

National Environmental Education Network Meeting 8, 17 June 2005 - Member Updates

The following updates were provided by members of the National Environmental Education Network prior to Meeting 8, 17 June 2005.

Disclaimer: The views expressed herein are not necessarily the views of the Australian Government, and the Government does not accept responsibility for any information or advice contained herein.

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Australian Government

Department: Department of the Environment and Heritage

Schools Sector

Sustainable Schools Initiative

Background investigation of possible options for the establishment of a Foundation to receive private sponsorship in support of the AuSSI is underway.

New Initiatives

The coordination of the SSI workshop 'The Australian Sustainable Schools Initiative - What do we know and where are we going?' on 3,4,5 August 2005 in Canberra is underway. Most members would have been contacted regarding this workshop.

Continuing Initiatives

Design and printing of the National Environmental Education Statement is expected to be completed in June / July.

Research (New/Upcoming/Update on existing research)

Completed and publicly released: Whole-School Approaches to Sustainability: An international Review of Sustainable Schools Programs, reflecting on International examples of sustainable schools programs, the key findings indicate that successful approaches had a number of key elements in common.

Further and Higher Education Sector

Research (New/Upcoming/Update on existing research)

Completed: *Education about and for Sustainability in Australian Business Schools.* Business Schools were examined to identify education about and for sustainability in Masters of Business Administration (MBA) curriculum and short courses; identified best practice in Australia and benchmark it against international standards; and recommended core areas to further integrate sustainability into MBA and short course programs.

Business and Industry Sector

Research (New/Upcoming/Update on existing research)

Completed: *Industry Sustainability Project - Background Research and Recommendations*, a review of sustainability resources for the business and industry sector examining international and Australian products designed to engage industry on various aspects of sustainability.

Community Sector

Research (New/Upcoming/Update on existing research)

The Environmental Education Section has consulted a number of areas of the Department to undertake research that is aligned with Government priorities and achieves tangible results. Projects selected for research by ARIES will enhance the outcomes being pursued by the Portfolio through education. The projects to be undertaken are listed below:

1. *Air Quality Education: Effective Programs.* This research will review air quality education program from Australia and overseas so as to identify the critical success factors which improve the effectiveness and outcomes or

education programs. The project will consist of 2 stages: stage 1 review case studies and identify critical success factors in design and management of education programs; Stage 2 development of a pilot through action research methodology. The anticipated completion of Stage 1 is December 2005.

2. *Reef Water Quality Protection Plan: Scoping of Issues Associated with Industry Practices.* The project aims to contribute to protecting the Great Barrier Reef by identifying how to address issues arising from agricultural land use and sustainability from farmers' perspectives. The project will be a two staged process: Stage 1 preliminary scoping research to provide in-depth and contextual understanding of the issues from farmer groups' and associated stakeholders' perspectives; Stage 2 based on the results of Stage 1, will develop and implement an educational program based on best practice EfS principles for farmer groups.
3. *Framework for a National Cooperative Approach to Coastal Zone Management: The Development of a Tool for Assessing Provision and Effectiveness of Coastal Management Education.* This project aims to improve the accessibility and effectiveness of coastal education and capacity building initiatives by providing an indicators tool for coastal management education and capacity building. The research will identify best practice case studies, develop an indicators tool, trial and adapt the tool and disseminate the tool to different stakeholders across various levels of government.
4. *Building Government Capacity Towards Sustainability.* This project seeks to enhance sustainability initiatives within government through participatory inquiry and capacity building. Through a participative inquiry approach, the study will interrogate dimensions of organisational change, learning and transformation for sustainability. The 12-month project will address a series of research questions regarding champions, management change and sustainability, which are shaped by a capacity building approach.

**Australian Government
Department: Department of Education, Science and
Training (DEST)
Schools Sector**

The National Environmental Education Statement (NEES) for Australian Schools was endorsed at the 12-13 May MCEETYA meeting, with MCEETYA agreeing to the Statement's release and distribution to all Australian schools.

In order to give added impetus to, and provide further demonstrable Australian Government support for the NEES, DEST will initiate the following complementary initiatives to support environmental education:

- Support will be made available for environmental education-related professional learning under the Australian Government Quality Teacher Program (AGQTP). (www.qualityteaching.dest.gov.au).
- DEST will seek to have environmental education perspectives incorporated into relevant National Statements of Learning (especially science and civics) currently under development.
- For future rounds of the Australian School Innovation in Science Technology and Mathematics (ASISTM) Project, encouragement will be provided for the development and submission of environmental education-related project proposals. (www.asistm.edu.au)

State: Australian Capital Territory

Department: ACT Government and Non-government

Schools Sector

Sustainable Schools Initiative

ACT Department of Education and Training

The funding agreement with DEH will be signed shortly. Following this, a Sustainable Schools officer will be appointed to the department, who will work with schools to implement the initiative.

Waste Wise Schools

Out of 150 schools in the ACT, 100 schools have sent teachers to the workshops 18 High Schools/Colleges and 82 Primary Schools since July 2003.

New Initiatives

Waste Wise Schools

There are 9 Waste Wise District Coordinators in the ACT.

The role of the DC is to manage a network of schools in their area that are participating in Waste Wise Schools as well as encourage non-participating schools in their area to join their network and get involved with Waste Wise. The DC's are to hold a meeting once a term for teachers in these schools to discuss Waste Wise practices, share information and support each other.

Continuing Initiatives

Environment ACT

Aboriginal Officer continuing to work with Birrigai Outdoor School on Indigenous programs. Aboriginal Officer visiting preschools, schools and colleges to conduct Aboriginal programs when asked. Rangers at Tidbinbilla Nature Reserve conduct school programs in a variety of areas.

Waste Wise Schools

School tours of the MRF (Materials Recovery Facility) and landfill have seen 1,500 school students attend these tours in 2005.

Evaluations

Waste Wise Schools

An independent evaluator, Sara Beavis from the ANU is currently completing her second evaluation report for the Waste Wise Schools program and will be delivering the report on 15th June 2005.

