

Remove the sandals from your feet...you are standing

On Holy Ground

Exodus 3:5



An Ecological Vision
for Catholic Education
in New South Wales



CATHOLIC EARTHCARE AUSTRALIA
www.catholicearthcareoz.net

greetings from bishop christopher toohey

It was cause for great satisfaction and gratitude, that many teachers and students in Catholic schools throughout the nation, wholeheartedly responded to the late Pope's call for an "ecological conversion". In the last few years, Catholic educators have initiated many varied and innovative ecological projects that have highlighted the need for all of us to live more sustainably, to leave a lighter "ecological footprint".

God created human beings in His own image as stewards and recipients of His wonderful handiwork. It was to this place that he sent his Son, the Word made flesh, to dwell amongst us.

Catholic educators have a critical role to play in promoting the Church's call to "ecological conversion" which finds its ground in our faith. We know God as Father, Son and the Holy Spirit, revealed to us in the Scriptures and finally through His Son. From Him all wisdom and holiness flows. Not long before he died, Pope John Paul II reminded us, that we are to take up our "ecological vocations, which in our time has become more urgent than ever."

In brief, this Ecological Vision document (together with the attached Environmental Audit CD-R) provides Catholic schools and colleges with a planned and logical pathway to journey towards more ecologically sustainable practices. As well as recognising the moral and spiritual dimensions, it makes good economic sense to carefully examine our use of water, energy and the potential for recycling and waste management.

Accordingly, I commend this Ecological Vision document and pray that all those good women and men involved in Catholic Education read and reflect upon the contents with great seriousness, and respond in a way that you consider most appropriate and beneficial, in your particular circumstances. We are called do this in love; for our children, their children and the generations to follow.

With every blessing and best wishes,

Yours in Christ,

Most Rev Christopher Toohey

Chair of Bishops' Commission for Justice & Service
Member Bishops' Commission for Education



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introduction

Australians live within one of the most diverse eco-systems on the planet - the “Land of the Holy Spirit”, as the first European maps recorded our ancient continent. Environmentally, it is important for us to “read the signs of the times” - “the signs of the Spirit”. We have been gifted with the care of this beautiful land and must hand it on to the next generation in a healthy and pristine condition. To carry out this sacred duty expresses our love for the Creator, each other and the rest of creation. This is sometimes called our “ecological vocation”.

Australians are global citizens, widely travelled and many with access to sophisticated technology, satellite and media information. We are well aware of the environmental crises enveloping the planet. We can read the signs.

Some commentators and scientists are saying that at the present rate of degradation our planet has a very limited future.

From around the world we are receiving scientific data, like the United Nations Eco-systems Reports (2005), that indicates that ecologically, so devastating has human impact been on Earth's ecosystems that we have entered “terra incognita” (land unknown) - that is, a phase in the history of Earth's evolution that “humans have never experienced before”.¹

Like much of the planet, our own country is deteriorating environmentally. There is incontrovertible evidence that our rivers, soil, land, air and oceans are in a worse state than twenty years ago.²

Scientists tell us that we are losing species (and biodiversity) at an exponential rate.³ Climate change is affecting us all.

The Federal Government's State of the Environment Report indicates that shamefully we have the highest rate of greenhouse gas emissions per capita in the developed world.⁴

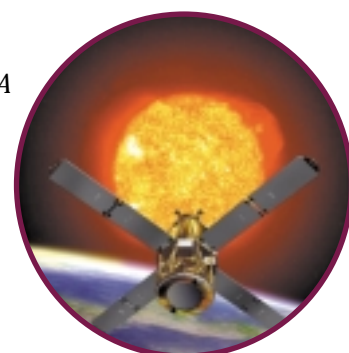
As Christians we are called, as a matter of urgency, to address this grim reality in the context of our living out our faith, and the biblical call to be good and wise custodians of creation and of God's Earth.

