhibition

The REF document was placed on public exhibition on Council's website for a period of three weeks, from 5 May to 31 May 2021. A notice was placed in the South Coast Register on 5 May and 12 May 2021 to notify the local community of the public exhibition period. Shoalhaven Water notified the following stakeholders of the public exhibition period via email:

- WaterNSW
- NSW Department of Primary Industries (Fisheries).

By the close of the exhibition period, zero responses were received.

6. Environmental assessment

This chapter of the REF provides a detailed description of the potential environmental impacts associated with the construction and operation of the proposal. All aspects of the environment potentially impacted by the proposal are considered. This includes consideration of the factors specified in the guidelines *Is an EIS required?* (DUAP 1999) as required under clause 228(1)(b) of the Environmental Planning and Assessment Regulation 2000 (refer Appendix A). Site-specific safeguards are provided to mitigate the identified potential impacts in chapter 7.

6.1 Soils, water quality, hydrology and groundwater

6.1.1 Existing environment

Topography and geology

The study area is located in the Kangaroo Valley Mitchell Landscape, which is comprised of an enclosed, narrow, western facing valley surrounded by sandstone escarpment features comparable to the Bulli coastal escarpment. The valley is incised into Permian pebbly siltstone and sandstone. The general elevation is 80 to 100 metres above sea level, with local relief 180 metres (Mitchell 2002). This landscape is 42 per cent cleared and therefore is not considered an over-cleared landscape (>70 per cent cleared).

The geology of the site falls within the Berry Siltstone geological unit from the Permian period. This unit is comprised of bluish grey to light grey siltstone, shaly in part with bands of silty sandstone (NSW Department of Mineral Resources 2002).

Soils

Soil types

The Kangaroo Valley Mitchell Landscape is comprised of loamy sand matrix soils in a sandstone matrix rubble beneath cliff lines on the slopes, then yellow texture-contrast profiles grading to deep loam on the valley floors (Mitchell 2002).

Acid sulfate soils

There are no known occurrences of acid sulfate soils in the study area. Based on mapping of acid sulfate soils for NSW (OEH 2013), it is unlikely that these would occur in the study area. Acid sulfate soils are generally confined to coastal areas, although they can occur at inland locations where there is poor drainage. No such environments are known to be present in the study area.

Soil contamination

A search of the EPA contaminated land register did not find any declared contaminated sites located in or near the study area. Search results are provided in Appendix C.

Hydrology and water quality

Hydrology

The study area is located adjacent to Bendeela Pondage, which is an earth and rockfill embankment dam structure located on the Kangaroo River arm of Lake Yarrunga. Drainage from the study area flows into the Kangaroo River to the south. The terrain of the study area is undulating to hilly with steep hills rising off the valley and Kangaroo River floodplain. The Kangaroo River rises within Budderoo National Park to the north-east of the study area then flows in a north-westerly direction to Carrington Falls. It then turns south-west and flows through

Kangaroo Valley in the vicinity of the study area before it ends by flowing into Lake Yarrunga, a reservoir formed by the Tallowa Dam, which is just downstream of the confluence of the Shoalhaven and Kangaroo rivers.

There are no natural drainage lines in the proposal site, with an unnamed ephemeral drainage line commencing from the south of the proposal site and flowing to the south-east.

Surface water quality

Given the Bendeela Pondage is located in the study area, water quality is routinely monitored and maintained at a high level to enable the good quality water within the drinking water supply system. Given the surrounding natural bush land in the study area, runoff would generally contain fewer contaminants than in an agricultural landscape.

Potential sources of water quality contamination occur from the operation of roads in the study area, leading to the build-up of contaminants (such as oil and heavy metals) on road surfaces and roadside corridors.

Groundwater

There are no registered groundwater bores in the study area. The nearest bore with a recorded depth to water table is located about 2.2 kilometres north-east of the study area, with a groundwater level of 15 metres.

In general, the depth to the water table would vary with season, rainfall, elevation, proximity to creeks and presence of aquifers. The water table may be closer to the ground surface in the vicinity of creeks in the study area, however, due to the nature of the works it is unlikely the water table would be intercepted during construction.

6.1.2 Potential impacts

Topography and soils

Vegetation removal

There is minimal tree and shrub removal required for the construction of the proposal, with groundcover mostly comprised of introduced species. Vegetation removal would be restricted to the areas where the reservoir and associated works, including paths and pipes, are to be constructed. Vegetation and earthworks would expose soils to weathering processes, increasing the risk of erosion and sedimentation. Disturbed areas along the proposal site would be stabilised after construction completion.

Earthworks

The proposal would involve earthworks for construction of the reservoir, new paths and drainage structures. Earthworks would potentially affect soils and loose fill may erode during rainfall events.

Erosion of earthworks could cause sedimentation of drainage lines and smother groundcover vegetation, changing soil surface characteristics. However, the proposal is unlikely to affect topography or destabilise landforms due to the relatively minor nature of the works and the location in a previously cleared and disturbed environment.

Vehicle movements, including machinery and support vehicles

Machinery and support vehicles used during construction of the proposal would be driven off road within the site and have the potential to disturb the ground surface and track excess material onto sealed roads.

Stockpiling

Excess excavated material would temporarily be stockpiled to be used for rehabilitation following completion of construction. Loose soil material could erode in periods of high rainfall or windy conditions.

Soil contamination

There is potential for chemical and fuel spills during construction, which may result in localised contamination of soils. The potential for contamination is considered to be low provided the safeguards and management measures outlined in chapter 7 are implemented.

Hydrology

Construction of the proposal would alter surface runoff characteristics near the proposal site. A man-made drainage line would be redirected to allow construction of the new reservoir, however, the new drainage line would serve a similar purpose to that of the existing drainage line and account for any additional runoff from the new structures. This is unlikely to significantly alter the hydrology of the study area due to the minor nature of the proposal.

There would be no works conducted within the unnamed ephemeral drainage line in the study area.

Surface water quality

The introduction of pollutants from construction of the proposal into the surrounding environment, if uncontrolled, could potentially have the following impacts on the water quality of drainage lines and dams:

- Increased sediment load and organic matter causing adverse impacts to water quality in drainage lines and creeks, such as increased turbidity. Provided safeguards and management measures are implemented, the proposal would be unlikely to contribute significant amounts of sediment and organic matter
- Gross pollutants (large waste items) entering drainage lines and dams in the study area
- Reduced water quality in drainage lines and creeks due to an influx of contaminants such as fuel or chemicals from accidental spills.

The potential for construction water quality impacts to the surrounding drainage lines and creeks is considered to be low with only minor potential for soil erosion and sedimentation during construction.

6.2 Biodiversity

6.2.1 Methodology

Desktop review

The desktop assessment included a review of background biodiversity information obtained from database searches and literature reviews. These searches included:

- NSW Department of Planning, Industry and Environment (DPIE) BioNet Atlas for records of threatened biota previously recorded in the locality (website for the Atlas of NSW Wildlife) (OEH 2021a) and *Threatened Biodiversity Data Collection* (TBDC) profiles of threatened species listed under the BC Act (DPIE 2021a)
- DPIE *Threatened biodiversity profile search* online database for threatened ecological communities and species listed under the BC Act (OEH 2021b)

- NSW BioNet Vegetation Classification (OEH 2020c) to identify matching plant community types (PCTs) in the study area
- DAWE (2021a) EPBC Act Protected Matters Search Tool – for a 10 kilometre radius around the proposal site (accessed January 2021)
- DAWE (2021b) Species profile and threats database, online profiles
- DPI priority weed declarations – South East region (DPI 2021) (accessed February 2021).

Assessment of the likelihood of occurrence of listed biota

An assessment of the likelihood of occurrence and possibility of impact was completed for listed species, populations and ecological communities with the potential to occur in the study area.

In assessing which of these species, populations and ecological communities are 'likely' to occur within the study area (as described in 'Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities Working Draft') (DEC 2004) the following factors were taken into consideration:

- The presence of potential habitat within the study area
- Condition and approximate extent of potential habitat within the study area
- Species occurrence within the locality and region (including results of previous surveys and results of database searches and literature review).

In addition, the possibility of impact by the proposal on threatened biota likely to occur, or present was assessed, and therefore whether a BC Act assessment of significance and/or EPBC Act significance assessment is required to assess the significance of the impact.

The likelihood of occurrence assessment is presented in Appendix B.

No species were considered likely to occur in the proposal site on a regular basis due to a lack of suitable habitat resources to reliably support them. The proposal site is surrounded by large tracts of native vegetation within both private property and reserves, which would contain a large proportion of the important habitat resources present in the locality. Species with the potential to occur are likely to utilise this better quality habitat outside of the proposal site.

Assessment of the potential impacts on listed biota

Due to the likely limited biodiversity impacts of the proposal, it was determined that no threatened species or ecological communities listed under the BC Act, FM Act and/or EPBC Act are likely to be impacted by the proposal. Therefore, no assessments of significance under section 7.3 of the BC Act or significance assessments according to the significant impact guidelines for the EPBC Act are required.

Development of safeguards and management measures

Safeguards and management measures for the proposal were developed based on the site conditions and potential impacts of the proposal (refer chapter 7).


6.2.2 Existing environment

A site walkover was conducted on 19 January 2021. Vegetation on site was photographed and the following vegetation and habitat assessment was conducted by an ecologist during the desktop review.

Vegetation

Photographs, aerial photographic imagery and regional vegetation mapping were used to help identify vegetation and habitat resources at the site. The vegetation onsite was generally consistent with the South East Local Land Services Biometric vegetation map VIS_ID 4211 (LLS 2014). Local Land Services (2014) mapped most of the site as cleared with a small area of Sydney Blue Gum x Bangalay - Lilly Pilly moist forest in gullies and on sheltered slopes, southern Sydney Basin (Biometric map unit SR652) in the south-west corner of the site. The biometric map unit SR652 is equivalent to PCT 1245 Sydney Blue Gum x Bangalay - Lilly Pilly moist forest in gullies and on sheltered slopes, southern Sydney Basin Bioregion.

GHD mapped three vegetation types on the site (refer to Figure 6.1) as follows.

PCT 1245 Sydney Blue Gum x Bangalay - Lilly Pilly moist forest in gullies and on sheltered slopes, southern Sydney Basin Bioregion		
PCT (OEH 2020)	Sydney Blue Gum x Bangalay - Lilly Pilly moist forest in gullies and on sheltered slopes, southern Sydney Basin Bioregion	
PCT ID	1245	
NSW Veg Type ID	SR652	
Keith (2004) Vegetation Formation	Wet Sclerophyll Forests (Shrubby sub-formation)	
Keith (2004) Vegetation Class	North Coast Wet Sclerophyll Forest	
Conservation significance	Native vegetation. Not listed as a TEC.	
Position	Occurs as a small patch on the south-west boundary of the site.	
Description	<p>Open woodland with a mid-storey and a moderately diverse understorey comprising grass, fern, rush and forb species. Canopy species include <i>Eucalyptus saligna</i>, <i>Eucalyptus pilularis</i>, <i>Syncarpia glomulifera</i> and <i>Corymbia maculata</i>. Mid-storey includes <i>Acacia decurrens</i>, <i>Acmena smithii</i>, <i>Pittosporum undulatum</i> and <i>Glochidion ferdinandi</i>.</p> <p>The patch of PCT 1245 on the site occurs on the edge of a larger patch. The understorey appears degraded with many exotic species including, <i>Sida rhombifolia</i>, <i>Hypochaeris radicata</i>, <i>Cenchrus clandestinus</i>, <i>Verbena bonariensis</i>, <i>Sonchus oleraceus</i>, <i>Conyza sumatrensis</i> and <i>Plantago lanceolata</i>. Native species are limited and include <i>Lomandra longifolia</i>.</p>	

Planted trees – no plant community type		
PCT (OEH, 2020)	-	
PCT ID	-	
NSW Veg Type ID	-	
Keith (2004) Vegetation Formation	-	
Keith (2004) Vegetation Class	-	

Planted trees – no plant community type	
Conservation significance	Native and non-local native vegetation. Not listed as a TEC.
Position	Occurs as narrow corridors of planted vegetation along northern fence lines.
Description	A narrow corridor of planted <i>Callistemon citrinus</i> and two larger <i>Corymbia maculata</i> with an understorey of exotic grass (<i>Cenchrus clandestinus</i>) and exotic forbs.

Exotic grassland – no plant community type	
PCT (OEH, 2020)	-
PCT ID	-
NSW Veg Type ID	-
Keith (2004) Vegetation Formation	-
Keith (2004) Vegetation Class	-
	
Conservation significance	Exotic vegetation
Position	Covering most of the site including the draining line that runs parallel to the north-east fence line.
Description	The exotic grassland is dominated by <i>Cenchrus clandestinus</i> with a mix of exotic forbs and grasses including <i>Sida rhombifolia</i> , <i>Hypochaeris radicata</i> , <i>Verbena bonariensis</i> , <i>Sonchus oleraceus</i> , <i>Conyza sumatrensis</i> and <i>Plantago lanceolata</i> . The drainage line has some water tolerant species such as <i>Cyperus eragrostis</i> and <i>Juncus sp.</i>

There are no threatened ecological communities listed under the BC Act and/or EPBC Act within the proposal site or nearby area.

Priority weeds

There were no priority weeds listed under the NSW *Biosecurity Act 2015* for the South East region identified from site photos or during the site walkover within the proposal site.

Fauna and habitat resources

There are very few habitat resources for native fauna at the site. The majority of the site is comprised of maintained exotic grassland. Maintained exotic grasslands are generally low in biodiversity value and provide marginal structural and floral diversity for local fauna species.

A number of raptors, including the Nankeen Kestrel (*Falco cenchroides*) are likely to hunt over maintained grassland within the site on occasion. Granivorous species such as cockatoos and parrots may forage on grass seeds. Maintained grassland would also provide foraging habitat for larger herbivorous species, including the Eastern Grey Kangaroo (*Macropus giganteus*) and Swamp Wallaby (*Wallabia bicolor*). Threatened microbats, including the Large Bent-winged Bat (*Miniopterus orianae oceanensis*), Little Bent-winged Bat (*Miniopterus australis*) and Eastern Free-tailed Bat (*Mormopterus norfolkensis*) may forage on occasion in open grassland areas, or along the ecotone formed where woodland/forest meets areas of grassland.

A small highly modified drainage line occurs in the site within maintained grassland (refer to Figure 6.1). It appears to drain water from the adjacent Bendeela Road and existing WTP site. Site photos show that water within PVC piping has been directed into this drainage line which has led to erosion. There are no aquatic water plants in this drainage line and it appears shallow where water is present. This drainage line appears to be constructed and would not contain deep pools. It drains into an ephemeral drainage line to the south-east. The drainage line does not contain habitat features such as woody debris, gravel beds or rocky areas that may contain refuge substrate for small fish, lizards or snakes. The drainage line may provide some foraging habitat for frog species adapted to urban or highly modified environments including Striped Marsh Frog (*Limnodynastes peronii*), Spotted Grass Frog (*Limnodynastes tasmaniensis*) and Common Eastern Froglet (*Crinia signifera*).

Maintained grassland adjoins a small patch of regrowth woodland mostly comprising Acacia and Eucalypt species. This patch of woodland may provide occasional foraging resources for highly mobile species such as birds, possums and bats, during fruiting or flowering events. As described above, this patch of woodland contains native plant species in the canopy and mid-storey and forms part of a native PCT. This native woodland vegetation contains some habitat resources of relevance to most native species but appears to be mostly regrowth adjacent to the proposal site.

There are no important habitat resources such as hollows, stags, dens, caves, or large mature trees that may provide roosting habitat for birds, mammals or bats at the site. There are no wetlands in the site.

The site would provide the following habitat resources for native fauna:

- occasional fruit or blossom-bearing native shrubs and small trees at the edge of maintained grassland
- scarce woody debris and leaf litter
- grass seeds; primarily in the maintained grassland
- access to water via a highly modified stormwater drainage line.

The site is surrounded by large tracts of native vegetation comprising private property, Morton National Park, Cambewarra Range Nature Reserve, Kangaroo River Nature Reserve and Meryla State Forest. These areas would contain most of the important habitat resources present in the locality. Bendeela Pondage and the Kangaroo River occur to the south of the site and would provide aquatic habitat for local fauna.

Threatened biota

Threatened and migratory biota listed under the BC Act, FM Act and EPBC Act that have been identified by database searches with potential to occur in the locality are identified in Appendix B.

The site is unlikely to provide reliable habitat for threatened species with the potential to occur in the locality. Threatened and migratory bird species may occur intermittently at the site, but due to a lack of substantial foraging or woodland habitat, they are unlikely to occur on a regular basis, or be dependent on the site.

The proposal site is surrounded by large tracts of native vegetation comprising private property and reserves that provide substantial habitat resources for threatened species in the locality. The groundcover in the proposal site is dominated by introduced species and is routinely disturbed via mowing. Native vegetation is limited to planted species and a small patch of regrowth vegetation in the south-east corner of the site. Given the highly modified and degraded

condition of vegetation within the proposal site, no threatened flora species are expected to occur.

The site is not considered to be core Koala habitat as there is no evidence of suitable tree species or resident population of Koalas at the proposal site. No threatened flora or fauna species were observed during the site visit, and based on poor quality habitat at the site, no threatened or migratory species are considered likely to reliably occur.

Due to the likely limited biodiversity impacts of the proposal, it was determined that no threatened species or ecological communities listed under the BC Act, FM Act and/or EPBC Act are likely to be impacted by the proposal.



6.2.1 Potential impacts

Vegetation and habitat removal

The proposal would remove about four regrowth trees from within the patch of woodland in the south-east of the site, two of which appear to be dead. An additional two planted Callistemon trees would be removed along the fence line in the north of the site. About 0.01 hectares of groundcover dominated by introduced species would be removed for the construction of the reservoir, with an additional 0.07 hectares of predominantly introduced groundcover vegetation to be disturbed for the compound site, pipework and associated infrastructure. Removal of trees and groundcover vegetation would result in the loss of a minor amount of marginal habitat for local fauna species, with disturbed areas adjacent to the proposal site allowed to regenerate following construction. The vegetation to be removed is unlikely to be relied upon by species given the availability of better quality habitat elsewhere in the study area and locality.

Given the lack of native habitat within the proposal site it is unlikely that threatened fauna species would reliably occur within the site or be reliant on habitat to be removed.

Disturbance of fauna

The proposal has the potential to temporarily affect the use of the study area by fauna as a result of increased disturbance during construction. The use of plant and machinery may temporarily deter some fauna species such as birds from using potential habitat in the study area during construction.

Chemical and fuel impacts on flora and fauna

The proposal has the potential to cause impacts to native flora and fauna through accidental fuel and chemical spills. This may occur during refuelling operations or during preparation and use of chemicals for weed management. Spills could potentially reach drainage lines in the study area.

Weeds

The groundcover vegetation in the study area contains predominantly introduced species. The proposal has the potential to further introduce and spread weeds in the study area through the movement of machinery and light vehicle traffic and disturbance associated with earthworks.

The implementation of safeguards detailed in Chapter 7 would limit the potential for the spread of weeds associated with the proposal.

Sedimentation

Sedimentation of creeks and drainage lines in the study area may result from vegetation removal and earthworks, particularly along the drainage channel in the south-east corner of the site. These works have the potential to erode channels and deposit sediment, impacting on water quality during periods of flow.

Sedimentation has the potential to affect flora and fauna, including fish, frogs, turtles and macroinvertebrates.

Fish normally move away from highly turbid water; however, sedimentation may block fish passage, having detrimental impacts during times of migration. More extreme impacts on fish species, as a result of sedimentation and accompanying turbidity increases in creeks in the wider locality can include:

- Smothering of gill surfaces with sediment leading to asphyxiation
- Swallowing of large amounts of sediment leading to illness

- Inhibition of light penetration into the water column which can affect predator-prey interactions
- Impacts on habitat diversity in the immediate area and downstream by smothering and filling of interstitial spaces inhabited by fish.

An Erosion and Sediment Control Plan will be prepared and implemented as part of the CEMP during the construction phase of the works.

Summary of biodiversity impacts

Provided the appropriate mitigation measures and controls are implemented as per Chapter 7, it is anticipated that potential impacts on biodiversity would be minimal as a result of the proposal.

6.3 Landuse and property

6.3.1 Existing environment

Land uses in the study area consist of (refer to Figure 1.1):

- Bendeela WTP
- Bendeela Pondage
- Kangaroo Valley pumping and power station
- Power substation
- Three residences
- Natural bushland
- Existing roads, including:
 - Jacks Corner Road running east-west
 - Bendeela Road running north-south and diverting to the east.

The proposal site is located wholly within Shoalhaven Water owned land.

6.3.2 Potential impacts

Indirect impacts on land use

No land acquisition would be required for the proposal as the site is Shoalhaven Water owned land. The proposal would supplement the existing use of the site with a new reservoir and associated interconnection works required to supply the water demands of the growing population in the region. The proposal does, however have the potential to indirectly affect land use through potential impacts relating to soil and water contamination, air quality and noise. These impacts are assessed in sections 6.1, 6.4 and 6.5. The proposal is unlikely to disrupt traffic or alter access during the construction period or cause significant long-term indirect impacts to land use.

Safeguards and management measures to mitigate potential impacts on land use are detailed in Chapter 7.

6.4 Noise and vibration

6.4.1 Methodology

The *Interim Construction Noise Guideline* (DECC 2009) states that construction works with a duration of more than three weeks should be subject to a quantitative assessment of noise impacts. It is anticipated that the construction period for the reservoir would occur over three to

four months in total. Methodology should be varied during the construction period to reduce noise impacts to sensitive receivers where possible. The site setup would seek to maximise the distance between plant and equipment and any residences and other noise sensitive receivers where practicable. There are three residences located within 500 metres of the proposal site, with the closest sensitive receiver a minimum of 300 metres. There is, however, native bushland forming a barrier between the site and sensitive receivers, which would assist in reducing noise levels.

Due to the equipment, methodology and timing, these works are only likely to generate a relatively low level of noise in the context of the surrounding environment. Therefore, a qualitative assessment of the potential noise impacts of the proposal has been undertaken.

6.4.2 Existing environment

The study area is located in a rural landscape about four kilometres west of the township of Kangaroo Valley and surrounded by natural bushland and the Bendeela Pondage. The topography of the study area consists of mountainous, flat, and undulating terrain.

Sensitive receivers with the potential to be affected by noise impacts during construction of the proposal include residents near the proposal site, with the closest residence located about 300 metres north-west of the proposal site (refer Figure 1.1). Existing noise levels in the study area would primarily be influenced by passing traffic on local roads including Jacks Corner Road and Bendeela Road and from the operation of surrounding infrastructure including the Kangaroo Valley pumping and power station.

6.4.3 Potential impacts

Construction of the proposal would generate noise not characteristic of the existing environment. Noise intensive works associated with activities such as excavation, construction and compaction etc. would be relatively short term in nature and are not expected to result in significant impacts.

While noise impacts are anticipated at nearby sensitive receivers, construction is anticipated to typically be completed within the following standard hours:

- Monday to Friday: 7 am to 6 pm.
- Saturday: 8 am to 1 pm.
- Sunday and Public Holidays: no work.

Generally, noise impacts during construction would be intermittent and short-term. With the implementation of the appropriate safeguards as detailed in Chapter 7, consideration of the native vegetation screening to sensitive receivers and considering the standard working hours to be employed, the proposal would be unlikely to have a significant noise impact on sensitive receivers.

6.5 Air quality

6.5.1 Existing environment

Air quality

The proposal site is located in a rural setting about four kilometres west of the township of Kangaroo Valley and surrounded by natural bushland and the Bendeela Pondage. Sources of air pollution in the study area are likely to include:

- Emissions from vehicles on local roads

- Dust from vehicles travelling on unsealed roads
- Dust from agricultural activities in the wider study area.

Search results from the national pollutant inventory managed by DAWE (2021c) indicate there are no industrial facilities within the boundaries of the Bendeela postcode (2577).

The most commonly reported atmospheric emissions in the catchment are:

- Total nitrogen
- Total phosphorus.

Sensitive receivers

Sensitive receivers with the potential to be affected by air quality impacts during construction of the proposal include residents near the proposal site, the Kangaroo Valley pumping and power station and the power substation. The nearest residence is located about 300 metres north-west of the proposal site (refer Figure 1.1).

6.5.2 Potential impacts

Construction

Construction of the proposal has the potential to produce dust as a result of following construction activities:

- Clearing of groundcover vegetation and trees
- Earthworks
- Stripping and stockpiling topsoil
- Transport and handling of soils and materials
- Use of construction vehicles, generating exhaust fumes.

The operation of machinery and trucks may also increase emissions in the area due to delivery of materials and during construction activities, however these impacts would be minor and short term in nature.

Given the relatively minor nature of the proposal and the natural vegetation screening surrounding residential receivers, it is not expected that the proposal would cause significant air quality impacts.

Overall, potential air quality impacts during construction would be minor, short-term and managed using the safeguards detailed in Chapter 7.

6.6 Landscape and visual

6.6.1 Existing environment

The landscape character of the study area is generally defined by natural bushland and the Bendeela Pondage used for water storage. The pondage is a dominant element in the landscape given it is a raised earth and rockfill embankment dam structure. The terrain of the study area is mountainous and undulating with the proposal site being relatively flat. A drainage line for stormwater flows to the south-east where it joins an ephemeral drainage line to the south-east boundary of the site.

There is remnant native woodland vegetation throughout private properties in the study area that connects to vegetation within reserves throughout the locality. Native woodland in the study area provides an aesthetic visual character.

Key receivers in the study area include rural residences, which occur as isolated properties, the Kangaroo Valley pumping and power station and power substation. The proposal site would also be visible for road users along local roads in the study area (refer Figure 1.1).

6.6.2 Potential impacts

Construction

Visual impacts during construction would generally be associated with:

- Plant and equipment
- Earthworks
- Establishment of the site compound and stockpile site.

These have the potential to temporarily affect views for the Kangaroo Valley pumping and power station, power substation and local road users. The residents in the study area are unlikely to be impacted due to their location being screened by native vegetation without a direct view of the proposal site.

Sensitive receivers would be affected by views of the construction of the proposal, including earthworks, construction plant and equipment and the compound and stockpile site.

The visual impacts of construction works would be temporary and relatively small-scale. It is anticipated that reinstatement of disturbed areas would reduce the visual impacts in the short to medium term after construction.

Operation

The construction of the proposal is unlikely to impact the visual amenity in the study area to more than a minor degree given the new reservoir would be located adjacent to similar existing infrastructure within the WTP. The proposal would be in keeping with the existing use of the land.

Safeguards and management measures to mitigate potential impacts on the visual amenity of the study area are detailed in Chapter 7.

6.7 Aboriginal heritage

6.7.1 Methodology

In assessing the potential impact of the proposal on Aboriginal heritage, the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010) was followed.

The proposal is not defined as a low impact activity under the *National Parks and Wildlife Regulation 2009* (NPW Regulation) as it involves excavation of soil. The due diligence process is therefore relevant to the proposal.

A search of the NSW Aboriginal Heritage Information Management System (AHIMS) was undertaken on 23 February 2021 for the proposal with a 200 metre buffer search area.

The study area generally has a high level of disturbance. Surveys were not required; as it is likely that previous disturbance has removed any existing sites of Aboriginal heritage. In addition, the trees to be removed are of a young age and/or planted.

6.7.2 Existing environment

The study area and proposal site have been substantially modified by the construction of Bendeela Pondage and associated power plant, power substation and local roads. The

proposal is located in the existing WTP site, which has previously been disturbed by the construction of the existing reservoir and associated infrastructure.

The AHIMS search results indicated that no Aboriginal sites or places have been recorded in or near the proposal site (refer Appendix C). No trees that could potentially bear Aboriginal scars would be removed by the proposal and the groundcover within the site is routinely disturbed by mowing.

6.7.3 Potential impacts

The proposal is not expected to impact on known Aboriginal cultural heritage. Nevertheless, the due diligence assessment process detailed in the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010) was followed for the proposal as outlined in Table 6.1.

Table 6.1: Due diligence assessment

Due diligence matter	Response
1. Will the activity disturb the ground surface or any culturally modified trees?	Yes – the proposal would disturb the ground surface for the construction of the new reservoir and associated infrastructure, however, the proposal site is located in previously disturbed land excavated during construction of the Bendeela pondage. No trees with potential cultural scars would be removed by the proposal.
2a. Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?	No - The results of the AHIMS search indicate that no Aboriginal sites or places have been recorded in or near the study area.
2b. Are there any other sources of information of which a person is already aware?	No - There are no other known studies of the area relevant to the proposal.
2c. Are there landscape features that are likely to indicate presence of Aboriginal objects?	No - There is one ephemeral drainage line located in the study area, which would not be directly impacted by the proposal. There are no other landscape features such as rock shelters, sand dunes, waterholes or wetlands present in the study area. The proposal is located on land that has been previously disturbed by clearing and construction of the WTP, pondage and other infrastructure. Because the site has previously been disturbed and no trees with potential cultural scars would be removed, no further investigation of Aboriginal heritage is necessary.

Safeguards and management measures to mitigate potential impacts on Aboriginal heritage are detailed in Chapter 7.

6.8 Non-Aboriginal heritage

6.8.1 Methodology

Heritage databases were searched on 23 February 2021 to identify any heritage items recorded in the study area, including the following:

- Australian Heritage database, for items and places of national heritage significance.
- NSW State Heritage Inventory, for items and places of State heritage significance.
- Heritage Schedule 5 of the Shoalhaven LEP for zoning and local heritage information.

6.8.2 Existing environment

There are no heritage listed items or sites located in the study area. The nearest items of heritage significance are located within the township of Kangaroo Valley, about four kilometres to the east of the study area (refer database searches in Appendix C).

6.8.3 Potential impacts

No items or sites with the potential to be of non-Aboriginal heritage significance were identified during the site visit in or near the proposal site. There are no listed items of heritage significance identified on the heritage databases located in the study area. It is unlikely that the proposal would cause any impacts to items or sites of non-Aboriginal heritage.

Safeguards and management measures to mitigate potential impacts on non-Aboriginal heritage are detailed in Chapter 7.

6.9 Traffic access

6.9.1 Existing environment

The proposal site is located off Jacks Corner Road, which runs east-west through the study area. Bendeela Road travels west from Kangaroo Valley in the east, until it meets Jacks Corner Road and diverts south, just east of the proposal site. These roads are sealed and classified as local roads under the responsibility of Council. There is a gravel access track surrounding Bendeela Pondage, which is used to access the pondage for maintenance.

6.9.2 Potential impacts

The proposal site would be accessed via the existing access road to the WTP off Jacks Corner Road. The existing access to the proposal site is satisfactory for the proposed works. During the construction phase, there would be a temporary increase in traffic entering and leaving the site.

Traffic would include construction personnel, contractors, delivery trucks and other machinery required to undertake the works. For the duration of the proposal, a small increase in light vehicle traffic movement is anticipated along Jacks Corner Road, Bendeela Road and Moss Vale Road from Kangaroo Valley. There is unlikely to be traffic delays during vehicle movement to and from the site with no traffic control required during the construction period. Access to all properties would be maintained throughout construction.

Provided the appropriate mitigation measures and controls are implemented as per Chapter 7, it is anticipated that the potential impacts associated with traffic and access would be minor as a result of the proposal.

6.10 Socio-economic

6.10.1 Existing Environment

The proposal site is located at Bendeela. There are no census statistics specifically for Bendeela, which is included in the statistics for Kangaroo Valley. At the time of the 2016 Census (ABS 2020) Kangaroo Valley had a population of 879 people. The mean age was 52 with a mean weekly household income of \$1,255. The town provides essential services, such as community facilities, shopping and schools. Kangaroo Valley is located within the Shoalhaven City Council area.

The 2016 Census (ABS 2020) provides the following core demographic data about Kangaroo Valley:

- The number of dwellings was 494, with an average household size of 2.3

- The proportion of people aged 19 years or under was 24.8 per cent
- The proportion of people aged 65 years or older was 28.2 per cent.
- The proportion of households with two motor vehicles was 36.2 per cent.
- People of Australian Aboriginal descent comprised 2.0 per cent of the population.

The top employment occupations for Kangaroo Valley (ABS 2020) are provided in Table 6.2.

Table 6.2: Top employment occupations for Kangaroo Valley

Industry	Number employed	Percentage of people employed
Managers	97	24.5
Professionals	88	22.2
Labourers	49	12.4
Community and personal service	45	11.4
Technicians and trades workers	39	9.8

The industry with the highest proportion of people employed in Kangaroo Valley is secondary education, accounting for 10.3 per cent (ABS 2020).

During construction there may be a minor reduction in amenity for sensitive receivers as a result of construction activities. Potential impacts on amenity have been assessed in the following sections of the REF:

- Noise and vibration (section 6.4)
- Air quality (section 6.5)
- Landscape and visual (section 6.6).

No land acquisition would be required for the proposal and potential impacts on the community are expected to be minimal.

Beneficial impacts

The proposal would provide a positive impact through a minor short-term increase in employment opportunities and procurement of local goods and services.

The proposal would have a long term positive impact on the Kangaroo Valley area, which is serviced by the Bendeela WTP, as it would provide the community with an improved standard of drinking water and secure the community's water supply.

Safeguards and management measures to mitigate potential impacts on socio-economic factors are detailed in Chapter 7.

6.11 Waste management

6.11.1 Policy setting

Shoalhaven Water is committed to ensuring responsible management of unavoidable waste and to promoting the reuse of such waste through appropriate measures. This is done in accordance with the resource management hierarchy principles contained in the *Waste Avoidance and Resource Recovery Act 2001*. The resource management hierarchy principles in order of priority as outlined in the *Waste Avoidance and Resource Recovery Act 2001* are:

- Avoidance of unnecessary resource consumption
- Resource recovery (including reuse, reprocessing, recycling and energy recovery)
- Diversion of Green waste, metal waste and E-waste
- Disposal.

By adopting the above principles, Shoalhaven Water encourages the most efficient use of resources and reduces cost and environmental harm.

6.11.2 Potential impacts

The proposal is unlikely to generate large quantities of waste. Waste would likely be generated from the following sources, some of which would be recycled or reused:

- Green waste from vegetation clearing (native and introduced vegetation). Priority weed material would be separated from native green waste
- Chemicals and oils
- Wastewater from wash-down and bunded areas
- Excess construction materials
- Redundant erosion and sediment controls
- Paper and office waste from site and management facilities
- General waste from staff (lunch packaging etc).

The proposal is not expected to generate large amounts of waste and excavated soil from earthworks is likely to be used as fill during construction.

Potential waste would be classified in accordance with the 'Waste Classification Guidelines' (EPA 2014) and disposed of at an approved materials recycling or waste disposal facility.

