



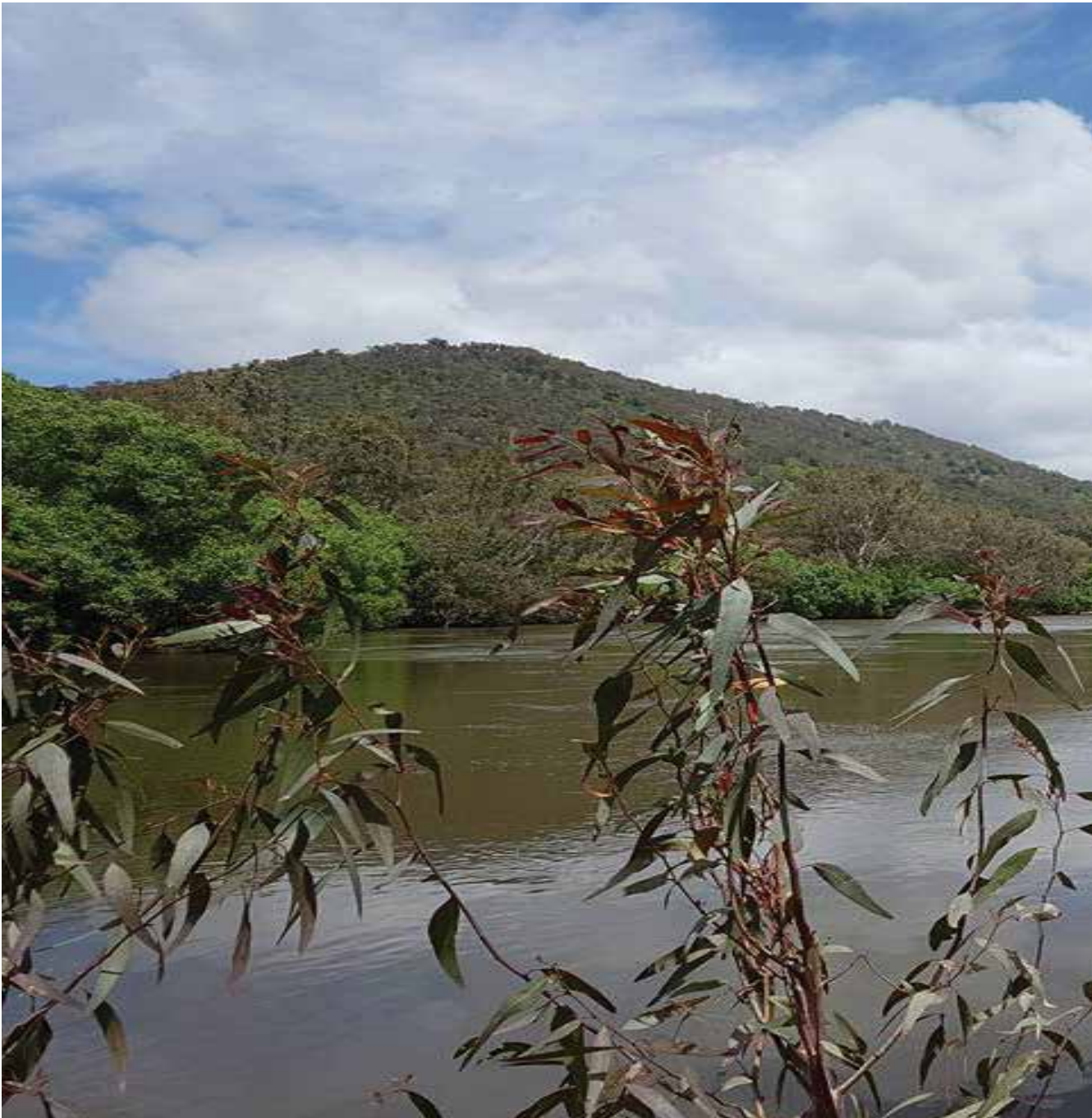
Snowy
Valleys
Council

2018-21
STATE OF THE
ENVIRONMENT
REPORT

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Front Cover: Pioneer Park, Tumut Floods



Jingellic views

Acknowledgement of Country

We acknowledge the traditional custodians of this land and pay respects to Elders past and present.

We recognise Aboriginal people as the original custodians of the lands that comprise the Snowy Valleys Council area.

Together we acknowledge the contributions of Aboriginal Australians to this country we all live in and share together.

Snowy Valleys Council is committed to enhancing the knowledge and understanding of our communities about the history, heritage and cultures of Aboriginal Australians.

