#### Barkers Vale Public School School Environment Management Plan (SEMP) 2010 – 2014

#### Our school at a glance...

Barkers Vale Public School is a supportive and active community situated on the scenic plateaus of the north coast tablelands. Barkers Vale has luscious, ecologically diverse surroundings which are a distinct feature of the high rainfall, sub tropical area it resides in, the school itself, located 35 km from Lismore and 55 km from Murwillumbah.

Embedded in the Richmond Shire, Barkers Vale is a friendly and devoted school community.

Barkers Vale Public School thrives on community input and participation, and each person involved is dedicated to providing the optimum learning experience for the children through unity. Our reputation is founded on delivering quality education, and developing the individual talents, interests and abilities of our students.

The school is positioned at the top of a picturesque valley and values its large playing fields, climbing equipment and park-like grounds. Our students and staff take pleasure in well resourced classrooms and facilities where students learn in a family and community friendly environment.

**Mission Statement** - The people in our school and community are committed to the development of a better environment for everyone Through ongoing programs that develop cleaner and more sustainable ways of doing everyday activities we hope to make our space on this Earth a more pleasant place to live, work and play

**School Vision** - "Our school strives to be a place where every child can learn and develop the skills to effectively function in and actively contribute to society. We want to encourage & empower people, link our community and develop an environment where every student can succeed, through excellence, innovation and team work... "It's up to us."

#### Rationale

Through the development of a SEMP students will -

- Develop a greater understanding of the impact of people on the environment;
- Gain a greater appreciation and understanding of the principles of sustainable development
- Use their knowledge of environmental management practices to apply strategies within the school environment and local community;
- Be able to identify the areas of the school environment that they can manage more effectively
- Acquire knowledge and skills to manage these key elements of the school environment
- Design and implement ways of monitoring, evaluating, reviewing and reporting the SEMP
- Try to encourage stakeholders to improve their environmental performance and gain an understanding of their place in the whole community
- Develop an understanding of the benefits of communicating our performance with our environmental work to the community;
- Make a lifetime commitment to environmental management practices at both the individual and community level.

#### **Target Areas:**

The following are issues that we have identified in our school. Although they are linked they are listed under five main areas:

- 1. Waste to reduce (avoid), recycle or re-use
- 2. Water its quality and the quantity used
- 3. Land the impact on the soil, plants & animals of our actions
- 4. Energy to use less and be more efficient whilst using cleaner types
- 5. Air- that is clean and enhances a quiet surrounding

Principles	Actioning
Integrate Sustainable practices into the curriculum	
Strengthen our relationship with the community.	Ask and listen to the community about its concerns or ideas relative to the school environment and the surrounding Caldera and Richmond range, and act upon it.
Value the input of all groups in the local area.	Seek the needs wants and opinions of the staff, students, parents, and community members, local community groups such as other Sustainability projects in the area, CAN, KSC, Land Care, Aboriginal Community Groups, and Local Businesses.
Integrating environmental management where possible, into all aspects of the school environment.	Make sure that all decisions made by the school, students and community include the consideration of the impact on the environment before during and after any initiatives are undertaken
Minimising the environmental impact	Identify existing and potential risks, problems and solutions before they arise, constantly reviewing plans if necessary, being cautious
Encouraging responsible use of paper, school materials & products used in the school by the staff and students	Adopt methods that enhance, support and reward a culture of waste reduction, recycling, safe depositing of avoidable waste, proactive waste reduction such as a reusable drink bottle, the reduction of plastic wrappers, using both sides of paper in class, reducing the use of photocopier paper, monitoring & reviewing the schools energy consumption, redirecting bubble water to the gardens and not as waste.
Continually improving our environmental performance	Review and monitor the environmental management plan & adopt new & better ways of doing things. Constantly seek the support and opinion, beliefs, needs and wants of stakeholders in the School and Reserve community.
Communicating our environmental performance	Report openly to the community on environmental progress & in doing so allow others the opportunity to evaluate the overall environmental performance.

#### 1. Target Area - Water - Reducing the quantity- analysing the quality- monitoring the usage

Actions	Timeframe	Personnel Involved	Resources required
1.1 Develop a water conscious culture that aims to minimize our water consumption by adopting water wise methods			
1.2 Divert the water from the bubblers exit pipe to a tank (for future use) or directly onto the gardens			
1.3 Place a brick into each cistern to reduce water usage			
1.4 Placing a plastic tub into the sink when washing & after painting			
1.5 Make sure that toilets are serviced regularly so that faulty ones don't stay on and waste water			
1.6 Make sure that bubblers are serviced regularly so that faulty ones don't stay on and waste water			