The recently published Compendium of Social Doctrine of the Catholic Church reminds us that: “The common good of society is not an end in itself; it has value only in reference to attaining the ultimate ends of the person and the universal common good of the whole of creation”.⁵

So much of our Australian economy is dependent upon the use of fossil fuels. Economic rationalism and ‘market forces’ are driving our fossil-fuel economy to the detriment of the common good.

Pope John Paul II has reminded us that, “the environmental crisis is not merely a technical one but a moral one”, calling for radical changes “in lifestyle and unsustainable patterns of consumption and production”.

Our own Catholic Bishops, have been challenging us to read these signs for the last decade. In 2002, they established Catholic Earthcare Australia and published, for distribution throughout the whole church, “*A New Earth: The Environmental Challenge*” as their Social Justice Statement for that year.



For many years, numerous Catholic schools have taken their ecological responsibilities seriously, devising and implementing a range of environmental initiatives within the classroom and the school environs.

In order to address the need for a uniformed Ecological Vision for all Catholic schools in NSW, Catholic Earthcare Australia has been commissioned to construct, distribute and promote this document.

Across Australia, and N.S.W. in particular, people are taking a stand on behalf of the environment. Schools have been amongst the forerunners. The N.S.W. D.E.T. has already developed a comprehensive Sustainable Schools Programme and Environmental Education Policy, to enable all N.S.W. government schools to become more sustainable.⁶

Similarly, this Ecological Vision document will assist Catholic schools in N.S.W. to become more authentically sustainable.

In the development of this document input was sought from experienced educators working in the Dioceses of Sydney, Broken Bay, Parramatta and Wollongong. It is now offered as an ecological model for all Catholic schools in N.S.W. wishing to respond to the Australian Catholic Bishops' call for 'ecological conversion'.

CD Rom

A CD ROM has been included with this document. It contains a very practical 'nuts and bolts' Environmental Audit especially developed for Catholic Schools, Parishes and Agencies, to assist in moving towards more ethical and sustainable practices.

While there is a need for environmental education in all sectors of the Australian community, this booklet will serve as a recommended tool for encouraging and assisting the Catholic community in learning to live more sustainably. In the process, it is hoped that young people discover the inexhaustible love of the Creator, through the teachings and example of Jesus Christ.

We must always remember that the future is not somewhere we are going it is something that each of us creates every day.⁷

As a people of faith we are today called to celebrate the splendour of God's creation, to be good stewards of Mother Earth and to safeguard the integrity of all creation.



an ecological vision for Catholic schools

AIMS & GOALS OF THE ECOLOGICAL VISION

Definition of Ecological Education

Ecological Education is a life-long process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness of all creation; to know of creation as a gift from God which requires equitable sharing and wise stewardship. It also entails practice in decision making for living a life that is ecologically and ethically sustainable.

The long-term vision for Catholic ecological education is the embedding of ecological values into school programmes and practices.

This is critical for:

- promoting ecologically sustainable development
- improving the capacity of people to address environmental issues
- effective participation in decision-making
- living out one's ecological vocation

The goals within the Ecological Vision are:

- to foster in learners an appreciation of creation as a gift, their relationship with it and their responsibility as co-creators for its future;
- to develop in learners the knowledge, skills, attitudes, values and commitment to initiate individual and collective responses that are environmentally responsible and reflective of their ecological vocation;
- to inspire learners to decrease their ecological footprint and increase their spiritual one, as creatures made in the image and likeness for God.

Ecological education develops in people an understanding of their role in creation as co-creators and as members of a species with a profound capacity to affect other species and the ecosystems that support life on Earth.



Objectives of the Ecological Vision

Through direct contact with the environment and practice in ecological decision-making, learners develop through involvement in liturgy, prayer, social justice, scripture and study:

- a moral and spiritual response as stewards of the gift of creation
- an aesthetic appreciation of environments, both built and natural
- an understanding of the operation of natural systems and the impact of human activity on these systems
- recognition of the balance between protection and use of our environmental and natural resources
- skills for environmental investigation, including participation, critical analysis and evaluation:
- an informed sense of responsibility for the environment, particularly the local catchment
- a commitment to participate in environmental management and improvement:
- a preference for a personal lifestyle compatible with ecological sustainability.