Research (New/Upcoming/Update on existing research)

Waste Wise Schools

Case studies on Waste Wise Schools are currently being developed and will be advertised on the ACT NOWaste website.

Further and Higher Education Sector

New Initiatives

Water Strategy implementation

Australian National University School of Business students undertook a semester-long project to develop communication strategies to promote water efficiency in the ACT community. After a briefing by the Office of Sustainability (the client), the

students researched the issues and developed creative communications proposals. These plans were presented to the tutors and the client. Approximately 60 students participated in the project. Outcomes from the initiative include:

- * some 60 students learning more about water issues during the course of their research for the project
- * a range of creative ideas to address water communication and awareness were generated by the students, some of which we hope to implement in the future
- * it provided good insight into ways to reach the youth segment of the community with water awareness campaigns.

Business and Industry

New Initiatives

Australian National Botanic Gardens

The Australian National Botanic Gardens Education Services sections have introduced a water erosion model to demonstrate the impacts of human induced changes on river systems. With a particular emphasis on native vegetation management, the model demonstrates the long-term sustainability of our actions. Additionally, the model uses recycled water and the pump is operated by solar energy system to enhance the sustainability of the system.

The ANBG have included a new evening-time program, the Twilight Forest Adventure. This is a sensory experience, which emphasizes the connection between urban environments and native species. We provide participants with dynamo torches, which operate on a sustainable energy system.

ACT NO Waste

The No Waste Business Challenge has just been launched. The aim of this program is to encourage businesses to avoid and reduce waste, recycle and improve their current waste service arrangements

Continuing Initiatives

Water Strategy implementation

Under Think water, act water (the ACT's water resources strategy) a program to assist businesses undertake water audits is underway.

Australian National Botanic Gardens

The ANBG Water for Life facilitated program continues for visiting local and interstate school groups. The Water for Life program incorporates an investigation of pond life, water quality testing, habitat searches, and also challenges students to consider water management issues on-site. We support learning about waste management issues and provide programs and information to visiting schools on composting. In the previous 12 months we have added to our Explainer education program a unit, which explores the threatened species in cultivation at the ANBG.

Evaluations

Australian National Botanic Gardens

We continue to evaluate our education programs by requesting formal feedback from participants through the use of feedback forms and by providing regular teacher professional development opportunities. Response has been positive.

Community

New Initiatives

Water Strategy implementation

Investigations into the viability and effectiveness of providing water wise gardening workshops are underway.

Sustainability and Health Strategy

Planning is underway for some workshops later in 2005, for representatives across a range of groups, like SHINE, to develop the "Sustainability and Health Strategy for the ACT". This aims to make the links between living healthily while living more sustainably.

Environment ACT

A children's area will be developed as part of the new display and redevelopment of the Namadgi Visitors' Centre Display and Woodland Walk at Tidbinbilla Nature Reserve.

Jo Pillinger developed some teacher notes for the woodland walk so teachers could self-guide the trail. Interpretive signage will be developed in the next 8 months which teachers can use when they self-guide.

ACT NO Waste

The Recycling Right Campaign was launched in April 2005 to help residents sort out what should and shouldn't be put into their recycling bins. Through a series of advertisements, a printed guide and facility open days we hope to further improve recycling rates and reduce the amount of waste sent to the landfill. A 6-week media campaign will include advertisements appearing on TV, radio and the local press.

Continuing Initiatives

Water Strategy implementation

ACT Government subsidised Indoor and Outdoor Water Tune-up programs. Plumbers (Indoor) and horticulturists (Outdoor) make house calls to registered participants and provide advice on how to improve water efficiency in the home or garden. In addition to the education component, water efficient devices are installed and leaks are fixed as part of the Indoor program, and a \$50 rebate for water efficient products for the garden is provided as part of the Outdoor program. More information:

www.thinkwater.act.gov.au

Sustainability Network

The Sustainability Network is developing, with increasing numbers of people forming online communities which have interests across the range of issues about living sustainably into the future. It is supported through the non-government organisation The Nature and Society Forum. The Australian Ecolabelling Association trialled it and is using it. They developed a Green Procurement Guide for businesses, government, institutions, communities and individuals. Other groups around Australia are coming online, and it provides opportunities for people to connect with others who are involved in similar activities to do with sustainability.

Australian National Sustainability Initiative

ANSI is working with the Australian Green Development Forum('green' architects, engineers, developers) to develop the National Sustainability complex, which will have very high sustainability design criteria in the design of its eco-innovative display spaces, its educational spaces, its office spaces and its landscaping. It will be the hub for the sustainability network.

BushCare

Some ACT ParkCare (BushCare) groups work with local schools in nearby Nature Parks learning about their local natural environments, and helping with plantings.

Evaluations

Water Strategy implementation

A model for the evaluation of the ACT's residential water efficiency programs (Indoor and Outdoor Tune-ups, rainwater tank and showerhead rebate schemes) is currently being developed.

State: New South Wales

Department: Department of Environment and Conservation

Further and Higher Education Sector

Continuing Initiatives

A National Project on VET knowledge and skills for sustainability

The DEC (NSW) is one of the two funding agencies for this project, with EcoRecycle Victoria. It's being run by the National Centre for Sustainability at Swinburne University (Vic). There is a steering committee comprising the funding agencies, the project managers, ANTA, the NSW Department of Energy Utilities and Sustainability and Melbourne Water. The role of the NSW DEC is to communicate with key NSW VET and industry bodies to inform them of the project, seek their input to the development and directions of the project and to take up the outcomes of the project, which are three Sustainability Guideline Competency Standards. These are a generic standards which fit across all training packages and need to be taken up by each National Industry Skills Council into their Training Packages where appropriate.

Phase 1: Guideline Standards for Sustainability

The main purpose of Guideline Competency Standards is to promote portability of recognition across industries. The aim in the development of these Guideline Standards is to:

- Contribute to an increased awareness and understanding of sustainability in business systems, practices and thinking at all levels of government, industry and community.
- Encourage behaviour change and systems implementation throughout industry, government and community in the area of sustainability and sustainable production and consumption

The development of the Guideline Standards is one critical aspect in the project titled 'Knowledge and Skills for Sustainability'. The Standards were "noted" by the NTQC in May 2005 and are now available on the NTIS website at www.ntis.gov.au.

