Fact Sheet Guide

Meet Zoe, our State of the Environment Reporting (SoE) friend.

Zoe will take you on a journey through South Australia's 20 key environmental issues from the State of the Environment Report for South Australia 2008. If you want more information, you can find it at the Environment Reporting site (www.environment.sa.gov.au/reporting/soe2008).

What is State of the Environment Reporting (SoE)?

State of Environment Reporting is a process that has been in place around the world for 20 years. It is a way of reporting what is happening in the environment and provides information to government, industry, non-government organisations and all sections of the community. The reports help to:

- raise public awareness about environmental issues,
- educate about the impacts of our lifestyles,
- help with developing policy for the environment,
- assess the performance of environmental policy and programs, and
- establish scientific information about the state of our environment.

Australia's first SoE report was published in 1988 and an up-to-date report has been produced every 5 years since – with the last report released in 2006. Many local governments also undertake SoE reporting.

In South Australia, it is a legislative requirement that the Environment Protection Authority (EPA) produce a SoE Report at least once every 5 years. The report is then presented to the Environment Minister who must present it to Parliament.

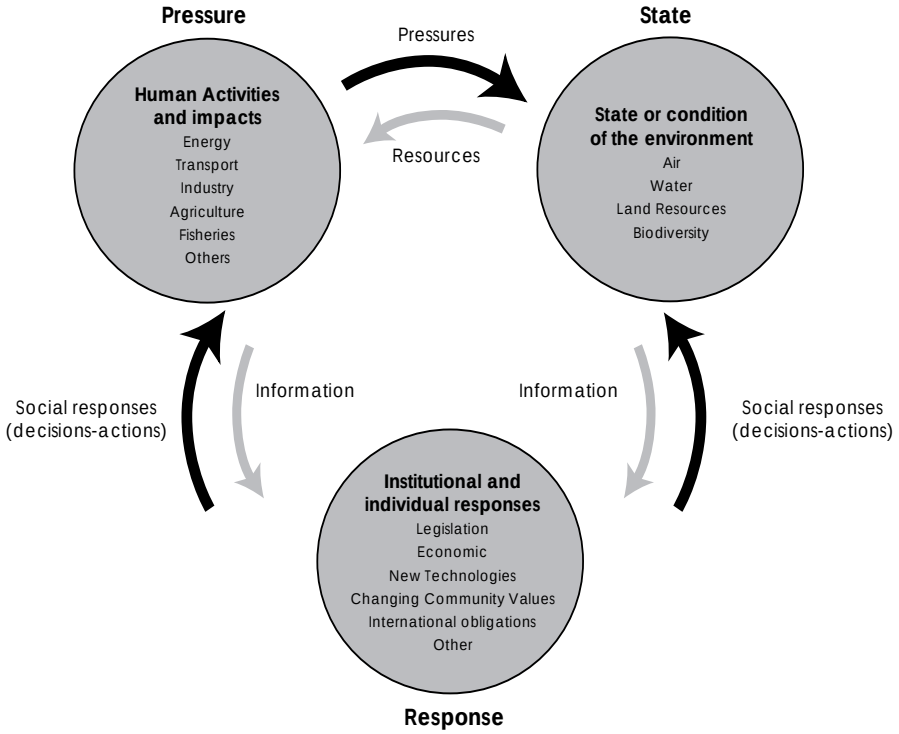
Much of the 2008 report is a comparison of the current situation with the last report in 2003 although the structure of the report has changed a little.

What is the structure of a SoE Report?

The most common structure used in SoE reports is the 'Pressure – State – Response' (PSR) model. Using this model, the state of the environment is assessed by looking at what is impacting on the environment (pressure), the condition (state) the environment is in, and what is happening to address these issues (response) as shown in the diagram below.

To make reporting easier, the report has been broken down into a variety of environmental themes to help classify the environment. In South Australia, 7 themes are used: atmosphere; inland waters; coasts and the sea; land; biodiversity; human settlements; and heritage.

For each of the environmental themes, environmental issues have been chosen to report on as the main topics of concern within the themes. For example, under the atmosphere theme, the major issues are air quality and climate change. For each issue, environmental indicators are used to measure the condition of the environment with respect to that particular issue.



How does sustainability relate to SoE reporting?

Sustainability is the ability of the earth, its ecosystems and resources, to provide a healthy home for humans and all other living things, now and into the future.