Effective ecological education promotes the integration of a range of disciplines and the application of the knowledge and skills from across key learning areas, especially the Religious Education curriculum of each Diocese.

A balanced approach to the development of ecological education programmes considers the principles of democratic process, individual rights and responsibilities, equitable and ecologically sustainable development.

**"Look dear people of
Australia, and behold this
vast continent of yours!**

It is your home!

**The place of your joys and
pains, your endeavours
and your hopes!**

**And for all of you
Australians, the way to the
Father's house passes
through this land - Jesus
Christ is the way."**

Pope John Paul II
Canberra, 29th November 1986



Ecological Principles for Catholic Education

The 1990 World Day of Peace Message of Pope John Paul II presented a comprehensive but concise overview of the spiritual and moral dimensions of ecological problems. From it can be drawn a set of principles for making ethical judgements about ecological issues.

- The natural world has value in itself and not merely for its use by humans.
- The world and all in it must be freed from what can be termed a state of suffering.
- Humans are part of the created world and inextricably part of a material existence.
- Earth belongs to God and is only on loan to humans who are called to care for it.
- Human choices in their use of the Earth gives humanity a hand in forming its history, a vocation to heightened consciousness within the life of Earth.
- Ecological education provides the background for wise and moral decisions.
- There are limits to world resources and the environmental services that Earth can meet before pushing it to a new epoch.
- Excessive demands are imposed on the Earth by nations with a consumerist economy and life-style.
- Restraint, penance and self-imposed limitations are part of authentic human living and are in the tradition of choosing sacrifice for the greater good.
- The right to a safe ecological environment is a universal human right.
- The fascinating beauty and intricacy deep in the natural world has great value for the artist and for healing the human spirit and body.
- Models of development, social structure and styles of technology must integrate environmental factors if there is to be authentic development.
- Super-development, often for the purpose of economic gain, poses an additional threat to the environment.
- Political leaders at every level have a duty to administer a nation for the good of all, including its environmental goods.
- The richer nations have an obligation to dismantle structural forms of global poverty and help poorer nations experiencing social or environmental problems.
- Future generations should not be robbed or left with extra burdens for they have a claim to a just administration of the world's resources by this generation.

(*"Climate Change - Our Responsibility to Sustain God's Earth"*, a Position Paper of the Bishops' Committee for Justice Development Ecology & Peace, Nov 2005, p11, presented at Catholic Earthcare Australia Conference, Canberra)





a Catholic context and rationale

God's whole creation is the context and concern of the mission of Christian people.

Of course, we must proclaim the Gospel, and nurture believers, and be a loving presence for the needy, and work to transform unjust structures of our society.

But today, our evangelisation needs to be expanded- to demonstrate authentic commitment to care for creation. We need to rediscover the great eco-traditions of our Church inspired by the teaching and example of Jesus Christ and lived out by his followers.

In July 2002, at the launch of Catholic Earthcare Australia, Archbishop John Bathersby stated, "The entire life of Christians is an exploration into Christ. Each generation pushes back ever so slightly the envelope of his mystery...One of the most significant developments in Catholic understanding of the Christian mission in more recent times is its embrace of creation in all its vitality and beauty and the need to educate people about the depth of vision demanded of those who would follow in Christ's footsteps."



Let everything that
breathes praise the Lord.