The Guidelines Standards are:

Code	Title
GCSSUS01	Participate in environmentally sustainable work practices (Cert. II & III level)
GCSSUS02	Implement and monitor environmentally sustainable work practices (Cert. IV level)
GCSSUS03	Develop workplace policy and procedures for sustainability (Diploma level)

The Guideline Standards have been designed so that they may be imported into all currently accredited industry Training Packages, as well as being taken up into newly developed Training Packages (TP). The Guideline Standards may also provide an opportunity for industries and TP developers to consolidate the number of units that address environmental sustainability presently available within and across TPs.

Phase 2: Implementation and Resourcing

In Phase 2 it is intended that a number of steps will be taken to ensure the Standards are resourced and used in training and in the workplace. The project will work with Industry Skills Councils (ISCs) to develop Guideline Briefs, to develop a Materials Resource Bank and to develop a series of Industry Learning Guides for 4 key ISCs. These guides will incorporate learning materials, case studies, assessment materials and additional resources on an industry specific level. The key ISCs are Manufacturing, Innovation & Business, Transport & Logistics, Agrifood. Partnerships and Pilot Projects will also be established with industry groups, unions and training providers to promote their uptake in workplaces. Phase 2 will involve all stakeholders ie industry, ISCs, environmental agencies, training providers, training package developers and education agencies to ensure the resources are relevant and useful to industry and able to be implemented by trainers and workplaces.

Business and Industry

New Initiatives

One -2- Five Sustainability

The NSW DEC is about to introduce an innovative management diagnostic tool that allows senior management from across an organisation to identify and prioritise environmental actions during a 2-hour meeting.

Known as 'One – 2 – Five Sustainability' the management diagnostic was developed for DEC use by Energetics Pty Ltd. Energetics has previously developed the 'media specific' 'One - 2 - Five Water' and 'One - 2- Five Energy' tools that are used extensively in Australia, the US and New Zealand. It covers key areas of sustainability such as: management commitment; OH&S and environmental compliance; energy, water and waste management; supply chain (procurement and product stewardship); performance indicators; management planning; awareness training; stakeholder engagement; operating and maintenance procedures; innovation and technology; monitoring; and reporting.

The NSW DEC is currently trialling 'One –2-Five' with major companies in the commercial property sector, including AMP, Stockland and Macquarie Bank.

Community

New Initiatives

Our Environment It's A Living Thing – Sustainability education partnership program

This project brings together the lead government and non-government environment agencies in a partnership that will deliver coordinated community education on priority environmental issues to key target groups in NSW. It will:

- i.. build understanding of sustainability and key actions for achieving a sustainable society;
- address education gaps and needs on the key issues of household chemicals, biodiversity information for coastal land managers, NESB sustainability education, and energy and water conservation for low income and not-for-profit human services agencies; and
- build more effective delivery by educators, NGO groups and organisations, industry leaders and schools. This partnership adds value to government environment policies by bringing together a critical mass of networks within a three year program, producing better solutions and enhanced long- term cooperation in areas not currently addressed.

There are six project partners involved with this program. These are;

- Department of Environment and Conservation
- Nature Conservation Council
- Australian Conservation Foundation
- Total Environment Centre
- NSW Council of Social Services
- Department of Utilities, Energy and Sustainability

Our Environment It's A Living Thing - Local Council Partnerships Program

In 2004, \$1.5 million in funding was provided by the NSW Government, through the Our Environment – It's A Living Thing program to local councils for 36 individual and 15 group sustainability education projects. These projects were completed in March 2005. There was very strong interest in this program with 113 applications received. Final reports from these projects are currently being received. A review of these projects indicates that grants are valuable in progressing a range of DEC and local government sustainability outcomes.

In order to reinforce and extend this program, a second round of grants be provided to a selection of councils from those that were unsuccessful in the 2003/04 round. Together, the two grant phases will constitute a strong and sustained intervention to get a critical mass of sustainability education outcomes in local government that will provide strong links to other programs and generate substantial professional learning by participants. The program will provide:

- Funding to local councils for 9 individual and 5 group sustainability education projects developed with communities across NSW,
- a learning program for local council educators including workshops, facilitated meetings of learning groups, individual support by facilitators and showcasing their experiences with peers,
- resources developed both for education programs (eg. posters) and program implementation within councils (eg. case studies, project management tools etc.),
- evaluation of projects and the overall program,
- support for processes within councils to integrate environmental education programs within council's own organisational framework and
- assistance with development of, or support of existing processes within councils to track sustained behaviour change and environmental outcomes from environmental education / environmental management interventions.

- i. Research (New/Upcoming/Update on existing research)

The Environment and Ethnic Communities in NSW

In 2004 the Department of Environment and Conservation commissioned research into the environmental knowledge, attitudes and behaviours of eight ethnic communities in NSW. The research explored people's general priorities for government action and what is important to them personally, as well as asking detailed questions about a range of environmental matters and their preferred forms of communication.

The findings show that the environment sits near the top of ethnic communities' concerns. 95% of those interviewed rate the environment as 'very important' or'

rather important' making this the second most important personal priority for ethnic communities after 'family'. The findings of this research indicate that while general environmental knowledge attitudes and behaviours across ethnic communities are converging with those of the broader community, there are large differences between specific language groups on a range of issues.

The research also gives a detailed picture of the media use and preferences of the eight communities studied.

This research will be of great use to a wide range of people and organisations working on ethnic communities' policy, service provision and communications. This paper will present key findings from the research and draw out implications for work in this field.