Materials not reused would be removed to a licensed or approved waste facility. Liquid and solid waste would be removed by tanker or truck and disposed of off-site at a facility that is suitably licensed and able to accept those wastes for storage, reuse or disposal. Fuel and chemical storage areas would be bunded and protected in accordance with the specifications set out by DPIE and WorkCover (as detailed further in section 6.1).

Operational aspects of the proposal would be similar to those currently in place with regards to resource use and waste management. There would be limited volumes of waste generated and minimal resources used, and the primary source of waste would continue to be sludge, which is stored in the sludge lagoons existing on site.

Safeguards and management measures to mitigate potential impacts of waste are detailed in Chapter 7.

6.12 Demands on resources

6.12.1 Potential impacts

The proposal would require the use of a number of resources, including:

- Resources associated with the operation of construction machinery, and motor vehicles (this includes a variety of resources, primarily diesel and petrol)
- Materials required for the construction of various components of the proposal including concrete and pipes and the reservoir

- Construction water (for dust suppression). This would be likely sourced from the local potable supply.

The quantities of materials required for the proposal would be determined during detailed design.

The materials required during the proposed construction works are not currently restricted resources. However, materials such as metals and fuels are considered non-renewable and would be used conservatively.

Materials would be sourced from local and commercial suppliers, where possible. Excess materials would be disposed of in accordance with safeguards and management measures outlined in Chapter 7.

6.13 Cumulative impacts

6.13.1 Impact assessment

Potential cumulative impacts could occur as a result of the proposal occurring simultaneously with other projects in the locality or due to the accumulation of a number of impacts from one project. Developments in the locality with which the proposal has the potential to have cumulative impacts include:

- Agricultural development, predominantly comprised of grazing, which has transformed the land in the locality over the last 150 years
- Maintenance of infrastructure in the study area including the existing WTP, Bendeela Pondage, Kangaroo Valley pumping and power station and the power substation
- Maintenance of linear infrastructure projects including roads, powerlines, the transmission lines exiting the substation and services that have been constructed in the study area and locality.

There are no other known major developments occurring concurrently or planned in the locality.

The proposal is expected to have a positive impact to the Kangaroo Valley area serviced by the Bendeela WTP.

6.13.2 Potential impacts

The combined developments outlined above have the potential for minor cumulative impacts in relation to ecology due to vegetation removal and maintenance and spread of weeds, soils and water quality, visual amenity and air quality impacts.

6.14 Summary of adverse effects

The main adverse effects of the proposal would include:

- Removal of two planted trees and four regrowth trees (including two that are dead)
- Potential for soil erosion and water quality impacts during construction due to removal of about 0.01 hectares of groundcover vegetation (dominated by introduced species) and potential disturbance of an additional 0.07 hectares of introduced groundcover vegetation
- Potential construction noise impacts on nearby sensitive receivers
- Potential for a reduction in air quality caused by the generation of dust during construction
- Other changes in amenity and environmental risks including visual impacts and waste.

7. Environmental management measures

A number of safeguards and management measures have been identified to minimise potential adverse environmental impacts which could arise as a result of the proposal. Should the proposal proceed, these management measures would be incorporated into the detailed design and applied during the construction and operation of the proposal.

A CEMP would be prepared to describe safeguards and management measures identified in this REF. The CEMP would include a framework for establishing how these measures would be implemented and who would be responsible for their implementation. The safeguards and management measures are summarised in Table 7.1 and are to be included in the CEMP for implementation during the works.

Table 7.1: Summary of safeguards and management measures

Impact	Safeguard	Timing and responsibility
Soils, water quality, hydrology and groundwater - Soil erosion, sedimentation and water quality	<ul style="list-style-type: none"> A soil and water management plan will be prepared as part of the CEMP for the proposal in accordance with the Blue Book - Soils and Construction - Managing Urban Stormwater Volume 1 (Landcom 2004) The soil and water management plan will include but not be limited to: <ul style="list-style-type: none"> A primary erosion and sedimentation control plan and a maintenance schedule for ongoing maintenance of temporary erosion and sediment controls An incident emergency spill plan which will include measures to avoid spillages of fuels, chemicals, and fluids onto any surfaces or into any adjacent/nearby waterways If considered necessary, an accredited soil conservationist may be engaged to provide advice during development and implementation of the soil and water management plan. The soil conservationist may regularly review and inspect works throughout the construction phase. 	Project manager Pre-construction
Soils, water quality, hydrology and groundwater - Soil erosion and sedimentation	<ul style="list-style-type: none"> Sediment and erosion controls will be installed before the commencement of earthworks with particular focus on the drainage line in the south-east of the site Erosion and sedimentation controls will be checked and maintained regularly during construction High risk soil erosion activities such as earthworks will not be undertaken immediately before or during high rainfall or wind events. Cease work during heavy rainfall events when there is a risk of sediment loss off-site or ground disturbance due to water logged conditions. Topsoil excavated at the proposal site will be stockpiled separately for reuse in landscaping and rehabilitation works Erosion and sediment control measures will be maintained until the works are complete and areas are stabilised. 	Project manager Construction
Soils, water quality, hydrology and	<ul style="list-style-type: none"> All fuels, chemicals, and liquids will be stored within an impervious bunded area within the compound site with adequate storage capacity 	Project manager Construction

Impact	Safeguard	Timing and responsibility
groundwater - Soil and water contamination	<ul style="list-style-type: none"> The refuelling of plant and maintenance of machinery would be undertaken offsite or in impervious bunded areas in the compound area. Check machinery daily for oil, fuel or other liquid leaks Adequately stocked emergency spill kits will be kept on-site at all times All staff will be inducted about incident and emergency procedures and made aware of the locations of emergency spill kits Should a spill occur during construction, the emergency spill plan will be implemented. The EPA will be notified as required under Part 5.7 of the POEO Act. 	
Biodiversity - Loss of native vegetation and fauna habitat	<ul style="list-style-type: none"> All staff will be inducted and informed of the limits of vegetation clearing and the areas of vegetation to be retained. Areas of vegetation not to be removed will be clearly marked prior to construction Temporary exclusion fencing will be erected to prevent encroachment and clearing of native vegetation beyond the construction footprint Stockpiles of construction materials will be restricted to existing cleared areas and not within areas of adjoining native vegetation 	Shoalhaven Water and Project manager Pre-construction
Biodiversity - Spread of weeds	<ul style="list-style-type: none"> Priority weed control measures will be implemented as part of the CEMP to prevent their spread in the study area Declared priority weeds will be managed according to requirements under the NSW <i>Biosecurity Act 2015</i> Soil disturbance will be avoided as much as possible to minimise the potential for spreading weeds and generating sediment Vehicles and plant will be cleaned prior to entering the site. 	Project manager Pre-construction and construction
Biodiversity – Chemical and fuel impacts on native vegetation	<ul style="list-style-type: none"> Any herbicides used for weed control will be applied to the manufacturer's specifications and as outlined in the manufacturers Safety Data Sheet Broad spectrum non-selective herbicides (residual herbicides) will not be used. Herbicides selected for use will be appropriate for the species being treated 	

Impact	Safeguard	Timing and responsibility
	<ul style="list-style-type: none"> Spraying of herbicides will not be undertaken in windy weather or within such distance of a watercourse as will permit any of the herbicide to enter the water. 	
Landuse and property – Land use disruption	<ul style="list-style-type: none"> Affected landowners and stakeholders, including the Kangaroo Valley pumping and power station will be consulted on an ongoing basis regarding the status and timing of construction. 	Project manager Construction
Noise and vibration - Construction noise and vibration impacts	<ul style="list-style-type: none"> Neighbouring properties would be notified of construction prior to the commencement of the proposal. 	Pre-construction and construction Shoalhaven Water
Noise and vibration - Construction noise from inappropriate practices	<ul style="list-style-type: none"> Inductions for the work crew would include the specific noise issues and mitigation measures required for the site. The induction would include: <ul style="list-style-type: none"> all relevant project specific and standard noise mitigation measures relevant approval conditions permissible hours of work location of nearest sensitive receivers construction employee parking areas designated loading/unloading areas and procedures site opening/closing times (including deliveries) behavioural practices including: <ul style="list-style-type: none"> avoiding the use of outdoor radios when working outside the recommended standard hours avoiding shouting and slamming doors where practical, operating machines at low revs and switching off when not being used rather than left idling for prolonged periods Minimise the use of compression braking when operating heavy vehicles Minimising reversing alarms. 	Shoalhaven Water and Project manager Pre-construction

Impact	Safeguard	Timing and responsibility
Noise and vibration - Construction noise impacts	<ul style="list-style-type: none"> • Works will be carried out during standard working hours (i.e. 7 am – 6 pm Monday to Friday, 8 am – 1 pm Saturdays) • Where the predicted and/or measured construction noise is greater than the noise affected level, works would be conducted in accordance with the ICNG and all reasonable and feasible practices would be undertaken to minimise noise • Site setup and dismantling would occur during standard work hours, reducing noise impacts to sensitive receivers where possible. The site setup would seek to maximise the distance between plant and equipment and any residences and other noise sensitive receivers where practicable. For example, vehicle movements and generator storage would be located as far as possible from residences • Machines found to produce excess noise compared to industry best practice would be removed from the site or stood down until repairs or modifications can be made • Any noise complaints would be addressed immediately in accordance with a standard resolution procedure (as documented in the CEMP). Property owners/occupiers potentially impacted by the construction works would be informed in advance of the proposed work and provided a contact phone number for any complaints or concerns during the construction period. 	Project manager Construction
Air quality - General air quality impacts	<ul style="list-style-type: none"> • Construction activities will be managed to minimise the emission of dust, smoke, and other substances. 	Project manager Construction
Air quality - Dust	<ul style="list-style-type: none"> • Air quality impacts relating to dust generated by construction vehicles will be visually monitored • Exposed unsealed surfaces will be watered regularly to minimise dust emissions, if required • Materials transported to and from the site would be covered to reduce dust generation in transit. • The CEMP will include a wind speed trigger level which will require assessment of construction activities, ensuring the potential for dust emissions are considered. Construction activities likely to result in dust generation will cease until appropriate controls (dust suppression) can be implemented 	Project manager Construction

Impact	Safeguard	Timing and responsibility
	<ul style="list-style-type: none"> The site access point will be inspected to determine whether sediment is being transferred to the surrounding road network. If required, sediment associated with the proposal will be removed from roads to minimise dust generation. Stabilisation of disturbed surfaces will take place as soon as practicable Areas that may generate dust will be managed to suppress dust emissions. 	
Air quality - Other emissions	<ul style="list-style-type: none"> Plant and machinery will be turned off when not in use as much as possible and will be fitted with emission control devices complying with Australian Design Standards Construction plant and equipment will be maintained in a good working condition in order to limit impacts on air quality. Plant maintenance and operational checks will be documented on the plant and machinery daily pre-start checks No burning of any materials will occur. 	Project manager Construction
Landscape and visual - Visual impacts of proposal	<ul style="list-style-type: none"> The footprint for construction works will be kept to a minimum to minimise earthworks and maintain existing vegetation wherever possible Sites disturbed by earthworks will be rehabilitated as soon as possible after construction. 	Project manager Construction
Landscape and visual - Visual impacts of construction works	<ul style="list-style-type: none"> The work site will be left in a tidy manner at the end of each work day. 	Pre-construction and construction Shoalhaven Water and contractor
Aboriginal heritage - Potential impacts to unexpected finds	<ul style="list-style-type: none"> The CEMP is to include an unexpected finds procedure to be implemented in the event of an unexpected find. In the event of an unexpected find of an Aboriginal heritage item (or suspected item), all works in the vicinity of the find must cease and the site supervisor will be contacted immediately for advice on how to proceed 	Pre-construction Shoalhaven Water and contractor

Impact	Safeguard	Timing and responsibility
	<ul style="list-style-type: none"> If the origin of the find cannot be determined quickly, or if it is determined that the find is of Aboriginal origin, immediately notify Biodiversity Conservation Division (BCD – formerly OEH): ph. 131 555. 	
Aboriginal heritage - Potential impacts to unexpected human remains	<ul style="list-style-type: none"> Cease all ground surface disturbance in the area of the find(s) immediately by notifying machinery operators in the immediate vicinity of the find(s). Also avoid touching the discovered remains Inform the site supervisor as soon as possible to organise for a qualified professional opinion (usually the police in the first instance) Create a buffer zone of 50 metres by 50 metres around the find spot. No authorised entry or earth disturbance will be allowed until the discovery has been assessed. 	Shoalhaven Water and Project manager Construction
Non-Aboriginal heritage - Potential impacts to unexpected finds	<ul style="list-style-type: none"> The CEMP is to include an unexpected finds procedure to be implemented in the event of an unexpected find. In the event of an unexpected find of a non-Aboriginal heritage item (or suspected item), all works in the vicinity of the find must cease and the site supervisor will be contacted immediately for advice on how to proceed Works will not recommence until the heritage value and associated protection and any approval requirements have been determined Shoalhaven Water will notify BCD if any item (or suspected item) of non-Aboriginal heritage is found during construction to determine the appropriate course of action. 	Shoalhaven Water and Project manager Construction
Traffic access - Construction impacts to traffic	<ul style="list-style-type: none"> Appropriate traffic management would be implemented, potentially including measures to provide safe access points to work areas from the adjacent road network, safety barriers, temporary speed restrictions, specific controls for partial road closures and changed road conditions, adequate sight distances and prominent warning signage and provision of barriers and markers to control public access and traffic around the proposal site. 	Construction Contractor
Traffic access - Construction impacts to traffic and property access	<ul style="list-style-type: none"> All property accesses would be maintained throughout the construction period. 	Pre-construction

Impact	Safeguard	Timing and responsibility
		Shoalhaven Water and contractor
Socio-economic - General impacts to properties	<ul style="list-style-type: none"> Potentially affected property owners, including the Kangaroo Valley pumping and power station, will be contacted before the commencement of works. Residents will be notified via a letter box drop providing information on the proposed works, working hours and a contact name and number should any complaints wish to be registered. 	Construction Contractor
Waste management - General waste impacts	<ul style="list-style-type: none"> A CEMP will be prepared that would include waste management procedures. This would focus on minimising waste generated through careful planning of works. Where waste is produced, the CEMP will recommend appropriate disposal methods. Waste minimisation will occur according to the hierarchy of avoidance, reuse, recycle and finally disposal. Excavated material must be temporarily stored in a bunded area or with appropriate environmental controls in place to prevent run-off of contaminants. 	Shoalhaven Water Pre-construction and construction
Waste management - General waste impacts	<ul style="list-style-type: none"> Site inductions will be undertaken (and recorded) by a site supervisor for all staff, to provide a thorough knowledge of all key environmental/safety issues, including waste disposal protocols Wastes will be managed and classified in accordance with the <i>Waste Classification Guidelines</i> (EPA 2014) and managed in accordance with the POEO Act All waste will be disposed of at appropriately approved and licensed facilities Garbage receptacles will be provided and recycling of materials encouraged. Rubbish will be transported to an appropriate waste disposal facility. Where appropriate, excess materials will be disposed of according to the following (in order): <ul style="list-style-type: none"> – Use remaining materials as directed by Shoalhaven Water and Contractor – Disposal at an approved materials recycling or waste disposal facility – As otherwise provided for by the relevant waste legislation. Waste material will not be left on site once the works have been completed. 	Pre-construction Contractor

Impact	Safeguard	Timing and responsibility
Demands on resources - Resource consumption	<ul style="list-style-type: none"> • The procurement of materials would be limited to the quantities required for the proposal • Procurement would endeavour to use materials and products with a recycled content where that material or product is cost and performance effective. 	Construction Contractor

8. Environmental management

This chapter describes how the proposal would be managed to reduce potential environmental impacts throughout construction and operation. A framework for managing the potential impacts is provided with reference to environmental management plans. The licence and/or approval requirements required before construction are identified.

8.1 Environmental management plan

A number of safeguards and management measures have been identified in order to minimise adverse environmental impacts, including social impacts, which could potentially arise as a result of the proposal. Should the proposal proceed, these management measures would be applied during the construction of the proposal.

A CEMP would be prepared to describe safeguards and management measures identified. The CEMP would provide a framework for establishing how these measures would be implemented and who would be responsible for their implementation.

The plans would be prepared by the Construction Contractor and approved by Shoalhaven Water prior to commencement of construction. The CEMP would be a working document, subject to ongoing change and updated as necessary to respond to specific requirements.

8.2 Licensing and approvals

The proposal would require the following approvals for construction:

- Section 60 approval under the *Local Government Act 1993* to construct or extend water treatment works from the Minister for Water, Property and Housing. This approval will need to be obtained through the Department of Industry – Lands and Water.

9. Conclusion

This chapter provides the justification for the proposal taking into account its biophysical, social and economic impacts, the suitability of the site and whether or not the proposal is in the public interest. The proposal is also considered in the context of the objectives of the EP&A Act, including the principles of ecologically sustainable development as defined in schedule 2 of the Environmental Planning and Assessment Regulation 2000.

9.1 Justification

The proposal is required to improve the chlorine contact times for water disinfection at the Bendeela WTP and to secure the water supply for the Kangaroo Valley area. In its current capacity water is subject to low chlorine contact time. Bushfires in 2020 also identified the need to secure the water supply for the area by making the water supply system more robust.

There would be a number of adverse environmental impacts as a consequence of the proposal. These impacts are mostly considered short-term, being directly related to construction activities.

The primary impacts during construction include:

- Removal of two planted trees and four regrowth trees (including two that are dead)
- Potential for soil erosion and water quality impacts during construction from the removal of about 0.01 hectares of groundcover vegetation dominated by introduced species and potential disturbance of an additional 0.07 hectares of introduced groundcover vegetation
- Potential construction noise impacts on nearby sensitive receivers
- Potential for a reduction in air quality caused by the generation of dust during construction
- Other changes in amenity and environmental risks including visual impacts and waste.

Due to the relatively small scale of the proposal and the proposed safeguards, the proposal would be unlikely to cause significant environmental impacts during construction.

Where possible, impacts would be avoided or minimised through the implementation of site-specific safeguards. The proposal is unlikely to have a significant long-term impact on the environment or the community. On balance, it is considered that the adverse environmental impacts of the proposal are outweighed by the benefit of the proposal and that the proposal is therefore justified.

9.2 Objects of the EP&A Act

The objects of the EP&A Act and relevance to the proposal are listed in Table 9-1.

Table 9-1: Objects of the EP&A Act

Object	Comment
5(a)(i) To encourage the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment.	<p>The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species, hence there is the potential for the further spread of weeds in the study area.</p> <p>The proposal has the potential to cause impacts to sensitive receivers in the study area during construction through noise and generation of dust.</p>

Object	Comment
5(a)(ii) To encourage the promotion and co-ordination of the orderly economic use and development of land.	Shoalhaven Water is undertaking environmental assessments required to properly plan and develop the proposal without undue impacts to the local economy.
5(a)(iii) To encourage the protection, provision and co-ordination of communication and utility services.	There are no utilities in the study area that would require relocation during construction. The proposal would not disrupt any services in the area.
5(a)(iv) To encourage the provision of land for public purposes.	The proposal would not impact on any land used for public purposes.
5(a)(v) To encourage the provision and co-ordination of community services and facilities.	The proposal is unlikely to affect the use of community facilities by the public.
5(a)(vi) To encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats.	The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species, hence there is the potential for the spread of weeds in the study area. The proposal would be unlikely to have a significant impact on any listed species, population or ecological community.
5(a)(vii) To encourage ecologically sustainable development.	Ecologically sustainable development is considered in Sections 9.2.1 to 9.2.4 below.
5(a)(viii) To encourage the provision and maintenance of affordable housing.	Not relevant to the project.
5(b) To promote the sharing of the responsibility for environmental planning between different levels of government in the State.	Not relevant to the project.
5(c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.	Shoalhaven Water will undertake liaison with affected parties as part of the proposal, including nearby residents and the Kangaroo Valley pumping and power station. Potential issues arising from the proposal have been addressed during the environmental planning and assessment process.

9.2.1 The precautionary principle

This principle states that *"if there are threats of serious or irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation"*.

The environmental consequences of the proposal have been assessed as accurately as possible using appropriate specialists in relevant disciplines where required. The assessment process involved analysis and interpretation of the potential environmental impacts associated with the proposal. This process has enabled the impacts of the proposal to be predicted within a reasonable degree of certainty. All predictions, however, contain a degree of variability, which reflects the variable nature of the environment.

The proposed works are not anticipated to result in serious or irreversible damage. Under the proposal, as a requirement of the CEMP, environmental monitoring will be undertaken as a precautionary measure to reduce any uncertainty regarding the potential for environmental damage. No mitigation measures or management mechanisms would be postponed as a result of a lack of information.

9.2.2 Intergenerational equity

The principle states that *"the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations"*.

The proposal would have a long-term benefit for future generations by providing a secure water supply for the community.

The proposal would benefit future generations by ensuring that proposed works do not give rise to significant long-term adverse impacts. Potential impacts would be minimised by the implementation of appropriate safeguards.

Should the proposal not proceed, the principle of intergenerational equity may be compromised, as future generations would inherit a water treatment plant not capable of providing a secure water supply with appropriate water disinfection.

9.2.3 Conservation of biological diversity and ecological integrity

This principle states that the *"diversity of genes, species, populations and communities, as well as the ecosystems and habitats to which they belong, must be maintained and improved to ensure their survival"*.

An assessment of the existing local environment has been undertaken in order to identify and manage any potential impacts of the proposal on local biodiversity. The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species. This vegetation is considered to provide marginal habitat for flora and fauna species. The proposal is considered unlikely to significantly impact on any species, population or ecological community listed under the BC Act or EPBC Act.

An ecological assessment and appropriate site-specific safeguards are provided in section 6.2 and Chapter 7 of this REF. Safeguards include consideration of design impacts on biodiversity, vegetation management and weed management.

9.2.4 Improved valuation, pricing and incentive mechanisms

This principle requires that *"costs to the environment should be factored into the economic costs of a project"*.

The REF has examined the environmental consequences of the proposal and identified mitigation measures for areas which have the potential to experience adverse impacts. Requirements imposed in terms of implementation of these mitigation measures would result in an economic cost to Shoalhaven Water. The implementation of mitigation measures would increase both the capital and operating costs of the proposal. This signifies that environmental resources have been given appropriate valuation.

The design for the proposal has been developed with an objective of minimising potential impacts on the surrounding environment. This indicates that the proposed works have been developed with an objective to minimise environmental impacts.

9.3 Conclusion

Shoalhaven Water proposes to construct a new reservoir at the Bendeela WTP located at Jacks Corner Road, Kangaroo Valley, to improve the chlorine contact time for water disinfection and secure the water supply for the Kangaroo Valley area. The proposal includes associated interconnection works and a new high security fence surrounding the site.

The proposal is subject to assessment under Part 5 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity.

The proposal as described in this REF best meets the project objectives but would still result in impacts relating to soils, biodiversity, noise and air quality.

Adverse environmental effects would be minimised through the implementation of safeguards and mitigation measures outlined in this REF.

On balance, it is considered that the adverse environmental impacts of the proposal are outweighed by the beneficial effects and that the proposal is therefore justified.

This REF concludes that the proposal is unlikely to have a significant impact on any species, population or ecological community listed under the *Biodiversity Conservation Act 2016* or *Fisheries Management Act 1994*. A species impact statement is therefore not required.

The proposal is predicted to have some potential environmental impacts resulting from the construction stage; however these are considered minor and short-term and can be adequately managed by implementing the recommended mitigation measures outlined in Chapter 7. The proposal is unlikely to result in significant environmental impacts. Accordingly an Environmental Impact Statement (EIS) is not required.

This REF finds that the proposal is unlikely to have a significant impact on any matter of national environmental significance listed under the *Environment Protection and Biodiversity Conservation Act 1999*. A referral to the Commonwealth Department of Agriculture, Water and the Environment is not therefore required.

10. References

- ABS, 2020, Regional population data, 2016 Census. Second release, Australian Bureau of Statistics. Data compiled by Profile.ID.
- BOM, 2021, Climate statistics for Australian sites. Bureau of Meteorology, website accessed February 2021. URL: http://www.bom.gov.au/climate/averages/tables/cw_073141.shtml
- DAWE, 2021a, Protected Matters Search Tool. Department of the Environment, online database, accessed January 2021, URL: <http://www.environment.gov.au/erin/ert/epbc/index.html>.
- DAWE, 2021b, Species Profile and Threats Database. Department of Sustainability, Environment, Water, Population and Communities, online database, accessed January 2021, URL: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.
- DAWE, 2021c, National Pollutant Inventory. Department of the Environment, online database, accessed February 2021, URL: <http://www.npi.gov.au/>.
- DECC, 2007, Threatened species assessment guidelines: the assessment of significance. Department of Environment and Climate Change, Sydney.
- DECC, 2009, Interim Construction Noise Guideline. Department of Environment and Climate Change, Sydney.
- DECCW, 2010, Aboriginal cultural heritage consultation requirements for proponents 2010. Department of Environment, Climate Change and Water NSW, Sydney.
- DotEE, 2013, Matters of National Environmental Significance: Significant impact guidelines 1.1, Environment Protection and Biodiversity Conservation Act 1999. Department of Environment, Water, Heritage and the Arts, Commonwealth of Australia.
- DPI, 2021, Priority Weed Declarations – South East region. NSW Department of Primary Industries, online database, accessed February 2021. URL: <http://weeds.dpi.nsw.gov.au/>
- DPIE 2020, Surveying threatened plants and their habitats: NSW survey guide for the Biodiversity Assessment Method. Department of Planning, Industry and Environment.
- DPIE 2021a, NSW Bionet Threatened Biodiversity Profile Data Collection. Department of Planning, Industry and Environment, online database, accessed January 2021. URL <https://data.gov.au/dataset/ds-nsw-9125a0e2-a575-40d4-83b0-45d985420d0e/details?q=>
- EPA, 2014, Waste classification guidelines. NSW Environment Protection Authority, November 2014.
- Keith, D. A., 2004, Ocean shores to desert dunes, the native vegetation of New South Wales and the ACT. Department of Environment and Conservation (NSW), Hurstville, NSW.
- Mitchell, P.B., 2002, NSW ecosystems database mapping unit descriptions. Unpublished report to the NSW National Parks and Wildlife Service, Hurstville.
- NSW Department of Mineral Resources, 2002, NSW Statewide Geology. GIS dataset, Geological Survey of New South Wales.
- OEH, 2021a, Atlas of NSW Wildlife database – licensed data for Shoalhaven local government area, Office of Environment and Heritage.
- OEH, 2021b, Threatened Species: Species, Populations and Ecological Communities of NSW. NSW Office of Environment and Heritage, online database, accessed January 2021, URL: <http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/index.aspx>.

OEH, 2021c, Vegetation Information System, VIS Classification 2.1. Website accessed January 2021. URL: <http://www.environment.nsw.gov.au/NSWVCA20PRapp/LoginPR.aspx>.

Office of Water, 2010, Pinneena 3.2 Groundwater works. Spatial data from New South Wales groundwater data archive.

11. Terms and acronyms used in this REF

AHIMS	Aboriginal Heritage Information Management System
BCD	Biodiversity Conservation Division (formerly OEH)
BC Act	<i>Biodiversity Conservation Act 2016</i>
Biota	The flora and fauna of a region.
CEMP	Construction Environmental Management Plan
DAWE	Department of Agriculture, Water and the Environment
DECC	Department of Environment and Climate Change, now DPIE (see below)
DECCW	NSW Department of Environment, Climate Change and Water, now DPIE (see below)
DotEE	Commonwealth Department of the Environment and Energy, now DAWE (see above)
DPIE	Department of Planning, Industry and Environment
DSEWPaC	Commonwealth Department of Sustainability, Environment, Water, Populations and Communities, now DAWE (see above)
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESD	Ecologically sustainable development. Development which uses, conserves and enhances the resources of the community so that ecological processes on which life depends, are maintained and the total quality of life, now and in the future, can be increased.
GHD	GHD Pty Ltd
Hydrology	Term given to the study of the rainfall and runoff process; in particular, the evaluation of peak flows, flow volumes and the derivation of hydrographs for a range of floods.
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local government area
Likely	Taken to be a real chance or possibility.
Locality	The area within a 10 kilometre radius of the proposal.
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NSW	New South Wales
OEH	NSW Office of Environment and Heritage (now BCD)
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Proposal site	The area that would be directly impacted by the proposal.
REF	Review of environmental factors
SEPP	State Environmental Planning Policy
Study area	The area of impact and any additional areas, which are likely to be affected by the proposal, either directly or indirectly. Generally this includes the area up to 500 metres from the proposal boundary.

Threatened species	A species specified in Schedule 1 Part 1 (critically endangered species), Part 2 (endangered species) Part 3 (vulnerable species) and Schedule 3 (presumed extinct) of the BC Act, in Schedule 4 (endangered species), 4A (critically endangered species) and Schedule 5 (vulnerable species) or under the EPBC Act.
Unlikely	Taken to be an unlikely or remote possibility of occurring.

Appendices

SA21.171 - Attachment 1

Appendix A – Consideration of clause 228 (2) factors and matters of national environmental significance

Clause 228(2) factors

In addition to the requirements of the guideline 'Is an EIS required?' as detailed in the REF, the following factors, listed in clause 228(2) of the Environmental Planning and Assessment Regulation 2000, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
a. Any environmental impact on a community?	
Sensitive receivers in the study area would potentially be affected during construction by noise from construction plant, machinery and vehicles as well as air quality impacts through generation of dust. Visual impacts would occur from earthworks, machinery and temporary stockpiling of materials. These impacts would be short-term and would be minimised through the implementation of safeguards detailed in Chapter 7.	Short-term minor negative
The proposal would benefit the community by providing a secure water supply for the Kangaroo Valley and appropriate chlorine contact times for water disinfection.	Long-term positive
b. Any transformation of a locality?	
The construction of the proposal would have minor short-term visual impacts through the excavation of the site. The impacts would be temporary and limited to the construction period. The site would be rehabilitated following construction and the proposal would be in keeping with the current water treatment plant.	Short-term minor negative
c. Any environmental impact on the ecosystems of the locality?	
During construction there is an increased risk of impacts such as erosion leading to water quality impacts and chemical and fuel spills. These risks would be minimised through the implementation of safeguards detailed in Chapter 7.	Short-term minor negative
The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species, hence the potential to cause the further spread of weeds in the study area. Safeguards to minimise impacts would be implemented as described in Chapter 7. The proposal would be unlikely to have a significant impact given the minor extent of vegetation removal required.	Long-term minor negative
d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	
Sensitive receivers in the study area would potentially be affected during construction by impacts as detailed in (a) above.	Short-term minor negative
e. Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	
The proposal is unlikely to impact on any sites with potential heritage or other social values. Safeguards to avoid or minimise impacts on heritage would be implemented as detailed in Chapter 7.	Nil
f. Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?	

Factor	Impact
The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species. This vegetation to be removed is a very minor extent of the vegetation within the study area and surrounding locality and provides marginal habitat for native fauna protected under the NPW Act, including species listed as threatened under the BC Act, as described in (g) below. The ecological assessment found that the proposal would be unlikely to significantly impact fauna species due to the limited vegetation removal required and the presence of additional habitat in the study area. Safeguards would be implemented as described in Chapter 7.	Long-term minor negative
g. Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	
The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species, hence the potential to cause the further spread of weeds in the study area. The proposal would be unlikely to endanger any species of animal, plant or other form of life due to the minor extent of vegetation removal required. Safeguards to minimise impacts would be implemented as described in Chapter 7.	Long-term minor negative
h. Any long-term effects on the environment?	
The proposal could potentially cause minor long-term ecological impacts as described in (g) above.	Long-term minor negative
The proposal would benefit the community by providing a secure water supply for the Kangaroo Valley and appropriate chlorine contact times for water disinfection.	Long-term positive
i. Any degradation of the quality of the environment?	
Sensitive receivers in the study area could potentially be affected by construction impacts as described in (a) above.	Short-term minor negative
The proposal would have a minor impact on the quality of the environment through the ecological impacts described in (g) above.	Long-term minor negative
j. Any risk to the safety of the environment?	
There is potential for safety to be reduced during the construction of the proposal. Traffic management safeguards described in Chapter 7 would address safety risks in relation to work near roads. Standard safety measures would be implemented to restrict public access to the proposal site during construction.	Short-term minor negative
k. Any reduction in the range of beneficial uses of the environment?	
The proposal would not result in any reduction to the range of beneficial uses of the environment	Short-term minor negative
l. Any pollution of the environment?	
Sensitive receivers in the study area could potentially be affected by construction impacts as described in (a) above.	Short-term minor negative
Construction of the proposal could potentially result in soil and water pollution, including the drainage lines in the study area. Pollution could result from sedimentation or chemical and fuel spills. Management of soil and water quality impacts would be undertaken in accordance with the safeguards outlined in Chapter 7.	Short-term minor negative
Waste generated during construction could also pollute the environment. Waste would be managed in accordance with the safeguards outlined in Chapter 7.	Short-term minor negative
m. Any environmental problems associated with the disposal of waste?	
The proposal would be unlikely to generate contaminated waste during construction. Other waste streams generated during construction are	Nil

Factor	Impact
common and would pose no difficulty in their disposal. Waste would be recycled wherever possible. Waste would be managed in accordance with the safeguards outlined in Chapter 7.	
n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?	
All resources required for the proposal are readily available and are not in short supply.	Nil
o. Any cumulative environmental effect with other existing or likely future activities?	
The cumulative effects of the proposal are discussed in section 6.13. Short-term cumulative impacts relate to soils and water quality, visual amenity and air quality impacts. The proposal would be likely to have relatively minor cumulative impacts in relation to these factors. There are no other known projects occurring in the study area.	Short-term minor negative
p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	
The proposal is not located within a coastal area, and would not cause any impact on coastal processes and coastal hazards.	Nil

Matters of national environmental significance

Factor	Impact
a. Any impact on a World Heritage property?	
The proposal would not have any impact on a World Heritage property. There are no World Heritage properties within 10 kilometres of the proposal.	Nil
b. Any impact on a National Heritage place?	
The proposal would not have any impact on a National Heritage place. There are no National Heritage places located within 10 kilometres of the proposal.	Nil
c. Any impact on a wetland of international importance?	
The proposal would not have any impact on a wetland of international importance and none are located within the locality of the proposal.	Nil
d. Any impact on listed threatened species or communities?	
The proposal would remove two planted trees and four regrowth trees (including two that are dead). Groundcover to be removed is dominated by introduced species. The proposal site and surrounding study area is not known to provide habitat to any listed species and the proposal is unlikely to have a significant impact on listed matters due to the minor extent of vegetation removal required. There is significant additional habitat available in the study area and locality. Safeguards would be implemented as described in Chapter 7.	Negligible
e. Any impacts on listed migratory species?	
The proposal is unlikely to affect any species listed as migratory under the EPBC Act.	Nil
f. Any impact on a Commonwealth marine area?	
The proposal is not located near a marine area and would be unlikely to have an impact on a marine area.	Nil
g. Does the proposal involve a nuclear action (including uranium mining)?	
The proposal does not involve a nuclear action.	Nil

Factor	Impact
h. Any impact on the Great Barrier Reef Marine Park?	
The proposal would not result in any impacts to the Great Barrier Reef Marine Park due to its distance from the park.	Nil
i. Any environmental impact on a water resource, in relation to coal seam gas development and large coal mining development?	
The proposal is not a coal seam gas or large coal mining development.	Nil
j. Additionally, any impact (direct or indirect) on Commonwealth land?	
The proposal would not have any impact on Commonwealth land. There is no Commonwealth land within the proposal site.	Nil
k. The environment, where Commonwealth agencies are proposing to take action?	
Shoalhaven Water is not a Commonwealth agency.	Nil

Appendix B – Likelihood of occurrence

An evaluation of the likelihood and extent of impact to threatened and migratory fauna recorded from within the Shoalhaven City Council LGA (BC Act threatened species); and within a 10 kilometre radius of the proposal site (EPBC Act threatened and migratory species). Records are from the EPBC Environmental Reporting Tool available from the Department of the Environment and Energy (DotEE) website. Ecology information has been obtained from the Threatened Species Profiles on the NSW OEH website (<http://www.environment.nsw.gov.au/threatenedspecies/>) and from the Species Profiles and Threats Database on the Commonwealth DotEE website (<http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>).