Psalm 150:6

Catholic educators are called to read the signs of the time, discern the movement of the Spirit, and to hear the cries of the suffering earth and its communities. These signs are being made clear through:



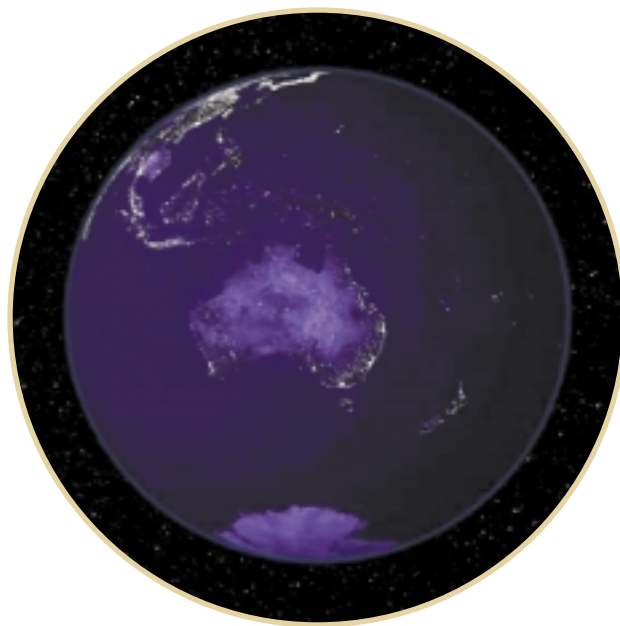
A call from the Earth

“Looking outward to the blackness of space, sprinkled with glory of lights I saw majesty but no welcome.

Below was a welcoming planet. There contained in the thin, moving, incredibly fragile shell of the biosphere is everything that is dear to you, all human drama and comedy.

That’s where life is: that’s where all the good stuff is!”

Astronaut: Loren Acton



Earth

our common home

“The web of life on Earth is under threat from accelerated climate change. That web compares to a seamless garment and it needs the application of a consistent ethic to protect it, one that considers life now and in the future, and ranges from protection of the unborn child to cherishing the diversity of species. Life is one, and human well-being is at its base interwoven

with all life on Earth and the rhythm of its systems. The suffering of any one part means that all creation groans, and rapid global climate change dramatically displays that suffering.” (*Climate Change- Our Responsibility to Sustain God’s Earth*, a Position Paper of the Bishops’ Committee for Justice Development Ecology & Peace, November 2005, p7)

Measuring the Impact on the Planet

The Ecological Footprint (EF) is an example of how we can compare the consumption of renewable natural resources between groups of humans, be it a school, a country or the world.

The EF for the average African or Asian consumer was less than 1.4 hectares per person in 1999, the average Australian footprint was about 7.1 hectares, and for the average North American person the EF was about 9.6 hectares.

The EF of the average world consumer in 1999 was 2.3 hectares per person, or 20 per cent above the earth’s biological capacity of 1.9 hectares per person. In other words, humanity now exceeds the planet’s capacity to sustain its consumption of renewable resources.



Source: Ecological Footprint of Nations 2004, <http://www.redefiningprogress.org/publications/footprintnations2004.pdf>; WWF’s Living Planet Report <http://www.panda.org/livingplanet>

"Without land
we are nothing . . .
Without land we are
a lost people."

Djon Mundine O.A.M.



A call from the primary custodians of our land

"My mother's land can be dry and harsh. Yet every cluster of rocks, mountain, waterhole, river, cave is sacred - every feature."

Maisie Cavanagh, 1998 Sydney

"These creatures, these great creatures are just as much alive today as they were in the beginning. They are everlasting and will never die. They are always part of the land and nature as we are. We cannot change nor can they. Our connection to all things natural is spiritual."

Silas Roberts - Chair, Northern Land Council, 1977 Ranger Enquiry



"Through your closeness to the land you touched the sacredness of man's relationship with God, for the land was proof of a power in life greater than yourselves.

You did not spoil the land, use it up, exhaust it, and then walk away from it. You realised that your land was related to the source of life."

Pope John Paul II Alice Springs 1986.





**"I can't imagine a world
without whales!"**

(Anna, 11 years, Greenpeace Ad)

A call from science

"We have contributed to a climate system that human beings have never before experienced."