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NSW Council on Environmental Education – 2003/04 annual report

This is the second annual report covering the reporting period, from July 2003 until June 2004 on the implementation of *Learning for Sustainability: NSW Environmental Education Plan 2002-05*. A key function of this annual reporting process is to show the direction of change during the plan implementation period 2002-2005. The first and second reports for 2002-03 and 2003-04 establishes benchmark for the first 18 months against key performance indicators. Subsequent data will enable comparisons and increase the analytic power of this reporting process.

The plan has 39 performance indicators across seven key outcomes. Reporting is mandatory for State agencies and voluntary for all other bodies. Responses were received from 99 organisations including: 20 State agencies, 53 local councils, 11 universities, 3 environment groups and 9 industry groups. This represented 46% of State agencies, most of the major NSW Government education providers, with the notable exception of the Department of Infrastructure Planning and Natural Resources (DIPNR) which has lead agency responsibilities for several strategies in the Plan. Data is modest from local government, with just over a third of councils responding and may be skewed to councils with dedicated education programs and staff. The low response rate from community and environment groups and industry responses means the reporting is limited by lack of information in some sectors, however it represents an improvement from the first reporting period when no industry groups were included in the survey.

Responses indicated that there has been significant progress in achieving Plan Outcomes. For example, in relation to *Outcome 1: Improved integration of environmental education with other tools and strategies used by organisations to promote Ecologically Sustainable Development*, 70% of the reporting State agencies and have incorporated environmental education into key corporate planning documents compared to 52% in 2002/03 .

Environmental Trust

The Environmental Trust has called for applications to its grants program.

An amount of \$1 million is available for community grants and state and local government grants (\$500,000 to each program). Closing date for Expressions of Interest is 10 June 2005.

An amount of \$150,000 is also available for the Eco Schools Program – a total of 60 grants of \$2,500 each to schools. Closing date for applications is 1 July 2005.

State: Northern Territory Department Employment Education and Training

Schools Sector

Sustainable Schools Initiative

10 schools from across the NT (2 primary-secondary, 1 independent) successfully nominated for the pilot that will run from March – November 2005.

Two facilitators from each pilot school attended a 2-day workshop in Darwin; the workshop was successful as it developed:

- A whole school approach to Environmental and Sustainable Education
- A range of strategies and resources to lead individual schools through the Sustainable Schools Initiative
- Networks with other facilitators and supporters
- A facilitators action plan

Continuing Initiatives

Tropical Savannas Knowledge for Schools Project

The Tropical Savannas Knowledge for School Project is a joint venture between Tropical Savannas CRC –Cooperative Research Centre for Tropical Savannas Management and DEET (Department of Employment, Education and Training). The project is an interactive resource-rich website (and CD-ROM) for teachers and students linking current research outcomes about natural resource management in northern Australia to the middle years of schooling. It focuses on the EsseNTial Learnings, Learning Technology, learning areas of Science and Studies of Society and the Environment (SOSE) as well as the cross-curricular literacy perspective. The site structure is completed and 2 interactive modules (linked to NT Curriculum Framework) focusing on biodiversity and cattle country will be ready for the flash design stage by the end of September 05, ready for piloting early 2006.

Department of Infrastructure, Planning and Environment (DPIE)

EnvironmentNT Grants

Through the Office of Environment and Heritage dedicated funding has been made available by the Northern Territory Government to community groups to undertake environmental projects. These Grants are available to community groups and individuals annually to address a wide range of environmental issues including biodiversity protection and environmental education.

School Project Grants: are available to schools for environmental activities and projects done by schools, on school grounds, throughout the Territory. Projects relating to litter or recycling are not eligible for funding, these proposals may seek funding support through the Litter and Recycling Grant program.

Community Education Unit of the PWCNT

“Parks Alive” programme for seasonal visitors, Junior Rangers activities, “Alice on the Line” programme at the Alice Springs Telegraph Station, Alice Springs Desert Park and Territory Wildlife Park guide activities, other interpretation in national parks e.g. signage, leaflets

Advisory Services

Extension officers provide advice on water and soil conservation and weed control, through responding to enquiries, distribution of fact sheets and guidelines, and field days. See website.

Cool Communities Program

The Northern Territory Government is providing \$50 000 per year over three years to fund the NT Cool Communities Program. The Environment Centre NT in Darwin and Palmerston, and the Arid Lands Environment Centre in Alice Springs, manage the program.

NT Cool Communities is designed to educate people about climate change and encourage individuals and households to reduce their greenhouse gas emissions. Households can reduce their emissions by minimising and improving the efficiency of their energy use, and choosing sustainable modes of transport.

Central Australian Sustainable Housing booklet

The Greenhouse Policy Unit recently published the booklet Sustainable Housing in Central Australia – A guide to efficient use of energy and water.

The booklet has been specifically targeted at housing in the desert region. It promotes sustainable housing design and encourages and advises on efficient household energy and water use.

By promoting energy efficiency in the residential sector, the booklet also aims to contribute to the management of greenhouse gas emissions in the Northern Territory.

The Office of Environment and Heritage contracted the Centre for Sustainable Arid Towns in Alice Springs to produce the booklet.

The booklet is available to interested members of the community from the Department of Infrastructure, Planning and Environment (DIPE) office in Alice Springs, the Arid Lands Environment Centre and Desert Knowledge Australia. The booklet has been made available at events such as the Desert Knowledge Sustainable Building Forum, and is on the DIPE website.

Green House competition

In 2004 the Government ran a Green House competition for the design and construction of houses, which are energy and water efficient. The competition aimed to encourage the housing design and construction industry to deliver housing, which is more environmentally sustainable.

The Government awarded the winners with specific blocks of land on which to build the houses at \$40,000 below the valuation price. In addition Government undertook to promote the winners and the houses.

Competitions of a similar nature usually focus solely on house design. In this case the NT Government was keen to ensure that the winning houses were built so that the community could visit the houses and see for themselves design features that might be adapted to their own homes. Both houses have received considerable interest from industry and the community.

As a result of the competition two houses have been constructed in the Territory: one in Palmerston and one in Alice Springs. Both houses generated considerable interest from the housing construction industry and the public.

Further and Higher Education Sector

Research

A Charles Darwin University research team has won a \$229,000 grant that will enable it to further its environmental research studies in northern Australia.