Status

National - Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

NSW - *Biodiversity Conservation Act 2016* or *Fisheries Management Act 1994*

- E – Endangered
- CE – Critically Endangered
- EP – Endangered population
- V – Vulnerable
- Mi – Migratory

Likelihood of occurrence in study area

- **Recorded** – The species was observed in the study area during the current survey
- **High** – It is highly likely that a species inhabits the study area and is dependent on identified suitable habitat (i.e. for breeding or important life cycle periods such as winter flowering resources), has been recorded recently in the locality (within 10 kilometres) and is known or likely to maintain resident populations in the study area. Also includes species known or likely to visit the study area during regular seasonal movements or migration
- **Moderate** – Potential habitat is present in the study area. Species unlikely to maintain sedentary populations, however may seasonally use resources within the study area opportunistically or during migration. The species is unlikely to be dependent (ie. for breeding or important life cycle periods such as winter flowering resources) on habitat within the study area, or habitat is in a modified or degraded state. Includes cryptic flowering flora species that were not seasonally targeted by surveys and that have not been recorded
- **Low** – It is unlikely that the species inhabits the study area and has not been recorded recently in the locality (within 10 kilometres). It may be an occasional visitor, but habitat similar to the study area is widely distributed in the local area, meaning that the species is not dependent (i.e. for breeding or important life cycle periods such as winter flowering resources) on available habitat. Specific habitat is not present in the study area or the species are a non-cryptic perennial flora species that were specifically targeted by surveys and not recorded
- **None** – Suitable habitat is absent from the study area.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Flora							
Bynoe's Wattle	<i>Acacia bynoeana</i>	E	V	Species or species' habitat may occur within 10km (DAWE 2021a)	Endemic to central eastern NSW, known a limited number of locations, often comprising populations of few plants. Grows mainly in heath/ dry sclerophyll forest on sandy soils, prefers open, sometimes slightly disturbed sites such as trail margins, road edges, and in recently burnt open patches. Flowers September to March, and fruit matures in November.	Acacias in the proposal site were identified as <i>Acacia decurrens</i> . The species does not occur in the proposal site.	Nil.
Deane's Boronia	<i>Boronia deanei</i>	V	V	Species or species' habitat known to occur within 10km (DAWE 2021a)	This small erect shrub is found in scattered populations between the far south-east of NSW and the Blue Mountains (including the upper Kangaroo River near Carrington Falls, the Endrick River near Nerriga and Nalbaugh Plateau), mainly in conservation reserves. The species grows on the margins of high altitude swamps, in wet heath on sandstone, and in drier open forest.	Shrubs to be removed by the proposal were identified as eucalypt and acacia species. The species does not occur in the proposal site.	Nil.
Thick Lip Spider Orchid	<i>Caladenia tessellata</i>	E	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Occurs from Central Coast NSW to southern Victoria. Mostly coastal but extends inland to Braidwood in southern NSW. In NSW grows in grassy dry sclerophyll woodland on clay loam or sandy soils, and less commonly in heathland on sandy loam soils. Flowers between September and November.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Leafless Tongue Orchid	<i>Cryptostylis hunteriana</i>	V	V	1 record within 10km, last recorded 2003 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	Occurs in coastal areas from East Gippsland to southern Queensland. Habitat preferences not well defined. Grows mostly in coastal heathlands, margins of coastal swamps and sedgeland, coastal forest, dry woodland, and lowland forest. Prefers open areas in the understorey and is often found in association with Large Tongue Orchid and the Bonnet Orchid. Soils include moist sands, moist to dry clay loam and occasionally in accumulated eucalypt leaves. Flowers November-February.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
White-flowered Wax Plant	<i>Cynanchum elegans</i>	E	E	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Occurs from Gerroa (Illawarra) to Brunswick Heads and west to Merriwa in the upper Hunter. Most common near Kempsey. Usually occurs on the edge of dry rainforest or littoral rainforest, but also occurs in Coastal Banksia Scrub, open forest and woodland, and Melaleuca scrub. Soil and geology types are not limiting. Flowering occurs between August and May, with the peak in November.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Camden Woollybutt	<i>Eucalyptus macarthurii</i>	E	E	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Occurs from Moss Vale to Kanangra Boyd National Park. In the Southern Highlands occurs mainly on private land, often as isolated paddock trees. Grows in grassy woodlands on relatively fertile soils on broad cold flats.	This species was not recorded in the proposal site and is unlikely to occur due to lack of broad cold flats as habitat.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Tangled Bedstraw	<i>Galium australe</i>	E		2 records within 10km, last recorded 2002 (DEES 2021a)	Tangled Bedstraw has been recorded historically in the Nowra (Colymea) and Narooma areas and is extant in Nadgee Nature Reserve, south of Eden. Range of habitats in NSW including a valley floor, alluvial soil beside a creek, heathland in a rocky gully, and the top of an escarpment above a creek. In other states known from a range of near-coastal habitats.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Bauer's Midge Orchid	<i>Genoplesium baueri</i>	E	E	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Occurs from Ulladulla to Port Stephens, with only 13 known extant populations. Grows in sparse sclerophyll forest and moss gardens over sandstone. Flowers from February to March.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Wingello Grevillea	<i>Grevillea molyneuxii</i>	V	E	1 record within 10km, last recorded 2001 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	Restricted to a small area south of Penrose, above Tallowa Gully and Bundanoon Creek, in Morton National Park and on Crown Land. Grows in low heathland on sandstone, in skeletal soil on flat, wet sandstone shelves above dissected valleys. Prefers open areas within heathland patches and colonises tracks that bisect its habitat.	There were no Grevillea species identified in the proposal site to be removed. The species does not occur.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Wingless Raspwort	<i>Haloragis exalata subsp. exalata</i>	V	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Square Raspwort occurs in 4 widely scattered localities in eastern NSW. It is disjunctly distributed in the Central Coast, South Coast and North Western Slopes botanical subdivisions of NSW. Requires protected and shaded damp situations in riparian habitats.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur. There is no riparian habitat in the proposal site.	Very low.
	<i>Helichrysum calvertianum</i>	V		3 records within 10km, last recorded 2010 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	Known from dry sclerophyll forest and heathland with rock outcrops, predominantly on Hawkesbury sandstone soils at altitudes 650-855m.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur. There is no rock outcrop habitat in the proposal site.	Very low.
Illawarra Irene	<i>Irenepharsus trypherus</i>	E	E	56 records within 10km (DEES 2021a); Species or species' habitat known to occur within	Recorded from 18 sites within the Kiama, Shellharbour, Shoalhaven, Tallaganda, Wingecarribee and Wollongong LGAs. Typically inhabits steep rocky slopes near cliff lines and ridge tops. Associated vegetation includes moist sclerophyll forest, Ironwood Backhousia myrtifolia thicket, and rainforest.	There is no suitable steep rocky slope habitat in the proposal site to be removed. The species is unlikely to occur.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
				10km (DAWE 2021a)			
Deane's Melaleuca	<i>Melaleuca deanei</i>	V	V	Species or species' habitat may occur within 10km (DAWE 2021a)	Occurs from Nowra to St Albans and west to the Blue Mountains, with most records in Ku-ring-gai/Berowra and Holsworthy/Wedderburn areas. Mostly grows on broad flat ridgetops, dry ridges and slopes and strongly associated with low nutrient sandy loam soils, sometimes with ironstone. Grows in heath- open forest, often in sandstone ridgetop woodland communities.	There were no Melaleuca species identified in the proposal site to be removed. The species does not occur.	Nil.
Knotweed	<i>Persicaria elatior</i>	V	V	Species or species' habitat may occur within 10km (DAWE 2021a)	Tall Knotweed has been recorded in south-eastern NSW from Ulladulla to the Victorian border. In northern NSW it is known from Raymond Terrace and the Grafton area. This species normally grows in damp places, especially beside streams and lakes. Occasionally in swamp forest or associated with disturbance.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur. There is limited damp habitat in the proposal site.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Spiked Rice-flower	<i>Pimelea spicata</i>	E	E	Species or species' habitat may occur within 10km (DAWE 2021a)	Disjunct populations within the Cumberland Plain ((Marayong and Prospect Reservoir south to Narellan and Douglas Park) and Illawarra (Landsdowne to Shellharbour to northern Kiama). In both the Cumberland Plain and Illawarra environments this species is found on well-structured clay soils. On the Cumberland Plain sites it is associated with Grey Box communities. In the coastal Illawarra it occurs commonly in Coast Banksia open woodland.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Cotoneaster Pomaderris	<i>Pomaderris cotoneaster</i>	E	E	2 records within 10km (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	Disjunct distribution including the Nungatta area, Tumut, the Tantawangalo area, near Tallong, the Yerranderie area, the Canyonleigh area and Ettrema Gorge. Found in wide range of habitats, including forest with deep, friable soil, amongst rock beside a creek, on rocky forested slopes and in steep gullies between sandstone cliffs.	There were no Pomaderris species identified in the proposal site to be removed. The species does not occur.	Nil.
Jervis Bay Leek Orchid	<i>Prasophyllum affine</i>	E	E	Species or species' habitat known to occur within 10km (DAWE 2021a)	Known from three areas south-east of Nowra on South Coast. These are Kinghorne Point, Wowly Gully near the town of Callala Bay, and near the township of Vincentia. Grows on poorly drained clay soils that support low heathland and sedgeland communities.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Tawny Leek-orchid	<i>Prasophyllum fuscum</i>	CE	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Restricted to an area of less than 4 km ² in the upper catchment of the Georges River, southwest of Sydney in the Wilton district. Grows in moist heath, often along seepage lines. The known population grows in moist sandy soil over sandstone amongst sedges and grasses in an area that appears to be regularly slashed by the local council.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Illawarra Greenhood	<i>Pterostylis gibbosa</i>	E	E	Species or species' habitat may occur within 10km (DAWE 2021a)	Known from a small number of populations in the Illawarra, Shoalhaven and Hunter regions. Grows in open forest or woodland, on flat or gently sloping land with poor drainage. In the Illawarra region, the species grows in woodland dominated by Forest Red Gum, Woollybutt and Melaleuca decora. Near Nowra, the species grows in an open forest of Spotted Gum, Forest Red Gum and Grey Ironbark. In the Hunter region, the species grows in open woodland dominated by Narrow-leaved Ironbark, Forest Red Gum and Black Cypress Pine.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Waterfall Greenhood	<i>Pterostylis pulchella</i>	V	V	3 records within 10km (DEES 2021a); Species or species' habitat known to occur within 10km	The Waterfall Greenhood is found only at Fitzroy Falls, Belmore Falls, upper Bundanoon Creek (Meryla) and Minnamurra Falls. The Waterfall Greenhood is found on cliff faces close to waterfalls and creek banks and mossy rocks alongside running water.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. There is no cliff habitat in the	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
				(DAWE 2021a)		proposal site and the species is unlikely to occur.	
Eastern Underground Orchid	<i>Rhizanthella slateri</i>	V	E	Species or species' habitat may occur within 10km (DAWE 2021a)	Currently known only from 10 locations, including near Bulahdelah, the Watagan Mountains, the Blue Mountains, Wiseman's Ferry area, Agnes Banks and near Nowra. The species grows in eucalypt forest but no informative assessment of the likely preferred habitat for the species is available. Flowers September and November.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Scrub Turpentine	<i>Rhodamnia rubescens</i>	CE	CE	10 records within 10km (DEES 2021a); Species or species' habitat likely to occur within 10km (DAWE 2021a)	Occurs in coastal districts north from Batemans Bay in New South Wales, to areas inland of Bundaberg in Queensland. Populations of <i>R. rubescens</i> typically occur in coastal regions and occasionally extend inland onto escarpments up to 600 m a.s.l. in areas with rainfall of 1,000 -1,600 mm. Found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest usually on volcanic and sedimentary soils.	There were no <i>Rhodamnia</i> species identified in the proposal site to be removed. The species does not occur.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Native Guava	<i>Rhodomyrtus psidioides</i>	CE	CE	Species or species' habitat may occur within 10km (DAWE 2021a)	Native Guava occurs from Broken Bay, approximately 90 km north of Sydney, New South Wales, to Maryborough in Queensland. Populations are typically restricted to coastal and sub-coastal areas of low elevation however the species does occur up to c. 120 km inland in the Hunter and Clarence River catchments and along the Border Ranges in NSW. It is a pioneer species found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest often near creeks and drainage lines.	There were no <i>Rhodamnia</i> species identified in the proposal site to be removed. The species does not occur.	Nil.
	<i>Solanum celatum</i>	E		12 records within 10km (DEES 2021a)	Occurs from Wollongong to Nowra and inland to Bungonia. Grows in rainforest clearings, or in wet sclerophyll forests.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Magenta Lilly Pilly	<i>Syzygium paniculatum</i>	E		Species or species' habitat likely to occur within 10km (DAWE 2021a)	Occurs in narrow coastal strip from Upper Lansdowne to Conjola State Forest. Grows in rainforest on sandy soils or stabilised Quaternary sand dunes at low altitudes in coastal areas, often in remnant littoral or gallery rainforests.	There were no <i>Syzygium</i> species identified in the proposal site to be removed. The species does not occur.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Kangaloon Sun Orchid	<i>Thelymitra sp. Kangaloon</i>	CE	CE	Species or species' habitat known to occur within 10km (DAWE 2021a)	Occurs in narrow coastal strip from Upper Lansdowne to Conjola State Forest. Grows in rainforest on sandy soils or stabilised Quaternary sand dunes at low altitudes in coastal areas, often in remnant littoral or gallery rainforests.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Austral Toadflax	<i>Thesium australe</i>	V	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Found in small, scattered populations along the east coast, northern and southern tablelands. Occurs in grassland or grassy woodland, and is often found in association with Kangaroo Grass.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Nowra Heath-myrtle	<i>Triplarina nowraensis</i>	E	E	Species or species' habitat likely to occur within 10km (DAWE 2021a)	This species has been recorded from five known populations. The populations occur west of Nowra, in Boolijong Creek valley and also north of the Shoalhaven River on the plateau above Bundanon. Nowra Heath Myrtle occurs on poorly drained, gently sloping sandstone shelves or along creek lines underlain by Nowra Sandstone. The sites are often either treeless or have a very open tree canopy due to the impeded drainage.	There were no <i>Triplarina</i> species identified in the proposal site to be removed. The species does not occur.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Swamp Everlasting	<i>Xerochrysum palustre</i>		V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Found in Kosciuszko National Park and the eastern escarpment south of Badja. Swamp Everlasting grows in wetlands including sedge-swamps and shallow freshwater marshes, often on heavy black clay soils.	Groundcover in the proposal site is dominated by introduced groundcover species and highly disturbed by routine mowing. The species is unlikely to occur.	Very low.
Velvet Zieria	<i>Zieria murphyi</i>	V	V	Species or species' habitat may occur within 10km (DAWE 2021a)	Found in the Blue Mountains at Mt Tomah and on the southern tablelands where it has been recorded in Morton National Park in the Bundanoon area. The Velvet Zieria is found in sheltered positions in moist gullies in moist eucalypt forest with sandy soil.	There were no Zieria species identified in the proposal site to be removed. The species does not occur.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Birds							
Regent Honeyeater	<i>Anthochaera phrygia</i>	CE	CE	1 record within 10km, last recorded 2005 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The Regent Honeyeater mainly inhabits temperate woodlands and open forests of the inland slopes of south-east Australia. Birds are also found in drier coastal woodlands and forests in some years. Once recorded between Adelaide and the central coast of Queensland, its range has contracted dramatically in the last 30 years to between north-eastern Victoria and south-eastern Queensland. There are only three known key breeding regions remaining: north-east Victoria (Chiltern-Albury), and in NSW at Capertee Valley and the Bundarra-Barraba region. In NSW the distribution is very patchy and mainly confined to the two main breeding areas and surrounding fragmented woodlands. In some years flocks converge on flowering coastal woodlands and forests. The species inhabits dry open forest and woodland, particularly Box-Ironbark woodland, and riparian forests of River Sheoak. Regent Honeyeaters inhabit woodlands that support a significantly high abundance and species richness of bird species. These woodlands have significantly large numbers of mature trees, high	Unlikely. No breeding and no foraging habitat present. The adjacent woodland is not a productive forest preferred by the species.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					canopy cover and abundance of mistletoes.		
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	V		2 records within 10km, last recorded 2001 (DEES 2021a)	The Dusky Woodswallow is widespread from the coast to inland, including the western slopes of the Great Dividing Range and farther west. It is often recorded in woodlands and dry open sclerophyll forests, and has also been recorded in shrublands, heathlands regenerating forests and very occasionally in moist forests or rainforests. The understorey is typically open with sparse eucalypt saplings, acacias and other shrubs, often with coarse woody debris. It is also recorded in farmland, usually at the edges of forest or woodland or in roadside remnants or wind breaks with dead timber. The nest is an open shallow untidy cup frequently built in an open hollow, crevice or stump. Although Dusky Woodswallows have large home ranges, individuals may spend most of their time in about a 2 ha range and defend an area about 50 m around the nest. Dusky Woodswallows prefer larger remnants over smaller remnants. Competitive exclusion by Noisy Miners (<i>Manorina melanocephala</i>) is a significant threat to this species.	Possible. Woodland edge could provide very limited potential foraging and breeding habitat.	Low. Removal of four small trees (mostly Acacia) in the mid-storey and some grassland comprises a negligible proportion of foraging and/or breeding habitat.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Australasian Bittern	<i>Botaurus poeciloptilus</i>	E	E	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Australasian Bitterns are widespread but uncommon over south-eastern Australia. In NSW they may be found over most of the state except for the far north-west. The Species favours permanent freshwater wetlands with tall, dense vegetation, particularly bullrushes (<i>Typha</i> spp.) and spikerushes (<i>Eleocharis</i> spp.), it hides during the day amongst dense reeds or rushes and feed mainly at night on frogs, fish, yabbies, spiders, insects and snails. The species may construct feeding platforms over deeper water from reeds trampled by the bird; platforms are often littered with prey remains.	Nil. No freshwater wetland present.	Nil.
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	V		31 records within 10km (DEES 2021a)	In New South Wales, the Gang-gang Cockatoo is distributed from the south-east coast to the Hunter region, and inland to the Central Tablelands and south-west slopes. It occurs regularly in the Australian Capital Territory. It is rare at the extremities of its range, with isolated records known from as far north as Coffs Harbour and as far west as Mudgee. In spring and summer the species is generally found in tall mountain forests and woodlands, particularly in heavily timbered and mature wet sclerophyll forests. In autumn and winter, the species often moves to lower altitudes in drier more open eucalypt forests and	Unlikely. May forage in adjacent woodland on occasion but the proposal site does not provide breeding or foraging habitat.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					woodlands, particularly box-gum and box-ironbark assemblages, or in dry forest in coastal areas and often found in urban areas.		
Glossy Black-Cockatoo	<i>Calyptrorhynchus lathamii</i>	V		40 records within 10km (DEES 2021a)	The species is uncommon although widespread throughout suitable forest and woodland habitats, from the central Queensland coast to East Gippsland in Victoria, and inland to the southern tablelands and central western plains of NSW, with a small population in the Riverina. It inhabits open forest and woodlands of the coast and the Great Dividing Range where stands of sheoak occur. Black Sheoak (<i>Allocasuarina littoralis</i>) and Forest Sheoak (<i>A. torulosa</i>) are important foods. Inland populations feed on a wide range of sheoaks, including Drooping Sheoak, <i>Allocasuarina diminuta</i> , and <i>A. gymnathera</i> . Belah is also utilised and may be a critical food source for some populations. The species is dependent on large hollow-bearing eucalypts for nest sites.	Nil. No breeding or foraging habitat (ie casuarina) is present).	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Varied Sittella	<i>Daphoenositta chrysoptera</i>	V		2 records within 10km, last recorded 2003 (DEES 2021a)	The Varied Sittella is sedentary and inhabits most of mainland Australia except the treeless deserts and open grasslands. Distribution in NSW is nearly continuous from the coast to the far west. The species inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland.	Possible. Woodland edge could provide very limited potential foraging and breeding habitat.	Low. Removal of four small trees (mostly Acacia) in the mid-storey and some grassland comprises a negligible proportion of foraging and/or breeding habitat.
Eastern Bristlebird	<i>Dasyornis brachypterus</i>	E	E	2 records within 10km, last recorded 2005 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	Occurs in three disjunct areas of south-eastern Australia: southern Queensland/northern NSW, the Illawarra Region and in the vicinity of the NSW/Victorian border. The habitat for central and southern populations is characterised by dense, low vegetation including heath and open woodland with a heathy understorey. In northern NSW the habitat occurs in open forest with dense tussocky grass understorey and sparse mid-storey near rainforest ecotone; all of these vegetation types are fire prone. The age of habitat since fires (fire-age) is of paramount importance to this species. The Illawarra and southern populations reach maximum densities in habitat that has not been burnt for at least 15 years; however, habitat in northern NSW requires frequent fires to maintain habitat condition and suitability. The northern fire regimes	Nil. No breeding and no foraging habitat present.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					is between 3-6 years and of variable intensity depending on the habitat condition.		
Grey Falcon	<i>Falco hypoleucos</i>	E	V	Species or species' habitat may occur within 10km (DAWE 2021a)	The Grey Falcon is sparsely distributed in NSW, chiefly throughout the Murray-Darling Basin, with the occasional vagrant east of the Great Dividing Range. The species is usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast. It also occurs near wetlands where surface water attracts prey.	Unlikely. No records within the locality. No watercourse habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Little Lorikeet	<i>Glossopsitta pusilla</i>	V		2 records within 10km, last recorded 2008 (DEES 2021a)	The Little Lorikeet is distributed widely across the coastal and Great Divide regions of eastern Australia from Cape York to South Australia. NSW provides a large portion of the species' core habitat, with lorikeets found westward as far as Dubbo and Albury. Nomadic movements are common, influenced by season and food availability, although some areas retain residents for much of the year and 'locally nomadic' movements are suspected of breeding pairs. The species forages primarily in the canopy of open Eucalyptus forest and woodland, yet also finds food in Angophora, Melaleuca and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity.	Unlikely. No foraging or breeding habitat is present. Could occur on occasion in adjacent woodland when canopy is in flower.	Very low.
Painted Honeyeater	<i>Grantiella picta</i>	V	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	The Painted Honeyeater is nomadic and occurs at low densities throughout its range. The greatest concentrations of the bird and almost all breeding occurs on the inland slopes of the Great Dividing Range in NSW, Victoria and southern Queensland. During the winter it is more likely to be found in the north of its distribution. The species inhabits Boree/ Weeping Myall (<i>Acacia pendula</i>), Brigalow (<i>A. harpophylla</i>) and Box-Gum Woodlands and Box-Ironbark Forests. It is a specialist	Unlikely. No foraging or breeding habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					feeder on the fruits of mistletoes growing on woodland eucalypts and acacias. Prefers mistletoes of the genus <i>Amyema</i> .		
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	V		7 records within 10km (DEES 2021a)	The White-bellied Sea-eagle is widespread along the New South Wales coast, and along all major inland rivers and waterways. The species habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. It occurs at sites near the sea or sea-shore, such as around bays and inlets, beaches, reefs, lagoons, estuaries and mangroves; and at, or in the vicinity of freshwater swamps, lakes, reservoirs, billabongs and saltmarsh. The terrestrial habitats the species has been recorded in, include coastal dunes, tidal flats, grassland, heathland, woodland, and forest (including rainforest).	Unlikely. No foraging or breeding habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Little Eagle	<i>Hieraaetus morphnoides</i>	V		2 records within 10km (DEES 2021a)	The Little Eagle is found throughout the Australian mainland excepting the most densely forested parts of the Dividing Range escarpment. It occurs as a single population throughout NSW. The species occupies open eucalypt forest, woodland or open woodland. Sheoak or Acacia woodlands and riparian woodlands of interior NSW are also used. It nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter.	Unlikely. Limited foraging habitat is present on the edge of woodland. No breeding habitat is present.	Very low.
White-throated Needletail	<i>Hirundapus caudacutus</i>		V,C,J,K	2 records within 10km, last recorded 2003 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	White-throated Needletails often occur in large numbers over eastern and northern Australia. White-throated Needletails are aerial birds and for a time it was commonly believed that they did not land while in Australia. It has now been observed that birds will roost in trees, and radio-tracking has since confirmed that this is a regular activity.	Unlikely. No foraging, breeding or roosting habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Swift Parrot	<i>Lathamus discolor</i>	E	CE	Species or species' habitat likely to occur within 10km (DAWE 2021a)	The Swift Parrot breeds in Tasmania during spring and summer, migrating in the autumn and winter months to south-eastern Australia from Victoria and the eastern parts of South Australia to south-east Queensland. In NSW mostly occurs on the coast and south west slopes. On the mainland the species occur in areas where eucalypts are flowering profusely or where there are abundant lerp (from sap-sucking bugs) infestations. Their favoured feed trees include winter flowering species such as Swamp Mahogany <i>Eucalyptus robusta</i> , Spotted Gum <i>Corymbia maculata</i> , Red Bloodwood <i>C. gummifera</i> , Forest Red Gum <i>E. tereticornis</i> , Mugga Ironbark <i>E. sideroxylon</i> , and White Box <i>E. albens</i> .	Unlikely. No foraging or breeding habitat is present.	Very low.
Square-tailed Kite	<i>Lophoictinia isura</i>	V		1 record within 10km, last recorded 2006 (DEES 2021a)	The Square-tailed Kite ranges along coastal and subcoastal areas from south-western to northern Australia, Queensland, NSW and Victoria. In NSW, scattered records of the species throughout the state indicate that the species is a regular resident in the north, north-east and along the major west-flowing river systems. It is a summer breeding migrant to the south-east, including the NSW south coast, arriving in September and leaving by March. The species is found in a variety of timbered habitats	Unlikely. No foraging or breeding habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					including dry woodlands and open forests. Shows a particular preference for timbered watercourses. In arid north-western NSW, it has been observed in stony country with a ground cover of chenopods and grasses, open acacia scrub and patches of low open eucalypt woodland.		
Powerful Owl	<i>Ninox strenua</i>	V		2 records within 10km, last recorded 2007 (DEES 2021a)	The Powerful Owl is endemic to eastern and south-eastern Australia, mainly on the coastal side of the Great Dividing Range from Mackay to south-western Victoria. In NSW, it is widely distributed throughout the eastern forests from the coast inland to tablelands, with scattered records on the western slopes and plains suggesting occupancy prior to land clearing. Now at low densities throughout most of its eastern range, rare along the Murray River and former inland populations may never recover. The Powerful Owl inhabits a range of vegetation types, from woodland and open sclerophyll forest to tall open wet forest and rainforest. The Powerful Owl requires large tracts of forest or woodland habitat but can occur in fragmented	Unlikely. Very limited foraging, breeding habitat is present. No roosting habitat is present. Could forage over grassland however likely to need more vegetated areas to hunt.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					landscapes as well. The species breeds and hunts in open or closed sclerophyll forest or woodlands and occasionally hunts in open habitats. It roosts by day in dense vegetation comprising species such as Turpentine <i>Syncarpia glomulifera</i> , Black She-oak <i>Allocasuarina littoralis</i> , Blackwood <i>Acacia melanoxylon</i> , Rough-barked Apple <i>Angophora floribunda</i> , Cherry Ballart <i>Exocarpus cupressiformis</i> and a number of eucalypt species.		
Scarlet Robin	<i>Petroica boodang</i>	V		4 records within 10km, last recorded 2003 (DEES 2021a)	In NSW, the Scarlet Robin from the coast to the inland slopes. After breeding, some Scarlet Robins disperse to the lower valleys and plains of the tablelands and slopes. Some birds may appear as far west as the eastern edges of the inland plains in autumn and winter. The Scarlet Robin lives in dry eucalypt forests and woodlands. The understorey is usually open and grassy with few scattered shrubs. This species lives in both mature and regrowth vegetation. It occasionally occurs in mallee or wet forest communities, or in wetlands and tea-	Unlikely. Limited foraging habitat is present on the edge of woodland. No breeding habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					tree swamps. The species habitat usually contains abundant logs and fallen timber: these are important components of its habitat.		
Australian Painted Snipe	<i>Rostratula australis</i>	E	E	Species or species' habitat likely to occur within 10km (DAWE 2021a)	In NSW many records of the Australian Painted Snipe are from the Murray-Darling Basin including the Paroo wetlands, Lake Cowal, Macquarie Marshes, Fivebough Swamp and more recently, swamps near Balldale and Wanganella. Other important locations with recent records include wetlands on the Hawkesbury River and the Clarence and lower Hunter Valleys. The species prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber.	Nil. No breeding and no foraging habitat present.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Diamond Firetail	<i>Stagonopleura guttata</i>	V		1 record within 10km, last recorded 2001 (DEES 2021a)	The Diamond Firetail is endemic to south-eastern Australia, extending from central Queensland to the Eyre Peninsula in South Australia. It is widely distributed in NSW, with a concentration of records from the Northern, Central and Southern Tablelands, the Northern, Central and South Western Slopes and the North West Plains and Riverina. Not commonly found in coastal districts, though there are records from near Sydney, the Hunter Valley and the Bega Valley. This species has a scattered distribution over the rest of NSW, though is very rare west of the Darling River. The species is found in grassy eucalypt woodlands, including Box-Gum Woodlands and Snow Gum Eucalyptus pauciflora Woodlands. It also occurs in open forest, mallee, Natural Temperate Grassland, and in secondary grassland derived from other communities, and often found in riparian areas (rivers and creeks), and sometimes in lightly wooded farmland.	Possible. Very few local records. Very limited potential foraging and breeding habitat.	Low. Removal of four small trees (mostly Acacia) in the mid-storey and some grassland comprises a negligible proportion of foraging and/or breeding habitat.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Masked Owl	<i>Tyto novaehollandiae</i>	V		3 records within 10km (DEES 2021a)	The Masked Owl occurs from the coast where it is most abundant to the western plains. Overall records for this species fall within approximately 90% of NSW, excluding the most arid north-western corner. There is no seasonal variation in its distribution. This species lives in dry eucalypt forests and woodlands from sea level to 1100 m an often hunts along the edges of forests, including roadsides. Roosts and breeds in moist eucalypt forested gullies, using large tree hollows or sometimes caves for nesting.	Unlikely. Very limited foraging, breeding habitat is present. No roosting habitat is present. Could forage over grassland however likely to need more vegetated areas to hunt.	Very low.
Sooty Owl	<i>Tyto tenebricosa</i>	V		5 records within 10km, last recorded 2003 (DEES 2021a)	The Sooty Owl occupies the easternmost one-eighth of NSW, occurring on the coast, coastal escarpment and eastern tablelands. This species occurs in rainforest, including dry rainforest, subtropical and warm temperate rainforest, as well as moist eucalypt forests. Sooty Owls roost by day in the hollow of a tall forest tree or in heavy vegetation and nest in very large tree hollows. This species hunts by night for small ground mammals or tree-dwelling mammals such as the Common Ringtail Possum (<i>Pseudocheirus peregrinus</i>) or Sugar Glider (<i>Petaurus breviceps</i>).	Nil. No breeding and no foraging habitat present.	Nil.
Frogs							

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Giant Burrowing Frog	<i>Heleioporus australiacus</i>	V	V	2 records within 10km, last recorded 2010 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The Giant Burrowing Frog is distributed in south eastern NSW and Victoria, and appears to exist as two distinct populations: a northern population largely confined to the sandstone geology of the Sydney Basin and extending as far south as Ulladulla, and a southern population occurring from north of Narooma through to Walhalla, Victoria. It is found in heath, woodland and open dry sclerophyll forest on a variety of soil types except those that are clay based.	Nil. No breeding and no foraging habitat present.	Nil.
Green and Golden Bell Frog	<i>Litoria aurea</i>	E	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Since 1990 there have been approximately 50 recorded locations of Green and Golden Bell Frog in NSW, most of which are small, coastal, or near coastal populations. These locations occur over the species' former range, however they are widely separated and isolated. Large populations in NSW are located around the metropolitan areas of Sydney, Shoalhaven and mid north coast (one an island population). There is only one known population on the NSW Southern Tablelands. The species inhabits marshes, dams and stream-sides, particularly those containing bullrushes (<i>Typha</i> spp.) or spikerushes (<i>Eleocharis</i> spp.). Optimal habitat includes water-bodies	Nil. No breeding and no foraging habitat present.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					that are unshaded, free of predatory fish such as Plague Minnow (<i>Gambusia holbrooki</i>), have a grassy area nearby and diurnal sheltering sites available. Some sites the species has been recorded in, occur in highly disturbed areas.		
Littlejohn's Tree Frog	<i>Litoria littlejohni</i>	V	V	Species or species' habitat may occur within 10km (DAWE 2021a)	Littlejohn's Tree Frog has a distribution that includes the plateaus and eastern slopes of the Great Dividing Range from Watagan State Forest (90 km north of Sydney) and south to Buchan in Victoria. The majority of records are within the Sydney Basin Bioregion with only scattered records south to the Victorian border. The species has not been recorded in southern NSW within the last decade and records are isolated and tend to be at high altitude. The species breeds in the upper reaches of permanent streams and in perched swamps. Non-breeding habitat is heath based forests and woodlands where it shelters under leaf litter and low vegetation, and hunts for invertebrate	Nil. No breeding and no foraging habitat present.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					prey either in shrubs or on the ground.		
Stuttering Frog	<i>Mixophyes balbus</i>	E	V	Species or species' habitat likely to occur within 10km (DAWE 2021a)	Stuttering Frogs occur along the east coast of Australia from southern Queensland to north-eastern Victoria. Considered to have disappeared from Victoria and to have undergone considerable range contraction in NSW, particularly in south-east NSW. The Dorrigo region, in north-east NSW, appears to be a stronghold for this species. It is found in rainforest and wet, tall open forest in the foothills and escarpment on the eastern side of the Great Dividing Range. Outside the breeding season adults live in deep leaf litter and thick understorey vegetation on the forest floor.	Nil. No breeding and no foraging habitat present.	Nil.
Mammals							