Dr Janette Lindesay, Climatologist, Australian National University, Catholic Earthcare Climate Change Conference, Canberra, 19 November 2005

"We have changed the very chemistry of the planet, we have altered the biosystem, we have changed the topography and even the geological structure of the planet, structures and functions that have taken hundreds of millions of years and even billions of years to bring into existence.

Such an order of change in its nature and magnitude has never before entered into Earth history or into human consciousness."

Fr. Thomas Berry C.P.

"Climate change will disrupt various natural systems that affect human health:

- regional food production;
- constraints on infectious agents;
- patterns of heat stress;
- exposure to extreme weather events (fire, flood, storms, cyclones, etc.)"

*Professor Tony McMichael,
Bio-medical Scientist, Australian National University*

Millennium Eco-systems Assessment

"Over the past 50 years humans have changed the eco-system faster and more extensively than any period in human history...the result...a substantial and largely irreversible loss in the diversity of life.

The substantial gains in human well-being have been achieved at growing cost to the environment...these problems, unless addressed, will substantially reduce the benefits that future generations get from

eco-systems. This degradation of eco-system services could get significantly worse during the next 50 years.

Reversing the degradation...is a challenge...involving significant changes to policies, institutions and practices...will have to be substantial when compared to the actions currently taken."

*Summary of Millennium Eco-System Report
(2005) Compiled by 250 Scientists for the
United Nations*



God's covenant with Noah
embraces all of God's
diverse creatures.

(Gen 9:12-16)

(The Gift of Wonder - Page 8)

A biblical call

What is the place of human beings in relation to the rest of creation? According to the Bible, we too are God's creatures. We are part of the inter-connected community of creation, inter-related with all other creatures. As people created in God's image (Gen 1:27) we are called to work with creation, and to do so in such a way as to manifest the love and respect that God has for each creature. We are to be humble stewards before God. We are told "to cultivate and take care" of what God has gifted. (Gen 2:15)

As we reflect about this in our own context, we interpret this to mean that our special part of creation, the Australian continent, is entrusted to us by God.

We are to receive its fruitfulness as God's gift. We are called to be faithful trustees, respecting the integrity of God's creation.

This involves a call to protect the biodiversity of Australia. According to the Bible, the diversity of creation not only springs from the hand of God, but gives expression to God:

*"O Lord,
how manifold are your works!
In wisdom you have made them all;
the earth is full of your creatures."*
(Psalm 104:24)

Jesus' story, "*Consider the Lilies in the Field*" is but one of many teachings to lead us to deepen our understanding of God's love for us through the gift of Creation.

Christ is the visible likeness of the
invisible God.

He is the first-born son, superior
to all created things . . .

God has created the whole
universe through him and for him..

Col 1:15-16





**“All creatures exist by
participation in divine
being”**

St. Thomas Aquinas

A call from Catholic theology

There are several things we can say about creation, about God, about God's priorities, . . . God is always “acting” as Creator, not just “in the beginning”, but throughout cosmic history, right now and into the future. God as Creator is always enabling, empowering and calling - but not controlling - us and all the things around us into being . . . Creation is unfinished - it is only being completed, moving towards full communion with God as it unfolds . . .”- “ we human beings have extraordinary responsibilities towards one another and towards our environment. We are in fact deeply and irretrievably embedded in Nature - not separated from it, or above it.”

Fr. Bill Stoeger S.J.

Catholic Earthcare Climate Change Conference, Canberra, 19 November 2005

Some of the greatest theologians of the church have meditated on the diversity of creatures and have seen this as expressing the abundance of the Trinitarian God. According to St. Thomas Aquinas and St. Bonaventure, the diversity of species represents the wonder and beauty of God that transcends any one creature. God's creatures express and represent the Trinity. They are not simply there for human use, but have their own dignity, value and integrity. Such a view challenges the destruction of species and their habitats in the modern era.

