

SITE *ENVIRONMENT MANAGEMENT PLAN (SEMP)

**includes environmental, social/ cultural and economic dimensions*

This page is required for the AuSSI-SA Online SEMP Data Base at semp.sustainableschools.sa.edu.au

Site: Banksia Park Kindergarten (SEMP started 2011)

Vision What will our school *environment be like in 3-5 years? How will we be more sustainable?	<i>We want sustainability to be part of our daily practice, embedded in our curriculum. Sustainability is written in our philosophy which outlines our values and practices.</i>					
Rationale (why the school wants to become more sustainable)	<i>Important for life and living skills and practices for children Developing new behaviours, adaptation, resilience in children It's a global sharing of practices. Children from diverse backgrounds – shared understandings, basic human necessities. Contributes to caring and respect values instilled in children</i>					
Context (the unique aspects of the schools that need to be considered in planning for improvement)	<i>Strong community involvement – parent community are passionate about environment, gardening and the grounds. Outdoor learning environment – families strongly value this Parents value the kindy's sustainability values as many practice sustainable behaviours at home.</i>					
Principles (the guiding ideals by which we will operate such as conservation, peace and equity, democracy) Google for further ideas on principles, including the <i>Earth Charter</i> .	Principle		Agreed Definition			
Links with other school plans and policies e.g. Site Improvement Plan						
Leadership team (working group) The leadership team is ideally representative of the broader school community (students, staff, parents, community members) and reports to school governance bodies.	<i>A member of our kindy community sits on the community garden committee...</i>					
Core Indicators Used The results of using the Core Indicators are not required for the Data Base. The Data Base can be used to document improvement plans.	Web link to Core Indicator Tool to be added We have used the Core Indicators to develop whole school plans for Education for Sustainability. Yes No					
Audits and AuSSI-SA SEMP database Indicate when you have undertaken Audits and entered the data on the database	Audit	Yes ✓	Date undertaken	Data Base Entry	Yes ✓	Date entered
	Energy			Energy		
	Waste	✓		Waste		
	Water			Water		
	Biodiversity	✓		Biodiversity		
	Air Quality			Air Quality		

	Transport			Transport		
Action plans	Attach all action plans (sample on page 3).					

What we are already doing
(Not required for the AuSSI-SA Online SEMP Data Base)

<p style="text-align: center;">Energy</p> <p>LEARNING Learning around the sun and how plants use energy</p> <p>“What if there is no energy- what do you do?” activity</p> <p>ACTIONS</p>	<p style="text-align: center;">Water</p> <p>LEARNING Water cycle poster used Water and health Why we need water Water conservation – learning around collecting rainwater and rainwater tank Children encouraged to use less water when washing hands Exploring using rainwater in the sand pit Exploring using rainwater to water the garden Water for the wormery Water has weight</p> <p>ACTIONS Bucket kept under outside tap to stop wastage. Children water the garden with rainwater Buckets instead of the hose for watering to limit usage Washing hands in a bucket instead of under running taps Dual flush toilets installed (using DECS Enviro Grant) Dripper irrigation system installed Native garden planted</p>	<p style="text-align: center;">Waste</p> <p>LEARNING Learning around the three bin system Learning around the wormery and composting with lunch scraps Recycling and reusing materials Healthy eating messages (less food waste)</p> <p>ACTIONS Students encouraged to tackle home zip lock bags for reuse – less packaging and bringing in plastic containers Money tree program White paper collection Clothes & toys recycled through Goodwill WOW workshop/waste audit Three buckets used at lunch time – green bin, litter and recycling bins. Parents encouraged to bring in recyclables to be reused Private contractor collects green waste and E Waste Shared fruit time - one piece of fruit (unpackaged) Separated waste made clear for cleaner</p>	<p style="text-align: center;">Social/ Cultural</p> <p>LEARNING “Where were you born” activity “We are all the same” activity</p> <p>ACTIONS Clothes and toys recycled through Goodwill Soles 4 Shoes program – encouraging parents to bring in old shoes Food collection for charity Christmas Hampers Work with local primary school and community volunteers on shared community garden Won an award (!!!) for community enagement with community, parents and local primary school. Approached Bunnings for garden materials/tools – received a voucher</p>
<p style="text-align: center;">What we will be doing next</p> <p>Raise awareness of energy usage Have lights off on sunny days</p> <p>For the future: Monitor site usage Look at grants for solar panels</p>	<p style="text-align: center;">What we will be doing next</p> <p>Look at improving soil quality – aeration Another rainwater tank More learning around water cycle eg. using a water cycle model Learning around water for the environment and water for animals Look at healthy river systems Water pollution – coasts/rivers/drains Develop life skills to save water</p>	<p style="text-align: center;">What we will be doing next</p> <p>Follow up from previous WOW audit – look at how much waste (volume) is generated over 1 week. Have a greater focus on reducing packaging Source scrap paper from parents/offices/businesses/libraries/schools</p>	<p style="text-align: center;">What we will be doing next</p> <p>Making cultural links through food grown in the veggie garden Approach Coles re. composting arrangement Shoebbox of Love initiative in December Linking environmental issues with global population needs Christmas food hampers at the end of the year</p>
<p style="text-align: center;">Biodiversity</p> <p>LEARNING</p>	<p style="text-align: center;">Air Quality</p> <p>LEARNING</p>	<p style="text-align: center;">Transport</p> <p>LEARNING</p>	<p style="text-align: center;">Economic</p> <p>LEARNING</p>