State of Environment Report 2018 - 21

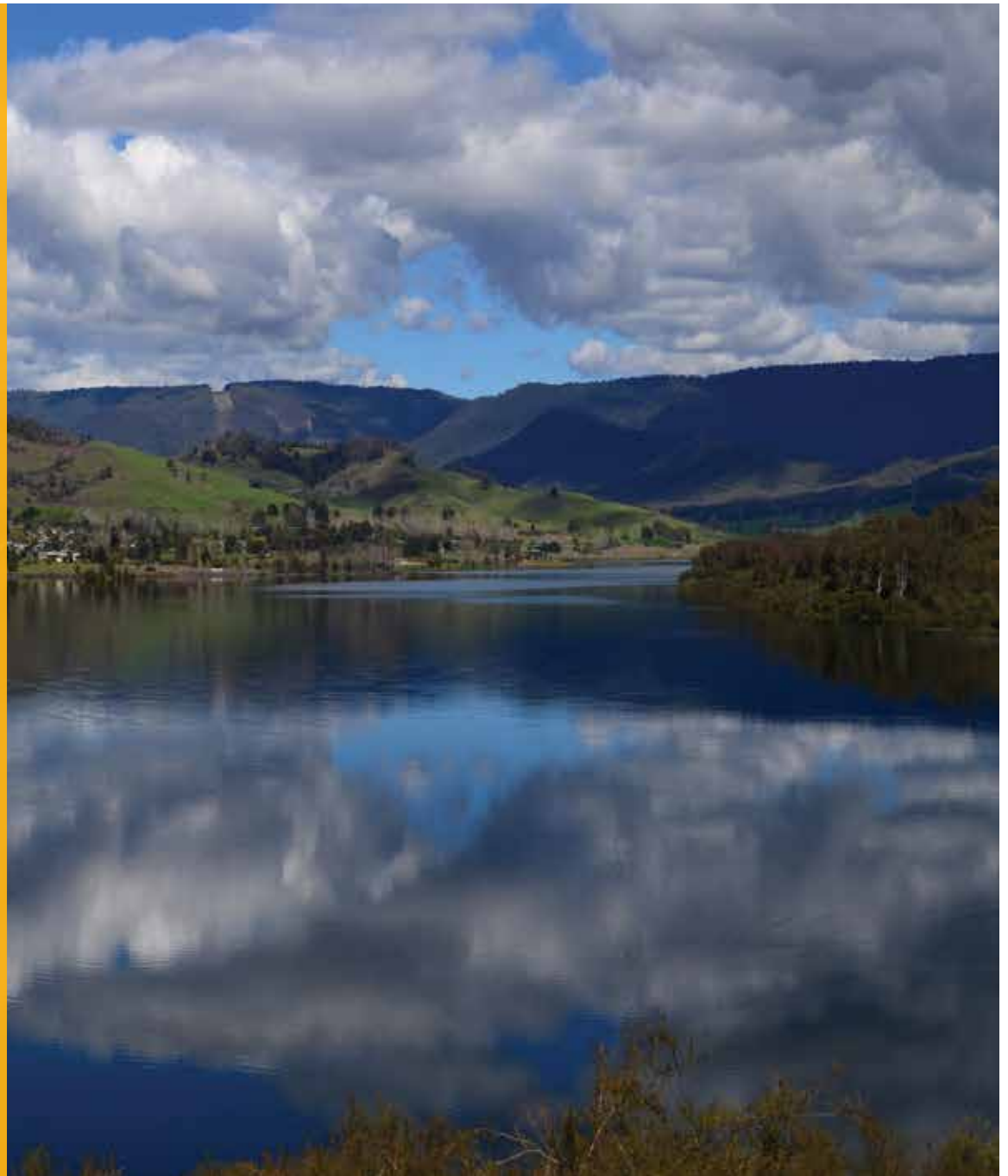
‘We care and protect our natural environment to ensure future generations can experience and enjoy its beauty’

This is the first State of the Environment Report (SoE) for Snowy Valleys Council. The SoE measures and reports Council's progress towards delivering the supporting strategies contained within the 'Our Natural Environment' section of Snowy Valleys 2028 Our Vision Our Future Community Strategic Plan (CSP).

The SoE is required to be delivered every four years during the year of an ordinary council election under the Local Government Act Section 428A.

It is important to note, that whilst Snowy Valleys Council is the custodian of the SoE Report, other agencies and the community have a role to play in meeting the community's goal and delivering on the supporting strategies.

Further information relating to Council's progress can be found in the 2017-2021 End of Term Report and Annual Reports.



Talbingo. Credit: Margaret Patterson

About the Snowy Valleys – an Environmental Snapshot

Environmental Snapshot

14,479 Population June 2020	21.4C Average Temperature	893.2mm Average Rainfall
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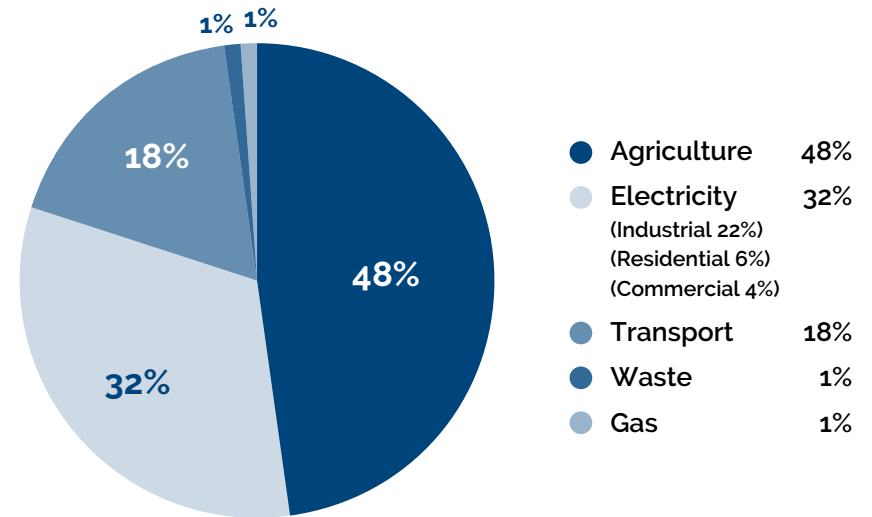
Source: Snapshotclimate

Snowy Valleys LGA Emissions

2017 Total 619,000 CO ₂ e	2018 Total 610,000 CO ₂ e	2019 Total 611,000 CO ₂ e
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Source: Snapshotclimate

Where the emissions are coming from:



Biodiversity in the Snowy Valleys

The Snowy Valleys region is located within the larger Australian Alps region, one of four identified 'Natural Landscapes' within NSW and recognised by the World Conservation Union as one of the 167 world centres of biodiversity. It includes highly valued rural and biodiversity lands, the Murray and Murrumbidgee rivers, and a symbiotic network of unique communities.

Snowy Valleys is host an abundance of Australian animals (such as emus, kangaroos, platypus, echidna, great gliders and microbats), as well as unique local species, including over 100 bird species located at the Tumut Wetlands. Important native flora, including significant areas of rich biodiversity such as those found along Old Tumbarumba and Back Kunama Roads, occur within the area.