Proposed areas of study include mangrove environments, the Timor Sea and Arafura Sea, and the Great Barrier Reef. Research programs include tracing sewage and aquaculture effluents, studies of bushfire smoke and the relationship between human and landscape health.

The grant, awarded by the Australian Research Council, will be used to purchase a Stable Isotope Ratio Mass Spectrometer (SIRMS) to measure the isotopes of carbon, nitrogen and sulphur on land, at sea and in the atmosphere.

The grant has been awarded to Associate Professor David Parry and Dr Niels Munksgaard of the School of Science and Primary Industries, in partnership with the Australian National University, the Australian Institute of Marine Science and the Northern Territory Department of Business, Industry and Resource Development.

The SIRMS will be housed in the new Arafura Timor Research Facility building adjacent to the university's Casuarina campus. Additional funding has been awarded from the NT Research and Innovation Board and Fund.

Associate Professor David Parry said today: "We will use the SIRMS to determine the impacts of sewage and aquaculture effluent in marine environments.

"We will also be able to analyse the composition of smoke caused by bushfires in the Top End and identify the source of fuels that cause severe air pollution.

"The SIRMS facility will provide a focus for research collaboration and training in northern Australia. It will enhance strong collaboration between organisations committed to increasing the understanding of unique northern environments, and will include the Arafura Timor Research Facility, a major national research facility.

"It will contribute to studies of conservation biology, natural resource management, environmental and marine science and resource development in the tropical north.

"It will help develop knowledge bases, innovative approaches to environmental management and sustainable development, and high levels of research and research training for regional development.

“The research infrastructure will provide a focus for research scientists from the partner organisations - CDU, AIMS, ANU and the NT Government - and also a range of other agencies. This will further enhance the building of resident research capacity in the Territory.”

Community

Continuing Initiatives

Tangentyere Landcare's Land & Learning project (tang – en – jeer –a)

Tangentyere Landcare's Land & Learning project is an environmental education program for Aboriginal children in central Australian communities. The Land & Learning program teaches traditional indigenous knowledge and 'western' science, and links to the NT Curriculum Framework.

Aboriginal community elders and Land and Learning project officers work together with the children on activities both in the bush and in the classroom. There are a wide range of activities based on the themes of animals, plants, water and fire. Examples are: looking for tracks, scats and burrows and learning about animals that are endangered or have disappeared from country; learning about bush tucker and bush medicine; looking after waterholes.

Wadeye Litter and Recycling Project:

Wadeye is located 400 kms south west of Darwin. A partnership program coordinated by the Thamarrurr Rangers and funded by an NT Govt Litter and Recycling Grant involves the local children undertaking a regular cleanup operation at litter hotspots. Each bag of rubbish collected is rewarded with a piece of fruit, juice or a pass to the local swimming pool. They also developed displays to demonstrate the effects of litter on marine animals and promote nutritional messages targeting children and their parents.

Aboriginal Landcare and Education Program

The Aboriginal Landcare and Education Program (ALEP) is a partnership between Greening Australia NT and the Northern Land Council. ALEP is a two-way education and training project that works with the whole community. One part of the project involves children in upper primary school in field trips and ‘country’ camps. The Environment Grant “Aboriginal Landcare Education Program - Junior Community Rangers” is helping with this work.

State: South Australia

Department of Education and Children's Services

Schools Sector

Sustainable Schools Initiative

The South Australian Sustainable Schools and Children's Services Initiative (SSACSI) is a joint initiative between the South Australian Government Departments of Education and Children's Services (DECS) and Environment and Heritage (DEH).

DECS and DEH have signed a Memorandum of Understanding to collaboratively develop and jointly manage the South Australian SSACSI.

The DECS part of the management of the Initiative is located in the Learning Outcome and Curriculum Group in the Office of Learning and Service Delivery. As such it has a strong learning and curriculum focus.

The SSACSI functions within a set of agreed principles that guide all levels of management from the Steering Committee, Management Group, an advisory group and 22 trialing schools and Children's Services sites.

These foundation principles support;

- Local management strategies that build community capacity through local and cross agency responsibility and commitment to wise use of resources
- Community developed vision and values
- Process and practices informed by 'whole systems' thinking
- Restoring and enhancing ecological systems
- Learning about and living sustainable lifestyles
- Learning based on local relevance within a global context
- Holistic community health and well being
- All stakeholders participating as equals

The 22 schools and Children's Services sites and a broad range of partners are working together to develop and trial the three components of the Initiative; The South Australian Sustainable School and Children's Services Initiative Management Framework to support a holistic model of sustainable change where all aspects of a school's and preschool's operation and decision making are connected A Toolkit to assist in performance monitoring, recording and reporting to support sustainability education.

Recognition of Sustainable School and Children's Services Site achievement

Jonathan Shankar-Noble (DECS) and Sue Coad (DEH) are currently visiting all preschools and schools in the trial to inform the development of the Framework and the growth of sustainable schools and Children's Services sites initiatives.

Partnerships to support the development of the Initiative include Travel SA (Travel Smart), Energy SA, Zero Waste (Waste Wise), River Murray Urban Users Committee, Landcare SA, Urban Forest Biodiversity Program, MurrayCare, Waterwatch, Catchment Care, the Catchment Water Management Boards and KESAB.

The following two attachments provide examples of SSACSI in action
SSACSI - A powerpoint developed by two teachers at Christies Beach High School and Southern Vocational College to introduce their school community to SSACSI
Communiqué Integrating Environmental Education in the SA Murray Darling Basin
from Pippa Kerby, Lower Murray Regional Coordinator Catchment Care/Waterwatch and
Rebecca Arnold, Upper Murray Catchment Care Officer.

New Initiatives in DECS

DECS Sustainability Plan and the corresponding Sustainability Action Plan are currently being developed. This will aim to bring together a strategic plan to guide DECS towards fulfilling the aims of Greening of Government Organisations Framework (GoGO).