## 1. Target Area - Water continued

Actions	Timeframe	Personnel Involved	Resources required
1.7 Make sure that taps are turned off in the playground and the toilets		Carbon Cops	
1.8 Install self regulating tap timers			
1.9 Clean up our rubbish so that it doesn't get washed down the drains and into the waterways			
1.10 Make sure that chemicals, paints or oils do not get washed down the drain			
1.11 Ensure our school utilizes organic/ biodegradable fertilizers and pesticides	ongoing	Neil, WJ	
1.12 Identify and stop any dripping taps		Carbon Cops	
1.13 Ensure the plants that we utilize in our school environment require minimal watering (Such as natives)			

## 1. Target Area - Water continued

1.14 Increase the schools collection of rainwater with extra rainwater tanks to be used on the gardens – apply for grant		Jen Parke	Water Tank Grant
1.15 School sprinklers are used at dawn (for maximum absorption by plants) or sunset & for a sensible length of time			
1.16 Brooms rather than hoses are used to clean paths			
1.17 The garden beds are mulched to retain water in the soil	Term 3 2010	WJ AJ Neil	Mulch donated KSC

## 2. Target Area – Air that is clean and enhances a quiet surrounding

Actions	Timeframe	Personnel Involved	Resources required
2.1 Students and staff walk, cycle or car pool when traveling to and from school instead of the family car where possible			
2.2 Maintain our mowers and machinery by regular services to keep emissions clean			
2.3 Don't burn off waste			
2.4 Utilize hand tools instead of power tools where possible			
2.5 Fit classrooms with furnishings that absorb noise			
2.6 Attempt to reduce the noise from traffic by designing gardens at the perimeters that absorb the noise and also provide a visual barrier to the busy street			
2.7 Erect please drive quietly signs on Kyogle Rd to remind many of the industrial trucks to be mindful with their air brakes			

## 3. Target Area - Land: the impact on the soil, plants & animals of our actions

Actions	Timeframe	Personnel Involved	Resources required
3.1 Plant and maintain Seedlings, cuttings, herbs, vegetables, fruit trees and native tube stock.			
3.2 Prepare Three areas for vegetable gardens 1. vegetable garden for the canteen to use. Neil 2.Herbs and small vegetables for K1 on K1 side of Road. Wendy3.Extra garden for all classes to use at different times.Raised gardens near shade house.	Term 1 - 2011 Term 1 2011	Neil and Parents WJ	
Apply for Kitchen Garden Grant	May 2011	JP WJ DT p&C	Grant 2500.00
3.3 Write songs that identify & support the work & through their appeal broaden the motivation & understanding of the issues.	Term 3 – 2010	Jamie North, students	
3.4 Film a Documentary showing our sustainable practices-Time Lapse Compost	Term 3- 2010	Jamie North and students	
3.5 Participate in community events to enhance, motivate & support for caring for the environment.			
3.6 Fundraise and enter environmental competitions	Term 2 2010	WJ - 2,3,4 class	Tumbleweed comp. McCains comp.

## 3. Target Area - Land continued

Actions	Timeframe	Personnel Involved	Resources required
3.7 Apply for funding opportunities to support SEMP e.g worm farms and compost bins, raised vege gardens.	Ongoing	Jen Parke WJ JM	<ul> <li>22/7 Coles Grants</li> <li>20/5 Sustainable         Schools grant.</li> <li>2/7 P&amp; C Awards         Grant</li> <li>30/6 Kyogle         Sustainablity         group grant.</li> </ul>
3.8 Search for and enter into community partnerships focusing on environmental sustainability	Term 4 2010	JP – Nimbin Rocks WJ – Lismore Community Gardens. NNC Kate Daniels	Bus
<ul> <li>3.9 Implement an awareness raising program focusing on the big picture with:</li> <li>local Aboriginal community</li> <li>Staff / Students</li> <li>Community groups</li> <li>Kyogle Shire Council</li> <li>NPWS</li> <li>Uki/Kyogle Sustainabilitity Projects</li> <li>Lismore Community Garden</li> </ul>			
3.10 Ensure that there are adequate pathways through gardens to prevent erosion			

# 3. Target Area - Land continued

Actions	Timeframe	Personnel Involved	Resources required
3.11 Ensure that non or limited land use areas are vegetated with appropriate natives to help prevent the infiltration of weeds and to encourage the growth of local natives	30/07/10	Whole School	National Tree Day
3.12 Gather seeds for a seed bank			Nimbin Seed Exchange
3.13 Start composting using compost bins and worm farms. Collect grass clippings for compost	ongoing	Whole School	
3.14 The soil is monitored and kept in good quality to support healthy plant life. If need be it will be given appropriate conditioners and fertilizers. We will use soil from school compost and castings form the worm farm on our gardens.	ongoing	WJ Class 5,6	School curriculum Mccains Competition Soil PH tester
3.15 K1 to have their own vege patch	Term 4-2010 or When it suits AR	K1, WJ	