<p>Children learning about the garden Insects, bugs, lizards and habitat Bird feeders – children painted them Bees and pollination – honey sandwich activity Pressing flower activity Planted potatoes found growing in compost bin</p> <p>ACTIONS Have a native garden Ladybirds, butterflies, birds and minibeasts now appearing on site Community garden efforts Raised bed vegetable garden on site Better soil through composting Bird feeder Frog pond (in early stages)</p>	<p>Books displayed on site re. air quality and pollution How trees grow - photosynthesis and air quality Importance of tree conservation (links with habitats and food sources)</p> <p>ACTIONS N/A</p>	<p>N/A</p> <p>ACTIONS Kindy catches the bus to the library Local walking Riding bikes Some students walk to Kindy Tea Tree Gully Westfield Christmas Parade – Kindergarten walked in the parade instead of riding on a car</p>	<p>Learning the value of making and reusing things Eg. pressed flowers, recycled cards for gifts and collage activity Less packaging costs by using and reusing containers Washing and reusing spoons Taking food home to eat later (encouraging no food wastage)</p> <p>ACTIONS Pressed flowers as gifts vs buying gifts and recycled paper</p>
<p>What we will be doing next</p> <p>Setting up maintenance plan for bird feeders Replace plants that die off – increasing plant species and diversity over time Extend/further develop frog pond with a recirculated water system Planting out raised garden bed with a seasonal theme/focus Seed collecting Weeding, ploughing soil, planting, watering, observing things grow Harvesting and cooking with help of parents Possibly sell excess produce to encourage less food wastage</p>	<p>What we will be doing next</p> <p>Linking with local council re. planting events at the local creek Hold more planting days for the community garden Get some indoor plants</p>	<p>What we will be doing next</p> <p>Run a survey – What do you do at home to cut down on your car usage Graph the results showing everybody's travel eg, walk, bike, bus, car, train etc.</p>	<p>What we will be doing next</p> <p>Veggie garden – food origins and destinations, linked with packaging focus Benefits of growing your own food versus the supermarket Cooking your own food versus buying cooked food. Sell excess produce from garden if applicable</p>

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Action Plan (required for AuSSI-SA Online SEMP Data Base)

Theme/ Topic:		OUR PRODUCTIVE PATCH!			YEAR: 2013
Goals:		Our goal is to develop understanding of food production and the growing cycle. We aim to have a harvest and collection of some food so that children can see the continual cycle. We are strategizing ways of embedding sustainability into our curriculum.			
Project	Location	Strategies to achieve action	Who?	Timeframe	Completed ✓
VEGGIE BEDS		<p>Current System: 3 x veggie beds, one large, two small. 1 x Wicking bed soon to be added</p> <p>Actions</p> <ul style="list-style-type: none"> • Wicking bed to be built • Garden sign currently being made • Children to decorate garden area with their artwork? • Need to source more Nasturtium seeds • After harvest of broccoli leave one plant for seed • Poster of growth cycle children illustrating and photos of the stages <p>Learning</p> <p><i>Include below some possible learning activities/themes/ideas to link to the veggie beds:</i></p> <ul style="list-style-type: none"> • Life cycles • Measuring and comparing seeds • Rain gauge and weather vane • Making organic pest traps • Making recipes from produce <p><i>Ideas from previous years:</i></p> <ul style="list-style-type: none"> • Photograph existing plants in raised bed, children to record measurements of the plants before leaving for holidays. Information to be used for comparisons next year. <p>seasonal planting guide, gardening jobs and cooking timeline planned out and ready for use in Term 1 2014.</p>	<p>Michell McCard</p> <p>Amanda Bywaters and Staff</p> <p>staff</p>	<p>Week 1/3</p> <p>End of term 3</p>	