Continuing Initiatives in DECS

Solar Schools

The SA Solar Schools Program is the ESD Team's (that is located in the Office of Business Improvement & Strategic Financial Management) most high-profile project. As an initiative established by Premier Mike Rann it initially planned to install a 2kW array of solar panels to around 50 schools and preschools across South Australia. The South Australian Strategic Plan has indicated the intention to increase installations to 250 schools and preschools by 2014.

DECS Xpress – this fortnightly publication is released to all DECS sites. The ESD Team maintain a fortnightly page in Xpress called 'Energy Efficiency and ESD News'. This is an efficient way of publicising the latest ESD news to sites. Energy saving tips, local energy news and a variety of ESD news which can be related to the department is published. DECS uses the page to publicise ESD Grants, awards and to showcase best practice schools.

ESD Grants

The ESD Team have administered DECS ESD Grants since 2000.

This annual round of grants have a budget of \$1m and aim to encourage and empower sites to develop sustainable initiatives onsite.

The last two rounds of ESD Grants (2003/04 and 2004/05) have been tailored to meet DECS' water conservation aims – links to SA Water's Permanent Water Conservation Measurements.

CRS

The scheme was developed as a response to the Federal Government initiative to donate high quality surplus IT equipment within the schooling sector.

Other State and Federal government departments also donate equipment through the Smart State scheme.

The aim of the program is to assist in fast tracking IT learning technologies for students and teachers.

Green Purchasing

Computers- Energy Efficient flat screen replacement program

ROSES (Reuse of Office Supplies and Equipment Scheme)

ROSES was launched by DECS in 2000. ROSES aims to considerably reduce the amount of surplus offices supplies and equipment which go to landfill. ROSES collects surplus material and stores it at its Ingle Farm depot. ROSES sees surplus material distributed to DECS sites for free.

ESD in Major Capital Works

During 2004 DECS ESD Team liaised with Department for Administrative and Information Services (DAIS) officers in the development of a mandatory ESD component to be integrated in all Major Capital Works (projects with a budget in excess of \$150,000). This policy outlined design and construction features which should be mandatory in Major Capital Works and which should be 'considered' in Major Capital Works. It is now used by architects and Major Project Coordinators in the design, construction and refurbishment of DECS facilities

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State: Victoria

Department of Education and Training

Education for a Sustainable Environment

DE&T Environmental Strategy: The Way Forward – An Environmental Sustainability Strategy for the Department of Education and Training

- approved by executive in May 2005
- aligned with DSE education strategy
- includes strategies across Corporate bodies, TAFE and schools
- includes strategies addressing management, day-to-day administration and curriculum
- goals in energy, waste, water, biodiversity, emissions and transport.

OLT Sustainable Schools Strategy 2005

- Derived from the evaluation report of the pilot project 2002-2004
- approved by GM in May 2005
- aligned with DE&T Environmental Sustainability Strategy and DSE education strategy includes:
 - a targeted training program for community and business organisations that will empower them to be state-wide facilitators for the sustainable schools initiative
 - a specific training program for pre-service teachers that will ensure ongoing promotion and support for the next generation of teachers in schools
 - placement of the responsibility for the Sustainable Schools Initiative within the Strategic Partnerships Program which funds 25 organisations with \$2.14m annually year to support schools and provide professional development for teachers
 - the Student Learning Division will work with the Corporate Services Division to incorporate an Administrative Guidelines for Sustainability. The guidelines will outline essential policy and ways to implement sustainability practices strategies across DE&T corporate bodies, TAFE and schools
 - commitment to exploring the development of indicators and measures of environmental sustainability in schools.

Department of Sustainability & Environment (DSE)

Whole of Government & Cross sector

Our Environment Our Future – Victoria's Environmental Sustainability Framework

This Framework:

- sets out the direction for government, business and the community to build environmental considerations into the way we work and live
- includes a set of environmental quality objectives and interim targets against which to measure progress.

Learning to Live Sustainably – Victoria’s Education & Behaviour Change Strategy for Environmental Sustainability

This Strategy aims to see all Victorians with the ability and commitment to contribute to creating lifestyles that are sustainable and fulfilling through a comprehensive, long term approach that has three main elements:

- a State Strategy
- a comprehensive Action Program
- a Communications Program

Victorian Greenhouse Strategy Action Plan Update April 2005

This document:

- acknowledges recent developments in state, national and international policy settings
- builds on the actions and commitments initiated by the Victorian Greenhouse Strategy (2002)
- advances actions to reduce greenhouse gas emissions and to develop adaptive responses to climate change.

Schools Sector

Sustainable Schools Initiative

DSE has contributed funding towards development of a Training Resource for Pre-service Teachers, Teacher Training Institutes and Facilitators in community and business organisations to assist in the implementation of the SSI in Victoria.

Continuing Initiatives

Water - Live it! Learn it!

- A component of the DSE Our Water Our Future initiative, this comprehensive tool helps schools develop their own programs to engage students and the school community in water conservation and education.
- Audience: Primary & Secondary Schools Prep - 10 levels
- Urban focus has recently extended to rural water retailers, supported by water authorities & CMAs. www.ourwater.vic.gov.au/education

Environmental Flows Educational Game

- Product of a partnership between Waterwatch, DSE’s River Health Program and rural water authorities
- a game for middle years to explore the issue of the importance of flow patterns to river health
- Teachers will be trialling the game in third term and the game will be launched January 2006.

Further and Higher Education Sector

Climate Change Roundtable for Universities - April 2005

- Guests included international and national leaders in the field of sustainability education in the higher education sector
- An opportunity for representatives from each of Victoria’s universities to interact with experts in the field and to share information about the exemplary programs in the tertiary sector
- A further forum will use local expertise to lead development of a strategic process for integration of sustainability more broadly across Victorian

universities.

Community

New Initiatives

Water Data Warehouse

The Water Data Warehouse is the one-stop shop for all Victorian water quality & quantity data.

The Warehouse (www.vicwaterdata.net) is the repository for all data collected by DSE, DPI, EPA & water authorities.