Council has a responsibility on behalf of the community to ensure the rich biodiversity of the Snowy Valleys region is managed and protected for future generations to enjoy, including the following threatened ecological communities, flora and fauna noted by the Office of Environment and Heritage.

Threatened Ecological Communities

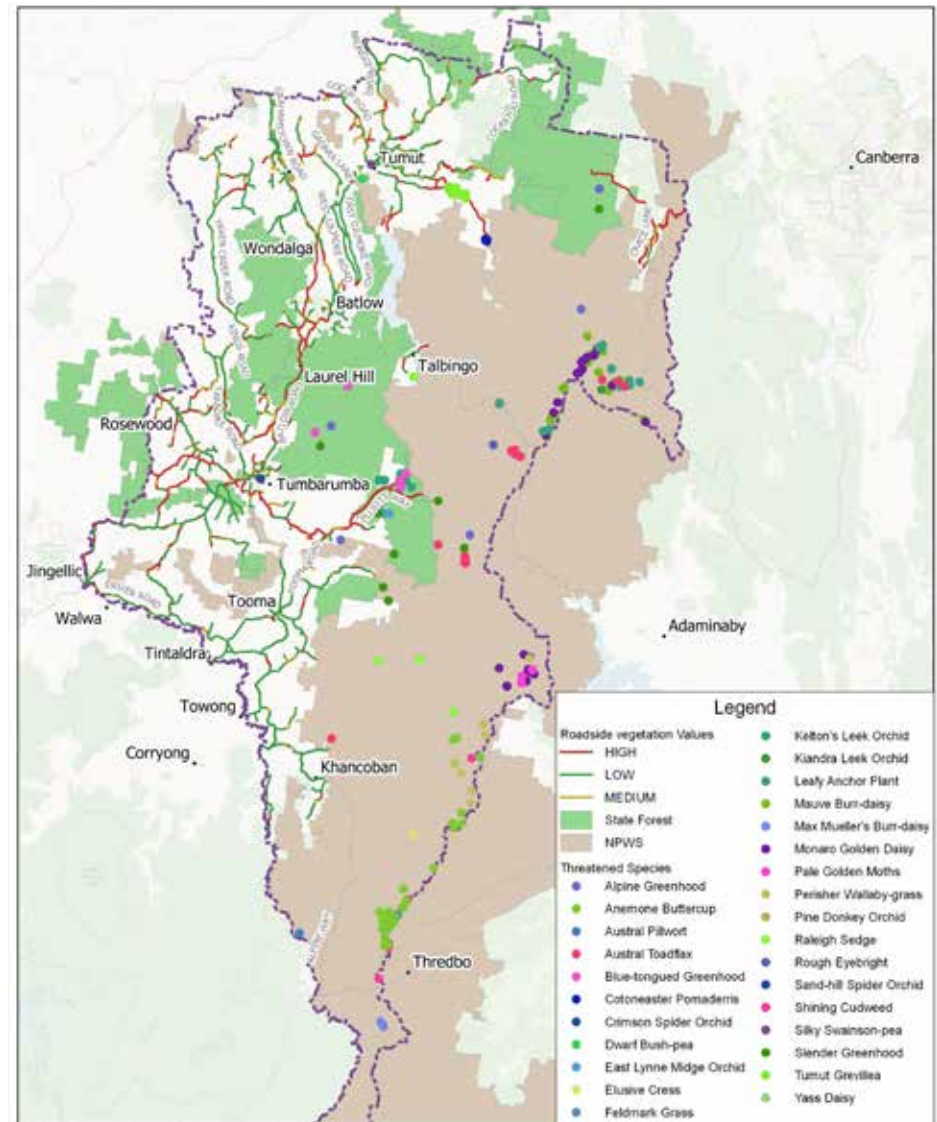
An ecological community is a naturally occurring group of native flora, fauna and other organisms living in a habitat. An ecological community becomes a threatened ecological community (TEC) when it is at risk of extinction. Within the Snowy Valleys region, four TEC are known.

- White Box, Yellow Box, Blakely's Red Gum Woodland (BC Act and EPBC Act)
- Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland (BC Act)
- Natural Temperate Grassland (EPBC Act)
- Coolac – Tumut Serpentinite Shrubby Woodland (BC Act).

Threatened Flora

29 Species of threatened flora are known from the Snowy Valleys region. These include the Tumut Grevillea (*Grevillea wilkibsonii*) and Silky Swainson-pea (*Swainsona servicea*).