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	V		1 record within 10km (DEES 2021a)	The Eastern Pygmy-possum is found in south-eastern Australia, from southern Queensland to eastern South Australia and in Tasmania. In NSW it extends from the coast inland as far as the Pilliga, Dubbo, Parkes and Wagga Wagga on the western slopes. The species is found in a broad range of habitats from rainforest through sclerophyll (including Box-Ironbark) forest and woodland to heath, but in most areas woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest. It feeds largely on nectar and pollen collected from banksias, eucalypts and bottlebrushes and is an important pollinator of heathland plants such as banksias; soft fruits are eaten when flowers are unavailable.	Nil. No breeding and no foraging habitat present.	Nil.
Large-eared Pied Bat	<i>Chalinolobus dwyeri</i>	V	V	3 records within 10km (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The Large-eared Pied Bat is found mainly in areas with extensive cliffs and caves, from Rockhampton in Queensland south to Bungonia in the NSW Southern Highlands. It is generally rare with a very patchy distribution in NSW. There are scattered records from the New England Tablelands and North West Slopes. The species roosts in caves (near their entrances), crevices in cliffs, old mine workings and in the disused, bottle-shaped mud nests of	Unlikely. No breeding and very limited foraging habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
					the Fairy Martin (<i>Petrochelidon ariel</i>), frequenting low to mid-elevation dry open forest and woodland close to these features. Females have been recorded raising young in maternity roosts (c. 20-40 females) from November through to January in roof domes in sandstone caves and overhangs. It is found in well-timbered areas containing gullies.		
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E	7 records within 10km, last recorded 2004 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The range of the Spotted-tailed Quoll has contracted considerably since European settlement. It is now found in eastern NSW, eastern Victoria, south-east and north-eastern Queensland, and Tasmania. Only in Tasmania is it still considered relatively common. The species has been recorded across a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Individual animals use hollow-bearing trees, fallen logs, small caves, rock outcrops and rocky-cliff faces as den sites. Females occupy home ranges of 200-500 hectares, while males occupy very large home ranges from 500 to over 4000 hectares. Are known to traverse their home ranges along densely vegetated creeklines.	Unlikely. Important habitat features are absent from the proposal site.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	V		2 records within 10km, last recorded 2003 (DEES 2021a)	The Eastern False Pipistrelle is found on the south-east coast and ranges of Australia, from southern Queensland to Victoria and Tasmania. The species prefer moist habitats, with trees taller than 20 m.	Unlikely. No roosting and very limited foraging habitat is present.	Very low.
Southern Brown Bandicoot (eastern)	<i>Isoodon obesulus obesulus</i>	E	E	Species or species' habitat known to occur within 10km (DAWE 2021a)	The Southern Brown Bandicoot has a patchy distribution. It is found in south-eastern NSW, east of the Great Dividing Range south from the Hawkesbury River, southern coastal Victoria and the Grampian Ranges, south-eastern South Australia, south-west Western Australia and the northern tip of Queensland. Southern Brown Bandicoots are largely crepuscular (active mainly after dusk and/or before dawn). They are generally only found in heath or open forest with a heathy understorey on sandy or friable soils. Males have a home range of approximately 5-20 hectares whilst females forage over smaller areas of about 2-3 hectares.	Nil. No breeding and no foraging habitat present.	Nil.
Eastern Coastal Free-tailed Bat	<i>Micronomus norfolkensis</i>	V		4 records within 10km, last recorded 2002 (DEES 2021a)	The Eastern Freetail-bat is found along the east coast from south Queensland to southern NSW. The species typically inhabit dry sclerophyll forest, woodland, swamp forests and mangrove forests east of the Great Dividing Range. It roosts mainly in tree hollows but will also roost under bark or in man-made structures.	Unlikely. No roosting and very limited foraging habitat is present.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Large Bent-winged Bat	<i>Miniopterus orianae oceanensis</i>	V		2 records within 10km (DEES 2021a)	Large Bentwing-bats occur along the east and north-west coasts of Australia. The species use caves as the primary roosting habitat, but also use derelict mines, storm-water tunnels, buildings and other man-made structures.	Unlikely. No roosting and very limited foraging habitat is present.	Very low.
Southern Myotis	<i>Myotis macropus</i>	V		1 record within 10km, last recorded 2003 (DEES 2021a)	The Southern Myotis is mainly coastal but may occur inland along large river systems. Usually associated with permanent waterways at low elevations in flat/undulating country, usually in vegetated areas. Forages over streams and watercourses feeding on fish and insects from the water surface. Roosts in a variety of habitats including caves, mine shafts, hollow-bearing trees, stormwater channels, buildings, under bridges and in dense foliage, typically in close proximity to water.	Nil. No breeding and no foraging habitat present.	Nil.
Greater Glider	<i>Petauroides volans</i>		V	13 records within 10km (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The greater glider is restricted to eastern Australia, occurring from the Windsor Tableland in north Queensland through to central Victoria (Wombat State Forest), with an elevational range from sea level to 1200 m above sea level. It prefers taller montane, moist eucalypt forest with relatively old trees and abundant hollows.	Unlikely. May forage in adjacent woodland on occasion but the proposal site does not provide breeding or foraging habitat.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Yellow-bellied Glider	<i>Petaurus australis</i>	V		15 records within 10km (DEES 2021a)	The Yellow-bellied Glider is found along the eastern coast to the western slopes of the Great Dividing Range, from southern Queensland to Victoria. The species occur in tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils. Vegetation preferences vary with latitude and elevation; mixed coastal forests to dry escarpment forests in the north; moist coastal gullies and creek flats to tall montane forests in the south.	Unlikely. May forage in adjacent woodland on occasion but the proposal site does not provide breeding or foraging habitat.	Very low.
Brush-tailed Rock-wallaby	<i>Petrogale penicillata</i>	E	V	5 records within 10km (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	In NSW the Brush-tailed Rock-wallaby occurs from the Queensland border in the north to the Shoalhaven in the south, with the population in the Warrumbungle Ranges being the western limit. The species occupy rocky escarpments, outcrops and cliffs with a preference for complex structures with fissures, caves and ledges, often facing north. It typically shelters or basks during the day in rock crevices, caves and overhangs and are most active at night when foraging.	Nil. No breeding and unlikely foraging habitat is present.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Koala	<i>Phascolarctos cinereus</i>	V	V	7 records within 10km (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The Koala has a fragmented distribution throughout eastern Australia from north-east Queensland to the Eyre Peninsula in South Australia. In New South Wales, koala populations are found on the central and north coasts, southern highlands, southern and northern tablelands, Blue Mountains, southern coastal forests, with some smaller populations on the plains west of the Great Dividing Range. The species inhabit eucalypt woodlands and forests, and feed on the foliage of more than 70 eucalypt species and 30 non-eucalypt species, but in any one area will select preferred browse species.	Nil. No breeding and no foraging habitat present.	Nil.
Long-nosed Potoroo	<i>Potorous tridactylus</i>	V	V	3 records within 10km, last recorded 2009 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The long-nosed potoroo is found on the south-eastern coast of Australia, from Queensland to eastern Victoria and Tasmania, including some of the Bass Strait islands. In NSW it is generally restricted to coastal heaths and forests east of the Great Dividing Range, with an annual rainfall exceeding 760 mm. It inhabits coastal heaths and dry and wet sclerophyll forests. Dense understorey with occasional open areas is an essential part of habitat, and may consist of grass-trees, sedges, ferns or heath, or of low shrubs of tea-trees or melaleucas. A sandy loam soil is also a common feature.	Nil. No breeding and no foraging habitat present.	Nil.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
New Holland Mouse	<i>Pseudomys novaehollandiae</i>		V	1 record within 10km, last recorded 2005 (DEES 2021a); Species or species' habitat known to occur within 10km (DAWE 2021a)	The New Holland Mouse has a fragmented distribution across Tasmania, Victoria, New South Wales and Queensland. The species is known to inhabit open heathlands, woodlands and forests with a heathland understorey and vegetated sand dunes	Nil. No breeding and no foraging habitat present.	Nil.
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	V	V	29 records within 10km (DEES 2021a); Roosting known to occur within 10km (DAWE 2021a)	Grey-headed Flying-foxes are generally found within 200 km of the eastern coast of Australia, from Rockhampton in Queensland to Adelaide in South Australia. In times of natural resource shortages, they may be found in unusual locations. The species occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops. Roosting camps are generally located within 20 km of a regular food source and are commonly found in gullies, close to water, in vegetation with a dense canopy.	Unlikely. May forage in adjacent woodland on occasion but the proposal site does not provide suitable breeding or foraging habitat.	Very low.

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Broad-headed Snake	<i>Hoplocephalus bungaroides</i>	E	V	6 records within 10km, last recorded 2009 (DEES 2021a)	The Broad-headed Snake is largely confined to Triassic and Permian sandstones, including the Hawkesbury, Narrabeen and Shoalhaven groups, within the coast and ranges in an area within approximately 250 km of Sydney. The species shelters in rock crevices and under flat sandstone rocks on exposed cliff edges during autumn, winter and spring.	Nil. No breeding and no foraging habitat present.	Nil.
Rosenberg's Goanna	<i>Varanus rosenbergi</i>	V		7 records within 10km (DEES 2021a)	Rosenberg's Goanna occurs on the Sydney Sandstone in Wollemi National Park to the north-west of Sydney, in the Goulburn and ACT regions and near Cooma in the south. There are records from the South West Slopes near Khancoban and Tooma River and found in heath, open forest and woodland. Rosenberg's Goanna is associated with termites, the mounds of which this species nests in; termite mounds are a critical habitat component. Individuals require large areas of habitat and helters in hollow logs, rock crevices and in burrows, which they may dig for themselves, or they may use other species' burrows, such as rabbit warrens. Runs along the ground when pursued (as opposed to the Lace Monitor, which climbs trees). Feeds on carrion, birds, eggs, reptiles and small mammals.	Nil. No breeding and no foraging habitat present.	Nil.

Migratory species

Common name	Scientific name	BC Status	EPBC Status	Source	Habitat association	Likelihood of occurrence in proposal site	Level of impact
Oriental Cuckoo	<i>Cuculus optatus</i>		C,J,K	Species or species' habitat may occur within 10km (DAWE 2021a)	This species migrates to northern and eastern Australia in the warmer months. Occurs south to the Shoalhaven area. Occurs in a range of habitats, including monsoon forest, rainforest edges, leafy trees in paddocks, river flats, roadsides and mangroves.	Possible. Woodland edge could provide very limited potential foraging and breeding habitat.	Low. Removal of four small trees (mostly Acacia) in the mid-storey and some grassland comprises a negligible proportion of foraging and/or breeding habitat.
White-throated Needletail	<i>Hirundapus caudacutus</i>		C,J,K	Species or species' habitat known to occur within 10km (DAWE 2021a)	White-throated Needletails often occur in large numbers over eastern and northern Australia. White-throated Needletails are aerial birds and for a time it was commonly believed that they did not land while in Australia. It has now been observed that birds will roost in trees, and radio-tracking has since confirmed that this is a regular activity.	Unlikely. No foraging or breeding habitat is present.	Very low.
Black-faced Monarch	<i>Monarcha melanopsis</i>			Species or species' habitat known to occur within 10km (DAWE 2021a)	The Black-faced Monarch is found along the coast of eastern Australia, becoming less common further south. It is found in rainforests, eucalypt woodlands, coastal scrub and damp gullies. It may be found in more open woodland when migrating.	Unlikely. No foraging or breeding habitat is present.	Very low.

Yellow Wagtail	<i>Motacilla flava</i>		C,J,K	Species or species' habitat may occur within 10km (DAWE 2021a)	The Yellow Wagtail breeds in temperate Europe and Asia. They occur within Australia in open country habitat with disturbed ground and some water. Recorded in short grass and bare ground, swamp margins, sewage ponds, saltmarshes, playing fields, airfields, ploughed land and town lawns.	Possible. Woodland edge could provide very limited potential foraging and breeding habitat.	Low. Removal of four small trees (mostly Acacia) in the mid-storey and some grassland comprises a negligible proportion of foraging and/or breeding habitat.
Satin Flycatcher	<i>Myiagra cyanoleuca</i>			Species or species' habitat known to occur within 10km (DAWE 2021a)	The Satin Flycatcher is found along the east coast of Australia from far northern Queensland to Tasmania, including south-eastern South Australia. It is also found in New Guinea. The Satin Flycatcher is not a commonly seen species, especially in the far south of its range, where it is a summer breeding migrant. The Satin Flycatcher is found in tall forests, preferring wetter habitats such as heavily forested gullies, but not rainforests.	Unlikely. No foraging or breeding habitat is present.	Very low.
Rufous Fantail	<i>Rhipidura rufifrons</i>			Species or species' habitat known to occur within 10km (DAWE 2021a)	The Rufous Fantail is found along NSW coast and ranges. Inhabits rainforest, dense wet forests, swamp woodlands and mangroves. During migration, it may be found in more open habitats or urban areas.	Unlikely. No foraging or breeding habitat is present.	Very low.

Spectacled Monarch	<i>Symposiachrus trivirgatus</i>			Species or species' habitat may occur within 10km (DAWE 2021a)	The Spectacled Monarch is found in coastal north-eastern and eastern Australia, including coastal islands, from Cape York, Queensland to Port Stephens, New South Wales. It is much less common in the south. Prefers thick understorey in rainforest, wet gullies and waterside vegetation as well as mangroves.	Unlikely. No foraging or breeding habitat is present.	Very low.
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Appendix C – Database searches



Australian Government
Department of Agriculture,
Water and the Environment

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 29/01/21 12:03:13

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

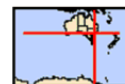
[Acknowledgements](#)



This map may contain data which are
©Commonwealth of Australia
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[Coordinates](#)

Buffer: 10.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	9
Listed Threatened Species:	55
Listed Migratory Species:	16

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	21
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	6
Regional Forest Agreements:	1
Invasive Species:	48
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occur within area
Illawarra and south coast lowland forest and woodland ecological community	Critically Endangered	Community may occur within area
Illawarra-Shoalhaven Subtropical Rainforest of the Sydney Basin Bioregion	Critically Endangered	Community likely to occur within area
Natural Temperate Grassland of the South Eastern Highlands	Critically Endangered	Community may occur within area
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community may occur within area
Robertson Rainforest in the Sydney Basin Bioregion	Critically Endangered	Community likely to occur within area
Southern Highlands Shale Forest and Woodland in the Sydney Basin Bioregion	Critically Endangered	Community likely to occur within area
Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion	Endangered	Community likely to occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat known to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species

Name	Status	Type of Presence
		habitat known to occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Crustaceans		
Euastacus dharawalus Fitzroy Falls Spiny Crayfish [83143]	Critically Endangered	Species or species habitat known to occur within area
Fish		
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
Frogs		
Heleioporus australiacus Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat known to occur within area
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area
Litoria littlejohni Littlejohn's Tree Frog, Heath Frog [64733]	Vulnerable	Species or species habitat may occur within area
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat known to occur within area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area
Isodon obesulus obesulus Southern Brown Bandicoot (eastern), Southern Brown Bandicoot (south-eastern) [68050]	Endangered	Species or species habitat known to occur within area
Petauroides volans Greater Glider [254]	Vulnerable	Species or species habitat known to occur within area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat known to occur within area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE Mainland) [66645]	Vulnerable	Species or species habitat known to occur

Name	Status	Type of Presence within area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat known to occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
Plants		
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat may occur within area
Boronia deanei Deane's Boronia [8397]	Vulnerable	Species or species habitat known to occur within area
Caladenia tessellata Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat likely to occur within area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat known to occur within area
Cynanchum elegans White-flowered Wax Plant [12533]	Endangered	Species or species habitat likely to occur within area
Eucalyptus macarthurii Camden Woollybutt, Paddys River Box [7827]	Endangered	Species or species habitat likely to occur within area
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat likely to occur within area
Grevillea molyneuxii [22052]	Endangered	Species or species habitat known to occur within area
Haloragis exalata subsp. exalata Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat likely to occur within area
Helichrysum calvertianum [5702]	Vulnerable	Species or species habitat known to occur within area
Irenepharsus trypherus Delicate Cress, Illawarra Irene [14664]	Endangered	Species or species habitat known to occur within area
Melaleuca deanei Deane's Melaleuca [5818]	Vulnerable	Species or species habitat may occur within area
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat may occur within area
Pimelea spicata Spiked Rice-flower [20834]	Endangered	Species or species habitat may occur within area
Pomaderris cotoneaster Cotoneaster Pomaderris [2043]	Endangered	Species or species habitat known to occur within area
Prasophyllum affine Jervis Bay Leek Orchid, Culburra Leek-orchid, Kinghorn Point Leek-orchid [2210]	Endangered	Species or species habitat known to occur within area

Name	Status	Type of Presence
Prasophyllum fuscum Tawny Leek-orchid, Slaty Leek-orchid [19455]	Vulnerable	Species or species habitat likely to occur within area
Pterostylis gibbosa Illawarra Greenhood, Rufa Greenhood, Pouched Greenhood [4562]	Endangered	Species or species habitat may occur within area
Pterostylis pulchella Pretty Greenhood [6448]	Vulnerable	Species or species habitat known to occur within area
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat known to occur within area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat may occur within area
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat likely to occur within area
Thelymitra kangaloonica Kangaloon Sun Orchid [81861]	Critically Endangered	Species or species habitat known to occur within area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
Triplarina nowraensis Nowra Heath-myrtle [64544]	Endangered	Species or species habitat likely to occur within area
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area
Zieria murphyi Velvet Zieria [4634]	Vulnerable	Species or species habitat may occur within area
Reptiles		
Hoplocephalus bungaroides Broad-headed Snake [1182]	Vulnerable	Species or species habitat known to occur within area
Listed Migratory Species		
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
[Resource Information]		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land **[Resource Information]**

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Listed Marine Species [Resource Information]		
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		

Name	Threatened	Type of Presence
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat may occur within area

Extra Information

State and Territory Reserves [Resource Information]

Name	State
Barrengarry	NSW
Budderoo	NSW
Bugong	NSW
Cambewarra Range	NSW
Kangaroo River	NSW
Morton	NSW

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included.

Name	State
Southern RFA	New South Wales

Invasive Species [Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
<i>Acridotheres tristis</i> Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
<i>Alauda arvensis</i> Skylark [656]		Species or species habitat likely to occur within area
<i>Anas platyrhynchos</i> Mallard [974]		Species or species habitat likely to occur within area
<i>Carduelis carduelis</i> European Goldfinch [403]		Species or species habitat likely to occur within area
<i>Columba livia</i> Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
<i>Lonchura punctulata</i> Nutmeg Mannikin [399]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Pycnonotus jocosus Red-whiskered Bulbul [631]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Plants		
Alternanthera philoxeroides Alligator Weed [11620]		Species or species habitat likely to occur within area
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera subsp. rotundata Bitou Bush [16332]		Species or species habitat likely to occur within area
Cytisus scoparius Broom, English Broom, Scotch Broom, Common Broom, Scottish Broom, Spanish Broom [5934]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Nassella neesiana Chilean Needle grass [67699]		Species or species habitat likely to occur within area
Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tussock, Nassella Tussock (NZ) [18884]		Species or species habitat likely to occur within area
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within

Name	Status	Type of Presence area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-34.72467 150.48001

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : Bendeela

Client Service ID : 570380

GHD - Wagga Wagga

Date: 23 February 2021

Suite 3, Level 1 161-169 Baylis Street
Wagga Wagga New South Wales 2650

Attention: Melissa Cotterill

Email: melissa.cotterill@ghd.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 818710 - 818713, Northings : 6151949 - 6151985 with a Buffer of 200 meters, conducted by Melissa Cotterill on 23 February 2021.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](http://www.nsw.gov.au/gazette) (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

Search Results

13 results found.

Anglican Church of the Good Shepherd 143 Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Cambewarra Mountain Area Cambewarra Rd	Cambewarra, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Church of the Good Shepherd Rectory (former) Rectory Park Way	Kangaroo Valley, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Devils Glen Nature Reserve Berry Mountain Rd	Berry, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Hampton Bridge Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Indigenous Place	Kangaroo Valley, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Kangaroo Valley Kangaroo Valley Rd	Kangaroo Valley, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Kangaroo Valley Pioneer Settlement Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Rejected Place) Register of the National Estate (Non-statutory archive)
Kangaroo Valley Police Station & Courthouse (former) Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Kangaroo Valley Soldiers Memorial Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)

Kangaroo and Lower Shoalhaven Rivers Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Rejected Place) Register of the National Estate (Non-statutory archive)
Public School 140 Moss Vale Rd	Kangaroo Valley, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Red Rocks Nature Reserve Nugents Creek Rd	Kangaroo Valley, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)

Report Produced: Tue Feb 23 16:31:03 2021



NSW legislation

Shoalhaven Local Environmental Plan 2014

Current version for 1 February 2021 to date (accessed 23 February 2021 at 16:36)

Schedule 5

Schedule 5 Environmental heritage

(Clause 5.10)

Part 1 Heritage items

Locality	Item	Address	Property description	Significance	Item no
Back Forest	Victorian weatherboard farmhouse	235A Back Forest Road	Lot 1, DP 629802	Local	1
Back Forest	Berry Estate former pumping station	255 Back Forest Road	Lot 1, DP 1064332	Local	2
Back Forest	Federation weatherboard farmhouse and outbuildings	37 Bailleul Lane (private)	Lot 5, DP 883117	Local	3
Bamarang	"Bamarang"—Victorian sandstone homestead and cemeteries	72 Bamarang Road	Lot 20, DP 746233	Local	4
Bangalee	"Weir"—family graves	Bangalee Scout Camp Road	Lot 48, DP 751273	Local	5
Barrengarry	"Cavan"—dairy farm complex	30 Cavan Road	Lot 7, DP 869740	Local	6
Barrengarry	Barrengarry Store, post office and residence	2167 Moss Vale Road	Lot 11, DP 3237	Local	7
Barrengarry	"Rosedale"—Victorian farmhouse and outbuildings	2240 Moss Vale Road	Lot 101, DP 623325	Local	8
Barrengarry	Former Barrengarry School and schoolmaster's residence	2565 Moss Vale Road	Lot 2565, DP 1118533	Local	9
Barrengarry	"Ascot"—dairy farm complex	49 Upper Kangaroo River Road	Lot 18, DP 773481	Local	10
Barrengarry	"Oakleigh"—(former gatehouse to Barrengarry House)	89 Upper Kangaroo River Road	Lot 1, DP 746459	Local	11
Barrengarry	"Barrengarry House"—two storey Victorian estate complex including tree-lined drive and approaches	171 Upper Kangaroo River Road	Lot 1 DP 259769; Part Lot 1, DP 195569	Local	12
Bawley Point	1830s colonial road	Johnston Street	Lot 7300, DP 1126283	Local	15
Bawley Point	Relocated Bawley Point mill worker's cottage	10 Johnston Street	Lot A, DP 380422	Local	13

Bawley Point	Bawley Point guesthouse and trees	21 Johnston Street	Lot 43, DP 1038219	Local	14
Bawley Point	"Murramarang"—former colonial estate house	226 Murramarang Road	Lot 23, DP 571930	Local	16
Bawley Point	Bawley Point sawmill and wharf (former)	Tingira Drive	Lots 120–129, DP 755961; Lot 7004, DP 1057514	Local	17
Beaumont	Cambewarra Lookout manager's residence and garden	182 Cambewarra Lookout Road	Lot 2, DP 849185	Local	18
Beecroft Peninsula	Wreck of the "Merimbula"	Beecroft Parade	Lot 7306, DP 1128620	Local	19
Beecroft Peninsula	Point Perpendicular lighthouse group	Lighthouse Road	Lots 51 and 52, DP 837775	Local	20
Bellawongarah	Bellawongarah Cemetery	Kangaroo Valley Road	Lots 1–5, DP 1115368; Lot 1, DP 115445; Lot 1, DP 1034714; Lot 7301, DP 1152357	Local	22
Bellawongarah	Former Bellawongarah Church	869 Kangaroo Valley Road	Lots 9 and 10, DP 113374	Local	21
Berry	Federation weatherboard cottage and garden	21 Albany Street	Lot 4, DP 375126	Local	24
Berry	Inter-war Federation style weatherboard cottage and fence	23 Albany Street	Lot B, DP 350396	Local	25
Berry	Victorian Georgian style weatherboard cottage	25 Albany Street	Lot 61, DP 826592	Local	26
Berry	Victorian Georgian style weatherboard cottage	19 Albert Street	Lot A, DP 408003	Local	27
Berry	Federation weatherboard cottage	54 Albert Street	Lot 17, Section 10, DP 8058	Local	28
Berry	Victorian carpenter gothic style hall	77 Albert Street	Lot 100, DP 1172397	Local	29
Berry	<i>Agathis robusta</i> (Kauri Pine)	Alexandra Street	Road reserve in front of Lot 2, DP 17926	Local	33
Berry	<i>Arancaria cunninghamii</i> (Hoop Pine)	Alexandra Street	In the road reserve adjacent to Lot A, DP 411591	Local	37
Berry	Avenue of Remembrance (tree-lined)	Alexandra Street	Road reserve in front of Lot 26, Section 5, DP 8058	Local	35
Berry	Berry War Memorial Park including sandstone war memorial	Alexandra Street	Lot 26, Section 5, DP 8058	Local	34
Berry	David Berry Memorial Park including David Berry Memorial Column and pedestal	Alexandra Street	Part Lot 10, DP 751268	Local	36
Berry	Former Federation brick butcher's shop	14 Alexandra Street	Lot 1, DP 513688	Local	30
Berry	Berry School of Arts	19 Alexandra Street	Lot 8, DP 924675	Local	31

Berry	Berry showground group and trees including Victorian agricultural pavilion, rotunda, poultry shed, wood chopping arena, cattle yards, Alexandra Street entrances, Sir John Hay Memorial Fountain, former Berry Municipal Chambers, <i>Araucaria bidwillii</i> (Bunya Pine), <i>Araucaria cunninghamii</i> (Hoop Pines), <i>Ficus sp</i> (Fig tree), <i>Erythrina sp</i> (Coral trees), <i>Eucalyptus sp</i> (Eucalyptus trees), <i>Magnolia sp</i> (Magnolias), <i>Photinia serratifolia</i> (Photinia), <i>Callitris macleayana</i> (Cypress), <i>Cinnamomum camphora</i> (Camphor Laurels) and <i>Camellia sp</i> (Camellias)	35 Alexandra Street	Lot 1, DP 940561	Local	32
Berry	Harley Hill Cemetery	Beach Road	Lot 1, DP 723973	Local	38
Berry	Victorian school and trees	1 Clarence Street	Lot 12, DP 882716	Local	108
Berry	Inter-war group of institutional brick and weatherboard buildings and trees	660 Coolangatta Road	Lot 1, DP 131859	Local	40
Berry	Remnant old growth eucalypts	George Street	Road reserve off George Street	Local	41
Berry	Berry General Cemetery	Kangaroo Valley Road	Lot 71, DP 4468	Local	43
Berry	<i>Eucalyptus pilularis</i> (Blackbutt)	42 Kangaroo Valley Road	Lot 2, DP 773489 and the adjacent road reserve	Local	42
Berry	<i>Calodendrum capense</i> (Cape Chestnut)	King Street	On the corner of King Street and Victoria Street in the road reserve adjacent to Lot 1, DP 710284	Local	45
Berry	<i>Syncarpia glomulifera</i> (Turpentine tree)	10 King Street	Lot 23, DP 375126	Local	44
Berry	Roman Catholic church including grounds and two storey brick convent	80 North Street	Lot 1, DP 86897	Local	46
Berry	Bill's concrete horse trough	Prince Alfred Street	Road reserve on the corner of Prince Alfred Street and the Princes Highway adjacent to Lot 2, DP 572830	Local	60
Berry	James Wilson Memorial Fountain	Prince Alfred Street	Road reserve on the corner of Prince Alfred Street and the Princes Highway adjacent to Lot 11, DP 816490	Local	61
Berry	Federation weatherboard cottage including brick stables and hedge	10 Prince Alfred Street	Lot 1, DP 572830	Local	47

Berry	Apex Park	12 Prince Alfred Street	Lot 2, DP 572830	Local	48
Berry	Former Federation weatherboard shop	21 Prince Alfred Street	Lot 16, Section 3, DP 8058	Local	50
Berry	Former Berry Estate Bakery and residence	23 Prince Alfred Street	Lot 2, DP 532935	Local	51
Berry	Federation weatherboard cottage	25 Prince Alfred Street	Lot A, DP 380097	Local	52
Berry	Federation weatherboard cottage and trees	31 Prince Alfred Street	Lot 3, DP 932362	Local	53
Berry	Federation weatherboard cottage and garden	32 Prince Alfred Street	Lot 1, DP 970121	Local	54
Berry	<i>Araucaria heterophylla</i> (Norfolk Island Pines-2)	40 Prince Alfred Street	Lot 1, DP 950717	Local	55
Berry	Georgian style weatherboard cottage	43 Prince Alfred Street	Lot 17, Section 5, DP 8058	Local	56
Berry	Federation weatherboard cottage	47 Prince Alfred Street	Lot 19, Section 5, DP 8058	Local	57
Berry	Victorian Georgian style weatherboard cottage and trees including <i>Araucaria cuminghamii</i> (Hoop Pines-2) and <i>Brachychiton acerifolius</i> (Illawarra Flame trees-3)	53 Prince Alfred Street	Lot 56, DP 701877	Local	58
Berry	Victorian Georgian style gatekeeper's cottage	66 Prince Alfred Street	Lot 1, DP 1022140	Local	59
Berry	"Constables Cottage"—Victorian Georgian style weatherboard cottage and garden	A15 Princes Highway	Lot 1, DP 558065; Lot 5, DP 600374	Local	62
Berry	"Mananga"—Berry Estate manager's farm complex	A40 Princes Highway	Lot 101, DP 1057897	Local	63
Berry	<i>Quercus virginiana</i> (American Live Oak)	Princess Street	Lot 1012, DP 872963	Local	69
Berry	Inter-war weatherboard Californian bungalow	52 Princess Street	Lot 1, DP 304729	Local	64
Berry	Inter-war weatherboard and fibro cottage	54 Princess Street	Lot 18, Section 8, DP 8058	Local	65
Berry	Inter-war brick residence including doctor's surgery and garden	65 Princess Street	Lots 8 and 9, Section 3, DP 8058	Local	66
Berry	Former two storey Anglican rectory and garden	68 Princess Street	Lot 20, DP 840778	Local	67
Berry	St Luke's Anglican Church including memorial gates and trees, including <i>Araucaria heterophylla</i> (Norfolk Island Pine)	68A Princess Street	Lot 21, DP 840778	Local	68

Berry	Colonial style weatherboard store (former Wilson and Co store), and <i>Araucaria heterophylla</i> (Norfolk Island Pines-2)	1 Pulman Street	Lot 1, DP 724944	Local	70
Berry	Colonial weatherboard cottage (former curate's cottage)	3 Pulman Street	Lot 23, DP 1017132	Local	71
Berry	"Lynstowe"—Colonial style weatherboard cottage and former grist mill	11 Pulman Street	Lot 20, DP 5270	Local	72
Berry	Farmhouse and Broughton Creek former grist mill (former Tindal's farm)	13 Pulman Street	Lot 1, DP 629875	Local	73
Berry	Pulman's Weatherboard Farmhouse	30 Pulman Street	Lots 210 and 211, DP 1124317	Local	74
Berry	Two storey Victorian rendered brick shop	Queen Street	Lot 7, DP 825542	Local	92
Berry	Federation weatherboard cottage	50 Queen Street	Lot 1, DP 530751	Local	75
Berry	Mid-twentieth century residence including pool and garden	60–62 Queen Street	Lots 1 and 2, DP 1109325	Local	76
Berry	Relocated Federation weatherboard cottage	65 Queen Street	Lot 1, SP 77007	Local	77
Berry	Inter-war Spanish mission style bungalow and garden	66 Queen Street	Lot 1, DP 619195	Local	78
Berry	Victorian Georgian style weatherboard residence	78 Queen Street	Lot 2, DP 270250	Local	79
Berry	Federation weatherboard cottage	81 Queen Street	Lot A, DP 369043	Local	80
Berry	Former Federation blacksmith's shop including <i>Cinnamomum camphora</i> (Camphor Laurel)	83 Queen Street	Lot B, DP 369043	Local	81
Berry	Two storey Federation residence and garden	89 Queen Street	Lot B, DP 400209	Local	82
Berry	Inter-war Art Deco style shop	102 Queen Street	Lot 1011, DP 872963	Local	83
Berry	Two storey Victorian Italianate style shop	105 Queen Street	Lot 1, DP 778335	Local	84
Berry	Former Victorian Free Classical style estate office	110 Queen Street	Lot 2, DP 209665	Local	85
Berry	Inter-war weatherboard shop	114–118 Queen Street	Lot 1, DP 121360; Lot X, DP 418264	Local	86
Berry	Two storey Victorian hotel and detached kitchen including <i>Acmena smithii</i> (Lilly Pillies-2)	120 Queen Street	Lot 1, DP 578257	Local	87

