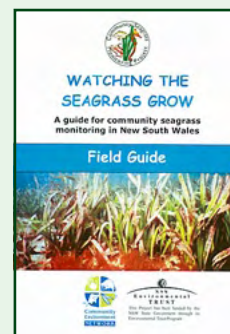


# NSW COASTAL COMMUNITIES CARING FOR SEAGRASS

## overview of the project

The Community Environment Network has successfully delivered 15 training workshops to over 250 people along the NSW coast to expand upon their community seagrass monitoring program. Seagrass is a key indicator for the health of a waterway. Seagrass also provides breeding ground and habitat for many other marine species. The training provided community groups with the skills and equipment required to collect data for areas that may not be monitored by local authorities. This ultimately allows community groups to observe changes to seagrass in their local area.

The information gathered by each group is used to fill in the gaps between formal monitoring events and aids in determining the overall health of estuaries, rivers and catchments. Community monitoring is not only an effective way of collecting information that can assist with management decisions, but its also an important educational tool that increases community awareness and can result in changes to behaviours that reduce negative impacts on the environment. As a result of the information gathered, the community can act to minimise further degradation.



Seagrass field guide

## how the project was carried out

Expressions of interest from key experts, government representatives and community leaders were sought to determine location for the workshops, with some direct targeting of known hot-spots across the state. Workshops were tailored to reflect local issues in relation to seagrass, estuaries and the environment.

A field guide, training manual and standardised data entry sheets were developed which detailed the scientific methods to collect localised, site specific information on seagrass. The aim of these documents was to ensure that the data collected was consistent and reliable over time, so that when data is analysed, changes can easily be detected.

The workshops covered four main facets: education, quality assurance, collecting data and managing data.

The education component of the workshop included identification of different species of seagrass, their current status, why the species are important and the potential threats. The remaining topics covered information on the most appropriate methods for collecting data on seagrass to ensure that quality is maintained across the regions and over-time. The workshops included a field demonstration of the methods involved.

Three 50 metre transects were established perpendicular to the shoreline at each monitoring site and measurements were taken every five metres in 50 centimetre quadrats. In each quadrat the following details were recorded:

- Depth of the water
- The sediment composition
- Seagrass species present (list of species)
- The percent of seagrass cover
- The seagrass species composition (how many of each species occurred)
- The height of the seagrass (for each species)
- Epiphyte coverage on seagrass
- Percentage of macro algae coverage

## outcomes now and in the future

A key outcome has been the increased understanding by the community of the importance of seagrass and the reasons for monitoring its health. Additionally, the project has played a pivotal role in assisting the Department of Industry and Investment to educate coastal communities about *Caulerpa taxifolia*, a rapidly growing and highly invasive marine alga that could out-compete native seagrass and have a detrimental impact on the local ecosystems that rely on seagrass.

## benefits, challenges & lessons learned

This program has developed synergies with the world-renowned "Seagrass-Watch" program that has allowed for the effective exchange of resources, information and ideas, as well as the publication of three articles that detailed information to an international audience. There has been a marked increase in the level of community interest in seagrass, with approximately ten enquiries received each week.

Through the running of this project it was recognised that standardised equipment is required to ensure the integrity of the data collected and that purchasing these resources is beyond the volunteers involved. Cost saving through the sharing of resources and utilising existing resources allowed for the purchase or in-house manufacturing of the required equipment.

The main difficulty encountered during the implementation of this project was conducting workshops and field demonstrations with only one trainer. It was difficult to assist large groups and to cover broad areas in the field. To overcome this issue, one volunteer was provided with additional training that allowed them to assist the trainer.