Threatened Flora from the Snowy Valleys Council local government area Map

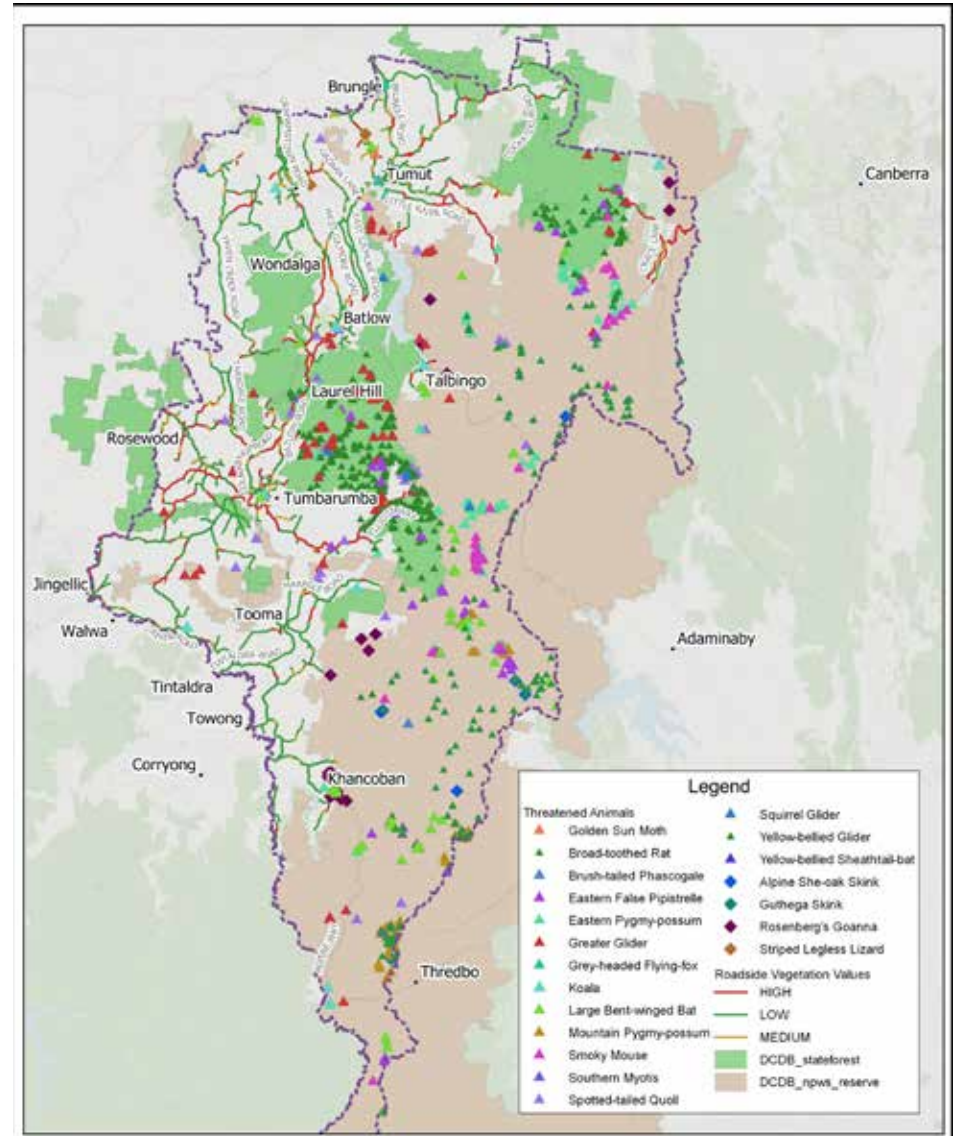


Threatened Fauna

71 species of threatened fauna are known from the Snowy Valleys region, including:

- 44 species of bird
- 16 species of mammal including an endangered population
- 6 species of frog
- 4 species of reptile
- One species of insect

Threatened fauna from the Snowy Valleys Council local government area Map

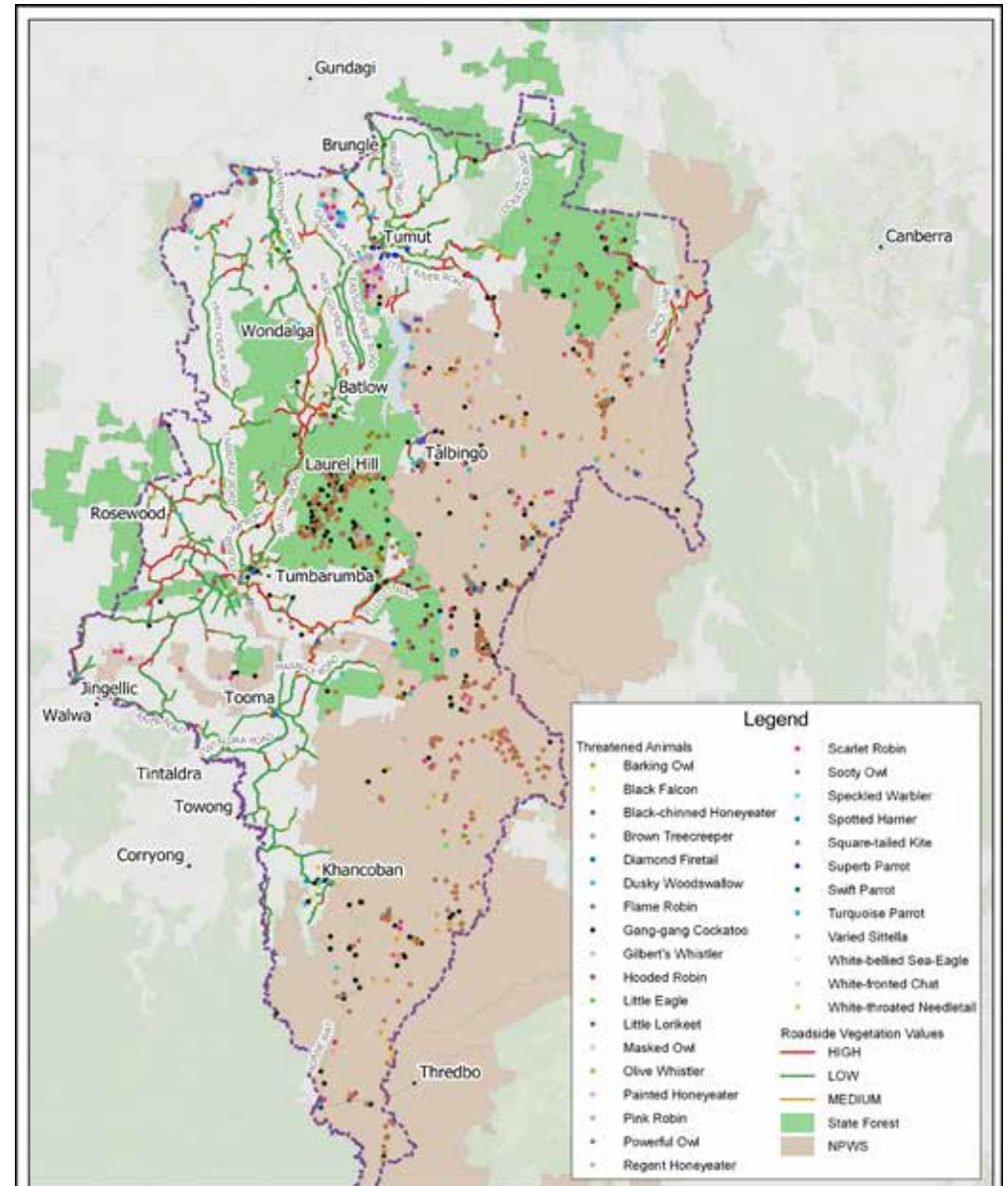


Migratory Species

Five species of migratory bird are known from previous records within the SVC LGA (OEH, 2018a). These being:

- White-throated Needletail
- Common Sandpiper
- Sharp-tailed Sandpiper
- Latham's Snipe
- Rainbow Bee-eater.

Threatened bird sightings from the Snowy Valleys Council local government area.



Community Strategic Plan - Highlight Achievements

Our CSP states that ***'We care and protect our Natural Environment to ensure future generations can experience and enjoy its beauty'***. The Community Strategic Plan (CSP) contains five themes, each with supporting strategies developed to achieve these themes. Theme 3 is focused on our natural environment.

The strategies created to support the vision for Our Natural Environment within the CSP were done so in the context of recognising the balance between promoting the offerings of the natural environment and ensuring it is protected and conserved.

Strategies recognised that education programs and initiatives can draw attention to steps which will create an environmentally sustainable future for the region, ensuring the local wildlife and ecosystems are supported to survive.

The following information provides the highlights of Council's achievements in striving to meet the community aspirations within the CSP.



Bushfire Recovery Committee

CSP 3.1 Demonstrate leadership in environment sustainability by reducing Council's carbon footprint and supporting the use of clean energy

Addressing Climate Change

Council recognises the importance of demonstrating leadership in addressing climate change and its impacts on our communities through responsible planning and collaboration.

In August 2021 Council resolved to join the Climate Council of Australia's Cities Power Partnership Program, Australia's largest network of local councils leading the way to a zero emissions future, to collaborate and accelerate activities to reduce Council's energy and emission footprint and mitigate the effects of climate change.

Snowy Valleys Council committed to actions in the key areas of renewable energy, energy efficiency, sustainable transport and advocacy. A summary of the commitments and progress against each deliverable is in the following table.

Cities Power Partnership Program | Progress

RENEWABLE ENERGY		
Action	Deliverables	Status
Install renewable energy (solar PV and battery storage) on Council buildings.	Continue with the installation of solar photovoltaic systems on Council-owned buildings and facilities as deemed feasible.	<p>Solar photovoltaic systems have been recently installed on a number of Council buildings and facilities including the Tumut, Adelong and Tumbarumba Pools.</p> <p>Solar photovoltaic systems have also been installed at Council's transfer stations.</p> <p>Solar photovoltaic lights have also been installed along a section of the River Walk.</p> <p>Council has allocated budget for the installation of a solar system on the Tumbarumba Council Office in 2021-22.</p> <p>Further opportunities to enhance/increase existing solar on Council buildings are continuing to be assessed by staff. These include:</p> <ul style="list-style-type: none"> • Works Depot in Tumut • Works Depot in Tumbarumba • Depot in Khancoban • Aerodrome upgrade • New Ournie Hall • Tumut Evacuation Centre <p>Council already utilises solar power at most of its water and sewer treatment plants.</p>

ENERGY EFFICIENCY		
Action	Deliverables	Status
Roll out energy efficient lighting across the municipally.	Upgrade streetlights across the municipality with LEDs.	<p>The project to upgrade over 1,400 streetlights to LEDs across the LGA was completed in November 2020.</p> <p>Lighting upgrades at sporting grounds across the LGA has been changed to LED, delivering considerable benefits. This includes:</p> <ul style="list-style-type: none"> • Bull Paddock • Tumbarumba Sportsground & Netball Courts • Tumbarumba Showground <p>Upgrade of lighting options internally in Council buildings to lower power usage options including:</p> <ul style="list-style-type: none"> • Batlow Library • Jingellic Toilets • Fitroy St Toilets • Tumut Pool

SUSTAINABLE TRANSPORT		
Action	Deliverables	Status
Ensure Council fleet purchases meet strict greenhouse gas emission requirements and support the uptake of electric vehicles.	Ensure Council maintains a modern fleet that complies with the relevant greenhouse gas emission requirements and investigate options for introducing an electric pool vehicle into the fleet for travel between the Tumbarumba and Tumut offices.	<p>Council has introduced a number of hybrid vehicles into its fleet and is monitoring the whole of life costs and suitability of these vehicles.</p> <p>Officers have also assessed options for introducing an electric pool vehicle into the fleet for travel between the Tumbarumba and Tumut offices.</p> <p>Based on available data, from past ownership of fuelled vehicles and the electric vehicles, electric vehicles have proven to be more expensive to operate than the ULP and diesel passenger vehicles, noting the following:</p> <ul style="list-style-type: none"> • estimated cost \$1,000 per year more expensive • the EV's have a higher purchase price and while the fuel costs are lower, the other fixed costs (rego, insurance, tyres, labour-servicing) are the same • limited data available on resale value in regional Australia on EV's • in regional areas the shorter range of EVs makes them a less attractive prospect than a hybrid or traditional vehicle, particularly once the batteries have 4 years age on them and the vehicle nears the end of the warranty period. <p>Given additional operational costs associated with electric vehicles and the limitations around budget, it is recommended that Council not proceed with purchase of an electric vehicle at this time.</p> <p>Noting that the technology for electric vehicles is improving, it is also recommended that the inclusion of an electric vehicle into Councils fleet be reassessed in 24 months.</p>
Support cycling through provision of adequate cycle lanes, bike parking and end-of-ride facilities.	Development of a Walking and Cycling Masterplan for the SVC Region for the development of existing and proposed trails in SVC.	<p>Council has recently completed the construction of the Tumbarumba to Rosewood Rail trail, bike pump tracks at Tumbarumba and Tumut and a multi-use track in Jingellic along with a new pathway in Tumbarumba from Booth Street to the Cemetery and the completion of the '5km loop' along Boundary Street.</p> <p>Funding for the development of a Walking and Cycling Masterplan has been secured, with planning underway.</p>