Berry	Former CBC bank including fence and trees	122 Queen Street	CP SP 93194	Local	88
Berry	Federation weatherboard shop	131 Queen Street	Lot 1, DP 1009635	Local	89
Berry	Berry Museum, former E S and A Bank and garden	135 Queen Street	Lot 1, DP 221105	State	90
Berry	Victorian Free Classical style post office	137 Queen Street	Lots 1 and 2, DP 1111478	Local	91
Berry	<i>Toona australis</i> (Australian Red Cedar)	11 Station Road	Lot 55, DP 701877	Local	93
Berry	Berry Railway Station group including Victorian Georgian style stationmaster's cottage, <i>Ilex cornuta</i> (Chinese Holly) and <i>Gardenia thunbergia</i> (Gardenia)	34 Station Road	Lot 2, DP 1001740	State	94
Berry	<i>Populus nigra italica</i> (Lombardy Poplars-23)	Tannery Road	Road reserve	Local	97
Berry	David Berry Hospital complex including gatehouse, stained glass window, garden, trees and remnant rainforest	85 Tannery Road	Part DP 924054	State	95
Berry	"Woodside Park"—dairy farm complex and gatehouse	94A Tannery Road	Lot 2, DP 731117; Lots 1 and 2, DP 1038647	Local	96
Berry	Mark Radium Park	Victoria Street	Lot 10, DP 1188080	Local	109
Berry	Inter-war Georgian style weatherboard cottage	23 Victoria Street	Lot 2, DP 519970	Local	98
Berry	Former Presbyterian manse and garden	36 Victoria Street	Lot B, DP 163935	Local	99
Berry	Inter-war schoolmaster's residence	40 Victoria Street	Lot 11, DP 882716	Local	100
Berry	<i>Melaleuca decora</i> (Paper Barks-2)	51A Victoria Street	Lot 101, DP 1125002	Local	101
Berry	Victorian Georgian style police residence and lockup	56 Victoria Street	Lot 1, DP 199995	Local	102
Berry	Victorian Classical Academic style court house including <i>Cinnamomum camphora</i> (Camphor Laurel)	58 Victoria Street	Lot 2, DP 199995	State	103
Berry	Federation weatherboard cottage	65 Victoria Street	Lot 11, Section 8, DP 8058	Local	104
Berry	Federation weatherboard cottage and trees	71 Victoria Street	Lot 2, DP 327819	Local	105
Berry	Relocated Colonial weatherboard school (former Broughton Creek School)	79 Victoria Street	Lot 4, Section 8, DP 8058	Local	106

Berry	Inter-war Gothic style brick church and fence	83 Victoria Street	Lot 2, Section 8, DP 8058	Local	107
Berry	Berry Estate salt wall	Wharf Road	Lot 1, DP 568280	Local	110
Berry	Windsor Drive Park	Windsor Drive	Lot 24, DP 248248	Local	111
Berry	<i>Populus nigra italica</i> (Lombardy Poplars-9)	Woodhill Mountain Road	Road reserve	Local	112
Berry Mountain	“Cobbadah”—dairy farm complex including garden, dry stone walls and survey marks	Ben Dooley Road	Lots 1210 and 1211, DP 1099097	Local	113
Berry Mountain	“Glenworth”—two storey residence and grounds	466 Kangaroo Valley Road	Lots 4, 7 and 8, DP 1037100	Local	114
Bewong	Federation weatherboard farmhouse (McDonalds)	Princes Highway	Lot 3, DP 209048; Lot 1, DP 200251	Local	115
Bolong	Berry Estate vertical timber slab cottage and outbuildings	459 Bolong Road	Lot 10, DP 1052770	Local	116
Bolong	“Beuna Vista”—dairy farm complex including Berry Estate vertical timber slab barn	500 Bolong Road	Lot 1; DP 655442; Lot 1, DP 1034357	Local	117
Bolong	Berry Estate timber stud framed flood boatshed	Jennings Lane	Lot 1, DP 872745	Local	120
Bolong	Former Bolong Public School including shelter shed and relocated Carpenter Gothic style Bolong Union Church	8 Jennings Lane	Lots 3 and 4, DP 1108931	Local	118
Bolong	“Iolanthe”—dairy farm complex	100 Jennings Lane	Lots 16, 17 and 19, DP 4266	Local	119
Bomaderry	Former Bomaderry Primary School and trees	5 Birriley Street	Lots 1 and 2, DP 568955	Local	121
Bomaderry	Milk factory (former)	31A Bolong Road	Lot 1, DP 189450	Local	124
Bomaderry	“Greenleaves”—Federation Queen Anne style residence and grounds	59 Bolong Road	Lot 5, Section 32, DP 2886	Local	122
Bomaderry	Federation brick and asbestos tile residence	67 Bolong Road	Part Lot 2, DP 324484	Local	123
Bomaderry	Bomaderry Aboriginal Children’s Homes (former United Aboriginal Mission)	Brinawarr Street	Lots 4–6, Section 29, DP 2886	State	125
Bomaderry	“Illowra”—Federation timber Berry Estate residence and garden	125 Brinawarr Street	Lot 2, DP 792770	Local	136
Bomaderry	Federation weatherboard residence	10 Coomea Street	Lot 16, Section 9, DP 2886	Local	126
Bomaderry	Federation weatherboard residence	12–14 Coomea Street	Lots 14 and 15, Section 9, DP 2886	Local	127
Bomaderry	Inter-war weatherboard Californian bungalow	21 Coomea Street	Lot 5, Section 24, DP 2886	Local	128

Bomaderry	Victorian weatherboard residence	37 Coomea Street	Lot 1, DP 613536	Local	129
Bomaderry	"Lynburn"—timber Federation residence and garden	Mattes Way	Lot 23, DP 793122	Local	130
Bomaderry	Bomaderry Railway Station and yard group including Nowra-Bomaderry Railway Station and "original bar holder", Bomaderry stationmaster's house and Bomaderry railway siding group including turntable, weighbridge, goods crane and water pump	Meroo Street	Lot 3, DP 802440; Lots 1 and 2, DP 1021415; Lot 1, DP 884113	State	135
Bomaderry	Bomaderry Presbyterian Church	7 Meroo Street	Lot 6, Section 9, DP 2886	Local	131
Bomaderry	Brick and asbestos tile Federation bungalow	13 Meroo Street	Lot 9, Section 9, DP 2886	Local	132
Bomaderry	Railwaymen's barracks	16 Meroo Street	Lot 1, DP 854131	Local	133
Bomaderry	Weatherboard cottage (formerly Mrs Pallett's residence)	77 Meroo Street	Lot 1, DP 506705	Local	134
Bomaderry	Federation Georgian style worker's cottage	9 Tanang Street	Lot 15, Section 7, DP 2886	Local	137
Bomaderry	Victorian weatherboard residence	6 Tarawara Street	Lot 3, DP 775937	Local	139
Bomaderry	Victorian weatherboard residence	8 Tarawara Street	Lot 1, DP 552899	Local	138
Brooman	Timber cottage group including former school, mill workers' cottages and mill manager's residence (old Brooman Town)	1295 Brooman Road	Lot 67, DP 755912	Local	140
Broughton	"Glenvale"—colonial vertical timber slab cottage and farm complex	A371 Princes Highway	Lot 81, DP 1188079	Local	141
Broughton Vale	Colonial weatherboard cottage	119 Bong Bong Road	Lot 103, DP 786955	Local	144
Broughton Vale	Drawing room rocks	Brogers Creek Road	Barron Grounds Nature Reserve	Local	142
Broughton Vale	Broughton Vale Cemetery	350 Broughton Vale Road	Lot 1934, DP 1100783	Local	143
Brundee	"Berry Estate"—vertical timber slab barn (former)	695A Greenwell Point Road	Lot 5, DP 632857	Local	145
Buangla	Grassy gully mine site	Yalwal Road	Morton National Park	Local	146
Bundewallah	Victorian Georgian style farmhouse	218 Bundewallah Road	Lot 1, DP 706470	Local	147
Burrier	Burrier ford	Burrier Road	Shoalhaven River in the vicinity of Lot 51, DP 862458 and Lot 2, DP 226584	Local	148

Burrill Lake	<i>Araucaria heterophylla</i> (Norfolk Island Pine)	4 Kendall Crescent	Lot 307, DP 15648	Local	150A
Burrill Lake	<i>Agathis robusta</i> (Kauri Pine)	McDonald Parade	McDonald Parade road reserve adjacent to land in DP 15648	Local	149
Burrill Lake	Post-war pseudo stone Burrill Lake community hall	Princes Highway	Lot 273, DP 415059	Local	150
Cambewarra	Colonial vertical timber slab cottage	94 Barfield Road	Lot 1, DP 573197	Local	152
Cambewarra	Cambewarra Rainforest Reserve	Cambewarra Lookout Road	Reserve No 57023; Lot 7300, DP 1130978; Lot 7301, DP 1131110; Lot 7302, DP 1131111; Lots 7305 and 7306, DP 1154007; Part Lot 252, DP 720937; Part Lot 2, DP 223819; Lot 3, DP 221288; Lot 103, DP 739867; Lot 1, DP 1116520 (road reserve); Lots 5 and 6, DP 1117580 (road reserve)	Local	151
Cambewarra	Evison's dairy farm complex	49 Hockeys Lane	Lot 2, DP 621553	Local	153
Cambewarra Village	"Llanthony Lodge"—two storey Victorian weatherboard residence	1 Kalinga Street	Lot 101, DP 788323	Local	154
Cambewarra Village	Former weatherboard school	Main Road	Lot 2, DP 839145	Local	158
Cambewarra Village	Corrugated iron community hall	75 Main Road	Lot 1, DP 725937	Local	155
Cambewarra Village	Federation Georgian style residence (former post office)	77 Main Road	Lot 2, DP 240571	Local	156
Cambewarra Village	Weatherboard gothic carpenter style Union Church	80 Main Road	Part Lot 170, DP 751273	Local	157
Cambewarra Village	Former schoolmaster's brick residence and garden	Tannery Road	Lot 1, DP 850699	Local	159
Comberton	Comberton Grange (former dairy farm complex)	Comberton Grange Road	Lot 1, DP 550098	Local	160
Comberton	Lone grave of Thomas Speechley	Forest Road	Part Lot 101, DP 755928	Local	161
Conjola	Conjola timber trestle bridge	Murrays Road	Road reserve	Local	164
Conjola	Murray Family Cemetery	40 Murrays Road	Lot 4, DP 864378	Local	163
Conjola	Conjola Cemetery	Princes Highway	Lot 7037, DP 93024	Local	165
Coolangatta	Berry-Hay Private Cemetery	Bolong Road	Lot 64B, DP 7851	Local	176

Coolangatta	Colonial brick building (former Coolangatta Estate harness room), and Colonial weatherboard building (former Coolangatta Estate blacksmith's shop) and colonial brick and timber building (former Coolangatta Estate tinsmith's shop and residence)	Bolong Road	Part Lot 2, DP 15290	Local	175
Coolangatta	Colonial brick building (former Coolangatta Estate office) and colonial brick hall (former Coolangatta Estate community hall)	Bolong Road	Part Lot 2, DP 223278	Local	173
Coolangatta	Colonial brick building (former Coolangatta Estate stables)	Bolong Road	Lot 3, DP 15290	Local	174
Coolangatta	Coolangatta Estate group	Bolong Road	Lot 10, DP 580917; Lots 1 and 4, DP 15290; Lot 1, DP 525517	Local	169
Coolangatta	Victorian Georgian style farmhouse and trees	1165 Bolong Road	Lot 3, DP 565593	Local	166
Coolangatta	Former Berry Estate brick schoolmaster's residence including garden and former weatherboard Berry Estate school	1180 Bolong Road	Lot 1, DP 657639	Local	167
Coolangatta	Victorian Georgian style farmhouse	1220 Bolong Road	Lot 101, DP 836951	Local	168
Coolangatta	"Coolangatta Park"—Victorian Federation filigree style residence and garden	1320 Bolong Road	Part Lot 1, DP 390622	Local	170
Coolangatta	Colonial weatherboard building (former Coolangatta Estate billiard rooms) and Colonial brick building (former Coolangatta Estate coachman's quarters)	1335 Bolong Road	Lot A, DP 33346	Local	172
Coolangatta	Colonial weatherboard cottage (former Coolangatta Estate convict quarters) and colonial weatherboard cottage (former Coolangatta Estate worker's cottage) and Coolangatta Estate gardens (remnants)	1335 Bolong Road	Lot 1, DP 223278	Local	171

Coolangatta	Coomanderry Swamp drainage channel	Coolangatta Road and Shoalhaven Heads Road	Lot 6, DP 786106; Lot 12, DP 1047067; Lot 12, DP 630628; Lot 1, DP 1196368; Lot 1, DP 706777; Lot 22, DP 1028714; Lot 2, DP 836097; Lot 1, DP 1148057; Lot 3, DP 805443; Lot 5, DP 860111; so much of DP 623346 and DP 615003 that comprises drainage reserves	Local	39
Coolangatta	"Coomanderry Park" (former estate manager's residence)	100 Coolangatta Road	Lot 2, DP 805443	Local	178
Croobyar	Warden Family Cemetery	Croobyar Road	Lot 1, DP 1145321	Local	179
Croobyar	"Sunny Vale"—dairy farm complex	439 Croobyar Road	Lot 1, DP 725999	Local	180
Croobyar	Old Croobyar farm and tree-lined access (former dairy farm complex)	46 Ringland Lane	Lot 32, DP 734992	Local	181
Croobyar	Former Victorian brick gatehouse to Mount Airlie including elm trees and orchard	32 Woodstock Road	Lots 4 and 5, DP 589195	Local	182
Cudmirrah	Errol Bond Memorial	Goonawarra Drive	Lot 7003, DP 1117842	Local	183
Culburra Beach	Penguin Head geological site	Penguins Head Road	Lot 630, DP 221746	Local	185
Culburra Beach	Moongate to former Culburra guesthouse site	196 Penguins Head Road	Lot 657, DP 12278; Lot C, DP 357811	Local	184
Culburra Beach	Crookhaven lighthouse complex	Prince Edward Avenue	Lot 7004, DP 1059066; Part Lot 34, DP 755971	Local	186
Curarong	Early fibro cottage	5 Beecroft Parade	Lot 41, DP 755903	Local	187
Curarong	Inter-war fibro cottage	14 Fishery Road	Lot 30, DP 16854	Local	188
Curarong	Dolphin Reserve rotunda	2 Piscator Avenue	Lot 222, DP 16854	Local	189
Currowan	Brimbramalla gold mining area	Bimberamala River, Browns Gully, Clyde Ridge and Mines Road	Part of Bimberamala National Park	Local	190
Currowan	"Black Diamond"—gold mine (former)	Currowan Road	Part of State Forest No 820	Local	191
Endrick	"Rixons"—(former coal mine)	Clyde River	Lot 8, DP 755935	Local	192
Falls Creek	Federation period school building	26 Vidler Road	Lots 62 and 63, DP 755965	Local	193
Greenwell Point	Single storey Federation period gabled school house	75 Greenwell Point Road	Lot 1, DP 869305	Local	194
Greenwell Point	Greenwell Point progress hall	83 Greenwell Point Road	Lot 3, Section B, DP 24007	Local	195
Greenwell Point	Colonial weatherboard cottage (former Greenwell Point schoolhouse)	91 Greenwell Point Road	Lot 8, Section A, DP 4071	Local	196

Greenwell Point	"Houshta"—(former Berry Estate worker's cottage)	93 Greenwell Point Road	Lot 7, Section A, DP 4071	Local	197
Greenwell Point	Greenwell Point Union Church	Jervis Street	Lot 2, DP 869305	Local	199
Huskisson	Tapalla Point geological rock platform	Beach Street	Lot 7012, DP 1021163; Lot 7044, DP 1117433	Local	201
Huskisson	Lone grave of Robert Johnson	2 Beach Street	Lot 7045, DP 1117438	Local	200
Huskisson	Lady Denman heritage complex including relocated former St Georges Basin school buildings and relocated former Woollamia Union Church	11 Dent Street	Lot 138, DP 720912	Local	202
Huskisson	Lady Denman ferry	11 Dent Street	Lot 138, DP 720912	State	203
Huskisson	Inter-war holiday cottage and trees	7 Fegen Street	Lot 1, DP 1093408	Local	204
Huskisson	Weatherboard and fibro boat builder's cottage	13 Field Street	Lot 2, DP 775346	Local	205
Huskisson	Victorian Georgian weatherboard cottage	40 Hawke Street	Lot 2, DP 323393	Local	206
Huskisson	Jervis Bay hotel	75 Owen Street	Lot 2, DP 209436	Local	207
Huskisson	Victorian weatherboard residence	8 Park Street	Lot 8, DP 528319	Local	208
Huskisson	Huskisson Literary Institute (former)	19 Sydney Street	Lot 7, Section 19, DP 758530	Local	209
Hyams Beach	The Green Cabins (inter-war holiday cabins)	53 Cyrus Street	Lot 1, DP 570194	Local	210
Hyams Beach	Inter-war weekend cabin	57 Cyrus Street	Lot 2, DP 285458	Local	211
Hyams Beach	"Pacific House" (former), including sandstone monument and tree	58–60 Cyrus Street	Lots 7 and 8, DP 550787	Local	212
Hyams Beach	Inter-war weekend cabin	59 Cyrus Street	Lot 3, DP 285458	Local	213
Hyams Beach	Hyams Beach bushfire station	Rose Street	Part Lot 78 and Lot 79, DP 755907	Local	214
Illaroo	"Bundanon"—homestead including outbuildings and natural landscape	533 Bundanon Road	Lots 12–14, 16, 17 and 118, DP 751273; Lot 5, DP 622583	Local	215
Jaspers Brush	Colonial style weatherboard farmhouse including outbuildings and trees	245 Croziers Road	Lot 149, DP 3059	Local	216
Jaspers Brush	Former Jaspers Brush school complex and gardens	4 O'Keeffes Lane	Lot 1, DP 872572	Local	217
Jerrawangala	Colonial road—remnants (former Wool Road)	The Wool Road	Lot 100, DP 787610; Lot 33, DP 651186; Lot 1, DP 100976; Lot 1, DP 745965; Lot 1, DP 197079; Road reserve	Local	218

Kangaroo Valley	"Clinton Park"—dairy farm complex	60 Clinton Park Road	Lot 4, DP 535456	Local	219
Kangaroo Valley	Kangaroo Valley Soldiers Memorial	Moss Vale Road	Lot 1, DP 169083	Local	240
Kangaroo Valley	"Hampden Bridge"—sandstone suspension bridge	Moss Vale Road	Road reserve	Local	241
Kangaroo Valley	Kangaroo Valley General Cemetery	Moss Vale Road	Lot 1, DP 1101764; Lot 1, DP 1120307; Lot 1, DP 1122644; Lots 7308 and 7309, DP 1153234	Local	242
Kangaroo Valley	Federation weatherboard cottage and shop	116 Moss Vale Road	Lot 1, DP 828529	Local	220
Kangaroo Valley	Federation weatherboard cottage	118 Moss Vale Road	Lot 1, DP 1076386	Local	221
Kangaroo Valley	Federation weatherboard cottage	120 Moss Vale Road	Lot 1, DP 883219	Local	222
Kangaroo Valley	Federation weatherboard cottage	124 Moss Vale Road	Lot 101, DP 840159	Local	223
Kangaroo Valley	"St Joseph's" Catholic brick church and hermitage	130 Moss Vale Road	Lot 1, DP 724070	Local	224
Kangaroo Valley	Relocated Victorian weatherboard school (former Beaumont School)	138 Moss Vale Road	Lot A, DP 409799	Local	225
Kangaroo Valley	Kangaroo Valley School and former schoolmaster's residence	140 Moss Vale Road	Lot 1, DP 122562; Lot 1, DP 913316	Local	226
Kangaroo Valley	Anglican Church of the Good Shepherd including graveyard, trees and fence	143 Moss Vale Road	Lot 1, DP 724064	Local	227
Kangaroo Valley	Kangaroo Valley Post Office	148 Moss Vale Road	Lot 2, DP 926830	Local	228
Kangaroo Valley	Victorian Georgian style bank (former ANZ Bank)	158 Moss Vale Road	Lot 2, DP 559041	Local	229
Kangaroo Valley	"Friendly Inn"—two storey Victorian masonry hotel	159 Moss Vale Road	Lot 4, DP 11616	Local	230
Kangaroo Valley	Victorian weatherboard shop and residence	170 Moss Vale Road	Lot 1, DP 1182201	Local	231
Kangaroo Valley	Federation weatherboard cottage	172 Moss Vale Road	Lot 9, DP 1940	Local	232
Kangaroo Valley	Weatherboard bakery (former)	174–176 Moss Vale Road	Lots 10 and 11, DP 1940	Local	233
Kangaroo Valley	Federation sandstone courthouse including police station and stables	175 Moss Vale Road	Lot 4, DP 589396	Local	234
Kangaroo Valley	"Osborne Park"—Federation weatherboard community hall and Kangaroo Valley showground complex	177–181 Moss Vale Road	Lot 1, DP 1003243; Lots 1 and 2, DP 210368; Lots A and B, DP 376259; Lot D, DP 409219; Part Lot 1, DP 909749	Local	235

Kangaroo Valley	Federation baker's residence and garage (former)	178 Moss Vale Road	Lot 1, DP 576156	Local	236
Kangaroo Valley	Federation weatherboard cottage	1705 Moss Vale Road	Lot 7, DP 1986	Local	237
Kangaroo Valley	"Ellerslie"—cottage and garden	1747 Moss Vale Road	Lot 1, DP 917487; Lot 1, DP 1101743	Local	238
Kangaroo Valley	"Pioneer Farm"—historic village including slab cottage	2029 Moss Vale Road	Lot 7007, DP 1075462	Local	239
Kangaroo Valley	"Scanzi"—colonial timber farmhouse and outbuildings	770 Mt Scanzi Road	Lot 4, DP 1016737	Local	243
Kangaroo Valley	"Hilltop"—Federation weatherboard residence	20 Quirk Street	Lots 20 and 21, DP 2159	Local	244
Kangaroo Valley	Anglican Church of the Good Shepherd rectory (former)	Rectory Park Way	Lot 9, DP 285133	Local	245
Kioloa	Kioloa sawmill and wharf (former)	Murramarang Road	Lot 24, DP 755941	Local	247
Kioloa	"Kioloa"—Federation weatherboard residence (former post office)	496 Murramarang Road	Lot 1, DP 782318	Local	246
Lake Conjola	Whitaker's Island View Resort (former)	2 Aney Street	Lot 441, DP 755923	Local	248
Little Forest	"Mimosa Farm"—dairy farm complex	40 Little Forest Road	Lot 11, DP 596370	Local	249
Little Forest	"Woodlands"—dairy farm complex	98 Little Forest Road	Lot 42, DP 777515	Local	250
Longreach	"Longreach Farm"—former dairy farm complex	501B Longreach Road	Lot 102, DP 710389	Local	251
Longreach	"Wogamia"—two storey colonial sandstone homestead and outbuildings	170 Wogamia Road	Lot 1, DP 865094	Local	252
Mayfield	Graham Family Grave	Mayfield Road	Lot 7314, DP 1169000	Local	253
Mayfield	"Monaghan's House"—colonial Georgian brick cottage	Mayfield Road	Lot 2, DP 1092338	Local	254
Meroo Meadow	Meroo Meadow Union Church	8 Boxsells Lane	Lot 4, DP 249776	Local	256
Meroo Meadow	Federation Georgian style farmhouse	55 Fletchers Lane	Lot 8, DP 1007274	Local	255
Meroo Meadow	"Pomona"—dairy farm complex	C360 Princes Highway	Lot 2, DP 620160	Local	257
Meroo Meadow	Former Meroo Meadow School and schoolmaster's residence	C385 Princes Highway	Lot 1, DP 716569	Local	258
Milton	Remnant rainforest	Church Street	Part Lot 1 and Lot 2, DP 861814; Lot 1, DP 737627	Local	262

Milton	Victorian weatherboard residence and garden	45 Church Street	Lot 1, DP 531839	Local	259
Milton	Victorian Georgian worker's cottage	47 Church Street	Lot 1, DP 957744	Local	260
Milton	Federation weatherboard residence	64 Church Street	Lot A, DP 164647	Local	261
Milton	Federation gothic brick Catholic Church including presbytery, grounds and <i>Araticaria cunninghamii</i> (Hoop Pine)	Corks Lane	Lot 1, DP 230083	Local	263
Milton	Milton Church of England Cemetery	12 Croobyar Road	Lot 100, DP 1033797	Local	264
Milton	Victorian Gothic Revival rubblestone church (former Congregational Church) including Victorian Georgian brick manse (former congregational manse)	38 Croobyar Road	Lot 1, DP 781179	Local	265
Milton	Victorian Gothic style church and graveyard (former Methodist Church)	71 Croobyar Road	Lot 1, DP 730746	Local	266
Milton	"Claydon Park"—dairy farm complex	75 Croobyar Road	Lot 2, DP 1097329	Local	267
Milton	"Eyrie Bowrie"—two storey Victorian Regency residence	17 Eyrie Bowrie Drive	Lot 3, DP 1124431	Local	285
Milton	"Wynella"—Victorian weatherboard residence	6 Gordon Street	Lot A4, DP 192832	Local	269
Milton	Federation weatherboard residence	17 Myrtle Street	Lot A, DP 384864	Local	270
Milton	<i>Ficus obliqua</i> (small leaved figtree)	Princes Highway	Lot 3, DP 548705	Local	298
Milton	Granite obelisk—War memorial	Princes Highway	Lot 1, DP 150104	Local	300
Milton	"Narrawilly"—dairy farm complex including garden, rainforest and convict road	Princes Highway	Lots 1 and 2, DP 1018899; Local Lot 198, DP 1091216	Local	301
Milton	"Times Past"—(former Federation weatherboard farmhouse)	51 Princes Highway	Lot 1, DP 558698	Local	271
Milton	Rendered masonry commercial store including residence and trees	61 Princes Highway	Lots 1–3 and CP, SP 66659; Lots 5–8, SP 76002	Local	299
Milton	Federation rendered masonry courthouse and police station	64 Princes Highway	Lot 1, DP 199555	Local	272
Milton	Two storey rendered masonry post office	66 Princes Highway	Lot 1, DP 557669	Local	273
Milton	Victorian Georgian style residence and bakehouse	67 Princes Highway	Lot 4, DP 631087	Local	274

Milton	Inter-war rendered masonry and fibro hall	69 Princes Highway	Lot 1, DP 736273	Local	275
Milton	Victorian classical style rendered masonry Town Hall	71 Princes Highway	Lot 2, DP 151179	Local	276
Milton	"The Star Hotel"—two storey rendered masonry building	82 Princes Highway	Lot 1, DP 872508	Local	277
Milton	Two storey Victorian bakery and residence	92 Princes Highway	Lot 11, DP 594775	Local	278
Milton	"The Settlement" including row of Victorian masonry shops, "Frederick Halls"—weatherboard shop and residence, "H C Blackburn and Sons"—two storey commercial building and tree	93–97 Princes Highway	Lots 1 and 2, DP 980292; Lot 1, DP 741976	Local	279
Milton	Victorian weatherboard residence and shop	94 Princes Highway	Lot 16, DP 1064376	Local	280
Milton	Federation weatherboard residence and well, "Garrad House"—Federation period farmhouse	106 Princes Highway	Lot 1, DP 1127802	Local	281
Milton	Victorian Italianate style bank building (former CBC Bank)	107 Princes Highway	Lot 1, DP 1067384	Local	282
Milton	Milton Anglican Church group including St Peter and St Paul Victorian Gothic Revival style Anglican Church, inter-war carpenter Gothic style Anglican hall and <i>Ulmus parvifolia</i> (Chinese Elm)	109 Princes Highway	Lot 1, DP 780778	Local	283
Milton	Relocated Victorian rendered masonry lighthouse keeper's cottage	122 Princes Highway	Lot 1, DP 85425	Local	284
Milton	Late Victorian brick residence	133 Princes Highway	Lot 1, DP 1171562	Local	297
Milton	Victorian Georgian residence and former dispensary	133 Princes Highway	Lot 1, DP 1171562	Local	286
Milton	Federation weatherboard residence and garden	137 Princes Highway	Lot 5, DP 78484	Local	287
Milton	Inter-war Federation style cottage	138 Princes Highway	Lot 4, DP 32536	Local	288
Milton	Victorian weatherboard hall (former Salvation Army hall)	141 Princes Highway	Lot 7, Section B, DP 975074	Local	289
Milton	Federation weatherboard residence	145 Princes Highway	Lot 9, Section B, DP 975074	Local	290
Milton	Inter-war Californian bungalow	147 Princes Highway	Lot 10, Section B, DP 975074	Local	291

Milton	Inter-war Federation style timber residence and grounds	148 Princes Highway	Lot 10, DP 32536	Local	292
Milton	"Melrose"—(former dairy farm complex)	150 Princes Highway and 73, 83A and 83B Garrads Lane	Lot 32, DP 707677; Lot 2, DP 1135803; Lot 5, DP 260771; Lot 8, DP 848894	Local	293
Milton	"Hillside"—Victorian Georgian residence and garden	156 Princes Highway	Lot 1, DP 737774	Local	294
Milton	"Candlemakers Cottage"—colonial rendered brick cottage	176 Princes Highway	Lot 2, DP 543122	Local	295
Milton	Two storey Victorian rendered masonry store	197 Princes Highway	Lot 1, DP 37905	Local	296
Milton	Avenue of <i>Ficus macrocarpa</i>	35 Stony Hill Lane	Lot 104, DP 1043266	Local	302
Milton	Victorian rendered masonry school and schoolmaster's cottage	Thomas Street	Lot 1, DP 861814	Local	304
Milton	Two storey Victorian former manse and graveyard	1 Thomas Street	Lot 55, DP 703805	Local	303
Milton	"Donovans Cottage"—Victorian weatherboard cottage and detached kitchen	42 Wason Street	Lot 1, DP 875432	Local	305
Milton	"King House"—two storey Victorian Georgian style residence	48 Wason Street	Lot A, DP 155412	Local	306
Milton	Inter-war Californian style bungalow	60 Wason Street	Lot 1, DP 907077	Local	307
Milton	Victorian weatherboard corner store	61 Wason Street	Lot 1, DP 1113658	Local	308
Milton	Colonial timber slab cottage	66 Wason Street	Lot 2, DP 331628	Local	309
Milton	"Priault Villa"—late Victorian weatherboard residence	69 Wason Street	Lot 81, DP 577186	Local	310
Milton	Victorian weatherboard worker's cottage	70 Wason Street	Lot 3, Section A, DP 192188	Local	311
Milton	Late Victorian weatherboard residence	73 Wason Street	Lots 14 and 15, DP 1142968	Local	312
Milton	"Mudges Corner"—Federation weatherboard residence including outbuildings, garden and fence	79 Wason Street	Lot 1, Section B, DP 192188	Local	268
Milton	"Pine View"—Federation farmhouse complex and trees	65 Wilfords Lane	Lot 3, DP 785757	Local	313
Milton	"Applegarth"—dairy farm complex including garden and cheese press	140 Wilfords Lane	Lot 15, DP 605477	Local	314

Milton	"Tilba Tilba"—Victorian Georgian style schoolhouse (former Burrill Lake School)	270 Wilfords Lane	Lot 1, DP 726013	Local	315
Milton	"Riverview"—Victorian Georgian style farm complex	299 Wilfords Lane	Lot 2, DP 702500	Local	316
Milton	"Loch Leven"—dairy farm complex including outbuildings, trees and cisterns	300 Wilfords Lane	Lot 2, DP 975557	Local	317
Milton	Milton Congregational Cemetery	Woodstock Road	Lot 1, DP 781178	Local	318
Mollmook	Sandridge General Cemetery	45 Ocean Street	Lots 7313 and 7314, DP 1167265	Local	319
Mollmook Beach	Silica wharf and railway (remnants)	Mitchell Parade	Part of Crown Reserve for Public Recreation from Bannister Point headland to north eastern corner of Lot 838, DP 233504	Local	320
Mondayong	Rubble sandstone memorial (wreck of the Walter Hood)	Bendalong Road	Lot 35, DP 755927	Local	321
Morton	Weatherboard and vertical slab timber farm complex	Woodburn Road	Lot 5, DP 755972	Local	322
Myola	Weatherboard holiday cottage and outbuildings	13 Catherine Street	Lot 26, DP 19900	Local	323
Narrawallee	Silica wharf and tramway	Matron Porter Drive	Lot D, DP 221281; Part of Lot 7009, DP 1116370	Local	324
Nowra	Mechanics Institute and School of Arts	Berry Street	Lot 20, DP 801794	Local	330
Nowra	Pressed metal clad industrial building (former Barnes Garage)	1 Berry Street	Lot 111, DP 997750	Local	325
Nowra	"The Peoples Emporium"—two storey Victorian shop and residence	26 Berry Street	Part Lot 1, DP 81072	Local	326
Nowra	Inter-war Art Deco style cinema and footpath	41 Berry Street	Lot 51, DP 625969	Local	327
Nowra	Former Victorian weatherboard residence	76 Berry Street	Lot 1, DP 972573	Local	328
Nowra	"Hampden Villa"—Victorian weatherboard residence including stables and garden	110 Berry Street	Lot 12, DP 1064853	Local	329
Nowra	Captain Cook Bicentennial Memorial	Bridge Road	Lot 5, DP 262460; Lot 7038, DP 1107416	Local	338
Nowra	"Kilsyth"—Federation weatherboard residence	33 Bridge Road	Lot 1, DP 152217	Local	331
Nowra	"Uuna"—late Victorian weatherboard cottage and garden	35 Bridge Road	Lot A, DP 161648	Local	332

Nowra	Victorian brick residence	45 Bridge Road	Lot 10, DP 601874	Local	333
Nowra	Late Victorian weatherboard cottage	49 Bridge Road	Lot 8, DP 549249	Local	334
Nowra	Inter-war weatherboard Californian bungalow	63 Bridge Road	Lot 2, DP 203275	Local	335
Nowra	"Rodway's Cottage"—inter-war Federation style residence and garden	86 Bridge Road	Lot 1, DP 737840	Local	336
Nowra	"The Bridge" Hotel—two storey Victorian masonry hotel	87 Bridge Road	Lot 2, DP 843396	Local	337
Nowra	Sandstone landscape monument (Batt's Folly)	Intersection of Bridge Road and North Street	Road reserve between Lot 2, DP 843396 and Lot 1, DP 737840	Local	339
Nowra	"The Pines"—late Victorian weatherboard residence and trees	76 East Street	Lot 1, DP 115881	Local	340
Nowra	"Cudgerie" Federation weatherboard residence	108 East Street	Lot 11, DP 2607	Local	341
Nowra	"Moss"—cottage (former Moss Central Hotel)	1 Ferry Lane	Lot 135, DP 1094714	Local	342
Nowra	Victorian Georgian style timber slab cottage	19 Ferry Lane	Lot 1, DP 193881	Local	343
Nowra	Victorian Italianate residence and garden	22 Jervis Street	Lot 11, DP 2624	Local	344
Nowra	"Trelawney"—Victorian Georgian weatherboard residence	69 Jervis Street	Lot 1, DP 998589	Local	345
Nowra	"Roseville"—Federation weatherboard residence and fig tree	49–51 Journal Street	Lots 1 and 2, DP 2607	Local	346
Nowra	Heritage streetscape	Junction Street	Road reserve	Local	360
Nowra	Federation weatherboard residence and trees	1 Junction Street	Lot 1, DP 21682	Local	347
Nowra	Federation weatherboard residence	2 Junction Street	Lot W, DP 405938	Local	348
Nowra	<i>Araucaria cunninghamii</i> (Hoop Pine)	12 Junction Street	Lot 4, DP 237126	Local	349
Nowra	<i>Araucaria cunninghamii</i> (Hoop Pine)	14 Junction Street	Lot 3, DP 237126	Local	350
Nowra	Two storey Federation timber convent (former Sisters of the Good Samaritan Convent) including fence and grounds	22 Junction Street	Lot 91, DP 1182460	Local	351
Nowra	"The White House"—two storey timber inter-war guesthouse	30 Junction Street	Lot 13, DP 654893	Local	352
Nowra	"Hillcrest"—two storey timber Federation residence	53 Junction Street	Lot 1, DP 580440	Local	353