## 3. Target Area - Land continued

Actions	Timeframe	Personnel Involved	Resources required
3.16 There is sufficient vegetation to provide shade.  More planting of small trees as windbreaks and noise barriers is necessary.	30/07/10	Whole School	National Tree Day
3.17 Use mulch on all gardens once/twice a year to retain moisture and prevent weeds.	ongoing		
3.18 Encourage and promote the growth and development of native species and construct garden areas that provide shelter and food for lizards, birds and other native animals. Be mindful of the impact of introduced species (Myna bird) & discourage them in our school environment.	Annual Tree Day		
3.19 Landscape correctly. Prune Mulberry tree correctly. Provide correct drainage next to the tree. Prevent soil compaction. Resurrect stone water feature. Landscape school entrance to prevent erosion and for asthetic value.		BC, AJ, WJ, DT, Neil	Landscaping grants
3.20 Research and plan Excursion to the local National Parks to investigate local flora		Leonie Walsh (Law) Parent & NPW manager	

#### 4. Target Area – Energy – Use less and be more efficient whilst using cleaner types

Actions	Timeframe	Personnel Involved	Resources required
4.1 Turn off heaters/ coolers when they're not really needed		Carbon Cops	-
4.2 Our school places stickers near lights and fans as reminders to turn them off			
4.3 Students wear appropriate clothing depending on the weather		Students	
4.4 We turn off the lights when not in the class room		Whole School Carbon Cops	
4.5 We switch off the computers or preset them to low energy modes when they're not being used		Whole School Carbon Cops	
4.6 We have carpet / rugs for warmth			
4.7 We use paper fans when it is hot			
4.8 We constantly monitor the school's energy efficiency			School Curriculum

## 4. Target Area – Energy continued

Actions	Timeframe	Personnel Involved	Resources required
4.9 The school's hot water system is set at a moderate temperature or the hot water system is connected to a solar generator			•
4.10 The school buildings are properly insulated			
4.11 Deciduous trees are planted to provide shade in summer to school buildings. If that is not appropriate then the installation of awnings or blinds is invested			
4.12 The structure of school buildings & the placement of windows are investigated to capitalize on the winter sun for rooms facing north; this may necessitate the installation of windows.			
4.13 The school's electrical appliances are 5 star rated for efficiency			
4. 14 Implement carbon cops/students to monitor progress			

5. Target Area - Waste - Reduce, Re use, Recycle

Actions	Timeframe	Personnel Involved	Resources required
Reduce (Avoid)			
5.1 Implement Litter free Lunches	Term 2 - 2010	Whole School	
5.2 Whole school excursion to Council Waste Management Facility to educate children, teachers and parents on issues of waste, landfill, recycling	Term 4 2010	Whole School Lismore City Council Kate Daniels	Bus, supervising staff, Lismore city council staff
5.3 Attempt to make sure our food is not over-packaged with plastic			
5.4 The canteen attempts to stock items with minimal wrapping		Wendy to do Canteen audit	
5.5 Our classes try not to use too much paper		Lyn	
5.6 Implement the Waste Wise Schools program	Term 3 -2010	JM and Lyn	
Audit Waste and make appropriate changes –Colour code bins			

5. Target Area – Waste continued

Actions	Timeframe	Personnel Involved	Resources required
5.7 We place enough bins around the school to cope with non recyclable or reusable rubbish and place those in a larger bin emptied weekly. (This will be monitored to measure the impact of our actions)		JM, Lyn	
5.8 We use Compost Bins and Worm Farms for our organic waste. K1 to have worm farm and recycling by Term 3 2010	Term 1 - 2010	WJ, Whole School Ronnie	
Re-use			
5.9 Try to bring our lunch (food and drink) in reusable containers	Term 3	Whole School	
LF Lunches on Fridays			
5.10 We reuse the backs of faxes in our photocopiers, computer printers and for art work	ongoing	Whole School	
5.11 Plastic bags are reused wherever possible and we wash and re-use reseal able plastic bags in our lunch boxes	ongoing	Whole School	

5. Target Area - Waste continued

Actions	Timeframe	Personnel Involved	Resources required
5.12 We will use a compost bin for the collection of our food scraps and use on our gardens and eventually a worm farm for all classes will be used.	Term 3 2010	Whole School	
5.13 We reuse empty household items (i.e. egg cartons etc) for our art and craft	ongoing	Whole School	
Recycle			
5.14 The school buys items made from recycled paper		Trish	
5.15 We sort our litter by placing paper, glass, plastic, tin, bottles, and cardboard into specially marked bins that are collected by the council both in the playground and in the classroom.		Lyn	

#### BARKERS VALE PUBLIC SCHOOL SITE MAP