WORK TOGETHER AND INFLUENCE		
Action	Deliverables	Status
Support the local community to develop capacity and skills to tackle climate change.	Establish a Climate Change Adaptation Advisory Committee to develop a 10 year plan to guide the Council and the community towards net-zero emissions and prepare our community for the impacts of climate change.	Council has agreed to establish a Climate Change Adaptation Advisory Committee and adopted the Terms of Reference.

CSP 3.2 Promote programs and initiatives which encourage more sustainable living

Food Organics and Garden Organics (FOGO) to reduce waste to landfill

At the December 2019 Ordinary Council Meeting Council resolved to implement a three-bin kerbside collection service with the introduction of a Food and Garden Organics (FOGO) bin to decrease the amount of waste we send to landfill.

The three-bin kerbside collection service started on 2 August 2021. Snowy Valleys organic material will be recycled into high-grade compost to use on local parks and gardens, recyclables are remade into new products, such as glass to make roads, and the small amount of waste leftover is buried in landfill. FOGO stands for Food Organics and Garden Organics. Snowy Valleys residents were able to put food scraps and garden organics such as leftovers (cooked or raw), spoiled food, baked good, fruit/vegetable scraps, bones, seafood, dairy, cheese, eggshells, tea bags and coffee rinds, lawn/ grass clippings, weeds, leaves, flowers and small prunings in their new organic bin.

On average almost 50% of the contents from SVC general waste is food and garden organics that went into landfill, putting pressure on limited landfill space and generating greenhouse gasses. The three-bin service provides a cost-effective solution for Council and the community to make significant progress towards the NSW State target of reducing 75% of waste from going to landfill by 2022.



New branding - Old truck

CSP 3.3 Sustainably manage waste through a commitment to resource recovery and best practice waste management

Zero Waste Strategy

Snowy Valleys Council recognises that Zero Waste to landfill is the future goal that will create a resilient community where resources are processed and utilised rather than disposed of as waste. At the August 2019 Ordinary Council Meeting Council adopted the Zero Waste Strategy, focusing on the redesigning of waste and recycling services over the next decade to reach a future goal of zero waste to landfill.

Council's Zero Waste Strategy establishes that business as usual is no longer viable financially, socially, technology, environmentally or regulatory. Five themes were developed to address the sections of current waste management practices that required improvements for the future.

The Themes are:

1. Deliver waste education and advocate for behavioral change
2. Minimises resource recovery
3. Innovation & circularity
4. Data capture and intelligent decision making
5. Service and infrastructure harmonisation and update

Towards Zero Waste | Progress

DELIVER WASTE EDUCATION AND ADVOCATE FOR BEHAVIOURAL CHANGE		
Action	Timeframe	2020-21 Status
Create a school education program with a continually updated kit	Short	Ongoing
Actively engage in the Love Food Hate Waste program including printed material and videos promoted from council	Short	Ongoing
Establish waste committees in Tumbarumba and Tumut	Short	Completed
Advocate for stories around avoidance, recycling and waste to be published in local press and radio	Short	Ongoing
Encourage tours and presentations of the waste and recovery centres including tip shop and recycling and waste process	Short	Ongoing
Redesign signs at the transfer stations to include messages of the each stream's life cycle	Short	Completed
Seek to establish a fellowship program for a key industry member to be supported to travel and learn from international examples for local applications	Medium	Not due to Start
Investigate a planned delivery of academic support for undergraduates to train in the creative resource recovery industry	Medium	Not due to Start
Promote existing organisations/initiatives such as Plastic Free July, No Waste in My Lunchbox, sustainable living programs	Short	Ongoing
Formalise the roles for a waste education officer within existing employees responsibilities or budget to hire a new 0.5-0.8 full-time equivalent (FTE) role	Short	In Progress

MAXIMISE RESOURCE RECOVERY		
Action	Timeframe	2020-21 Status
Deliver a food and garden organics diversion (FOGO) collection service to households and food generating businesses	Short	Completed
Deliver continued monitoring and education to minimise organic contamination and continually increase diversion	Short	Ongoing
Design, budget and continuously deliver a household recycling education program which informs incorrect behaviours, encourages good practices and warns poor practices	Short	Ongoing

Increase the number of kerbside serviced tenements	Short	Ongoing
Investigate appropriate locations for the bank of bins (BOB) kerbside services and e-swap bin program and provide clear information on council customer service outlets	Short	In Progress
Investigate the design and viability of a assisted bin collection program for residents with difficulties managing kerbside bins	Medium	On Hold
Develop clear and continuous communication about the recycling services in SVC, including: services available at transfer stations, local drop-offs (soft plastics, second-hand shops) and the kerbside co-mingled service	Short	Ongoing
Plan and deliver public place recycling bins for permanent and temporary locations	Short	Ongoing
Upgrade the recycling infrastructure at all six transfer stations to correspond to the MRFs sorting capacities in accordance with the number five infrastructure theme	Short	Ongoing
Investigate how to logistically best provide silage, hay and fruit tree netting recycling services to farmers	Short	In Progress
Engage with the business community about the promotion of New South Wales Environment Protection Authority Business Waste Reduction Program	Medium	Ongoing
Ensure recycling collection services are available for all businesses and incentivise the use	Medium	Completed
Establish a tip shop and main transfer station and points for dropping off material at all council transfer stations	Medium	In Progress
Promote and support sharing services such a tool libraries and repair cafes	Medium	Not due to Start
Develop a plan to capture C&D waste and evaluate appropriate diversion methods and markets for distribution	Medium	In Progress
Impose new information and policy around new development to include recovery options and sustainable practices	Medium	In Progress
Provide information and links to green star rated building practices	Medium	Not due to Start
Promote the use of recovered C&D material to business and lead through example by council use	Medium	Not due to Start
Design a campaign message that values SVC natural landscape and highlights the issues of litter and dumping	Medium	Not due to Start
Work with state and region on a coherent message, monitoring and processes for offences	Medium	In Progress
A litter and illegal dumping reporting register is implemented and maintained	Short	In Progress
Work with other land managers (NP and Forestry) to address waste service needs and sharing of costs	Short	Ongoing