Project	Location	Strategies to achieve action	Who?	Timeframe	Completed ✓
COMPOSTING		<p>Current System: 2 x worm farms 1 x compost bin? Separate bin system to collect food scraps</p> <p>Actions</p> <ul style="list-style-type: none"> • Compost gate to be fixed more securely • Regular compost maintenance? • Continue worm maintenance....food cut up <p>Learning <i>Include below some possible learning activities/themes/ideas to link to the composting:</i></p> <ul style="list-style-type: none"> • Study of minibeast in particular vinegar flies • Fine motor skills shredding paper • Reduction of waste and caring for the environment • Children continue to identify different stages of the worm cycle within the worm farms. • Mushroom farm and research toad stool 	Parent volunteers	By the end of the year	

FRUIT TREES		<p>Current System: Mandarin, nectarine & peach trees planted</p> <p>Actions</p> <ul style="list-style-type: none"> • Children to fertilise, treat the woolly aphids, cover our apple tree when it its fruiting. • Putting up the possum box to encourage them to eat things other than our apples • Looking at other ways to use fruit products eg juice, puree, stew preserve. We have purchased dehydrator • Visiting Joel's farm <p>Learning</p> <ul style="list-style-type: none"> • Literacy- songs rhymes and stories eg hungry caterpillar • Science- transformation, prediction observation • Identity- Multicultural fruit and veg 			
GARDEN SHED		Arrange so materials are easily accessible and safe	Staff	End of term	
Project	Location	Strategies to achieve action	Who?	Timeframe	Completed ✓

RAINWATER TANK		<p>Proposed Plan: Square Rainwater tank donated by a parent. Will be situated next to the garden area. Main water source for the garden beds. Parents and staff to rotate watering duties in warmer months</p> <p>Actions</p> <ul style="list-style-type: none"> • Requires a concrete footing to be installed: • Purchase concrete mix? • Hire concrete mixer? • Source a willing parent to lay concrete slab • For end of the year – develop watering roster. • Decoration of tank <p>Learning</p> <ul style="list-style-type: none"> • Water conservation • Water cycle • Research what happens when we • 	Parents and staff	End of 2013	
SUCCULENTS/ CACTUS GARDEN		<p>Proposed Plan: Garden planned to host cacti and succulents Will be situated out the back, in front of the window so children can see it Will also host the bird bath.</p> <p>Actions</p> <ul style="list-style-type: none"> • Determine what plants to use (eg. butterfly/bird attracting? Just succulents etc?) or seek donations/cuttings from parents • Any site prep. required? • When will the garden be planted? <p>Learning</p> <ul style="list-style-type: none"> • Habitat, • water conservation • planning and design: props in block corner • Identity...bringing succulents from home • 	staff	By week 5 term 3	

Theme/ Topic: BIODIVERSITY 2011 - 2012 applicable) Goals:						Target/s: (if
Action identified	Location	Strategies to achieve action		Who? All children	Timeframe	Completed ✓
Learning + Curriculum	Learning: Biodiversity Audit		2011 <ul style="list-style-type: none"> Children to assist with biodiversity audit. Results of survey to be shared with children. <i>Photo Wall</i> to be developed displaying the butterflies, insects and birds photographed on-site. <i>**Diary used instead of a Photo Wall.</i> 		T4, 2011	✓ ✓ ✓
	Learning: Vegetable Garden and Nature Learning Journal		2011 <ul style="list-style-type: none"> <i>Vegetable Diary</i> (see Action below) to dictate garden jobs children will be doing from week to week. Children to use the Worm Calendar (see Action below) to identify different stages of the worm cycle within the worm farm. Photograph existing plants in raised bed, children to record measurements of the plants before leaving for holidays. Information to be used for comparisons next year. 		T4 2011 – T1 2012 T4 2011 – T1 2012 T4, 2011	- - -
			2012 <ul style="list-style-type: none"> Comparison between natural compost used in raised bed versus soil used in primary school beds – rate of plant growth to be observed and compared. Learning around Jack & the Beanstalk story: grew Broad beans with focus on Literacy. Focus on Autumn: change of the seasons, evergreen trees, deciduous trees. Olympics and food for fuel: fresh fruits and vegetables, healthy bodies through healthy eating. 		Wk 1-5 T1 2012 T2 ? T1/T2? T3	✓ ✓ ✓ ✓

