

STORMWATER HARVESTING FOR AN AQUATIC RESEARCH AREA

overview of the project

Murray High School in Albury carried out a project to create an aquatic research area as part of a larger environmental education demonstration site in their grounds. They chose a neglected and underutilised part of the school and used natural drainage lines to transform the area into a thriving, sustainable wetland habitat planted with native vegetation. They used the project to help provide access to water, a problem faced in many inland Australian cities. The site is now an aquatic research area and is a valuable resource for several areas of the curriculum including Geography, Science and Design and Technology. The project successfully coordinated the involvement of a large number of school students, community members and organisations at all stages.



Murray High School grounds

how the project was carried out

The school students were involved in all activities connected with the project. They recorded data in the early stages to assess all aspects of the site including layout, biodiversity, sun and shade locations and the main drainage patterns. Students and teachers installed drainage channels to divert stormwater into three natural drainage areas of the school. They planted a series of reed beds leading into two ponds and a bog.

Local community members were involved with the project as they offered expertise in many aspects such as native plant selection, mentoring for students and hardware requirements. Individuals from Charles Sturt University, Riverina TAFE, Albury City Council, the Wonga Wetlands Aquatic Environmental Education Centre and a plumbing team were able to lend their skills and advice.

outcomes now and in the future

All stages of planning, construction and landscaping of the site were carried out successfully. A wetland planted with water tolerant native plant species was created and is being used primarily by Science and Geography students for their studies of environmental management, but also by other members of the school community. In addition, the school developed a mentoring arrangement with Charles Sturt University and the National Environment Centre of Riverina TAFE. This was not only helpful in the planning and landscaping stages of the project but is a valuable outcome in terms of future working relationships.

The aquatic centre will continue to be a living system and a resource for future students. Work on the site is ongoing, with students being organised by a roster for further planting and water sampling. The school community plans to construct a timber walking deck and to purchase test kits for monitoring the water quality. Provided an ongoing scheme of maintenance is in place, especially for weed control and rubbish removal, the system should provide a site for the study of many areas of the curriculum. Continued sharing of the site is encouraged, as the centre is most likely to thrive into the future if it is valued by a wide group of users.

benefits, challenges & lessons learned

The project integrated well with the school's Environment Management Plan and many key learning areas of the curriculum benefited. Some specific learning areas assisted by this project were a unit on waste management in Geography, earth resources in Science, water quality in Chemistry, investigation and research of ecosystems in Biology and creation of 'learnsapes' in Design and Technology.

The school team successfully coordinated the involvement of a large number of school students, community members and organisations to deliver the project. As an ongoing benefit, the school shares the site with two local primary schools as a part of the district's Sustainable Schools Program. This has the advantage of encouraging an early sense of responsibility for and an awareness of the environment, with a particular focus on water management issues.