



FUTURE
READY®

Case Study

SPECIAL ACTIVATION PRECINCTS - SUPPORTING MASTERPLANNING

Project Overview

Special Activation Precincts (SAPs) are defined by the NSW government as areas with the potential to activate state or regional significant economic development. An innovative place-based solution, the NSW government is drawing on the AUD4.2 billion Snowy Hydro Legacy Fund to contribute towards making Future Ready regional communities. Specifically, the regions will prosper both socially and economically from the windfalls of major public and private investment to create jobs, attract businesses and investors, and fuel economic development.

WSP is engaged on four SAPs – Parkes, Wagga Wagga, Moree and the Snowy Mountains – works initially led by our Environment team and expanded to include full multi-disciplinary support from our Transport, Advisory, Water, Power and Sustainability teams. Precinct development includes masterplanning, permitted land uses and the identification of specific principal standards.











The goal for WSP is to co-design precincts that are distinctly local by amplifying the local economic engines. Also, to reflect the local place context with reference to place for the local Aboriginal communities, in a way that is resilient to a changing future. Prior to design of the masterplans, our Indigenous Specialist Services team was engaged to provide cultural context mappings and advise on responding to cultural practices. The aim is the understanding of Country – highlighting high level opportunities for Aboriginal involvement, design and engagement.

SAPs for Parkes, Wagga Wagga and Moree build upon the generational opportunity provided by the Inland

Rail project. These areas are focused on transitioning the power grid towards renewables and advancing interests in manufacturing, agribusiness, freight and logistics.

With an economy largely driven by tourism, the Snowy Mountains is looking to establish a more year-round offering by embracing and improving the quality of the visitor experience. To achieve the aim of Australia's Adventure and Alpine capital, WSP is working with the NSW Government to enhance and capitalise on the region's assets in adventure, sport, education, sustainability, design and culture, and infrastructure connectivity.

What Future Trends Did We Consider?

 Climate	 Society	 Resources
 More Extreme Weather	 Indigenous Influence	 Circular Economy
 Hotter & Drier	 Densification	 Renewables Reign
		 Declining Biodiversity

How Did We Consider These Trends?

Climate



- **Parkes:** conducted a flood and water quality management study, producing a set of models to assist in the development of the master plan by defining the baseline environment and constraints on future development.
- **Wagga Wagga:** worked closely with stakeholders to implement thorough Ecological Sustainable Development plans, Community and Social Impact Assessments, and flood and water quality management studies.
- **Snowy Mountains:** area is prone to flooding in winter and in the summer, dry spells and bushfires. To help prepare the region for more severe weather fluctuations, we are investigating the region's water catchments and hydrogeological patterns to better utilise rainfall and natural resources. With the devastating effects of the 2019/20 summer period, a review of bushfire controls and management scenarios will be conducted. Also, a Future Ready climate change assessment of the Kosciuszko National Park was undertaken to examine climate projections and impacts.

Society



To ensure our recommendations for the SAPs are Future Ready, key consideration was given to significant societal trends including provisions for services and facilities to address inclusive employment and training, health and wellbeing, ageing populations, cultural acknowledgement, tourism and community identity.

- **Indigenous Influence** – our Indigenous design specialists engaged and incorporated the input

of the local Wiradjuri people throughout the masterplanning phase of both the Parkes and Wagga Wagga SAPs and the Gomeroi people in the Moree region. This included the identification of potential themes, stories, places and totems, and strategies for community, elder and artist engagement. Together, we created and planned for communities that reflected the traditional owners of the land and their heritage as well as sacred sites and places of spiritual meaning. An assessment of Aboriginal and non-Aboriginal heritage within the Snowy Mountains SAP area will be undertaken, in addition to extensive consultation with local Aboriginal groups at all stages.

— **Densification** –

- **Wagga Wagga:** we analysed the region's utilities infrastructure as well as sewerage and waste systems in response to population growth, recommending infrastructure investment, expansion of the current utility systems, and new roads to support connectivity and industry growth.

For all SAPs our analysis considered a growing regional population and what that would mean for local services.

Resources



Parkes, Wagga Wagga and Moree SAPs use circular economy and sustainable development principles to build upon the regions' freight and logistics connection to the Inland Rail as well as high-value agricultural industries. Sustainability was a key theme of the Snowy SAP, guiding our advice.

— **Circular Economy** –

- **Wagga Wagga:** the structure plan was developed to create a circular economy where waste can be better utilised.