For the first time this September the Warehouse will include data collected through the Waterwatch program by community groups, schools and individuals.

Public access to the data will be available from Sept 05.

Guide to using community collected data – to be part of National Travelling Freshwater Ecology Roadshow

- A guide for potential users of the Water Data Warehouse has been developed by the CRC Freshwater Ecology with assistance from Waterwatch Victoria.
- The guide will support natural resource managers in understanding the
- .educational opportunities for community involvement in catchment management.
- Guide available August '05.

Department: EPA Victoria

Schools Sector

Sustainable Schools Initiative

EPA Victoria was involved in the negotiations for the 2003 \$100,000 Sustainable Schools grant from Commonwealth (DEH) to Victoria, and participates in SSI planning meetings.

However, now EPA's main contribution to the Victorian Sustainable schools program is through the **Airwatch Victoria** program which provides professional development for teachers and supporting educational resources including scientific equipment and print materials. (see also below, 'continuing initiative').

We see AirWatch as a high quality educational program, with substantial ongoing resource allocation from EPA. However, it's operation in partnership with SSI has not been fully worked out.

New Initiatives

EnviroExpo Bendigo: a pilot project, being run by a working group of the Victorian Curriculum Assessment Authority (VCAA) with funding from EPA Victoria. To run an expo over two days at La Trobe University (Bendigo Campus) for students and teachers in the Bendigo region (Victoria).

Industry partners that have offered in-kind assistance include: PACIA; Bendigo Mining; Coliban Water; City of Greater Bendigo; LaTrobe and Monash (Green Chemistry Department) Universities, Department of Primary Industry; and North Central Management Catchment Authority.

A significant focus will be hands-on environmental education activities for students in Years 9 and 10 with the highlighting of resources for Environmental Science at Years 11 and 12 and promotion of environmental careers.

”Going for Gold for the Environment”– Commonwealth games materials.

A CD ROM has been sent to all Victorian schools – from the Victorian Department of Education and sponsored by the Commonwealth Games 2006 Committee. This includes provision of activities / resources on sustainability issues such as: Eco Footprint calculations, and Sustainable Transport. EPA Victoria’s main contribution is the Going for Gold for Sustainability game. A paper-based desk-top question and answer game with dice, developed by the AirWatch Victoria team.

The Wheel of Sustainability – a floor game for students.

A question and answer game with dice also developed by the AirWatch Victoria program. The Game is now available on sturdy 4 X 4 metre drop sheet, and is played by small teams of students with large cloth covered set of dice. This is a popular interactive student game – for primary school students – and is now one of the suite of educational activities of the AirWatch Victoria program.

Call the AirWatch “Gaming Gurus” Margot Finn or Sue Gipson, for more information about either game (03) 8710 5566.

Continuing Initiatives

The **AirWatch program** provides high quality environmental education for primary and secondary schools. A recent focus has been work developed specifically for environmental science at years 11 & 12, and for the Commonwealth Games 2006 Committee.

AirWatch provides professional development for teachers and subsidised access to state of the art equipment for purchase – or in some cases for loan at no cost.

The program has strong social and scientific streams. These are linked and have proved popular with teachers as scientifically literate educational programs.

Evaluations

An external evaluation of the AirWatch Victoria program was carried out in 2004 ... the findings were broadly supportive and some changes have been made in the program in line with recommendations of the evaluation.

Further and Higher Education Sector

New Initiatives

Two potential new initiatives are being explored as noted below under research:

Higher Education: An environmental guide to planning (with undergraduate planning students as one of a number of targeted users), and

Further Education: Teaching English as a Second Language using environmental topics.

Continuing Initiatives.

From time to time, EPA staff make presentations at (University or TAFE) for undergraduate or post graduate courses. However, this activity is ad hoc and probably not very extensive. We don’t keep a central reckoning of how much of this is done.

Research (New/Upcoming/Update on existing research).

Two ‘market’ research –or ‘scoping’ research projects

FIRST: EPA has just commissioned a brief research project as preparatory work for the production of an Environmental planning guide.

This will replace an out-of-date publication: Planning measures for Environmental protection: A practical guide for Local Government., March 1996.

The investigation will assess potential demand including:

- * assessment of possible users
- * assessment of the preferred content
- * assessment of the preferred medium (eg hard-copy, web, etc)

SECOND: EPA has commissioned a study by Adult Multicultural Education services to assess the likely level demand for ESL Language units based on environmental topics, and also what would be the preferred format, style, content etc.. The study will also be across the teaching levels and across potential environmental topics, including the possible linking of environmental topics with so called “settlement issues”.

Business and Industry

New Initiative

Sustainability Covenants:

Are a significant new area of activity for EPA Victoria.

AS for NEIPs – Sustainability Covenants have been recently defined in the Environmental Protection Act 1970 – and to date six have been signed.

They are proving to be a good way of working with sectoral leaders, to enhance their environmental performance by more than they would have done without covenants.

Individual covenants vary, but often include environmental training measures.

Each covenanter, by being a leader in its industry sector – provides de facto education (teaching by example) for others in that industry sector.

The six organizations which have signed covenants with EPA are:

Kangan Batman Institute of TAFE, VicSuper, LendLease, PACIA (the industry association), SENSIS (owner of white pages, yellow pages, the Trading Post, etc), and City West water.

Community

New Initiatives.

Community Forum*: EPA Victoria is planning a Community Forum for Oct / Nov later this year (2005) to showcase the contemporary work of practitioners and stakeholders working in the Community to promote and bring about environmentally preferred behaviours in the Community. Examples including Sustainability Street, etc.

See research topic below.

(* Building bridges: a community forum.)

Continuing Initiatives.

Neighborhood Environmental Improvement Plans (NEIPs).

In Victoria the Environmental Protection Act 1970, was amended in 2002 to provide legislative powers for the creation of NEIPs as a way of empowering community members, around environmental problems in geographic localities.

The NEIPs program is still in its infancy, but some NEIPs have been created with significant successes.