INNOVATION & CIRCULARITY

Action	Timeframe	2020-21 Status
Create a public procurement policy to purchase local, reused, repurposed and recycled products	Medium	In Progress
Establish a composting facility that processes SVC household and commercial food, garden and agricultural organics into resources that are sold within the community	Short	In Progress
Conduct an analysis of business opportunities investigating: existing waste streams, existing regional processors, national regional solutions applicable for mimicking and potential local operators	Medium	Not due to Start
Seek assistance from state/regional groups to collaborate and establish a local C&D sorting and processing facility	Medium	In Progress
Commence a collaboration with the region through JO or ROC to analyse composition and quantity of waste streams from municipal and main industry and investigate the viability of a WtE plant and/or PEF	Medium	In Progress
Investigate key industries interest in a local/regional solution such as WtE or PEF	Medium	Not due to Start
Consider strict regulation and policy to ensure avoidance and recycling is prioritised over other disposal solutions	Medium	Not due to Start

DATA CAPTURE AND INTELLIGENT DECISION MAKING

Action	Timeframe	2020-21 Status
Conduct a baseline household waste and recycling audit with regular follow up audits (every 1-3 years)	Short	Ongoing
Conduct a transfer station audit of incoming contractor and self-haul waste	Short	Ongoing
Investigate all non-council disposal locations and seek to establish data sharing partnerships	Short	Ongoing
Conduct an audit of the MRF to identify issues, opportunities and recycling rate	Short	Ongoing
Implement a weighbridge at a central location for recording all council-managed waste	Short	In Progress
Redesign the logistical operations of waste and recycling collections to allow for accurate data recording	Short	Ongoing
Produce annual waste reports to track change	Short	Ongoing
Streamline litter and illegal dumping reporting for all land managers (council, NP, Forestry, others)	Short	Not due to Start

Set quantifiable diversion, recovery and contamination targets for all waste stream over time	Short	In Progress
Conduct public surveying to gain qualitative insight into education programs and enable improvements to be targeted to an expressed need or issue	Short	Ongoing
Investigate strategies for improved recycling and pricing structures that are accepted by the community	Short	Completed

SERVICE AND INFRASTRUCTURE HARMONISATION AND UPGRADE

Action	Timeframe	2020-21 Status
All transfer stations offer services of co-mingled containers, cardboard, silage wrap, tyres, mattresses, CRC, drumMUSTER, green waste, oil, salvageable (tip shop) items, scrap metal and general waste	Short	Completed
All transfer stations adapt best practice layouts where resource recovery is encouraged	Short	Completed
Upgrade drumMUSTER cage infrastructure, disposal procedures and collection by contractor	Short	Completed
Purchase council owned transfer station bins that cater to the size that optimises servicing	Short	In Progress
Purchase council owned truck to service the transfer station	Short	In Progress
Redesign the logistic servicing of the transfer station to optimise efficiency in correspondence to servicing demand	Short	Completed
Purchase a polystyrene machine	Short	On Hold
At a minimum, inform residents of location and pricing of appropriate safe disposal of asbestos	Short	Completed
Explore operating a disposal location for asbestos within council borders	Short	In Progress
Train site and truck operators to identify asbestos and procedures for safe disposal	Short	Ongoing
Redesign Tumut Waste & Recycling Centre to: -	Achieve operational health and safety -	Include a layout that corresponds to best practices for optimum resource recovery -
Evaluate Tumut Waste & Recycling Centre site for capacity to include a composting site and/or a C&D processing pad	Short	In Progress

CSP 3.4 Protect and manage local air quality, waterways, rivers and streams

Managing Mannus Lake

Mannus Lake is situated 4kms west of Tumberumba. The lake is a popular location for recreational fishing, boating, walking and bird watching. The capacity of the dam is 2350ML. The lake supplies stock water and supplementary drinking water to 38 properties.

Council engaged the University of Technology Sydney (UTS) in 2018 to undertake a research study of the algae bloom in Mannus Lake following a series of toxic blooms affecting downstream water quality to better understand the causes of toxic cyanobacterial blooms at Mannus Lake and to indicate possible management approaches.

The interim report identified distinct algal blooms in the lake; Chrysoosporium in December 2018, and Microcystis and Dolichospermum blooms in April 2019 and recommended mechanical mixing as the most effective and rapid method to mitigate the blue green algal blooms.

A mixer supplied by NSW Fisheries was installed at the lake in December 2019, and Council implemented a program of regular monitoring and reporting program to enable early detection and communication of any future outbreak.

CSP 3.5 Partner and support other agencies to protect local fauna and biodiversity ecosystem

Partnership and support for Bush Fire Recovery efforts

The 2019-20 Black Summer bushfires impacted over 600 000ha across the Southwest Slopes of NSW and northern Victoria having a devastating impact on local fauna and biodiversity.

45% of the Snowy Valleys was impacted by bushfire, including 100,000ha of agricultural land and 110,000ha of Kosciusko National Park.