Nowra	Former Nowra fire station	55 Junction Street	Lot 1, DP 81794	Local	354
Nowra	Mafeking Boer War Memorial	60–62 Junction Street	Lots 2 and 3, DP 363266 and adjacent road reserve	Local	355
Nowra	Nowra Post Office (former)	72 Junction Street	Lot 1, DP 884212	Local	356
Nowra	Two storey Victorian commercial building	76 Junction Street	Lot 1, DP 512886	Local	357
Nowra	Inter-war Art Deco commercial building	80 Junction Street	Lot 1, DP 321055	Local	358
Nowra	“P. Walsh & Sons”—two storey Victorian commercial building	90 Junction Street	Lot 1, DP 732396	Local	359
Nowra	Nowra General Cemetery	Kalandar Street	Lot 1, DP 724120; Lot 1, DP 1221276; Lots 7305 and 7306, DP 1151018; Lot 7321, DP 1155510	Local	361
Nowra	Federation police residence and lockup (former)	Kinghorne Street	Lot 1, DP 1123776	Local	367
Nowra	Nowra courthouse	Kinghorne Street	Lot 701, DP 1024854	Local	368
Nowra	Two storey Victorian Gothic style manse	3 Kinghorne Street	Lot 11, DP 130904	Local	362
Nowra	St Andrew’s Presbyterian Church and Federation Gothic style rendered brick hall (former church)	5 Kinghorne Street	Lot 2, DP 567875	Local	363
Nowra	“Roslyn Court”—inter-war Art Deco style rendered shops and offices	21 Kinghorne Street	Lot 1, DP 225562	Local	364
Nowra	Victorian commercial bank stables (former)	56 Kinghorne Street	Lot 1, DP 817564	Local	365
Nowra	Victorian weatherboard residence	192 Kinghorne Street	Lot B, DP 157265	Local	366
Nowra	Graham Family Cemetery	Lyrebird Drive	Lot 3, DP 328915	Local	369
Nowra	Two storey Victorian masonry terrace house	1 Moss Street	Lot 38, Section 1, DP 1607	Local	370
Nowra	Inter-war weatherboard cottage and trees	2 Moss Street	Lot B, DP 335109	Local	371
Nowra	Victorian weatherboard store (former iron store)	3 Moss Street	Lot 37, Section 1, DP 1607	Local	372
Nowra	“Hazelmere”—Victorian Georgian masonry residence	7–9 Moss Street	Lot C, DP 410954; Lots 34 and 35, Section 1, DP 1607	Local	373
Nowra	Federation weatherboard residence	11–15 Moss Street	Lots 31 and 32, Section 1, DP 1607; Part Lot D, DP 410954	Local	374
Nowra	Late Victorian weatherboard residence	21 Moss Street	Lot 1, DP 862764	Local	375
Nowra	Late Victorian weatherboard residence	29 Moss Street	Lot 24, Section 1, DP 1607	Local	376

Nowra	Late Victorian weatherboard cottage	31 Moss Street	Lot 23, DP 963328	Local	377
Nowra	St Michael's Roman Catholic Cemetery	North Street	Lot 1, DP 1088531	Local	380
Nowra	St Michael's Roman Catholic Church including two storey Victorian presbytery and grounds	20 North Street	Lot 1, DP 1088531	Local	378
Nowra	Two storey Victorian shop and residence (former Armstrong's Saddlery)	83 North Street	Lot B, DP 386390	Local	379
Nowra	Uniting Church (former Methodist Church)	54 Osborne Street	Lot 1, DP 714910	Local	381
Nowra	Wesley Centre (former Wesleyan Parsonage)	54 Osborne Street	Lot 1, DP 714910	Local	382
Nowra	Victorian Georgian rendered masonry residence	91 Osborne Street	Lot 1001, DP 1220696	Local	383
Nowra	Mid-Victorian timber residence including detached kitchen, well and Red Cedar tree	93 Osborne Street	Lot 8, Section 17, DP 758794	Local	384
Nowra	Two storey mid-Victorian weatherboard residence	95 Osborne Street	Lot 3, DP 601332	Local	385
Nowra	Victorian Georgian rendered masonry residence	97 Osborne Street	Lot 4, DP 601332	Local	386
Nowra	Late Victorian weatherboard residence	105 Osborne Street	Lot 1, DP 986393	Local	387
Nowra	Victorian Georgian style timber residence	109 Osborne Street	Lot 11, DP 545053	Local	388
Nowra	Graham Lodge (former Greenhills Estate Homestead) and grounds	10 Pleasant Way	Lot 1, DP 1010062	State	389
Nowra	Victorian brick Anglican rectory	66 Plunkett Street	Lot 1, DP 1047926	Local	390
Nowra	All Saints Anglican Church including memorial lychgate, trees and Victorian Gothic style hall (former St John's Church)	70 Plunkett Street	Lot 23, DP 1190551	Local	391
Nowra	Victorian rendered brick school and grounds	74 Plunkett Street	Lot 2, DP 863880	Local	392
Nowra	Victorian weatherboard residence	75 Plunkett Street	Lot 3, DP 213471	Local	393
Nowra	Victorian Georgian weatherboard residence	77 Plunkett Street	Lot 4, DP 213471	Local	394
Nowra	Victorian rendered brick residence (former schoolmaster's residence)	82 Plunkett Street	Lot 1, DP 863880	Local	395

Nowra	Police sergeant's residence and grounds (former Nowra courthouse)	84 Plunkett Street	Lot 429, DP 823259	Local	396
Nowra	"Karinga"—inter-war weatherboard residence	85 Plunkett Street	Lot 2, DP 10492	Local	397
Nowra	Brick Californian bungalow (former policeman's quarters)	87 Plunkett Street	Lot 3, DP 10492	Local	398
Nowra	Federation weatherboard residence	89 Plunkett Street	Lot A, DP 401567	Local	399
Nowra	"Wernick Cottage"—Georgian style weatherboard cottage	102 Plunkett Street	Lot 3, DP 329271	Local	400
Nowra	"Myambah"—Federation weatherboard bungalow and garden	134 Plunkett Street	Lot 1, DP 124486	Local	401
Nowra	"Shoalhaven River Bridge"—Victorian wrought iron bridge	Princes Highway	Road reserve	Local	402
Nowra	"Nowra Park"—early Victorian masonry residence and garden	124 Wallace Street	Lot 4, DP 542656	Local	403
Nowra	Nowra showground and sportsground complex including Federation brick pavilion, Victorian masonry gate, toilet, former Victorian Masonry Entrance Gate, Hanging Rock Lookout, Inter-war Castellated Sandstone Memorial Gateway and Sculpture, "Monaghan's"—Victorian Memorial Cast Iron Fountain	West Street	Lot 374, DP 755952; Lot 702, DP 1024852; Lot 7302, DP 1134093; Lot 7323, DP 1164817	Local	405
Nowra	Ben's Walk including Suspension Bridge and Aboriginal Art Sites	West and Worrigee Streets	Reserve No R70802; Reserve No R6754; Lot 7036, DP 1068935; Lot 7326, DP 1166983; Lot 701, DP 1025652; Lot 7005, DP 1023875; Lot 7301, DP 1134093; Lot 704, DP 1024834; Part Lots 94 and 95, DP 755952; Part Lots 1 and 2, Section 31A, DP 758794; Lot 703, DP 1024833; Part Lot 1, Section 15, DP 758794; Part Lot 4, DP 1136269; Lot 3, DP 585626; Lot 701, DP 1024852; Part of Lot 7018, DP 1024840; Lot 7322, DP 1164817; Lot 7019, DP 1016688; Lot 392 and Part Lot 391, DP 755952; Crown roads	Local	406

Nowra	"Meroogal"—Victorian Timber Residence including Outbuildings and Garden	35 West Street	Part Lot F, DP 403286	State	404
Nowra	Inter-war Weatherboard Building and Timber Wharf	Wharf Road	Lot 7012, DP 1002643	Local	407
Nowra	Inter-war Californian Bungalow	31 Worrigeer Street	Lot 1, DP 62072	Local	408
Nowra	Inter-war Federation Style Residence	42 Worrigeer Street	Lot 1, DP 912561	Local	409
Nowra	Inter-war Weatherboard Bungalow	47 Worrigeer Street	Lot 2, DP 152694	Local	410
Nowra	Federation Weatherboard Residence	49 Worrigeer Street	Lot 100, DP 1102700	Local	411
Nowra	Victorian Weatherboard Residence	54 Worrigeer Street	Lot 14, DP 976539	Local	412
Nowra	Victorian Weatherboard Residence	56 Worrigeer Street	Lot 13, DP 976539	Local	413
Nowra	Victorian Georgian Weatherboard Residence	57 Worrigeer Street	Lot 1, DP 780982	Local	414
Nowra	Victorian Weatherboard Residence	58 Worrigeer Street	Lot 12, DP 976539	Local	415
Nowra	Victorian Weatherboard Residence	59 Worrigeer Street	Lot 1, DP 710860	Local	416
Nowra	Victorian Weatherboard Residence	63 Worrigeer Street	Lot 2, DP 736763	Local	417
Nowra Hill	HMAS Albatross—military defence complex and aviation museum	489A Albatross Road	Lot 102, DP 842713; Lot 2, DP 1002996	Local	418
Numbaa	Berry Estate Canal and Ferry	Comerong Island Road		Local	427
Numbaa	<i>Ficus macrophylla</i> (Fig tree)	Comerong Island Road	Road reserve between Lot K, DP 979245 and Lot G, DP 979245	Local	429
Numbaa	Numbaa Cemetery (former)	Comerong Island Road	Lot 10, DP 2812	Local	422
Numbaa	Numbaa Council Chambers (former) and Well	Comerong Island Road	Lot K, DP 979245	Local	428
Numbaa	Lower Numbaa Barn (Berry Estate Slab Barn)	581 Comerong Island Road	Lot 9, DP 2812	Local	426
Numbaa	Former Prefabricated Cast Iron Presbyterian Church	591 Comerong Island Road	Lot 591, DP 1137949	Local	419
Numbaa	Numbaa Catholic Presbytery (former)	601 Comerong Island Road	Lot 1, DP 933179	Local	420
Numbaa	"Chinaman's Cottage"—Victorian Weatherboard Cottage (former Berry Estate Cottage)	655 Comerong Island Road	Lot G, DP 979245	Local	421
Numbaa	Numbaa Schoolmaster's Residence (former)	766 Comerong Island Road	Lot 1, DP 550305	Local	423

Numbaa	Numbaa School (former)	770 Comerong Island Road	Lot 2, DP 550305	Local	424
Numbaa	"Prairievale"—(former Berry Estate Manager's Residence)	835 Comerong Island Road	Lot 14, DP 4332	Local	425
Numbaa	War Memorial Tree (<i>Lophostemon confertus</i>)	Corner of Jindy Andy Lane and Comerong Island Road	Road reserve	Local	433
Numbaa	Berry Estate Slab Barn	130 Jindy Andy Lane	Lot 26, DP 2813	Local	432
Numbaa	"Edinglassie Lodge"—Federation Weatherboard Farmhouse	175 Jindy Andy Lane	Lot 1, DP 208292	Local	430
Numbaa	Concrete Tub Silo	251 Jindy Andy Lane	Lot 2, DP 556830	Local	431
Numbaa	Salt Pans	Smiths Lane	Lots 24 and 25, DP 2813	Local	435
Numbaa	Colonial Farm Complex including Berry Estate Cottage, Outbuildings and Fig trees	68 Smiths Lane	Lot 26A, DP 2813	Local	434
Orient Point	Vertical Timber-lined Drydock	Orsova Parade	Part Lot 111, DP 755971	Local	436
Orient Point	"Roseby Park"—Jerrinja Aboriginal Community Complex and Tribal Burial Ground	Park Row	Lot 51, DP 755971; Lot 98, DP 720072	Local	437
Parma	Parma Farm	Parma Road	Lot 4, DP 1143944; Lots 3 and 4, DP 1160993	Local	438
Pebbly Beach	Pebbly Beach Sawmill Complex, including Sawmill remnants, Town and school site	Pebbly Beach Road	Lots 39, 47, 102–104, 108, 114 and 115, DP 755941; Part of Murramarang National Park	Local	439
Pyree	"Caffery's"—Roadside Tree Planting (<i>Lophostemon confertus</i>)	At the junction of Jindy Andy Lane, Bournes Lane and Mayfield Road with Greenwell Point Road	Road reserve	Local	440
Pyree	"The Avenue"—Casuarina Trees	Greenwell Point Road		Local	447
Pyree	"Mervalperden"—Dairy Farm Complex (former)	664 Greenwell Point Road	Lot 61, DP 2813	Local	441
Pyree	Upper Numbaa Barn (former Berry Estate Grain Mill)	719 Greenwell Point Road	Lot 101, DP 629485	Local	442
Pyree	"Jindy Andy" (former Berry Estate Dairy)	739 Greenwell Point Road	Lot 105, DP 773888	Local	443
Pyree	Pyree Literary Institute	880 Greenwell Point Road	Lot 126, DP 2813	Local	444
Pyree	Victorian Georgian Schoolhouse (former Pyree Public School) and Coral trees	888 Greenwell Point Road	Lot 126, DP 821471	Local	446
Pyree	Pyree Public Schoolmaster's Residence (former)	890 Greenwell Point Road	Lot 128, DP 821471	Local	445

Pyree	"George Borrowdale's house"—(former Berry Estate cottage)	Pyree Lane	Lot 6, DP 1185885; Lot 8, DP 111636	Local	450
Pyree	War Memorial Tree triangle (<i>Lophostemon confertus</i>)	Pyree Lane		Local	449
Pyree	"Somerset House"—Federation weatherboard farmhouse and trees	117 Pyree Lane	Lot A, DP 377595	Local	448
Pyree	"Thistlebank"—Dairy Farm Complex	85 Ryans Lane	Lot 8, DP 876329	Local	451
Shoalhaven Heads	Relocated Weatherboard Church (former Berry Estate Library)	126 Scott Street	Lot 1, DP 704667	Local	452
St Georges Basin	Former Boarding House and St Georges Basin Post Office	23 Deane Street	Lot 1, DP 1049843	Local	453
St Georges Basin	World War II Flying Boat Base	2 Island Point Road	Lot 118, DP 17823; Part of adjoining reserve	Local	454
St Georges Basin	"Jessie Blacket"—Sandstone Memorial Drinking Trough	41 Tasman Road	Lot 110, DP 25769	Local	455
St Georges Basin	Federation Fisherman's Cottage and garden	146 The Wool Road	Lot A, DP 375526	Local	456
Sussex Inlet	"Greentree's"—Holiday Cabins	158 Jacobs Drive	Lot 2, DP 574349	Local	457
Sussex Inlet	Post-war fibre cement Community Hall/Sussex Inlet Picture Theatre	173 Jacobs Drive	Lot A, DP 343373	Local	458
Sussex Inlet	Gothic Carpenter style relocated Church (former Termeil Wesleyan Church)	175 Jacobs Drive	Lot B, DP 343373	Local	459
Sussex Inlet	"Kemp's Boatshed"	River Road	Part Lot 7028, DP 1052695	Local	460
Swanhaven	"The Springs"—Holiday Cabins	1A Yarroma Avenue	Lot 2, DP 554118	Local	461
Tapitallee	Good Dog Cemetery	Bangalee Road	Lot 7312, DP 1153579	Local	462
Terara	"The Old House"—Weatherboard Residence and Well	3–7 Fox Street	Lots 1–5, DP 1035937	Local	463
Terara	"Terara Lodge" (former Wesleyan Parsonage)	6 Holme Street	Lot 28, DP 779285	Local	464
Terara	Victorian Sandstone School and attached Residence including Terara School grounds and Trees	20 Millbank Road	Lot 1, DP 725988	Local	465
Terara	"Dower House" (former Coachman's House to Millbank)	27B Millbank Road	Lot 2, DP 313528	Local	466
Terara	"Millbank Cottage"—Outbuildings and trees	31 Millbank Road	Lot 1, DP 32426	Local	467

Terara	"Rosebank"—Victorian Georgian style cottage	62 Millbank Road	Lot 6, DP 770600	Local	468
Terara	"Terara House" including Chapel, Grounds and Tree-lined drive	77 Millbank Road	Lot 1, DP 579451	Local	469
Terara	"Rose Cottage" (former Pooley's Store)	157 South Street	Lot 1, DP 735264	Local	470
Terara	"Ayrton House" (former CBC Bank)	175 South Street	Lot 11, DP 52910	Local	471
Terara	Timber Vertical Slab Worker's Cottage	119 Terara Road	Lot 102, DP 817248	Local	472
Terara	"Woodlawn"—Victorian Weatherboard Cottage and trees	124 Terara Road	Lot 3, DP 602305	Local	473
Terara	"Citrus Grove"—Victorian Residence and trees	126 Terara Road	Lot 2, DP 79001	Local	474
Terara	"Solway House"—late Victorian Brick Residence and Store	10 West Berry Street and 3 Holme Street	Lots 10 and 11, DP 1080453	Local	475
Tianjara	Alley Family graves	Braidwood Road	Lot 3, DP 755962	Local	476
Tolwong	Tolwong Copper Mine (remnants)	Touga Road	National Park	Local	477
Tomerong	Tomerong Cemetery	331 Hawken Road	Lot 1, DP 812581	Local	478
Tomerong	Victorian Schoolmaster's Residence	355–359 Hawken Road	Lot 2, DP 725948	Local	479
Tomerong	Interwar Community Hall (former School of Arts)	356 Hawken Road	Lot 100, DP 1148693	Local	480
Tomerong	Tomerong Carpenter style Union Church and Hall	363 Hawken Road	Lot 47, DP 925270	Local	481
Touga	Tim's Gully Mine	Touga Road	South of Portion 16 in the vicinity of the intersection of North Oaky Creek and Tims Gully	Local	482
Ulladulla	Warden Head Lighthouse	Deering Street	Lot 290, DP 755967	Local	483
Ulladulla	Victorian Georgian style Sandstone School and Schoolmaster's Residence	241 Green Street	Lot 1, DP 122514	Local	484
Ulladulla	Relocated Victorian Georgian Timber Slab Worker's Cottage	275 Green Street	Lot 702, DP 1056245	Local	485
Ulladulla	"Springfield"—ornate late Victorian weatherboard farmhouse	41 Kanuka Drive	Lot 146, DP 1122896	Local	487
Ulladulla	"Mascot"—Slab Timber Cottage	56 North Street	Lot 1, DP 337491	Local	486
Ulladulla	Ulladulla Cemetery (former)	Princes Highway	Lot 7012, DP 1031353	Local	490
Ulladulla	"Millards Cottage"—two storey Victorian rendered Masonry Building	81 Princes Highway	Lot 12, DP 565744	Local	488

Ulladulla	"The Marlin"—early Post-war American Colonial Hotel	108–112 Princes Highway	Lots A and B, DP 155990; Lots 11 and 12, Section 2, DP 759018; Lot 1, DP 743246	Local	489
Ulladulla	Warden Head Geological Site	Rennies Beach Close	Lot 59, DP 237534	Local	491
Ulladulla	Sandstone Weir—Millards Creek	St Vincent Street	Lot 702, DP 1030099	Local	492
Ulladulla	Ulladulla Harbour including Old pier and stone pier, Steps and Walls	Wason Street	Part of Lot 1, DP 612935; Lots 3–7 and 9, DP 260884; Part of Lot 7314, DP 1166835	Local	494
Ulladulla	Ulladulla Seawater Pool	Wason Street	Lot 376, DP 726691	Local	495
Ulladulla	Victorian Brick Residence (former Ulladulla Post Office)	23 Wason Street	Lot 50, DP 828221	Local	493
Upper Kangaroo River	"Fern Hill"—(former Church of England Church)	Upper Kangaroo River Road	Lot 100, DP 842428	Local	498
Upper Kangaroo River	Relocated Weatherboard Schoolhouse (former Hillcrest School)	Upper Kangaroo River Road	Lot 1, DP 172019	Local	499
Upper Kangaroo River	"Yarrawooma"—Dairy Farm Complex including Red Cedar Slab Selector's Cottage	679 Upper Kangaroo River Road	Lot 4, DP 1000686	Local	496
Upper Kangaroo River	Upper Kangaroo River Community Hall	1009 Upper Kangaroo River Road	Lot 1, DP 224929	Local	497
Vincentia	Greenfields Beach Cottage Site and Pine Trees	Birriga Avenue	Lot 44, DP 755907	Local	500
Vincentia	South Huskisson Wharf Sandstone Remnants	Elizabeth Drive	Lot 7021, DP 1117368	Local	501
Vincentia	Plantation Point Rock Platform	Plantation Point Parade	Lot 7023, DP 1117371	Local	502
Wandandian	Wandandian Post Office (former) and Residence	D2625 Princes Highway	Lot 26, DP 1092958	Local	503
Wandandian	"Dalton Park"—Farmhouse and Wandandian Cricket Ground (former)	10 Windley Road	Lot 40, DP 862334	Local	504
Watersleigh	Condie Farm including former Condies cottage, trees and graves	Koloona Drive	Lot 117, DP 751273	Local	505
Wattamolla	Brogers Creek Cemetery	515 Wattamolla Road	Lot 121, DP 1049038	Local	506
Wattamolla	"Pinkawilinie"—(former Wattamolla school house)	539 Wattamolla Road	Lot 190, DP 751264	Local	507
Wattamolla	Victorian weatherboard farmhouse and trees	545 Wattamolla Road	Lot 4, DP 258693	Local	508
West Nowra	Inter-war reinforced concrete building and storage dam (former Nowra water supply and filtration plant)	Filter Road	Lots 6 and 12, DP 805611, Flatrock Creek Waterway	Local	509

Woodhill	Corrugated iron building (former Wesleyan Church)	1 Brogers Creek Road	Lot 100, DP 1006659	Local	510
Woodhill	Woodhill Cemetery	Wattamolla Road	Lot 3, DP 1030426	Local	511
Woodstock	"Woodlands"—weatherboard and iron farmhouse	24 Evans Lane	Lot 22, DP 623582	Local	512
Woodstock	"Avenal"—dairy farm complex	108 Evans Lane	Lot 24, DP 863026	Local	513
Woodstock	"Danesbank"—two storey Victorian stone farmhouse and garden	121 Evans Lane	Lot 9, DP 792205	Local	514
Woodstock	"Woodlawn"—Federation weatherboard farmhouse	Woodstock Road	Lot 16, DP 827800	Local	518
Woodstock	"Mount Airlie"—two storey Victorian Italianate estate residence and trees	34A Woodstock Road	Lot 3, DP 856688	Local	515
Woodstock	Inter-war reinforced concrete butter factory	170 Woodstock Road	Lot 1, DP 529083; Lot 1, DP 726006	Local	516
Woodstock	Federation brick residence (former school residence) and trees	358 Woodstock Road	Lot 1, DP 1031696	Local	517
Woollamia	Lone grave of Sarah Coulon	22 James Farmer Grove	Lot 4, DP 1027849	Local	519
Woollamia	Weatherboard and fibro holiday cottage	759 Woollamia Road	Lots 1 and 2, DP 9289; Lots 3 and 4, DP 1172636	Local	520
Worrigee	Rubblestone school (former Worrigee schoolhouse)	20 Booligal Road	Lot 15, DP 755953	Local	521
Worrigee	Worrigee Cemetery	Greenwell Point Road	Lot 8, DP 791226	Local	524
Worrigee	"Congla"—(former Mackenzie Estate manager's residence)	315 Greenwell Point Road	Lot 2, DP 1087811	Local	522
Worrigee	Cement rendered colonial (dome) wells (2)	361 Greenwell Point Road	Lot 2, DP 1087811	Local	523
Worring Heights	"Erowal Farm" including homestead (ruins), garden, trees and resort ruins	Walter Hood Parade	Lot 34, DP 1093403	Local	525
Yadboro	Pigeon House Mountain Lookout including fire trail and longfella pass	Yadboro Road	Morton National Park	Local	526
Yalwal	Former Yalwal gold mine and township site	Yalwal Road	Part Lots 1 and 2, DP 252335; Part of Reserve No R3167; Part of Reserve No R3168; Lot 7314, DP 1147788; Lot 7 and Part Lots 1–6, Section 5, DP 759129; Part Lots 12 and 13, DP 755931; Lot 7016, DP 1039312; Lot 7018, DP 1039313; Lot 7017, DP 1039315	Local	527
Yatte Yattah	The Sheaffe Family Cemetery	Pointer Road	Lot 17, DP 847482	Local	528

Yatte Yattah	Roman Catholic Church and cemetery	Princes Highway	Lot 138, DP 755923	Local	536
Yatte Yattah	Yatte Yattah Nature Reserve and 2 Waterfalls	Princes Highway and 67B Skye Farm Lane	Lot 15A, DP 755923; Lot 44, DP 806933	Local	537
Yatte Yattah	“Woppindally”—dairy farm complex	E280 Princes Highway	Lot 1, DP 738631	Local	529
Yatte Yattah	“Kendall Dale”—dairy farm complex including homestead and garden	E379A Princes Highway	Part Lot 189, DP 755923; Lot 3, DP 1193328	Local	530
Yatte Yattah	Quercus robur (English Oak trees-2) on driveway entrance	E379A Princes Highway	Part Lot 189, DP 755923; Lot 3, DP 1193328	Local	531
Yatte Yattah	“Kirmington”—dairy farm complex and Henry Kendall monolith	E379B Princes Highway	Lot 425, DP 755923	Local	532
Yatte Yattah	Industrial building (former Yatte Yattah cheese factory)	E380 Princes Highway	Lot 1, DP 725962	Local	533
Yatte Yattah	“Boolgatta”—dairy farm complex and barn	E402D Princes Highway	Lot 71, DP 854641	Local	534
Yatte Yattah	Former Yatte Yattah Public School and schoolmaster’s residence	8A Tierney Road	Lot 453, DP 755923	Local	538
Yatte Yattah	“Hillview” Private Cemetery	8B Tierney Road	Lot 6, DP 32380	Local	539

Part 2 Heritage conservation areas

Name of area	Identification on Heritage Map	Significance
Hampton Bridge Heritage Conservation Area	Shown by red hatching and labelled “C4”	Local
Nowra CBD Fringe West Heritage Conservation Area	Shown by red hatching and labelled “C5”	Local
Pulman Street Heritage Conservation Area	Shown by red hatching and labelled “C1”	Local
Plunkett Street Heritage Conservation Area	Shown by red hatching and labelled “C2”	Local
Terara Heritage Conservation Area	Shown by red hatching and labelled “C3”	Local

Part 3 Archaeological sites

Suburb	Item name	Address	Property description	Significance	Item no
Bendalong	Red Head timber mill and wharf	1 Waratah Street	Lot 187, DP 755923	Local	A1
Comerong Island	Former coal wharf site	Comerong Island Road	Comerong Island	Local	A2
Coolangatta	Berry Estate homestead ruins	1335 Bolong Road	Lot A, DP 33346	Local	A3
Coolangatta	Berry Estate shipyard	Bolong Road	Lot 12, DP 28128	Local	A4
Greenwell Point	Greenwell Point wharf and surrounds	Greenwell Point Road	Lots 7300–7302, DP 1165443	Local	A5
Watersleigh	Condie Farm	Koloona Drive	Lot 117, DP 751273	Local	A6

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Statutory listed items

Information and items listed in the State Heritage Inventory come from a number of sources. This means that there may be several entries for the same heritage item in the database. For clarity, the search results have been divided into three sections.

- **Section 1** - contains Aboriginal Places declared by the **Minister for the Environment** under the National Parks and Wildlife Act. This information is provided by Heritage NSW.
- **Section 2** - contains heritage items listed by the **Heritage Council of NSW** under the Heritage Act. This includes listing on the State Heritage Register, an Interim Heritage Order or protected under section 136 of the Heritage Act. This information is provided by Heritage NSW.
- **Section 3** - contains items listed by **local councils** on Local Environmental Plans under the Environmental Planning and Assessment Act and **State government agencies** under s.170 of the Heritage Act. This information is provided by local councils and State government agencies.

Section 1. Aboriginal Places listed under the National Parks and Wildlife Act.

Your search did not return any matching results.

Section 2. Items listed under the Heritage Act.

Your search returned 10 records.

Item name	Address	Suburb	LGA	SHR
Berry Courthouse	58 Victoria Street	Berry	Shoalhaven	01736
Berry Museum	135 Queen Street	Berry	Shoalhaven	01755
Berry Railway Station group and movable relics	Illawarra railway	Berry	Shoalhaven	01084
Bomaderry Aboriginal Children's Home	59 Beinda Street	Bomaderry	Shoalhaven	01874
Bomaderry Railway Station and yard group	Illawarra railway	Bomaderry	Shoalhaven	01090
David Berry Hospital Precinct	Beach Road	Berry	Shoalhaven	00822
Graham Lodge	Pleasant Way	Nowra	Shoalhaven	01699
Hampden Bridge	Moss Vale Road	Kangaroo Valley	Shoalhaven	02024
Lady Denman (M.V.)	Dent Street	Huskisson	Shoalhaven	01518
Meroogall	35 West Street	Nowra	Shoalhaven	00953

Section 3. Items listed by Local Government and State Agencies.

Your search returned 672 records.