Examples include a NEIP at the coastal town of Lorne, and a very different one for the area surrounding Edwards Lake in Reservoir (a Northern suburb of Melbourne)

Research (New/Upcoming/Update on existing research).

Preparatory research for: **Building Bridges: a Community Forum:** to assess potential participants, key themes, possible sponsors, preferred style, timing, etc for a

Community Forum (hopefully) to be held in Melbourne round Oct November this year.

There is increasing activity in this area, (community environmental promotions) with little obvious linking or showcasing of the activities. A key area to explore is how programs labeled as 'social' and programs labeled as 'environmental' can learn from each other / interact / possibly even merge / etc.

For further information about any of the above – call Frank Mitchell at EPA Victoria on (03) 9695 2705 or send an e-mail: to him at frank.mitchell@epa.vic.gov.au

State: State: Western Australia Department: Conservation and Land Management (CALM)

The Department of Conservation and Land Management is responsible for managing the State's national parks, marine parks, conservation parks, regional parks, nature reserves (land and marine), State forests and timber reserves, an area of more than 25 million hectares. In January 2005 CALM released a discussion paper, Towards a Biodiversity Conservation Strategy for Western Australia, which proposes strategic directions and initiatives for the next 25 years, with follow-up actions and outcomes for the next century. Two key strategic directions emphasise the importance of focused and effective environmental education programs (www.naturebase.net/haveyoursay).

CALM uses a variety of approaches to assist the wider community to understand and value Western Australia's biodiversity and natural areas and to participate in their conservation and protection.

These approaches include:

- Nature-based activity programs, which aim to increase the community's environmental awareness, knowledge and skills through enjoyable activities in natural areas. Nearer to Nature is the most comprehensive of these programs, and
- EcoEducation curriculum-linked programs for youth and school communities from Kindergarten to Year 12.

The following provides an update on these aspects of CALM's programs

Schools Sector

Sustainable Schools Initiative

CALM's EcoEducation Section supports the Western Australian SSI. It is represented on the Steering Committee and aims to provide resources, professional development for teachers and opportunities for camps and excursions that will assist the pilot schools to address the biodiversity component within the developing SSI framework.

New Initiatives

Fire for Life program

In the aftermath of the Western Australia's January Perth Hills wildfire, which burnt out 28,000 ha of forest on the doorstep of the metropolitan area, EcoEducation is now engaged in the development of a program for schools and the community. This program will demonstrate to the public the role of fire in biodiversity conservation, its use in sustainable forest management and the threats posed by wildfire. It also aims to encourage debate about and advocacy for the use of fire in promoting biodiversity.

Tuart ecosystem conservation program

Tuart (*Eucalyptus gomphocephala*) woodlands, once dominant along the SW coastal plain, have been mostly cleared for agriculture and urban development.

The health of trees in remaining areas at some sites is in decline. The Minister for the Environment recently approved for some of the offset funding from mining (\$830,000), to be spent on education. In line with the recommendations of the Tuart Conservation and Management Strategy, EcoEducation has started planning for the educational component of this strategy.

Continuing Initiatives

Environmental Education Strategy and Action Plan

The Minister for the Environment launched this plan in December 2005. CALM is represented by its Senior EcoEducation's Project Officer on the advisory committee (EEAC) appointed to implement the strategy. The EEAC prepared a detailed submission to CALM, relating specifically to the education component of the biodiversity strategy discussion paper.

EcoEducation programs

(www.naturebase.net/schools/ecoed_programs_index.html)

- CALM's EcoEducation programs continue to expand throughout Western Australia. EcoEducation offers a suite of programs and activities for schools. There are three elements: professional development (PD) for teachers, excursions or camps for students and resources for use in school.
- EcoEducation works closely with a number of other agencies, community groups and industries to develop and deliver its programs.
- Camps, excursions and PDs are offered at six field centres in metropolitan Perth and the South West. A statewide threatened species program offers professional development at five field centres. In addition, EcoEducation runs special projects and competitions.
- In the past two years there have been more than 45,000 participants in EcoEducation programs.
- EcoEducation has two full time project officers with part time administrative support.

CALM Bush Rangers (CBR) (www.naturebase.net/schools/bushrangers/index.html)

- CBR have been part of the State Government's Cadet's WA program since 1998. The program fosters competence and confidence in life skills such as teamwork and leadership and an ethic for conservation community service.
- CBR is a nationally accredited program giving students the option of obtaining a nationally accredited 'Certificate I and II Conservation and Land Management' and a 'Certificate I and II of Leadership'
- In 2004, a total of 29 Units operated across Government and non-Government school sectors involving over 1000 cadets, completing more than 200,000 hours of voluntary conservation and community service. The program maintained 150 partnerships with community groups and agencies.
- The CBR program is an inclusive program made up of young people from all geographic regions from Kalumburu in the north to Wongutha near the south coast. It includes representatives of Indigenous Australians, those who speak English as a second language and those with disabilities.
- In 2005, the program has expanded to 37 Units.
- This program is coordinated by one EcoEducation Project Officer with part time administrative support.
- Substantial funding is provided to CBR Units by the Western Australian office of Children and Youth.

Community

Continuing Initiatives

Nearer to Nature program (www.naturebase.net/tourism/n2n/index.html)

- Nearer to Nature provides guided nature-based activities across the Perth metropolitan area for local residents, and visitors to Western Australia, focusing on four local ecosystems: forest, woodland, wetland and marine.
- Nearer to Nature operates with a small, highly mobile staff, and in the past year has delivered the majority of its programs away from its base in Perth Hills east of the city. The program uses two trailers, equipped to take all needed resources to any suitable location. One of the trailers is set up specifically for the marine program, and spends most of the year working along the coast near Perth, delivering Touch Pool and other activities to community and school groups. In the past year the most significant growth has been in the marine area.
- Four seasonal programs are created each year delivering a range of interpretive activities relevant to each season.
- Nearer to Nature also has a group booking service that provides guided nature experiences for community organizations, tour groups and the corporate sector.
- In 2004-2005 Nearer to Nature offered 50 different activities with 11,500 participants.