In the wake of the bushfires, partnership and support from other agencies was crucial to the recovery effort. Council partnered with a range of funding bodies to deliver key actions designed to help local fauna and fragile ecosystems recover. Some of the programs delivered included: 350kms of Vegetation removed from Local and Regional Road reserves.

More than 8,000 tonne of fire impacted debris and timber was removed across Snowy Valleys by Council along over 350kms of road corridor to reduce the impact of fire scarring and future fire risk.

Directly following the fires Council teams undertook significant works to clear and make safe dangerous fire impacted trees and vegetation ensuring local roads were safe to drive on again. The next phase of work saw further debris removed to reduce future fire risk, while also maintaining safe habitat trees to support endemic wildlife species.

As part of the Disaster Recovery Funding Arrangement, an initial \$5.5million was allocated to roadside cleanup, haulage and processing of the debris.

Approximately 200,000 cubic metres of green waste was produced from the clean up which was processed into mulch.

Wildlife and Habitat Recovery

Council received a \$150,000 grant from the Governments Wildlife and Habitat Corridors & Reserves Project to undertake a project of recovery, rehabilitation and restoration activities on significant areas of native flora and fauna habitat damaged in the bushfire.

This funding assisted with the initial phase of an overall recovery and rehabilitation plan for the region to restore over 300kms of natural habitat corridors and reserves along bush fire affected roads and public lands.

Council collaborated with other agencies such as Aboriginal environmental working groups, Local Land Services and Landcare to undertake surveys and assessments of the significant habitats which will help to inform the implementation of a targeted invasive weed management plan.

Weed Control

Council acknowledged that the cleanup of damaged and destroyed vegetation would create the perfect environment for weeds to emerge and spread due to the lack of natural competition.

In 2020 Council signed an agreement with Local Land Service to participate in the 2020-2025 NSW Weed Action Program (WAP). Through Council's participation in the WAP funding program, Council was able to embark on a program of increased weed spraying of bushfire impacted roadside verges throughout the LGA. The program is targeted at rehabilitating fire scarred roadsides and reducing the emergence of new and existing weed species likely to cause ongoing environmental damage.

Identified species emerging in road corridors include: Blackberry, Oxeye Daisy, Briar, Amsinkia, Broom rapes, Various Thistles Broom, Holly, invasive Ivy, and morning Glory/periwinkle.

As part of the WAP Agreement, Council committed to:

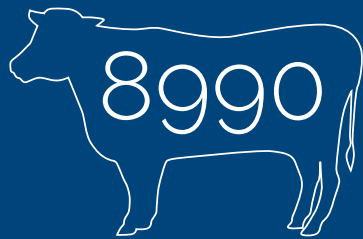
- Presentation, elimination, minimisation and management of the biosecurity risk posed or likely to be posed by weeds on their own lands
- To develop, implement, co-ordinate and review weed control programs
- To inspect land in connection with LCA weed control programs
- To keep records about the exercised of the LCA function under the Act
- To report to the Secretary about the exercises of LCA functions under the Act

Snowy Valleys Council | 2019-20 Bushfire Impact on Environment



NATIVE ANIMALS SEVERE IMPACT

960 FARMING properties affected



LIVESTOCK LOST

Kosciusko National Park
110,000 ha affected



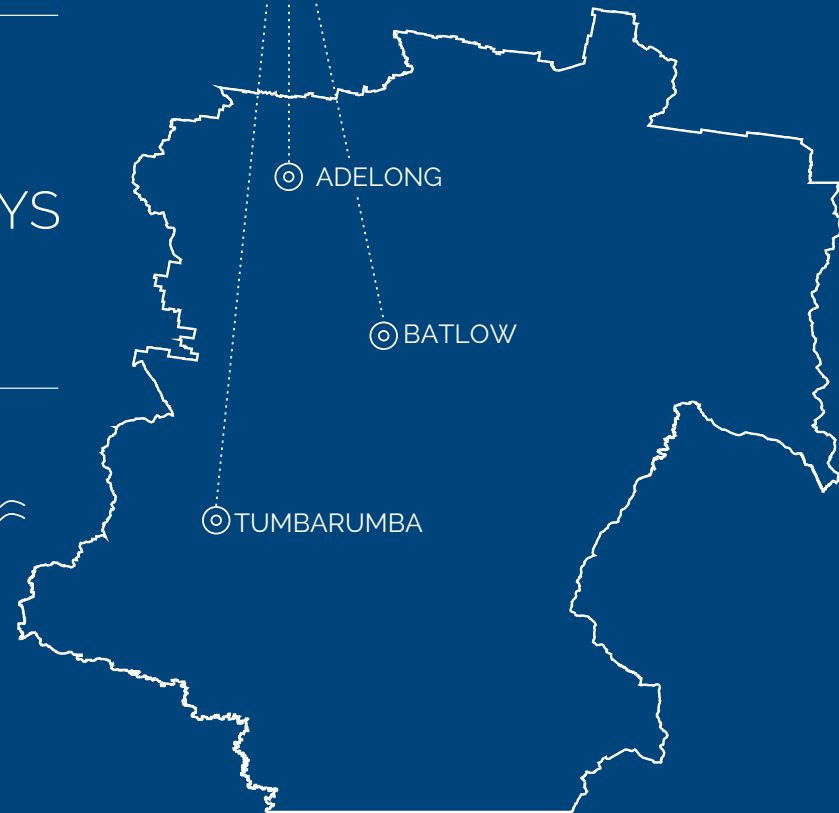
45% OF SNOWY VALLEYS LGA BURNT
402.650ha BURNT

IMPACTED Waterways



- Kunama Dam
- Mannus Lake
- Talbingo Dam
- Jounama Pondage
- Blowering Dam
- Khancoban Pondage

WATER SUPPLY COMPROMISED





Black Summer Bushfires 2019-20



2018-21

STATE OF THE ENVIRONMENT REPORT