Item name	Address	Suburb	LGA	Information source
"Osborne Park" - Kangaroo Valley Showground Complex	177-181 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
"Osborne Park" community hall and Kangaroo Valley showground complex	177-181 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
"Roseby Park" Jerringa Aboriginal Community Complex and Tribal Burial Ground	Park Row	Orient Point	Shoalhaven	LGOV
1830s Colonial Road	Johnston Street	Bawley Point	Shoalhaven	LGOV
A Row of Victorian Masonry Shops	93-97 Princes Highway	Milton	Shoalhaven	LGOV
Acmena Smithii (2) (Trees)	120 Queen Street	Berry	Shoalhaven	LGOV

Agathis robusta (Kauri Pine Tree)	Alexandra Street	Berry	Shoalhaven LGOV
Agathis robusta (Kauri Pine)	McDonald Parade	Burrill Lake	Shoalhaven LGOV
Albany - Victorian Georgian style weatherboard cottage	25 Albany Street	Berry	Shoalhaven LGOV
All Saints Anglican Church including memorial lychgate, trees and hall	70 Plunkett Street	Nowra	Shoalhaven LGOV
Alley Family Graves	Braidwood Road	Tianjara	Shoalhaven LGOV
Anglican Church of the Good Shepherd & rectory		Kangaroo Valley	Shoalhaven GAZ
Anglican Church of the Good Shepherd including graveyard, trees and fence	143 Moss Vale Road	Kangaroo Valley	Shoalhaven LGOV
Anglican Church of the Good Shepherd rectory (former)	Rectory Park Way	Kangaroo Valley	Shoalhaven LGOV
ANZ Bank (Former)	Queen Street	Berry	Shoalhaven GAZ
Apex Park (Trees)	12 Prince Alfred Street	Berry	Shoalhaven LGOV
Applegarth - dairy farm complex including garden and cheese press	140 Wilfords Lane	Milton	Shoalhaven LGOV
Araucaria bidwillii & Casuarina cunninghamii (Trees)	30 Pulman Street	Berry	Shoalhaven LGOV
Araucaria cunninghamii (Hoop Pine Tree)	Alexandra Street	Berry	Shoalhaven LGOV
Araucaria cunninghamii (Hoop Pine Tree)	Corks Lane	Milton	Shoalhaven LGOV
Araucaria cunninghamii (Hoop Pine Tree)	35 Alexandra Street	Berry	Shoalhaven LGOV
Araucaria Cunninghamii (Mature Hoop Pine Trees)	14 Junction Street	Nowra	Shoalhaven LGOV
Araucaria Cunninghamii (Mature Hoop Pine Trees)	12 Junction Street	Nowra	Shoalhaven LGOV
Araucaria heterophylla (2) (former Wilson & Co Store)	1 Pulman Street	Berry	Shoalhaven LGOV
Araucaria heterophylla (Norfolk Island Pine)	4 Kendall Crescent	Burrill Lake	Shoalhaven LGOV
Araucaria heterophylla (Norfolk Island Pines-2)	40 Prince Alfred Street	Berry	Shoalhaven LGOV
Ascot - Dairy Farm Complex	49 Upper Kangaroo River Road	Barrengarry	Shoalhaven LGOV
Avenal - dairy farm complex	108 Evans Lane	Woodstock	Shoalhaven LGOV
Avenue of Ficus macrocarpa (trees)	35 Stony Hill Lane	Milton	Shoalhaven LGOV
Avenue of Remembrance (tree-lined)	Alexandra Street	Berry	Shoalhaven LGOV
Ayrton House (former CBC Bank)	175 South Street	Terara	Shoalhaven LGOV
Bamarang - Victorian sandstone homestead and cemeteries	72 Bamarang Road	Bamarang	Shoalhaven LGOV
Bank and Post Office Group incl. fmr ANZ Bank & CBC Bank	Queen Street	Berry	Shoalhaven GAZ
Barrengarry House - two storey Victorian estate complex	171 Upper Kangaroo River Road	Barrengarry	Shoalhaven LGOV
Barrengarry Store, Post Office and Residence	2167 Moss Vale Road	Barrengarry	Shoalhaven LGOV
Bawley Point Guesthouse and Trees	21 Johnston Street	Bawley Point	Shoalhaven LGOV
Bawley Point Sawmill and Wharf (former)	Tingira Drive	Bawley Point	Shoalhaven LGOV
Bellawongarah Cemetery	Kangaroo Valley Road	Bellawongarah	Shoalhaven LGOV
Ben's Walk including Suspension Bridge and Aboriginal Art Sites	West and Worrigee Streets	Nowra	Shoalhaven LGOV
Berry Estate - vertical timber slab barn (former)	695A Greenwell Point Road	Brundee	Shoalhaven LGOV
Berry Estate Canal and Ferry	Comerong Island Road	Numbaa	Shoalhaven LGOV
Berry Estate former pumping station site	255 Back Forest Road	Back Forest	Shoalhaven LGOV
Berry Estate Homestead Ruins Archaeological Site	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Berry Estate Salt Wall	Wharf Road	Berry	Shoalhaven LGOV
Berry Estate Shipyard Archaeological Site	Bolong Road	Coolangatta	Shoalhaven LGOV
Berry Estate timber stud framed flood boatshed	Jennings Lane	Bolong	Shoalhaven LGOV
Berry Estate Vertical Slab Barn	130 Jindy Andy Lane	Numbaa	Shoalhaven LGOV
Berry Estate vertical timber slab cottage and outbuildings	459 Bolong Road	Bolong	Shoalhaven LGOV
Berry General Cemetery	Kangaroo Valley Road	Berry	Shoalhaven LGOV
Berry Museum, former E. S. & A Bank and garden	135 Queen Street	Berry	Shoalhaven LGOV
Berry Public School - Building B00D and Significant Trees	Clarence Street	Berry	Shoalhaven SGOV
Berry Railway Station Group	Station Road	Berry	Shoalhaven SGOV
Berry Railway Station Group including Victorian Georgian Style Stationmaster's Cottage, Chinese Holly and Gardenia	34 Station Road	Berry	Shoalhaven LGOV
Berry School of Arts	19 Alexandra Street	Berry	Shoalhaven LGOV

Berry Showground Group & Agricultural Pavilion	35 Alexandra Street	Berry	Shoalhaven	LGOV
Berry Showground Trees	Alexandra Street	Berry	Shoalhaven	LGOV
Berry War Memorial Park	Alexandra Street	Berry	Shoalhaven	LGOV
Berry War Memorial Park including sandstone war memorial	Alexandra Street	Berry	Shoalhaven	LGOV
Berry-Hay Private Cemetery	Bolong Road	Coolangatta	Shoalhaven	LGOV
Beuna Vista - dairy farm complex including Berry Estate vertical timber slab barn	500 Bolong Road	Bolong	Shoalhaven	LGOV
Bill's Concrete Horse Trough	Prince Alfred Street	Berry	Shoalhaven	LGOV
Black Diamond - Gold Mine (former)	Currowan Road	Currowan	Shoalhaven	LGOV
Bomaderry (Edwards Ave) Overbridge	Edwards Avenue	Bomaderry	Shoalhaven	SGOV
Bomaderry Aboriginal Children's Homes (former United Aboriginal Mission)	Brinawarr Street	Bomaderry	Shoalhaven	LGOV
Bomaderry Milk Factory (former)	31A Bolong Road	Bomaderry	Shoalhaven	LGOV
Bomaderry Presbyterian Church	7 Meroo Street	Bomaderry	Shoalhaven	LGOV
Bomaderry Rail Station & Stationmasters House	Meroo Street	Bomaderry	Shoalhaven	LGOV
Bomaderry Railway Siding Group	Bolong Road & Railway Street	Bomaderry	Shoalhaven	LGOV
Bomaderry Railway Station and yard group	Meroo Road	Bomaderry	Shoalhaven	LGOV
Bomaderry Railway Station and Yard Group	Meroo Street	Bomaderry	Shoalhaven	SGOV
Bomaderry Stationmaster's House	Meroo Street	Bomaderry	Shoalhaven	LGOV
Boolgatta - dairy farm complex and barn	E402D Princes Highway	Yatte Yattah	Shoalhaven	LGOV
Brachychiton acerifolium (3) (Illawarra Flame trees)	53 Prince Alfred Street	Berry	Shoalhaven	LGOV
Brick and asbestos tile Federation bungalow	13 Meroo Street	Bomaderry	Shoalhaven	LGOV
Brick Californian Bungalow (former Policeman's Quarters)	87 Plunkett Street	Nowra	Shoalhaven	LGOV
Brimbramala Gold Mining Area (former)	Bimberamala River, Browns Gully, Clyde Ridge and Mines Road	Currowan	Shoalhaven	LGOV
Broggers Creek Cemetery	515 Wattamolla Road	Wattamolla	Shoalhaven	LGOV
Broughton Vale Cemetery	350 Broughton Vale Road	Broughton Vale	Shoalhaven	LGOV
Bundanon - homestead including outbuildings and natural landscape	533 Bundanon Road	Illaroo	Shoalhaven	LGOV
Bundanon and surrounding landscape	Shoalhaven River	Nowra	Shoalhaven	GAZ
Burrier Ford	Burrier Road	Burrier	Shoalhaven	LGOV
Caffery's - Roadside Tree Planting (Lophostemon confertus)	At the junction of Jindy Andy Lane, Bournes Lane and Mayfield Road with Greenwell Point Road	Pyree	Shoalhaven	LGOV
Calodendrum capense (Cape Chestnut Tree)	King Street	Berry	Shoalhaven	LGOV
Cambewarra Lookout manager's residence and garden	182 Cambewarra Lookout Road	Beaumont	Shoalhaven	LGOV
Cambewarra Rainforest Reserve	Cambewarra Lookout Road	Cambewarra	Shoalhaven	LGOV
Candlemakers Cottage - colonial rendered brick cottage	176 Princes Highway	Milton	Shoalhaven	LGOV
Captain Cook Bicentennial Memorial	Bridge Road	Nowra	Shoalhaven	LGOV
Castellated Anzac Memorial Gateway & Sculpture	West Street	Nowra	Shoalhaven	LGOV
Cavan - Dairy Farm Complex	30 Cavan Road	Barrengarry	Shoalhaven	LGOV
CBC Bank	Queen Street	Berry	Shoalhaven	GAZ
Cement Rendered Colonial (Dome) Wells (2)	361 Greenwell Point Road	Worrigee	Shoalhaven	LGOV
Chatburn - Federation Weatherboard Residence	17 Myrtle Street	Milton	Shoalhaven	LGOV
Chinaman's Cottage - Victorian Weatherboard Cottage (Fmr Berry Estate Cottage)	655 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Cinnamomum camphora (tree)	83 Queen Street	Berry	Shoalhaven	LGOV
Citrus Grove - Victorian Residence and trees	126 Terara Road	Terara	Shoalhaven	LGOV
Claydon Park - former Dairy Farm Complex	75 Croobyar Road	Milton	Shoalhaven	LGOV
Clinton Park - Dairy Farm Complex	60 Clinton Park Road	Kangaroo Valley	Shoalhaven	LGOV
Cobbadah - dairy farm complex including garden, dry stone walls and survey marks	Ben Dooley Road	Berry Mountain	Shoalhaven	LGOV
Cockwhy Creek Bridge	Princes Highway	31.7 km south of Milton	Shoalhaven	SGOV
Colonial Brick Building (Fmr Estate Coachman's Qtrs)	Bolong Road	Coolangatta	Shoalhaven	LGOV
Colonial Brick Building (Fmr Estate Tinsmith's Shop)	Bolong Road	Coolangatta	Shoalhaven	LGOV
Colonial Brick Building (Fmr Estate Harness Room)	Bolong Road	Coolangatta	Shoalhaven	LGOV

Colonial Brick Building (Fmr. Estate Office)	Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial brick building (former Coolangatta Estate stables)	Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Brick Hall (Former Estate Community Hall)	Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Building (Fmr. Estate Blacksmiths Shop)	Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Cottage (Fmr. Estate Workers Cottage)	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Farm Complex including Berry Estate Cottage, Outbuildings and Fig trees	68 Smiths Lane	Numbaa	Shoalhaven LGOV
Colonial road - remnants (former Wool Road)	The Wool Road	Jerrawangala	Shoalhaven LGOV
Colonial style weatherboard farmhouse including outbuildings and trees	245 Croziers Road	Jaspers Brush	Shoalhaven LGOV
Colonial style weatherboard store and Norfolk Island Pines	1 Pulman Street	Berry	Shoalhaven LGOV
Colonial Timber Building (Fmr. Estate Billiard Room)	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Timber Cottage (Fmr. Estate Convict Quarters)	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Timber Slab Cottage	66 Wason Street	Milton	Shoalhaven LGOV
Colonial vertical timber slab cottage	94 Barfield Road	Cambewarra	Shoalhaven LGOV
Colonial weatherboard building and brick building (former Coolangatta Estate)	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Colonial Weatherboard Cottage	119 Bong Bong Road	Broughton Vale	Shoalhaven LGOV
Colonial weatherboard cottage (former Curate's Cottage)	3 Pulman Street	Berry	Shoalhaven LGOV
Colonial weatherboard cottage (former Greenwell Point schoolhouse)	91 Greenwell Point Road	Greenwell Point	Shoalhaven LGOV
Colonial weatherboard cottages and gardens (former Coolangatta Estate)	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Comberton Grange (former dairy farm complex)	Comberton Grange Road	Comberton	Shoalhaven LGOV
Concrete Tub Silo	251 Jindy Andy Lane	Numbaa	Shoalhaven LGOV
Condle Farm Archaeological Site	Koloona Drive	Watersleigh	Shoalhaven LGOV
Conjola - (former Mackenzie Estate manager's residence)	315 Greenwell Point Road	Worrigee	Shoalhaven LGOV
Conjola Cemetery	Princes Highway	Conjola	Shoalhaven LGOV
Conjola Timber Trestle Bridge	Murrays Road	Conjola	Shoalhaven LGOV
Constables Cottage - Victorian Georgian style weatherboard cottage and garden	185 Queen Street	Berry	Shoalhaven LGOV
Coolangatta Estate	Shoalhaven Heads Road	Coolangatta	Shoalhaven GAZ
Coolangatta Estate Gardens (remnants)	1335 Bolong Road	Coolangatta	Shoalhaven LGOV
Coolangatta Estate Group	Bolong Road	Coolangatta	Shoalhaven LGOV
Coolangatta Park - Victorian Federation filligree style residence and garden	1320 Bolong Road	Coolangatta	Shoalhaven LGOV
Coomanderry Park (former estate manager's residence)	100 Coolangatta Road	Coolangatta	Shoalhaven LGOV
Coomanderry Swamp Drainage Channel	Coolangatta Road and Shoalhaven Heads Road	Coolangatta	Shoalhaven LGOV
Corrugated iron building (former Wesleyan Church)	1 Brogers Creek Road	Woodhill	Shoalhaven LGOV
Corrugated iron community hall	75 Main Road	Cambewarra Village	Shoalhaven LGOV
Courthouse	Princes Highway	Milton	Shoalhaven GAZ
Courthouse (former)	Shoalhaven Road	Kangaroo Valley	Shoalhaven GAZ
Croobyar Creek Weir No 1	Croobyar Creek	Milton	Shoalhaven SGOV
Croobyar Creek Weir No 2	Croobyar Creek	Milton	Shoalhaven SGOV
Croobyar Creek Weir No 3	Croobyar Creek	Milton	Shoalhaven SGOV
Croobyar Creek Weir No 4	Croobyar Creek	Milton	Shoalhaven SGOV
Croobyar Creek Weir No 5	Croobyar Creek	Milton	Shoalhaven SGOV
Crookhaven Lighthouse Complex	Prince Edward Avenue	Culburra Beach	Shoalhaven LGOV
Cudgerie Federation weatherboard residence	108 East Street	Nowra	Shoalhaven LGOV
Dalton Park - Farmhouse and Wandandian Cricket Ground (former)	10 Windley Road	Wandandian	Shoalhaven LGOV
Danesbank - two storey Victorian stone farmhouse and garden	121 Evans Lane	Woodstock	Shoalhaven LGOV
David Berry Hospital Complex including Remnant Rainforest	85 Tannery Road	Berry	Shoalhaven LGOV
David Berry Memorial Column & Pedestal	Alexandra Street	Berry	Shoalhaven LGOV
David Berry Memorial Park	Alexandra Street	Berry	Shoalhaven LGOV
David Berry Memorial Park including Memorial column	Alexandra Street	Berry	Shoalhaven LGOV

Shoalhaven Shire Council	Address	City	Shoalhaven LGA	Category
Dispensary (Former)	133 Princes Highway	Milton	Shoalhaven	LGOV
Dolphin Reserve Rotunda and Figtree	2 Piscator Avenue	Curarong	Shoalhaven	LGOV
Donovans Cottage - Victorian weatherboard cottage and detached kitchen	42 Wason Street	Milton	Shoalhaven	LGOV
Dower House (former Coachman's House to Millbank)	27B Millbank Road	Terara	Shoalhaven	LGOV
Drawing Room Rocks	Brogers Creek Road	Broughton Vale	Shoalhaven	LGOV
Dungowan - Former Guest House	99 Naval Parade	Erowal Bay	Shoalhaven	LGOV
Early fibro cottage	5 Beecroft Parade	Curarong	Shoalhaven	LGOV
Edinglassie Lodge - Federation Weatherboard Farmhouse	75 Jindy Andy Lane	Numbaa	Shoalhaven	LGOV
Ellerslie - cottage and garden	1747 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Elston - Former Weatherboard Private Hospital	83 Plunkett Street	Nowra	Shoalhaven	LGOV
Erowal Farm including homestead (ruins), garden, trees and resort ruins	Walter Hood Parade	Worwong Heights	Shoalhaven	LGOV
Errol Bond Memorial	Coonawarra Drive	Cudmirrah	Shoalhaven	LGOV
Eucalyptus pilularis (Blackbutt Tree)	42 Kangaroo Valley Road	Berry	Shoalhaven	LGOV
Evison's Dairy Farm Complex	49 Hockays Lane	Cambewarra	Shoalhaven	LGOV
Eyre Bowrie - two storey Victorian Regency residence	17 Eyre Bowrie Drive	Milton	Shoalhaven	LGOV
Falls Creek Public School - Buildings B00A and B00E	26 Vidler Road	Falls Creek	Shoalhaven	SGOV
Farmhouse and Broughton Creek former grist mill (former Tindal's farm)	13 Pulman Street	Berry	Shoalhaven	LGOV
Federation baker's residence and garage (former)	178 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Brick and Asbestos Tile Residence	67 Bolong Road	Bomaderry	Shoalhaven	LGOV
Federation brick Catholic Church & Presbytery	Corks Lane	Milton	Shoalhaven	LGOV
Federation brick residence (former school residence) and trees	358 Woodstock Road	Woodstock	Shoalhaven	LGOV
Federation Fisherman's Cottage and garden	146 The Wool Road	St Georges Basin	Shoalhaven	LGOV
Federation Georgian Style Farmhouse	55 Fletchers Lane	Meroo Meadow	Shoalhaven	LGOV
Federation Georgian style residence (former post office)	77 Main Road	Cambewarra Village	Shoalhaven	LGOV
Federation Georgian style Worker's Cottage	9 Tanang Street	Bomaderry	Shoalhaven	LGOV
Federation gothic Catholic Church including presbytery, grounds and Hoop Pine	Corks Lane	Milton	Shoalhaven	LGOV
Federation Gothic style Rendered Brick Hall	5 Kinghorne Street	Nowra	Shoalhaven	LGOV
Federation period school building	26 Vidler Road	Falls Creek	Shoalhaven	LGOV
Federation police residence and lockup (former)	Kinghorne Street	Nowra	Shoalhaven	LGOV
Federation rendered masonry courthouse and police station	64 Princes Highway	Milton	Shoalhaven	LGOV
Federation Residence (demolished) & Well	102 Princes Highway	Milton	Shoalhaven	LGOV
Federation sandstone courthouse including police station and stables	175 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Weatherboard Community Hall	177 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Weatherboard Cottage	172 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Weatherboard Cottage	81 Queen Street	Berry	Shoalhaven	LGOV
Federation Weatherboard Cottage	54 Albert Street	Berry	Shoalhaven	LGOV
Federation Weatherboard Cottage	47 Prince Alfred Street	Berry	Shoalhaven	LGOV
Federation Weatherboard Cottage	50 Queen Street	Berry	Shoalhaven	LGOV
Federation Weatherboard Cottage	65 Victoria Street	Berry	Shoalhaven	LGOV
Federation weatherboard cottage	1705 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Weatherboard Cottage	124 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Weatherboard Cottage	120 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation Weatherboard Cottage	118 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation weatherboard cottage and garden	32 Prince Alfred Street	Berry	Shoalhaven	LGOV
Federation Weatherboard Cottage and Shop	116 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Federation weatherboard cottage and trees	31 Prince Alfred Street	Berry	Shoalhaven	LGOV
Federation weatherboard cottage and trees	71 Victoria Street	Berry	Shoalhaven	LGOV
Federation weatherboard cottage including brick stables and garden	10 Prince Alfred Street	Berry	Shoalhaven	LGOV

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Federation Weatherboard Farmhouse (McDonalds)	Princes Highway	Bewong	Shoalhaven	LGOV
Federation weatherboard farmhouse and outbuildings	37 Bailleul Lane (private)	Back Forest	Shoalhaven	LGOV
Federation weatherboard residence	145 Princes Highway	Milton	Shoalhaven	LGOV
Federation Weatherboard Residence	64 Church Street	Milton	Shoalhaven	LGOV
Federation Weatherboard Residence	89 Plunkett Street	Nowra	Shoalhaven	LGOV
Federation Weatherboard Residence	11-15 Moss Street	Nowra	Shoalhaven	LGOV
Federation Weatherboard Residence	26- 26A Worrige Street	Nowra	Shoalhaven	LGOV
Federation Weatherboard Residence	2 Junction Street	Nowra	Shoalhaven	LGOV
Federation Weatherboard Residence	12 - 14 Coomea Street	Bomaderry	Shoalhaven	LGOV
Federation Weatherboard Residence	49 Worrige Street	Nowra	Shoalhaven	LGOV
Federation Weatherboard Residence	10 Coomea Street	Bomaderry	Shoalhaven	LGOV
Federation weatherboard residence and garden	137 Princes Highway	Milton	Shoalhaven	LGOV
Federation weatherboard residence and trees	1 Junction Street	Nowra	Shoalhaven	LGOV
Federation Weatherboard Shop	131 Queen Street	Berry	Shoalhaven	LGOV
Fern Hill - (former Church of England Church)	890 Upper Kangaroo River Road	Upper Kangaroo River	Shoalhaven	LGOV
Ficus macrophylla (2) (Morton Bay Fig Tree)	15 Pulman Street	Berry	Shoalhaven	LGOV
Ficus macrophylla (Morton Bay Fig Tree)	Comerong Island Road	Numbaa	Shoalhaven	LGOV
Ficus obliqua (Small leaved fig tree)	Princes Highway	Milton	Shoalhaven	LGOV
Former Barrengarry School and schoolmaster's residence	2565 Moss Vale Road	Barrengarry	Shoalhaven	LGOV
Former Bellowongarah Wesleyan Church	869 Kangaroo Valley Road	Bellowongarah	Shoalhaven	LGOV
Former Berry Estate Bakery and Residence	23 Prince Alfred Street	Berry	Shoalhaven	LGOV
Former Berry Estate School, Residence and Gardens	1180 Bolong Road	Coolangatta	Shoalhaven	LGOV
Former Berry Estate Schoolmaster's Residence & Garden	1180 Bolong Road	Coolangatta	Shoalhaven	LGOV
Former Berry Estate Weatherboard School	1180 Bolong Road	Coolangatta	Shoalhaven	LGOV
Former Berry Municipal Chambers	Alexandra Street	Berry	Shoalhaven	LGOV
Former Bolong Public School and Relocated Bolong Union Church	8 Jennings Lane	Bolong	Shoalhaven	LGOV
Former Bomaderry Primary School and Trees	5 Birriley Street	Bomaderry	Shoalhaven	LGOV
Former CBC bank including fence and trees	122 Queen Street	Berry	Shoalhaven	LGOV
Former Coal Wharf Archaeological Site	Comerong Island Road	Comerong Island	Shoalhaven	LGOV
Former Coolangatta Estate harness room, blacksmith, tinsmith shops and residence	Bolong Road	Coolangatta	Shoalhaven	LGOV
Former Coolangatta Estate office and Coolangatta Estate community hall	Bolong Road	Coolangatta	Shoalhaven	LGOV
Former Federation Blacksmith's Shop	83 Queen Street	Berry	Shoalhaven	LGOV
Former Federation blacksmith's shop including Camphor Laurel tree	83 Queen Street	Berry	Shoalhaven	LGOV
Former Federation Brick Butcher's Shop	14 Alexandra Street	Berry	Shoalhaven	LGOV
Former Jaspers Brush School Complex and Gardens	4 O'Keefes Lane	Jaspers Brush	Shoalhaven	LGOV
Former Meroo Meadow School and schoolmaster's residence	C385 Princes Highway	Meroo Meadow	Shoalhaven	LGOV
Former Nowra Fire Station	55 Junction Street	Nowra	Shoalhaven	LGOV
Former Prefabricated Cast Iron Presbyterian Church	591 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Former Schoolmaster's Italianate style Brick Residence and Garden	Tannery Road	Cambewarra Village	Shoalhaven	LGOV
Former Silica Wharf and Tramway Remnants (Mollymook)	Mitchell Parade	Mollymook Beach	Shoalhaven	LGOV
Former Silica Wharf and Tramway Remnants (Narrawallee)	Matron Porter Drive	Narrawallee	Shoalhaven	LGOV
Former St Johns Victorian Gothic style Anglican Church	70 Plunkett Street	Nowra	Shoalhaven	LGOV
Former two storey Anglican rectory and garden	68 Princess Street	Berry	Shoalhaven	LGOV
Former Two Storey Presbyterian Manse and Garden	36 Victoria Street	Berry	Shoalhaven	LGOV
Former Victorian brick gatehouse to Mount Airlie including elm trees and orchard	32 Woodstock Road	Croobyar	Shoalhaven	LGOV
Former Victorian Congregational Manse and Victorian Revival Uniting Church	38 Croobyar Road	Milton	Shoalhaven	LGOV
Former Victorian Free Classical style estate office	110 Queen Street	Berry	Shoalhaven	LGOV
Former Victorian weatherboard residence	76 Berry Street	Nowra	Shoalhaven	LGOV

Former weatherboard school	Main Road	Cambewarra Village	Shoalhaven	LGOV
Former Yalwal gold mine, township site and cemetery	Yalwal Road	Yalwal	Shoalhaven	LGOV
Former Yatte Yattah Public School and schoolmaster's residence	8A Tierney Road	Yatte Yattah	Shoalhaven	LGOV
Friendly Inn - two storey Victorian masonry hotel	159 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Gardenia thunbergia (tree)	34 Station Road	Berry	Shoalhaven	LGOV
Garrad House	Princes Highway	Milton	Shoalhaven	SGOV
Garrad House - Federation Period Farmhouse and Well	106 Princes Highway	Milton	Shoalhaven	LGOV
Gate House	See David Berry Hospital Act No.53 1906	Waverton	Shoalhaven	SGOV
George Borrowdale's house - (former Berry Estate cottage)	Pyree Lane	Pyree	Shoalhaven	LGOV
Georgian style Weatherboard Cottage	43 Prince Alfred Street	Berry	Shoalhaven	LGOV
Glencor - Victorian Weatherboard Cottage	59 Plunkett Street	Nowra	Shoalhaven	LGOV
Glenvale - colonial vertical timber slab cottage and farm complex	A371 Princes Highway	Broughton	Shoalhaven	LGOV
Glenworth - Two Storey Residence and Grounds	466 Kangaroo Valley Road	Berry Mountain	Shoalhaven	LGOV
Good Dog Cemetery	Bangalee Road	Tapitallee	Shoalhaven	LGOV
Gothic Carpenter style relocated Church (former Terrell Wesleyan Church)	175 Jacobs Drive	Sussex Inlet	Shoalhaven	LGOV
Graham Family Cemetery	Lyrebird Drive	Nowra	Shoalhaven	LGOV
Graham Family Grave	Mayfield Road (east side, between 'Mayfield' and 'Mayfair')	Mayfield	Shoalhaven	LGOV
Graham Lodge (former Greenhills Estate Homestead) and grounds	10 Pleasant Way	Nowra	Shoalhaven	LGOV
Granite Obelisk - War Memorial	Princes Highway	Milton	Shoalhaven	LGOV
Grassy Gully Mine Site	Yalwal Road	Buanga	Shoalhaven	LGOV
Greenfields Beach Cottage Site and Pine Trees	Birriga Avenue	Vincentia	Shoalhaven	LGOV
Greenhills - Weatherboard and vertical slab timber farm complex	210 Woodburn Road	Morton	Shoalhaven	LGOV
Greenleaves - Federation Queen Anne style residence and grounds	59 Bolong Road	Bomaderry	Shoalhaven	LGOV
Greentree's - Holiday Cabins	158 Jacobs Drive	Sussex Inlet	Shoalhaven	LGOV
Greenwell Point Progress Hall	83 Greenwell Point Road	Greenwell Point	Shoalhaven	LGOV
Greenwell Point Public School - Building B00D	75 Greenwell Point Road	Greenwell Point	Shoalhaven	SGOV
Greenwell Point Union Church	Jervis Street	Greenwell Point	Shoalhaven	LGOV
Greenwell Point Wharf and Surrounds Archaeological Site	Greenwell Point Road	Greenwell Point	Shoalhaven	LGOV
Hampden Bridge		Kangaroo Valley	Shoalhaven	GAZ
Hampden Bridge - sandstone suspension bridge	Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Hampden Bridge, Kangaroo Valley	Main Road 261	Kangaroo Valley	Shoalhaven	SGOV
Hampden Villa		Unknown	Unknown	GAZ
Hampden Villa - Victorian weatherboard residence including stables and garden	110 Berry Street	Nowra	Shoalhaven	LGOV
Hampton Bridge Heritage Conservation Area	Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Hanging Rock Lookout	West Street	Nowra	Shoalhaven	LGOV
Harley Hill Cemetery	Beach Road	Berry	Shoalhaven	LGOV
Hazelmere - Victorian Georgian Masonry Residence	7-9 Moss Street	Nowra	Shoalhaven	LGOV
Higgins Creek Bridge	Road No. 1	95.9 km south of Nowra (21.72 km south of Milton)	Shoalhaven	SGOV
Hillcrest - two storey timber Federation residence	53 Junction Street	Nowra	Shoalhaven	LGOV
Hillside - Victorian Georgian residence and garden	156 Princes Highway	Milton	Shoalhaven	LGOV
Hilltop - Federation Weatherboard Residence	20 Quirk Street	Kangaroo Valley	Shoalhaven	LGOV
Hillview Private Cemetery	8B Tierney Road	Yatte Yattah	Shoalhaven	LGOV
HMAS Albatross - military defence complex and aviation museum	489A Albatross Road	Nowra Hill	Shoalhaven	LGOV
Houshta - (former Berry Estate Worker's Cottage)	93 Greenwell Point Road	Greenwell Point	Shoalhaven	LGOV
Huskisson Literary Institute (former)	19 Sydney Street	Huskisson	Shoalhaven	LGOV
Hyams Beach bushfire station	Rose Street	Hyams Beach	Shoalhaven	LGOV
Ilex cornuta (Chinese Holly Tree)	34 Station Road	Berry	Shoalhaven	LGOV
Illowra - Federation timber Berry Estate residence and	125 Brinawarr Street	Bomaderry	Shoalhaven	LGOV

garden				
Industrial building (former Yatte Yattah cheese factory)	E380 Princes Highway	Yatte Yattah	Shoalhaven	LGOV
Inter-war Carpenter Gothic style Hall	109 Princes Highway	Milton	Shoalhaven	LGOV
Inter War Roman Catholic Church Group	80 North Street	Berry	Shoalhaven	LGOV
Inter War Two Storey Brick Convent	80 North Street	Berry	Shoalhaven	LGOV
Inter War Weatherboard Californian Bungalow	31 Bridge Road	Nowra	Shoalhaven	LGOV
Inter War Weatherboard Cottage	59 Bridge Road	Nowra	Shoalhaven	LGOV
Inter-war Art Deco Commercial Building	80 Junction Street	Nowra	Shoalhaven	LGOV
Inter-war Art Deco style cinema and footpath	41 Berry Street	Nowra	Shoalhaven	LGOV
Inter-war Art Deco style shop	102 Queen Street	Berry	Shoalhaven	LGOV
Inter-war brick residence including doctor's surgery and garden	65 Princess Street	Berry	Shoalhaven	LGOV
Inter-war Californian bungalow	147 Princes Highway	Milton	Shoalhaven	LGOV
Inter-war Californian Bungalow	31 Worrige Street	Nowra	Shoalhaven	LGOV
Inter-war Californian style bungalow	60 Wason Street	Milton	Shoalhaven	LGOV
Inter-war Community Hall (former School of Arts)	356 Hawken Road	Tomerong	Shoalhaven	LGOV
Inter-war Federation style cottage	138 Princes Highway	Milton	Shoalhaven	LGOV
Inter-war Federation Style Residence	42 Worrige Street	Nowra	Shoalhaven	LGOV
Inter-war Federation style timber residence and grounds	148 Princes Highway	Milton	Shoalhaven	LGOV
Inter-war Federation style weatherboard cottage and fence	23 Albany Street	Berry	Shoalhaven	LGOV
Inter-war fibro cottage	14 Fishery Road	Curarong	Shoalhaven	LGOV
Inter-war Georgian style weatherboard cottage	23 Victoria Street	Berry	Shoalhaven	LGOV
Inter-war Gothic style Brick Presbyterian Church and Fence	83 Victoria Street	Berry	Shoalhaven	LGOV
Inter-war group of institutional brick and weatherboard buildings and trees	660 Coolangatta Road	Berry	Shoalhaven	LGOV
Inter-war holiday cottage and trees	7 Fegen Street	Huskisson	Shoalhaven	LGOV
Inter-war reinforced concrete building and storage dam	Filter Road	West Nowra	Shoalhaven	LGOV
Inter-war reinforced concrete butter factory	170 Woodstock Road	Woodstock	Shoalhaven	LGOV
Inter-war Rendered Masonry and Fibro Hall	69 Princes Highway	Milton	Shoalhaven	LGOV
Inter-war schoolmaster's residence	40 Victoria Street	Berry	Shoalhaven	LGOV
Inter-war Spanish mission style bungalow and garden	66 Queen Street	Berry	Shoalhaven	LGOV
Inter-war weatherboard and fibro cottage	54 Princess Street	Berry	Shoalhaven	LGOV
Inter-war Weatherboard Building and Timber Wharf	Wharf Road	Nowra	Shoalhaven	LGOV
Inter-war weatherboard Californian bungalow	52 Princess Street	Berry	Shoalhaven	LGOV
Inter-war Weatherboard Californian Bungalow	63 Bridge Road	Nowra	Shoalhaven	LGOV
Inter-war Weatherboard Californian Bungalow	47 Worrige Street	Nowra	Shoalhaven	LGOV
Inter-war weatherboard Californian bungalow	21 Coomea Street	Bomaderry	Shoalhaven	LGOV
Inter-war weatherboard cottage and trees	2 Moss Street	Nowra	Shoalhaven	LGOV
Inter-war weatherboard shop	114 -118 Queen Street	Berry	Shoalhaven	LGOV
Inter-war weekend cabin	57 Cyrus Street	Hyams Beach	Shoalhaven	LGOV
Inter-war weekend cabin	59 Cyrus Street	Hyams Beach	Shoalhaven	LGOV
Iolanthe - dairy farm complex	100 Jennings Lane	Bolong	Shoalhaven	LGOV
James Wilson Memorial Fountain	Prince Alfred Street	Berry	Shoalhaven	LGOV
Jerringa Aboriginal Community Complex	Park Row	Orient Point	Shoalhaven	LGOV
Jerringa Tribal Burial Ground	Park Row	Orient Point	Shoalhaven	LGOV
Jervis Bay Hotel (former)	75 Owen Street	Huskisson	Shoalhaven	LGOV
Jessie Blacket - Sandstone Memorial Drinking Trough	41 Tasman Road	St Georges Basin	Shoalhaven	LGOV
Jindy Andy (former Berry Estate Dairy)	739 Greenwell Point Road	Pyree	Shoalhaven	LGOV
Junction Street Heritage Conservation Streetscape	Junction Street	Nowra	Shoalhaven	LGOV
Kangaroo Valley General Cemetery	Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Kangaroo Valley Police Station and Official Residence	175 Main Road	Kangaroo Valley	Shoalhaven	SGOV
Kangaroo Valley Post Office	148 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV

Kangaroo Valley Public School - Building B00A	140 Moss Vale Road	Kangaroo Valley	Shoalhaven	SGOV
Kangaroo Valley Public School - Building B00D	140 Moss Vale Road	Kangaroo Valley	Shoalhaven	SGOV
Kangaroo Valley School and former schoolmaster's residence	140 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Kangaroo Valley Soldiers Memorial	Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Karinga - Inter-war Weatherboard Residence	85 Plunkett Street	Nowra	Shoalhaven	LGOV
Kemp's Boatshed (demolished)	River Road	Sussex Inlet	Shoalhaven	LGOV
Kendall Dale - dairy farm complex including homestead and garden	E379A Princes Highway	Yatte Yattah	Shoalhaven	LGOV
Kiah - Federation Weatherboard Cottage	25 Prince Alfred Street	Berry	Shoalhaven	LGOV
Kilsyth - Federation weatherboard residence	33 Bridge Road	Nowra	Shoalhaven	LGOV
King House - two storey Victorian Georgian style residence	48 Wason Street	Milton	Shoalhaven	LGOV
Kioloa - Federation weatherboard residence (former post office)	496 Murramarang Road	Kioloa	Shoalhaven	LGOV
Kioloa Sawmill and Wharf (former)	Off Murramarang Road	Kioloa	Shoalhaven	LGOV
Kirmington	Princes Highway (west of)	Milton	Shoalhaven	GAZ
Kirmington - dairy farm complex and Henry Kendall monolith	E379B Princes Highway	Yatte Yattah	Shoalhaven	LGOV
Lady Denman Ferry	11 Dent Street	Huskisson	Shoalhaven	LGOV
Lady Denman Heritage Complex	11 Dent Street	Huskisson	Shoalhaven	LGOV
Late Victorian Georgian Brick Residence	133 Princes Highway	Milton	Shoalhaven	LGOV
Late Victorian Weatherboard Cottage	31 Moss Street	Nowra	Shoalhaven	LGOV
Late Victorian Weatherboard Cottage	55 Bridge Road	Nowra	Shoalhaven	LGOV
Late Victorian Weatherboard Cottage	49 Bridge Road	Nowra	Shoalhaven	LGOV
Late Victorian Weatherboard Residence	29 Moss Street	Nowra	Shoalhaven	LGOV
Late Victorian Weatherboard Residence	21 Moss Street	Nowra	Shoalhaven	LGOV
Late Victorian Weatherboard Residence	73 Wason Street	Milton	Shoalhaven	LGOV
Late Victorian Weatherboard Residence	105 Osborne Street	Nowra	Shoalhaven	LGOV
Llanthony Lodge - two storey Victorian weatherboard residence	1 Kalinga Street	Cambewarra Village	Shoalhaven	LGOV
Loch Leven - dairy farm complex including outbuildings, trees and cisterns	300 Wilfords Lane	Milton	Shoalhaven	LGOV
Lone Grave of Robert Johnson	2 Beach Street	Huskisson	Shoalhaven	LGOV
Lone grave of Sarah Coulon	22 James Farmer Grove	Woollamia	Shoalhaven	LGOV
Lone Grave of Thomas Speechley	Forest Road	Comberton	Shoalhaven	LGOV
Longreach Farm - former dairy farm complex	501B Longreach Road	Longreach	Shoalhaven	LGOV
Lower Numbaa Barn (Berry Estate Slab Barn)	581 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Lynburn - timber Federation residence and garden	13 Mattes Way	Bomaderry	Shoalhaven	LGOV
Lynstowe - Colonial style weatherboard cottage and former grist mill	11 Pulman Street	Berry	Shoalhaven	LGOV
Mafeking Boer War Memorial	60-62 Junction Street	Nowra	Shoalhaven	LGOV
Main Building	See David Berry Hospital Act No.53 1906	Waverton	Shoalhaven	SGOV
Mananga - Berry Estate Manager's Farm Complex	A40 Princes Highway	Berry	Shoalhaven	LGOV
Mark Foys Workers Holiday Cottage	37 Beecroft Way	Curarong	Shoalhaven	LGOV
Mark Radium Park	Victoria Street	Berry	Shoalhaven	LGOV
Mascot - Slab Timber Cottage	56 North Street	Ulladulla	Shoalhaven	LGOV
Mechanics Institute and School of Arts	25 Berry Street	Nowra	Shoalhaven	LGOV
Melaleuca decora (Paper Barks-2)	51A Victoria Street	Berry	Shoalhaven	LGOV
Melrose - Victorian Georgian Weatherboard Residence	77 Plunkett Street	Nowra	Shoalhaven	LGOV
Melrose Farmhouse (former dairy farm complex)	150 Princes Highway	Milton	Shoalhaven	LGOV
Meroo Meadow Union Church	8 Boxsells Lane	Meroo Meadow	Shoalhaven	LGOV
Meroogal - Victorian Timber Residence including Outbuildings and Garden	35 West Street	Nowra	Shoalhaven	LGOV
Mervalperden - Dairy Farm Complex (former)	664 Greenwell Point Road	Pyree	Shoalhaven	LGOV
Mid-twentieth century residence including pool and garden	60-62 Queen Street	Berry	Shoalhaven	LGOV
Mid-Victorian timber residence incl. detached kitchen, wall and Red Cedar tree	93 Osborne Street	Nowra	Shoalhaven	LGOV

