



Bendee Downs

Kooma Nation

Local Projects Summary

EWB and Kooma Traditional Owners Association Incorporated (KTOAI) have worked together to identify a range of student projects separated into nine design areas. Students are invited to develop innovative and appropriate solutions that make a real contribution towards the sustainable development of Bendee Downs, a remote Aboriginal community in south-western Queensland.

Design Area 1 / Bendee Downs Redevelopment Plan

- Integrated site Bendee Downs site redevelopment
- Business Case for site development (including eco-tourism, education and accommodation)

Design Area 2 / Building Design

- Modified building design for the shearing shed on Bendee Downs
- Appropriate housing for the Kooma family clans
- Low cost insulation for the Bendee Downs Shearing Shed
- Appropriate heating or cooling technologies for the Bendee Downs Shearing Shed

Design Area 3 / Transportation

- Improve the road grade of the Murra Murra Rd to enable access to the Bendee Downs site
- Develop a long term road maintenance plan
- Developing the existing air strip on Bendee Downs
- Designing a bridge to cross the Nebine River
- Design an appropriate low cost fence to prevent stock from the pastoral leases crossing into the nature reserve
- Design a low cost and appropriate pathway that will not require significant maintenance to the Ephemeral lake near the Bendee Downs Shearing Shed
- Developing other modes of transport to site
- Develop a cost effective road base that is sourced locally and will not have a long term negative impact on the environment.
- Develop a remote sensing system to detect when gates have been left open, fences are broken or water troughs have run dry. This system would commonly use HF or UHF radio equipment.

Design Area 4 / Water Supply and Sanitation Systems

- Cost effective rainwater capture and storage system
- Grey and black water recycling
- Water consumption efficiency measures
- Low cost water pumping devices
- Toilet waste treatment systems e.g. waste Biodigester systems
- System for cooling the bore water for hot and cold applications
- Determine a method to distil the bore water for consumption

Design Area 5 / Energy

- Solar energy
- Wind Energy
- Water Energy from the Nebine River
- Building Energy Efficiency
- Alternative cooking systems
- Bio-digesters

Design Area 6 / Information, Communication and Technology (ICT) for Educational Activities

- Cost effective internet and communication system
- Software for educational games relating to Indigenous history, culture and development
- Software for educational games relating to primary and secondary education
- Hardware for interactive educational games
- Interactive software program that explains the history of the Kooma nation from dreamtime through to white settlement, including the relative magnitude of each of these periods of history.
- Develop a cost effective radio transmitter to linked to repeater stations to enable communication-throughout the property. Utilised to locate missing people or vehicles and improve safety.

Design Area 7 / Waste Management

- Integrated waste management systems including recycling and reuse opportunities
- Composting system for household waste
- Waste collection devices
- Waste reduction and management education
- Alternative packaging materials to plastics and foam

Design Area 8 / Sustainable Use of Biodiversity

- Local plants on Bendee Downs to feed the local community
- Local plants on Bendee Downs as a commercial enterprise to feed visiting tourists
- Tours that show the local bio-diversity
- Market garden which will thrive in the remote Kooma environment
- Fish trap to capture carp in the Nebine Creek.
- Cage to feed fish with dead animals from hunting and improve fish stocks
- Fire management plan for the site to protect the proposed infrastructure and projects.

Design Area 9 / Eco-tourism, Accommodation & Education Site

- Eco-tourism Development
- Property tours including: rock art, local hot springs, cultural heritage, emu nesting, walking tours, ephemeral lakes tours, bird watching, horse riding utilising local community, stockmen skills, motorbike tours which consider the environment and significant sites
- Indigenous Cultural Heritage museum & visitor centre
- Indigenous art centre & gallery
- Performance centre for corroborees
- Provision of camping and picnic spots around the property
- Development of an education centre for the local community and visiting tourists
- Identify opportunities to convert the location into a scientific centre to study the unique ecology of the region
- Design a golf course for visiting tourists