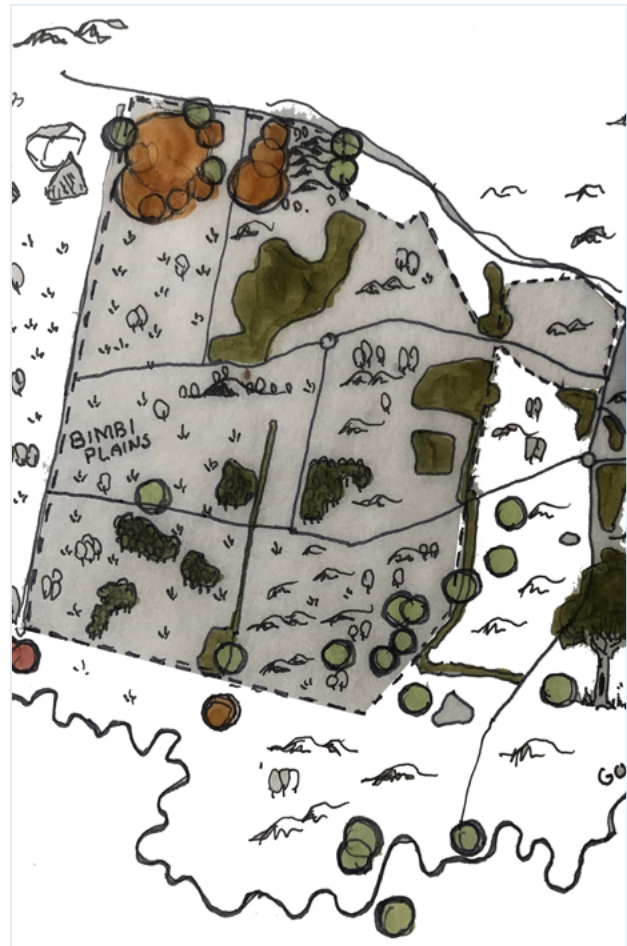
- **Moree:** assisted the precinct in applying net zero principles. The SAP identified sustainability objectives including alignment with the UN sustainable development guide, a holistic water cycle management strategy, net zero energy strategies and climate resilience.

— **Renewables Reign** —

- **Wagga Wagga:** shifting the city towards 100% clean energy generation is a priority for the region. With several large-scale solar farms in development, WSP provided a range of services and recommendations to maximise outcomes. Technical advisory and feasibility studies were undertaken to identify the potential of a circular grid network including the implementation of a virtual power plant network as well as a clean-energy mix between solar, biotechnology, waste to energy, transmission infrastructure and battery storage.
- **Moree:** WSP applied the Climate Active Carbon neutral standard to energy strategies including expansion of the solar farm, biofuels, roof top PV, hydrogen production and buying renewables to achieve carbon offset objectives. The approach involved looking at different scenarios and testing to see how well they meet the vision of the SAP, in particular meeting net zero targets.
- **Snowy Mountains:** with seasonal fluctuations in demand likely for energy, WSP will investigate the potential for one or a mix of renewables including bio-mass, geothermal, wind and solar as well as emerging energy storage technologies such as hydrogen. These energy types will contribute to achieving the SAP's carbon negative aspirations.

— **Declining Biodiversity** —

- **Wagga Wagga:** assisted the Department of Planning, Industry and Environment through their masterplanning phase, conducting an ecology assessment of the landscape to identify important biodiversity values and corridors. WSP also undertook field surveys to investigate and remediate contaminated land and groundwater needs.
- **Snowy Mountains:** field surveys will be conducted to identify sensitive areas where protected alpine flora and fauna live. Given ecotourism is a key draw card in the overall growth of the region, a set of recommendations will be developed as to how best to preserve the land while encouraging and welcoming tourists to enjoy the region's stunning landscape.



How Was Our Approach Better?

With the Inland Rail project acting as a key enabler for the Parkes, Wagga Wagga and Moree SAPs, WSP has been at the forefront of the development in these regions since the projects began a decade ago. At various points, we have mobilised our multi-disciplinary services to provide our clients with the gold standard in service.

The SAP regions are designed to build upon the opportunity provided by Inland Rail to boost their economic activity and provide investors with attractive opportunities to pursue competitive advantages in specialty areas. For the community, new infrastructure provides them with improved social and economic prosperity and will lead to greater inflows of investment given the expected growth in population.

Due to the uniqueness of the Snowy Mountains region, WSP utilised our collaborative nature to call on our international experts from New Zealand and Canada to understand some of their lessons learnt and key insights into delivering thriving alpine communities. We conducted workshops with our New Zealand colleagues to understand the key engineering lessons learnt from their involvement in the cold climate resort of Queenstown and with our Canadian team to deliver a Salt Management Plan as part of the environmental package.

Our assessment of current infrastructure in the Snowy Mountains region has included transport connectivity into Jindabyne and out to the ski fields, the ability to cope with high-levels of tourism, improvement to route access and an airport feasibility assessment. In addition, the SAP will provide opportunities to better keep and grow young talent in the region by providing education pathways that are closely paired to the region's strengths in sports, environmental science, hospitality and tourism.

Further, the WSP team will also undertake an in-depth review of the current sewerage and wastewater systems to identify potential investment opportunities with known flooding events through the river and dam systems. As the region becomes more sustainable, the emphasis will be on preserving and saving water for the hotter and drier summer periods.

The Outcomes

WSP supported the NSW Department of Planning, Industry and Environment with technical services in a flexible and fast-paced approach to contribute to master plans for the Special Activation Precincts.

The collaborative approach of WSP is well suited to the Enquiry-by-Design method deployed to develop these plans. It required our teams to work across different consultant packages on a project that is critical for the growth of regional communities and their economies. WSP specialists challenged the norm - applying our Future Ready innovative approach to thinking beyond the conventional. Our thinking-outside-the-box achieved value-for-money outcomes and set the standard for delivering future master planning projects.

Other key projects WSP has been involved with in the regions include the new Riverina Intermodal Freight and Logistics Hub in Wagga Wagga, as well as the Parkes Bypass and Pacific National's intermodal hub to improve both road and rail connectivity.



For More Information

Alex McDonald
NSW/ACT Regional Executive - Environment,
Planning and Stakeholder Engagement

+61 2 9272 1418
Alex.McDonald@wsp.com

Find Us

WSP Australia Pty Limited
Level 27, 680 George Street
Sydney, NSW 2000

wsp.com