Sustainability is a very important part of environmental management and monitoring. If we make sure that what we are doing is sustainable, then our children, and our children's children will also have enough resources to live comfortably.

Sustainability is an important part of SoE reporting. We can use indicators to measure whether or not our actions are falling within sustainable limits. For example, we can measure how much water we are using from the River Murray and work out if we can keep using that amount into the future. If we cannot, then we are using water beyond what is sustainable. When we work out that our actions are unsustainable, we need to think of ways to achieve sustainability.

What is an indicator?

Environmental indicators help track changes in the environment. They are key measures that help us to find out the major trends and changes within a system. Indicators help to make the reporting process simpler.

They can be measured and reported on frequently and their information can be gathered and interpreted in a uniform manner over time. In relation to the PSR model (or adaptations of the model), there are 3 types of indicators:

Pressure indicators describe the pressures from human activity that affect the environment.

State (or condition) indicators measure the quality of the environment and the functioning of important environmental processes.

Response indicators identify the human actions or efforts that have been made to address pressures on the environment.

State of the Environment Trends

On every fact sheet there is a section that outlines environmental trends in South Australia. These icons will indicate whether the environment is making progress, needs attention or is stable.

Making progress

Attention required

Stable

Linking the issues to each other

An important consideration for achieving sustainable practices is the recognition that all the different aspects of the environment and community are related to each other. For example, water use is listed under 'Human settlements' but poor water management can also impact on other environmental themes such as biodiversity loss, degradation of coastal and marine resources, the River Murray and a reduction in heritage values. Not only do the different themes relate to each other, but they also impact on other sectors in the community: health, economy and culture.

Each fact sheet has a section that outlines the impacts that the particular issue has on the other parts of the environment. Make sure you look for the images below to see how the issue you are reading about affects other aspects of the environment and community. This will help you to understand more about impacts on sustainability.

Taking Action

When you see the 'taking action' symbol in the fact sheets, you can learn about the things that you can do in your life to help make our society sustainable. It is important to learn about environmental issues, and even more important that we act on the information we have learned.

Without action, how can we achieve sustainable change in our community?

To find out more about actions that you can take, have a look at the Action Levels on the SoE education website: www.epa.sa.gov.au/soe

Here you can learn about projects you can take part in or how to develop your own environmental project.

Impact symbols

Atmosphere

Human Settlements

Biodiversity

Heritage

Coasts and Sea

Health

Inland Waters

Economy

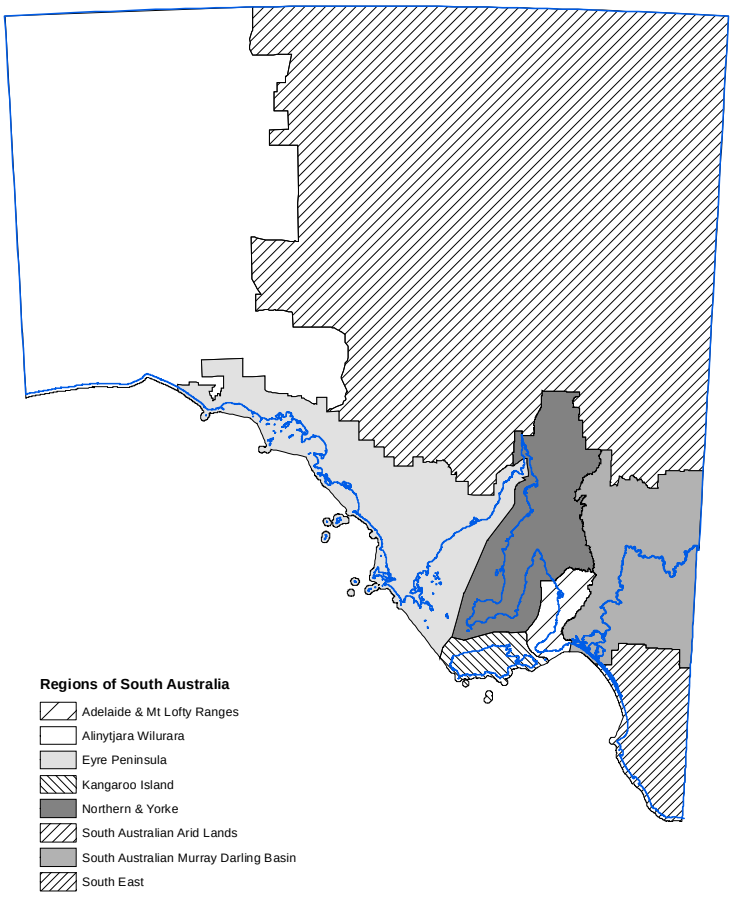
Land Resources

Culture

Natural Resource Management (NRM) Regions in South Australia

A region is an area of land that has some common issues of environmental management. South Australia is broken into eight regions. The map shows these regions.

