

Natural resources management research project ideas

Natural resources management (NRM) is an approach that aims for the community, industry and three tiers of government to work together to manage the environment in a way that achieves a balance between the needs of people and those of nature.

Our vision is to create 'a healthy living landscape meeting the social, environmental, economic and cultural needs of the community, and ensuring the rights and wellbeing of future generations'.

Below is a list of business areas (themes and topic ideas) that Natural Resources works within. A few potential questions have been provided for many of the topic areas, but don't let these limit your imagination! The possibilities are endless.

For more information about NRM in South Australia please visit:

www.naturalresources.sa.gov.au/home or www.environment.sa.gov.au/Home or contact your local NRM Education Coordinators:

NRM Education

Adelaide and Mount Lofty Ranges

Phone (08) 8234 7255

Theme	Topic ideas	Potential questions/ideas
Land 	Sustainable agriculture	The role sustainable agriculture can play now and into the future for rural communities.
	Urban sprawl	How much green space do we need?
	Land uses	How should we use our landscapes?
	Food production	GM crops – opportunity or fear of the unknown? How will technology shape the way we produce food into the future?
	Soil health	Why should farmers be concerned about soil health?
	Carbon sequestration	Why is this important to soil structure and plant growth?
	Technology in agriculture	How was technology developed in agriculture over time?
	Forestry	How do we look after habitat whilst producing sustainable timber?
	National parks and reserves	How do we get more people into national parks? Why have national parks?
	Fire management	Vegetation responses to fire – frequency and intensity is the burning question. Indigenous fire management. Why have controlled burns?
Waste audit	How much waste does my school generate and how can we reduce what goes to landfill?	



Water



River Murray	Effect from drought/climate change on the Murray-Darling Basin
Wetlands	How can wetlands connect people to local flora and fauna?
International agreements (e.g. Ramsar)	Why are international agreements (like Ramsar) needed?
Water quality	How does the water quality of my local creek/wetland/river change throughout the year and why? What can be done to improve water quality?
Stormwater pollution	How can we reduce the amount of pollution in stormwater?
Water allocation planning	How do you balance the social, environmental and economic needs of different water users? How do you put a price on environmental services e.g. who pays for water that is needed by the environment?
Desalination	How sustainable are desalination plants? Can desalination plants be a solution for poor countries affected by sea-level rise?
Recycled water	Would you drink it? Pros and cons of stormwater harvesting
Local creeks and rivers	What is special about them? Why are they important?
Water sensitive urban design	What would a water sensitive urban design look like?
Water audit	How much water does my school use and where can we improve?

Plants and animals



Native plants and animals	Is it too late to prevent the extinction of certain species? How have humans contributed to the decline in native species and what can be done to save them?
Pest plants and animals	What is the major pest plant/animal in my region and how can it be controlled?
Urban biodiversity	How does our local biodiversity contribute to the global environment?
Threatened species and ecological communities	What are the threatened species in your local community? How can people assist/help the threatened species in their community? What impact have humans had on them?
Animal welfare	How can we prevent so many dogs and cats being surrendered to animals shelters?
Domestic pets and native wildlife	What effect do cats and dogs have on our native wildlife and how can we prevent this?
Revegetation	Can we recreate habitats in our schools and homes?
Habitats	What can we do to improve habitats for native species?
Biodiversity audit	Do we have a biodiverse school? How could we increase biodiversity at our school?



Climate change



Adaptation and mitigation	What support do people need in order to feel empowered to tackle the problem of climate change?
Energy use	Consider the life cycle of a product. Conduct a school energy audit and suggest improvements.
Transport	What modes of transport are the most sustainable? What will travel look like in the future and how will it be done?
Conservation	How could a warming climate affect/impact on survival of species? (e.g. plants and animals)
Effects on local environment	What does climate change mean for me, for my local community and for my local environment? How will life be different?
Energy audit	How well do we conserve energy at school and where can we improve?
Air quality	What do we breathe in? Wood vs gas or electric heating - which is better? Types of air pollution

Community



Environmental awareness raising	How can I get my message out there and get people on board?
Youth and volunteering	How can we get more young people volunteering?
Indigenous links and connections to country	What is the importance of cultural heritage in natural resources management? How do the historical practices of Aboriginal people managing the land apply to what we do today?
Attitudinal survey	What does my school community think about sustainability issues?
Future visioning	What do I want my future to look like and how can I make that happen?
Exploring a culture of sustainability	What would building a culture of sustainability look like for my school?

Coast and marine



Sustainable fishing and aquaculture	Is fishing in my local area sustainable? What are fishers doing to become more sustainable?
Marine parks	Why do we need marine parks? How do we balance the needs of fishers with the needs of the environment?
Coastal development	What rules should there be around coastal development? If you were developing coastal areas 50 years ago, what would have you done differently and what would you do differently 20 years from now?
Rising sea levels	What can be done to minimise the impact of rising sea levels? What would be the effect of rising sea levels on South Australia?
Recreational activities	What effects do recreational activities have on our coast and marine environments?
Marine debris (litter)	Conduct a beach litter survey and find out where the litter could be coming from.