Ulladulla New Levee Site				
Millards Cottage - two storey Victorian rendered Masonry Building	81 Princes Highway	Ulladulla	Shoalhaven	LGOV
Millbank Cottage - Outbuildings and trees	31 Millbank Road	Terara	Shoalhaven	LGOV
Milton Anglican Church Group including church, hall and chinese elm	109 Princes Highway	Milton	Shoalhaven	LGOV
Milton Church of England Cemetery	12 Croobyar Road	Milton	Shoalhaven	LGOV
Milton Congregational Cemetery	Woodstock Road	Milton	Shoalhaven	LGOV
Milton Courthouse	Princes Highway	Milton	Shoalhaven	SGOV
Milton Public School - Buildings B00A and B00Q	Thomas Street	Milton	Shoalhaven	SGOV
Milton Vict. Rendered Masonry Public School	11 Thomas Street	Milton	Shoalhaven	LGOV
Milton Vict. Rendered Stone Schoolmaster's Cottage	11 Thomas Street	Milton	Shoalhaven	LGOV
Mimosa Farm - Dairy Farm Complex	40 Little Forest Road	Little Forest	Shoalhaven	LGOV
Minto House	102 Princes Highway	Milton	Shoalhaven	SGOV
Mongghan's House - colonial Georgian brick cottage	Mayfield Road	Mayfield	Shoalhaven	LGOV
Mongghan's Vict. Memorial Cast Iron Fountain	West Street	Nowra	Shoalhaven	LGOV
Moongate to former Culburra Guesthouse Site	196 Penguins Head Road	Culburra Beach	Shoalhaven	LGOV
Moss - cottage (former Moss Central Hotel)	1 Ferry Lane	Nowra	Shoalhaven	LGOV
Mount Airlie - two storey Victorian Italianate estate residence and trees	34A Woodstock Road	Woodstock	Shoalhaven	LGOV
Mudges Corner - Federation Weatherboard Residence	79 Wason Street	Milton	Shoalhaven	LGOV
Murramarang - Former Colonial Estate House	226 Murramarang Road	Bawley Point	Shoalhaven	LGOV
Murray Family Cemetery	40 Murrays Road	Conjola	Shoalhaven	LGOV
Myambah - Federation weatherboard bungalow and garden	134 Plunkett Street	Nowra	Shoalhaven	LGOV
Myrumbene - Victorian Italianate residence and garden	22 Jervis Street	Nowra	Shoalhaven	LGOV
Narrawilly - dairy farm complex including garden, rainforest and convict road	E120A Princes Highway	Milton	Shoalhaven	LGOV
Nowra Bridge over the Shoalhaven River	Princes Highway	Nowra	Shoalhaven	SGOV
Nowra CBD Fringe West Heritage Conservation Area		Nowra	Shoalhaven	LGOV
Nowra Courthouse	Plunkett Street	Nowra	Shoalhaven	SGOV
Nowra Courthouse	Kinghorn Street	Nowra	Shoalhaven	LGOV
Nowra General Cemetery	Kalander Street	Nowra	Shoalhaven	LGOV
Nowra Park - early Victorian masonry residence and garden	124 Wallace Street	Nowra	Shoalhaven	LGOV
Nowra Post Office (former)	72 Junction Street	Nowra	Shoalhaven	LGOV
Nowra Public School	74 Plunkett Street	Nowra	Shoalhaven	SGOV
Nowra Public School - Building B00A and Grounds	74 Plunkett Street	Nowra	Shoalhaven	SGOV
Nowra Public School - Building B00H	74 Plunkett Street	Nowra	Shoalhaven	SGOV
Nowra Showground & Sportsground Complex	West Street	Nowra	Shoalhaven	LGOV
Nowra Showground Federation Brick Pavilion	27 West Street	Nowra	Shoalhaven	LGOV
Nowra Uniting Church (former Methodist Church)	54 Osborne Street	Nowra	Shoalhaven	LGOV
Numbaa Catholic Presbytery (former)	601 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Numbaa Cemetery (Former)	Comerong Island Road	Numbaa	Shoalhaven	LGOV
Numbaa Council Chambers (former) and Well	Comerong Island Road	Numbaa	Shoalhaven	LGOV
Numbaa School (former)	770 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Numbaa Schoolmaster's Residence (former)	766 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Oakleigh - (former gatehouse to Barrengarry House)	89 Upper Kangaroo River Road	Barrengarry	Shoalhaven	LGOV
Old Croobyar farm and tree-lined access (former dairy farm complex)	46 Ringland Lane, Croobyar Creek	Croobyar	Shoalhaven	LGOV
Old Nowra Road Bridge - across Shoalhaven River	Princes Highway	Nowra	Shoalhaven	GAZ
Old Ulladulla Cemetery (former)	Princes Highway	Ulladulla	Shoalhaven	LGOV
P. Walsh & Sons - two storey Victorian commercial building	90 Junction Street	Nowra	Shoalhaven	LGOV
Pacific House (former), including sandstone monument and tree	58-60 Cyrus Street	Hyams Beach	Shoalhaven	LGOV
Pair of Victorian style Commercial Buildings & Tree	97 Princes Highway	Milton	Shoalhaven	LGOV
Panvil - Former Federation weatherboard shop	21 Prince Alfred Street	Berry	Shoalhaven	LGOV

Parma Farm	269 and 383E Parma Road	Parma	Shoalhaven	LGOV
Pebbly Beach Sawmill Complex, including Sawmill remnants, Town and school site	Pebbly Beach Road	Pebbly Beach	Shoalhaven	LGOV
Penguin Head Geological Site	Penguins Head Road	Culburra Beach	Shoalhaven	LGOV
Pigeon House Mountain Lookout including fire trail and longfella pass	Yadboro Road	Yadboro	Shoalhaven	LGOV
Pine Cottage - Victorian Weatherboard Cottage	61 Plunkett Street	Nowra	Shoalhaven	LGOV
Pine View - Federation farmhouse complex and trees	65 Wilfords Lane	Milton	Shoalhaven	LGOV
Pinkawilnie - (former Wattamolla School House)	539 Wattamolla Road	Wattamolla	Shoalhaven	LGOV
Pioneer Farm - historic village including slab cottage	2029 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Plantation Point Rock Platform	Plantation Point Parade	Vincentia	Shoalhaven	LGOV
Plunkett Street Conservation Area	Plunkett Street	Nowra	Shoalhaven	GAZ
Plunkett Street Heritage Conservation Area	Plunkett Street	Nowra	Shoalhaven	LGOV
Point Perpendicular Lighthouse Group	Lighthouse Road	Beecroft Peninsula	Shoalhaven	LGOV
Police sergeant's residence and grounds	84 Plunkett Street	Nowra	Shoalhaven	LGOV
Pomona - Dairy Farm Complex	C360 Princes Highway	Meroo Meadow	Shoalhaven	LGOV
Populus nigra italica (Lombardy Poplars-23)	Tannery Road	Berry	Shoalhaven	LGOV
Populus nigra italica (Lombardy Poplars-9)	Woodhill Mountain Road	Berry	Shoalhaven	LGOV
Post-war fibre cement Community Hall / Sussex Inlet Picture Theatre	173 Jacobs Drive	Sussex Inlet	Shoalhaven	LGOV
Post-war Pseudo Stone Burrill Lake Community Hall	Princes Highway	Burrill Lake	Shoalhaven	LGOV
Prairievale - (former Berry Estate Manager's Residence)	835 Comerong Island Road	Numbaa	Shoalhaven	LGOV
Pressed metal clad industrial building (former Barnes Garage)	1 Berry Street	Nowra	Shoalhaven	LGOV
Priaux Villa - late Victorian weatherboard residence	69 Wason Street	Milton	Shoalhaven	LGOV
Public School		Kangaroo Valley	Shoalhaven	GAZ
Pulman Street Heritage Conservation Area	Pulman Street	Berry	Shoalhaven	LGOV
Pulman's Weatherboard Farmhouse	30 Pulman Street	Berry	Shoalhaven	LGOV
Pyree Literary Institute	880 Greenwell Point Road (corner of Pyree Lane)	Pyree	Shoalhaven	LGOV
Pyree Public Schoolmaster's Residence (former)	890 Greenwell Point Road	Pyree	Shoalhaven	LGOV
Quercus robur (English Oak trees-2) on driveway entrance	E379A Princes Highway	Yatte Yattah	Shoalhaven	LGOV
Quercus virginiana (American Live Oak Tree)	Princess Street	Berry	Shoalhaven	LGOV
Railwaymen's Barracks	16 Meroo Street	Bomaderry	Shoalhaven	LGOV
Red Head Timber Mill and Wharf Archaeological Site	1 Waratah Street	Bendalong	Shoalhaven	LGOV
Relocated Bawley Point Mill Worker's Cottage	10 Johnston Street	Bawley Point	Shoalhaven	LGOV
Relocated Colonial weatherboard school (former Broughton Creek School)	79 Victoria Street	Berry	Shoalhaven	LGOV
Relocated Federation weatherboard cottage	65 Queen Street	Berry	Shoalhaven	LGOV
Relocated Victorian Georgian Timber Slab Worker's Cottage	275 Green Street	Ulladulla	Shoalhaven	LGOV
Relocated Victorian rendered masonry lighthouse keeper's cottage	122 Princes Highway	Milton	Shoalhaven	LGOV
Relocated Victorian weatherboard school (former Beaumont School)	138 Moss Vale Road	Kangaroo Valley	Shoalhaven	LGOV
Relocated Weatherboard Church (former Berry Estate Library)	126 Scott Street	Shoalhaven Heads	Shoalhaven	LGOV
Relocated Weatherboard Schoolhouse (former Hillcrest School)	Upper Kangaroo River Road	Upper Kangaroo River	Shoalhaven	LGOV
Remnant old growth Eucalypts	George Street	Berry	Shoalhaven	LGOV
Remnant rainforest	Church Street	Milton	Shoalhaven	LGOV
Rendered masonry commercial store including residence and trees	61 Princes Highway	Milton	Shoalhaven	LGOV
Rhodeside - Two storey Federation residence and garden	89 Queen Street	Berry	Shoalhaven	LGOV
Riverview - Victorian Georgian Style Farm Complex	299 Wilfords Lane	Milton	Shoalhaven	LGOV
Rixons - (former coal mine)	Clyde River	Endrick	Shoalhaven	LGOV
Rodway's Cottage - Inter-war Federation Style Residence and Garden	86 Bridge Road	Nowra	Shoalhaven	LGOV
Roman Catholic Church and Cemetery (former)	Princes Highway	Yatte Yattah	Shoalhaven	LGOV
Rose Cottage (former Pooley's Store)	157 South Street	Terara	Shoalhaven	LGOV
Rocky - Federation weatherboard cottage and garden	21 Albany Street	Berry	Shoalhaven	LGOV

Rosedale - Victorian Georgian Style Cottage	62 Millbank Road	Terara	Shoalhaven LGOV
Rosedale - Victorian farmhouse and outbuildings	2240 Moss Vale Road	Barrengarry	Shoalhaven LGOV
Roseville - Federation weatherboard residence and fig tree	49-51 Journal Street	Nowra	Shoalhaven LGOV
Roslyn Court - inter-war Art Deco style rendered shops and offices	21 Kinghorne Street	Nowra	Shoalhaven LGOV
Rubble sandstone memorial (wreck of the Walter Hood)	Bendalong Road, Monument Beach	Mondayong	Shoalhaven LGOV
Rubblestone school (former Worrigee schoolhouse)	20 Booligal Road	Worrigee	Shoalhaven LGOV
Salt Pans	169 Smiths Lane	Numbaa	Shoalhaven LGOV
Sandridge General Cemetery	45 Ocean Street	Mollymook	Shoalhaven LGOV
Sandstone landscape monument (Batt's Folly)	Intersection of Bridge Road and North Street	Nowra	Shoalhaven LGOV
Sandstone War Memorial	Alexandra Street	Berry	Shoalhaven LGOV
Sandstone Weir - Millards Creek	St Vincent Street	Ulladulla	Shoalhaven LGOV
Scanzi - Colonial Timber Farmhouse and Outbuildings	770 Mt Scanzi Road	Kangaroo Valley	Shoalhaven LGOV
SHOALHAVEN DISTRICT MEMORIAL HOSPITAL	Shoalhaven Street	Nowra	Shoalhaven SGOV
Shoalhaven River Bridge - Victorian wrought iron bridge	Princes Highway	Nowra	Shoalhaven LGOV
Single storey Federation period gabled school house	75 Greenwell Point Road	Greenwell Point	Shoalhaven LGOV
Sir John Hay Memorial Fountain	Alexandra Street	Berry	Shoalhaven LGOV
Solway House - late Victorian Brick Residence and Store	10 West Berry Street	Terara	Shoalhaven LGOV
Somerset House - Federation weatherboard farmhouse and trees	117 Pyree Lane	Pyree	Shoalhaven LGOV
South Huskisson Wharf Sandstone Remnants	Elizabeth Drive	Vincentia	Shoalhaven LGOV
Springfield - ornate late Victorian weatherboard farmhouse	41 Kanuka Drive	Ulladulla	Shoalhaven LGOV
St Andrew's Presbyterian Church	5 Kinghorne Street	Nowra	Shoalhaven LGOV
St Andrew's Presbyterian Church and Federation Rendered Brick Hall	5 Kinghorne Street	Nowra	Shoalhaven LGOV
St Joseph's Catholic brick church and hermitage	130 Moss Vale Road	Kangaroo Valley	Shoalhaven LGOV
St Luke's Anglican Church including memorial gates and trees	68A Princess Street	Berry	Shoalhaven LGOV
St Lukes Anglican Church trees - Araucaria heterophylla (Norfolk Island Pine)	68A Princess Street	Berry	Shoalhaven LGOV
St Michael's Catholic Church including Presbytery and grounds	20 North Street	Nowra	Shoalhaven LGOV
St Michael's Roman Catholic Two Storey Victorian Presbytery	20 North Street	Nowra	Shoalhaven LGOV
St. Michael's Catholic Church	20 North Street	Nowra	Shoalhaven LGOV
St. Michael's Roman Catholic Cemetery	20 North Street	Nowra	Shoalhaven LGOV
Sunny Vale - Dairy Farm Complex	439 Croobyar Road	Croobyar	Shoalhaven LGOV
Syncarpia glomulifera (Turpentine Tree)	10 King Street	Berry	Shoalhaven LGOV
Tapalla Point geological rock platform	Beach Street	Huskisson	Shoalhaven LGOV
Tapalla Point Rock Platforms		Huskisson	Shoalhaven GAZ
Tapitallee Creek Weir	Tapitallee Creek	Nowra	Shoalhaven SGOV
Terara Heritage Conservation Area	South Street, Fox Street, Forsyth Street, Southern Road, Bryant Street, West Berry Street	Terara	Shoalhaven LGOV
Terara House including Chapel, Grounds and Tree-lined drive	77 Millbank Road	Terara	Shoalhaven LGOV
Terara Lodge (former Wesleyan Parsonage)	6 Holme Street	Terara	Shoalhaven LGOV
Terara Primary School & attached Residence	20 Millbank Road	Terara	Shoalhaven LGOV
Terara Public School - Buildings B00A, B00C and B00E, Grounds and Significant Trees	20 Millbank Road	Terara	Shoalhaven SGOV
Terara School Grounds and Trees	20 Millbank Road	Terara	Shoalhaven LGOV
The Avenue - Casuarina Trees	Greenwell Point Road	Pyree	Shoalhaven LGOV
The Bridge Hotel - Two Storey Victorian Masonry Hotel	87 Bridge Road	Nowra	Shoalhaven LGOV
The Grange - Former Boarding House and St Georges Basin Post Office	23 Deane Street	St Georges Basin	Shoalhaven LGOV
The Green Cabins (inter-war holiday cabins)	53 Cyrus Street	Hyams Beach	Shoalhaven LGOV
The Marlin - early Post-war American Colonial Hotel	108-112 Princes Highway	Ulladulla	Shoalhaven LGOV
The Old House - Weatherboard Residence and Well	3-7 Fox Street	Terara	Shoalhaven LGOV
The Peoples Emporium - two storey Victorian shop and	26 Berry Street	Nowra	Shoalhaven LGOV

residence				
The Pines - late Victorian weatherboard residence and trees	76 East Street	Nowra	Shoalhaven	LGOV
The Settlement including Frederick Halls, H.C. Blackburn and Sons and trees	93-97 Princes Highway	Milton	Shoalhaven	LGOV
The Sheaffe Family Cemetery	Pointer Road	Yatte Yattah	Shoalhaven	LGOV
The Springs - Holiday Cabins	1A Yarroma Avenue	Swanhaven	Shoalhaven	LGOV
The Star Hotel - two storey rendered masonry building	82 Princes Highway	Milton	Shoalhaven	LGOV
The White House - two storey timber inter-war guesthouse	30 Junction Street	Nowra	Shoalhaven	LGOV
Thistlebank - Dairy Farm Complex	85 Ryans Lane	Pyree	Shoalhaven	LGOV
Tilba Tilba - Victorian Georgian style schoolhouse (former Burrill Lake School)	270 Wilfords Lane	Milton	Shoalhaven	LGOV
Timber cottage group	1295 Brooman Road	Brooman	Shoalhaven	LGOV
Timber Vertical Slab Worker's Cottage	119 Terara Road	Terara	Shoalhaven	LGOV
Times Past - (former Federation weatherboard farmhouse)	51 Princes Highway	Milton	Shoalhaven	LGOV
Tim's Gully Mine	Touga Road	Touga	Shoalhaven	LGOV
Toilet Former Victorian Masonry Entrance Gate	West Street	Nowra	Shoalhaven	LGOV
Tolwong Copper Mine (remnants)	Touga Road	Tolwong	Shoalhaven	LGOV
Tomerong Carpenter style Union Church and Hall	363 Hawken Road	Tomerong	Shoalhaven	LGOV
Tomerong Cemetery	331 Hawken Road	Tomerong	Shoalhaven	LGOV
Tomerong Public School - Building B00A	359 Hawken Road	Tomerong	Shoalhaven	SGOV
Toona australis (Australian Red Cedar)	11 Station Road	Berry	Shoalhaven	LGOV
Town Hall		Milton	Shoalhaven	GAZ
Trehearne Holiday Resort Cabin	37 Carroll Avenue	Lake Conjola	Shoalhaven	LGOV
Trelawney - Victorian Georgian weatherboard residence	69 Jervis Street	Nowra	Shoalhaven	LGOV
Two Storey Federation Timber Convent	22 Junction Street (Corner of Shoalhaven Street)	Nowra	Shoalhaven	LGOV
Two storey Mid-Victorian Weatherboard Residence	95 Osborne Street	Nowra	Shoalhaven	LGOV
Two Storey Rendered Masonry Post Office	66 Princes Highway	Milton	Shoalhaven	LGOV
Two Storey Victorian Bakery and Residence	92 Princes Highway	Milton	Shoalhaven	LGOV
Two storey Victorian commercial building	76 Junction Street	Nowra	Shoalhaven	LGOV
Two storey Victorian former manse and graveyard	1 Thomas Street	Milton	Shoalhaven	LGOV
Two Storey Victorian Gothic style Presbyterian Manse	3 Kinghorne Street	Nowra	Shoalhaven	LGOV
Two Storey Victorian Hotel & Detached Kitchen	120 Queen Street	Berry	Shoalhaven	LGOV
Two storey victorian hotel and detached kitchen including Lilly Pillies	120 Queen Street	Berry	Shoalhaven	LGOV
Two Storey Victorian Italianate style Shop	105 Queen Street	Berry	Shoalhaven	LGOV
Two Storey Victorian Masonry Terrace House	1 Moss Street	Nowra	Shoalhaven	LGOV
Two Storey Victorian Rendered Brick Shop	101 Queen Street	Berry	Shoalhaven	LGOV
Two Storey Victorian Rendered Masonry Store	197 Princes Highway	Milton	Shoalhaven	LGOV
Two storey Victorian shop and residence (former Armstrong's Saddlery)	83 North Street	Nowra	Shoalhaven	LGOV
Two Storey Victorian Weatherboard Cottage	97 Princes Highway (inside Settlement Courtyard)	Milton	Shoalhaven	LGOV
Ulladulla Harbour including Old pier and stone pier, Steps and Walls	Wason Street	Ulladulla	Shoalhaven	LGOV
Ulladulla Public School - Building B00A	241 Green Street	Ulladulla	Shoalhaven	SGOV
Ulladulla Seawater Pool	50 Wason Street	Ulladulla	Shoalhaven	LGOV
Ulmus parvifolia (Chinese Elm)	109 Princes Highway	Milton	Shoalhaven	LGOV
Upper Kangaroo River Community Hall	1009 Upper Kangaroo River Road	Upper Kangaroo River	Shoalhaven	LGOV
Upper Numbaa Barn (former Berry Estate Grain Mill)	719 Greenwell Point Road	Pyree	Shoalhaven	LGOV
Yuna - late Victorian weatherboard cottage and garden	35 Bridge Road	Nowra	Shoalhaven	LGOV
Vertical Timber-lined Drydock	Orsova Parade	Orient Point	Shoalhaven	LGOV
Vict. Gothic Revival Rubblestone Uniting Church	38 Croobyar Road	Milton	Shoalhaven	LGOV
Victorian Anglican Church & Memorial Gates	68A Princess Street	Berry	Shoalhaven	LGOV
Victorian Brick Anglican Rectory (Former)	66 Plunkett Street	Nowra	Shoalhaven	LGOV
Victorian Brick Residence	45 Bridge Road	Nowra	Shoalhaven	LGOV

Victorian Brick Residence (former Ulladulla Post Office)	23 Wason Street	Ulladulla	Shoalhaven LGOV
Victorian carpenter gothic style hall	77 Albert Street	Berry	Shoalhaven LGOV
Victorian Classical Academic style court house including Cinnamomum camphora	58 Victoria Street	Berry	Shoalhaven LGOV
Victorian Classical style Rendered Masonry Town Hall	71 Princes Highway	Milton	Shoalhaven LGOV
Victorian Commercial Bank Stables (former)	56 Kinghorne Street	Nowra	Shoalhaven LGOV
Victorian Free Classical style Post Office	137 Queen Street	Berry	Shoalhaven LGOV
Victorian Georgian Brick Fmr Congregational Manse	38 Croobyar Road	Milton	Shoalhaven LGOV
Victorian Georgian Rendered Masonry Residence	97 Osborne Street	Nowra	Shoalhaven LGOV
Victorian Georgian Rendered Masonry Residence	91 Osborne Street	Nowra	Shoalhaven LGOV
Victorian Georgian Schoolhouse (former Pyree Public School) and Coral trees	888 Greenwell Point Road	Pyree	Shoalhaven LGOV
Victorian Georgian style bank (former ANZ Bank)	158 Moss Vale Road	Kangaroo Valley	Shoalhaven LGOV
Victorian Georgian style Cottage & Garden	53 Prince Alfred Street	Berry	Shoalhaven LGOV
Victorian Georgian style Farmhouse	1220 Bolong Road	Coolangatta	Shoalhaven LGOV
Victorian Georgian style Farmhouse	218 Bundewallah Road	Bundewallah	Shoalhaven LGOV
Victorian Georgian style farmhouse and trees	1165 Bolong Road	Coolangatta	Shoalhaven LGOV
Victorian Georgian style Police Residence and Lockup	56 Victoria Street	Berry	Shoalhaven LGOV
Victorian Georgian Style Railway Gatekeeper's Cottage	66 Prince Alfred Street	Berry	Shoalhaven LGOV
Victorian Georgian Style Residence and Bakehouse	67 Princes Highway	Milton	Shoalhaven LGOV
Victorian Georgian style Sandstone School and Schoolmaster's Residence	241 Green Street	Ulladulla	Shoalhaven LGOV
Victorian Georgian Style Stationmasters Cottage	34 Station Road	Berry	Shoalhaven LGOV
Victorian Georgian Style Timber Residence	109 Osborne street	Nowra	Shoalhaven LGOV
Victorian Georgian Style Timber Slab Cottage	19 Ferry Lane	Nowra	Shoalhaven LGOV
Victorian Georgian Style Weatherboard Cottage	19 Albert Street	Berry	Shoalhaven LGOV
Victorian Georgian Style Weatherboard Residence	78 Queen Street	Berry	Shoalhaven LGOV
Victorian Georgian weatherboard cottage	40 Hawke Street	Huskisson	Shoalhaven LGOV
Victorian Georgian Weatherboard Residence	57 Worrigeer Street	Nowra	Shoalhaven LGOV
Victorian Georgian Worker's Cottage	47 Church Street	Milton	Shoalhaven LGOV
Victorian Gothic Revival Style Church	109 Princes Highway	Milton	Shoalhaven LGOV
Victorian Gothic style church and graveyard (former Methodist Church)	71 Croobyar Road	Milton	Shoalhaven LGOV
Victorian Italianate style bank building (former CBC Bank)	107 Princes Highway	Milton	Shoalhaven LGOV
Victorian rendered brick residence (former schoolmaster's residence)	82 Plunkett Street	Nowra	Shoalhaven LGOV
Victorian Rendered Brick School and Grounds	74 Plunkett Street	Nowra	Shoalhaven LGOV
Victorian rendered masonry school and schoolmasters cottage	Thomas Street	Milton	Shoalhaven LGOV
Victorian School and Residence including Terara School grounds and trees	20 Millbank Road	Terara	Shoalhaven LGOV
Victorian school and trees	1 Clarence Street	Berry	Shoalhaven LGOV
Victorian Schoolmaster's Residence and Grounds	355-359 Hawken Road	Tomerong	Shoalhaven LGOV
Victorian Weatherboard Corner Store	61 Wason Street	Milton	Shoalhaven LGOV
Victorian Weatherboard Farmhouse	235A Back Forest Road	Back Forest	Shoalhaven LGOV
Victorian Weatherboard Farmhouse and trees	545 Wattamolla Road	Wattamolla	Shoalhaven LGOV
Victorian weatherboard hall (former Salvation Army hall)	141 Princes Highway	Milton	Shoalhaven LGOV
Victorian weatherboard residence	8 Park Street	Huskisson	Shoalhaven LGOV
Victorian Weatherboard Residence	192 Kinghorne Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	75 Plunkett Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	59 Worrigeer Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	63 Worrigeer Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	54 Worrigeer Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	56 Worrigeer Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	58 Worrigeer Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Residence	87 Conmee Street	Bomaderry	Shoalhaven LGOV

Victorian Weatherboard Residence	6 Tarawara Street	Bomaderry	Shoalhaven LGOV
Victorian Weatherboard Residence	8 Tarawara Street	Bomaderry	Shoalhaven LGOV
Victorian weatherboard residence and garden	45 Church Street	Milton	Shoalhaven LGOV
Victorian weatherboard residence and shop	94 Princes Highway	Milton	Shoalhaven LGOV
Victorian Weatherboard Shop and Residence	170 Moss Vale Road	Kangaroo Valley	Shoalhaven LGOV
Victorian weatherboard store (former iron store)	3 Moss Street	Nowra	Shoalhaven LGOV
Victorian Weatherboard Worker's Cottage	70 Wason Street	Milton	Shoalhaven LGOV
Wandandian Creek Bridge	Princes Highway	31.5 km south of Nowra	Shoalhaven SGOV
Wandandian Post Office (former) and Residence	D2625 Princes Highway	Wandandian	Shoalhaven LGOV
War Memorial Tree (Lophostemon confertus)	Corner of Jindy Andy Lane and Comerong Island Road	Numbaa	Shoalhaven LGOV
War Memorial Tree triangle (Lophostemon confertus)	Pyree Lane	Pyree	Shoalhaven LGOV
Warden Family Cemetery	Croobyar Road	Croobyar	Shoalhaven LGOV
Warden Head Geological Site	Rennies Beach Close	Ulladulla	Shoalhaven LGOV
Warden Head Lighthouse	Deering Street	Ulladulla	Shoalhaven LGOV
Weatherboard and fibro boat builder's cottage	13 Field Street	Huskisson	Shoalhaven LGOV
Weatherboard and fibro holiday cottage	759 Woollamia Road	Woollamia	Shoalhaven LGOV
Weatherboard Bakery (former)	174-176 Moss Vale Road	Kangaroo Valley	Shoalhaven LGOV
Weatherboard Corner Shop	71 Plunkett Street Nowra	Nowra	Shoalhaven LGOV
Weatherboard Cottage (formerly Mrs Pallett's Residence)	77 Meroo Street	Bomaderry	Shoalhaven LGOV
Weatherboard gothic carpenter style Union Church	80 Main Road	Cambewarra Village	Shoalhaven LGOV
Weatherboard holiday cottage and outbuildings	13 Catherine Street	Myola	Shoalhaven LGOV
Weir Family Graves	Bangalee Scout Camp Road	Bangalee	Shoalhaven LGOV
Wernick Cottage - Georgian style weatherboard cottage	102 Plunkett Street	Nowra	Shoalhaven LGOV
Wesley Centre (former Wesleyan Parsonage)	54 Osborne Street	Nowra	Shoalhaven LGOV
Whitaker's Island View Resort Cabins (former)	2 Aney Street	Lake Conjola	Shoalhaven LGOV
Wilson's - Former Colonial style Weatherboard Store	1 Pulman Street	Berry	Shoalhaven LGOV
Windsor Drive Park (Eucalypts trees)	Windsor Drive	Berry	Shoalhaven LGOV
Wogamia - two storey colonial sandstone homestead and outbuildings	170 Wogamia Road	Longreach	Shoalhaven LGOV
Woodhill Cemetery	Wattamolla Road	Woodhill	Shoalhaven LGOV
Woodlands - Dairy Farm Complex	98 Little Forest Road	Little Forest	Shoalhaven LGOV
Woodlands - weatherboard and iron farmhouse	24 Evans Lane	Woodstock	Shoalhaven LGOV
Woodlawn - Federation Weatherboard Farmhouse	133 Woodstock Road	Woodstock	Shoalhaven LGOV
Woodlawn - Victorian Weatherboard Cottage and trees	124 Terara Road	Terara	Shoalhaven LGOV
Woodside Park - dairy farm complex and gatehouse	94A Tannery Road	Berry	Shoalhaven LGOV
Woppindally - Dairy Farm Complex	E280 Princes Highway	Yatte Yattah	Shoalhaven LGOV
World War II Flying Boat Base	2 Island Point Road	St Georges Basin	Shoalhaven LGOV
Worrigee Cemetery	Greenwell Point Road	Worrigee	Shoalhaven LGOV
Wreck of the Merimbula	Beecroft Parade	Beecroft Peninsula	Shoalhaven LGOV
Wynella - Victorian weatherboard residence	6 Gordon Street	Milton	Shoalhaven LGOV
Yarrowooma - Dairy Farm Complex including Red Cedar Slab Selector's Cottage	679 Upper Kangaroo River Road	Upper Kangaroo River	Shoalhaven LGOV
Yatte Yattah Nature Reserve and 2 Waterfalls	67B Skye Farm Lane and Princes Highway	Yatte Yattah	Shoalhaven LGOV

There was a total of 682 records matching your search criteria.

Key:

LGA = Local Government Area

GAZ = NSW Government Gazette (statutory listings prior to 1997), HGA = Heritage Grant Application, HS = Heritage Study, LGOV = Local Government, SGOV = State Government Agency.

Note: While Heritage NSW seeks to keep the Inventory up to date, it is reliant on State agencies and local councils to provide their data. Always check with the relevant State agency or local council for the most up-to-date information.

[Home](#) [Public registers](#) [Contaminated land record of notices](#)

Search results

Your search for: LGA: SHOALHAVEN CITY COUNCIL

Matched 12 notices
relating to 3 sites.

[Search Again](#)
[Refine Search](#)

Suburb	Address	Site Name	Notices related to this site
BOMADERRY	320 Princes HIGHWAY	Commercial Land	2 current
NOWRA	Lamonds LANE	Former gasworks	1 current and 3 former
NOWRA EAST	Lot 3 Kalandar STREET	Mobil Service Station	6 former

Page 1 of 1

22 February 2021

For business and industry

For local government

Contact us

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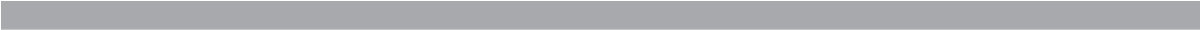
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Find us on



GHD

Suite 3, Level 1, 161-169 Baylis Street
Wagga Wagga NSW 2650
T: 61 2 6923 7400 F: 61 2 6971 9565 E: wgamail@ghd.com

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
DRAFT	M. Cotterill	L. Bourne	On file	A. Beldom	On file	22.04.2021
FINAL	M. Cotterill	L. Bourne	On file	A. Beldom	On file	17.06.2021

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