	Learning: Living Gifts (TBC)		2012 <ul style="list-style-type: none">Grow Tomato seedlings for Christmas presents in bio degradable pots 2013 <ul style="list-style-type: none">Give succulents for Christmas that the children divide when they make the garden		Term 4	✓
	Learning: Maintain Bird feeders		2012 <ul style="list-style-type: none">Move to a place where birds have better access			✓
	Learning: Native garden maintenance		2012 2013 <ul style="list-style-type: none">Divided plants on mounds investigate some butterfly attracting natives			
Biodiversity Audit		2011 <ul style="list-style-type: none">Conduct a Biodiversity audit with the children using materials from S&A .Marianne to send S&A Audit materials to Bronwyn.Use an 'Audit Book' to collect and add data to over time. Book will be used to share with the students. Photos will be taken, dated and added to the book.		Before the end of T4 2011	✓ ✓ ✓	
		2012 <ul style="list-style-type: none">Conduct a Biodiversity Audit with the children using materials from S&A .Collect and add data to Audit Book or Nature Learning Journal? over time. Book will be used to share with the students. Photos will be taken, dated and added to the book. 2013 <ul style="list-style-type: none">Continue and maintain Nature Diary		T4? Week_?	✓	
Maintain Bird Feeders		2011 <ul style="list-style-type: none">Will record what birds use the bird feeder.Continue to refill with seed.		T4 onwards	Ongoing ✓ ✓	
		2012 <ul style="list-style-type: none">Will record what birds use the bird feeder and document in Nature Learning JournalContinue to refill with seed. 2013 <ul style="list-style-type: none">Install a Bird Bath		T3 onwards Term 4 2013		
		2011 <ul style="list-style-type: none"><i>Vegetable Diary</i> to be developed – a term planner layout with a seasonal planting guide, gardening jobs and cooking timeline planned out and ready for use in T1 2012.		T4, 2011	-	
		<ul style="list-style-type: none"><i>Worm Calendar</i> to be developed depicting worm stages throughout the year, to sit beside the <i>Vegetable Diary</i>.		T4, 2011	-	

Vegetable Diary					
		2012 <ul style="list-style-type: none"> The <i>Nature Learning Journal</i> will document all the children's stories, comments, photos and experiences relating to nature occurring at the Kindy. <i>Nature Learning Journal</i> to be located in the parent corner. Worm calendar (see details above) to be incorporated into the <i>Nature Learning Journal</i> 		T3 week T3 week T4?	- ✓ -
Living Gifts for Mother's Day/Easter/Christmas		2011 <ul style="list-style-type: none"> Herbs, veggies, flowers, grasses (any plants) to be grown and potted in egg cartons or other recycled materials as gifts for Easter and Mother's Day. Preparation will begin a few weeks before April. Any plants the parents/community wish to donate will be encouraged? 		April- May 2012	- - -
		2012 <ul style="list-style-type: none"> Herbs, veggies, flowers, grasses (any plants) to be grown and potted in egg cartons or other recycled materials as gifts for Christmas? Any plants the parents/community wish to donate will be encouraged 2013 <ul style="list-style-type: none"> Succulents for Christmas 		T3 or T4? week_?	✓
Native garden maintenance		2011 <ul style="list-style-type: none"> Continue replacing plants that die-off. Increase plant species and diversity over time. Children will continue to do the weeding. Get the parent roster for garden maintenance up and running again. 		Ongoing T1, 2012	✓ ✓ ✓ -
		2012 <ul style="list-style-type: none"> Continue replacing plants that die-off. Increase plant species and diversity over time. Children will continue to do the weeding. Get the parent roster for garden maintenance up and running again. 2013 <ul style="list-style-type: none"> Investigate and plant butterfly attracting plants Continue to divide and maintain native grasses and plants 		Ongoing T4	
Further develop Frog pond		2011 <ul style="list-style-type: none"> Explore creating and maintaining the frog pond with assistance from community groups (eg. Lions and Rotary). The frog pond will be an initial step in a broader garden plan across the site. Explore available grants 		To be initiated before the end of 2012	- -
		2012		initiated	

		<ul style="list-style-type: none"> • Explore creating and maintaining the frog pond with assistance from community groups (eg. Lions and Rotary). • The frog pond will be an initial step in a broader garden plan across the site. • Explore available grants <p>2013</p> <ul style="list-style-type: none"> • This project has been shelved for the time being instead we wish to develop a butterfly garden over the next few years 		before the end of 2012	
<p>Evaluation</p> <p>How we will know we have achieved our goals.</p>		<p>2013</p> <ul style="list-style-type: none"> • Carry out Biodiversity Audit and compare results to those collected in late 2011 • SEMP Meeting in late Term 4 to evaluate and plan for 2014? • • 		<p>T4, 2013?</p> <p>End Term 4 2013?</p>	