Source: Department for Environment and Heritage



Glossary

Biodiversity
Biodiversity is short for biological diversity and means the variety of life forms on earth.

Catchment (watershed)
A catchment is an area of land that collects water. The water flows to the lowest point through water systems, like rivers, creeks, lakes and dams.

Catchments also include groundwater, wastewater and water related infrastructure. We all live in a catchment, and caring for our waterways is everyone's responsibility.

Degradation
When we degrade something, we reduce its value. We often talk of degradation to the environment in relation to human actions or other processes that have a negative impact on the value of the environment. For example, animals introduced with hard hooves can degrade the land by trampling the soil.

Estuary
An estuary is an area of water where the river meets the sea, and fresh and saltwater mix together.

Groundwater
Groundwater is water that occurs naturally below ground level and is accessed by pumping from bores and wells.

Habitat
Habitat is the place in which a particular species lives; the home of a species.

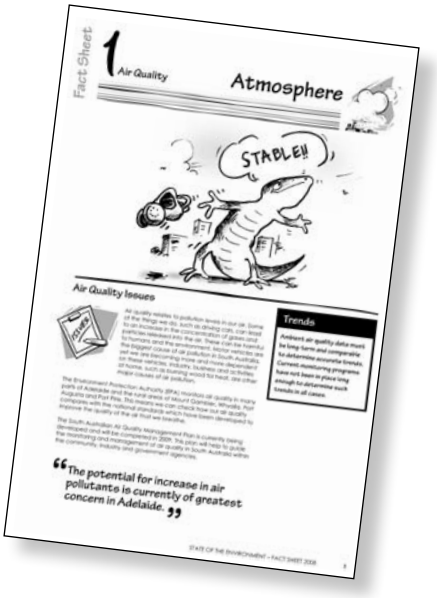
Renewable and non-renewable resources
Non-renewable resource sources are not replaceable within human time-frames. These include coal, gas, oil and many mineral resources, like copper. Renewable resource sources are those replaced within a reasonable time frame by natural processes. These sources of energy do not create as much pollution and use resources that we are able to keep using – like the sun and wind! Energy created from renewable resources is sometimes called green power.

Resource
A resource is a material that is found naturally in the environment and is used for food or energy, or to produce other goods, like timber or coal.

Surface Water
Surface water is any water that occurs on the land surface including run-off, creeks, rivers, streams, dams and reservoirs.

Sustainability
Sustainability is the ability of the earth, with all its resources, to keep going into the future, and keep providing a healthy home for humans and all other species of plants and animals.

Sustainability is a very important part of environmental management and monitoring.



Resources

For more detailed information on the issue and actions you can take see the State of the Environment report for South Australia 2008.

This is available at:
www.epa.sa.gov.au/soe

This fact sheet is part of a set of 20 fact sheets about the key environmental issues identified in the State of the Environment report 2008, produced for the Environment Reporting Education Resource. You can access the fact sheets and learn more about taking action for the environment at the Education Resource website: www.epa.sa.gov.au/soe.
For more information call the Environmental Education Unit of the Department for Environment and Heritage (08) 8463 3911.

Government of South Australia
Department for Environment and Heritage

EPA South Australia

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Fact Sheets:

Atmosphere

1. Air Quality
2. Climate Change

Inland Waters

3. Water Quality
4. Water Quantity
5. River Murray

Coasts and the Sea

6. Water Quality and Habitats
7. Coastal and Marine resources

Land

8. Land Use
9. Soil Erosion and Acidity
10. Dryland Salinity

Biodiversity

11. Native Vegetation
12. Threatened Species
13. Introduced Species

Human Settlements

14. Population and Urban Form
15. Transport
16. Energy
17. Water Use
18. Material Consumption, Recovery and Waste

Heritage

19. Built Heritage
20. Cultural Heritage