As we ponder this . . . we see the rivers and all their birds, fish and animals as creatures that emerge and are sustained by God's ongoing creation. The loving act of ongoing creation has enabled them to flourish in this place. They are part of a story of ongoing creation that takes place over millions of years.

They are God's gift to us. They can communicate something of God to us. We are called to care for them, as fellow creatures before God and as loving and wise stewards of God's creation.

(“*The Gift of Water*” Statement - 2004, Catholic Earthcare Australia).

**“... we are part of the interconnected
community of creation, inter-related
with all other creatures ...”**

Fr. Dennis Edwards

Catholic Earthcare Climate Change Conference, Canberra,
19 November 2005



"The Eucharist provides the movement of the cosmos with its direction; it anticipates its goal and at the same time urges it on."

Joseph Cardinal Ratzinger
San Francisco, 2002

A eucharistic call

Pope John Paul II urged Catholics to see that "The Eucharist is celebrated in order to offer 'on the altar of the whole Earth the world's weak and suffering' (in the beautiful words of Teilhard de Chardin)."

"Gift and Mystery", 1995

"The culture created by the living ethos of a vibrant Christian community centred on the Eucharist, offers, the most powerful long-term resource for ecological commitment."

Sr. Pat Fox R.S.N.
(Quoting John Zizioulas)



"We participate in this transformation in Christ. The most intense moment of our Communion with God is at the same time an intense moment of our communion with the Earth."

Fr. Tony Kelly C.S.S.R.

"We need to appreciate all over again that the whole universe is a sacrament, vivified by the presence of the Creator Spirit."

Sr. Elizabeth Johnson, R.S.J.

"Knowingly destroying the living systems of our planet amounts to a denial of what we celebrate when we gather for Eucharist.

Eucharist is a sacrament of the Risen Christ transforming creation. 'The Christ we encounter in the Eucharist is the risen one in whom all things were created and are reconciled' (Col. 1:15-20); 'to gather up all things in Him' (Eph. 1:10) . In every Eucharist we are taken up into God. We participate in the divine Communion."

Fr. Dennis Edwards
Catholic Earthcare Climate Change
Conference, Canberra,
19 November 2005



All creation rightly gives you praise.

3rd Eucharist Prayer



A papal call

Pope John Paul II for many years drew attention to the environmental crises facing humanity. In his 1990 New Year Message, he stated, “Christians, in particular, realise that responsibility within creation and their duty towards nature and the Creator, are an essential part of their faith”.

Nine years later, in his 1999 New Year Message, Pope John Paul II warned that “the danger of serious damage to land and sea, and to the climate, flora and fauna, calls for a profound change in modern society’s typical consumer life-style, particularly in the richer countries”.

Again, on 17th January 2001, (General Audience, Vatican), he drew attention to the continuing environmental deterioration of the planet, describing humanity’s disregard for the integrity of creation as “humiliating ... the earth, that flower-bed that is our home”. Prophetically, in this address, the Pope called the world’s Catholics to an “ecological conversion” to avoid planetary “catastrophe”.

**God has made us what we
are and in union with
Christ Jesus He has created
us for a life of good deeds,
which He has already
prepared for us to do.**

Eph 2:10



With environmental degradation, "it is always the poor who will be impacted upon disproportionately."

Fr. Sean McDonagh S.S.C
Catholic Earthcare Climate Change
Conference, Canberra,
19 November 2005

A call for justice

"I cannot be silent when my brothers and sisters are threatened. I become the voice of those who have no voice . . . the voice of the generations to come . . . it is possible to make a difference . . . Let our response now be even more generous and effective."

Pope John Paul II, May 10, 1980

"Global climate change has already impacted and the number of environmental refugees increases yearly. Australian citizens need to be informed and to debate how best to relocate these people. Of immediate concern are environmental refugees coming from our Pacific neighbours. Their representatives have already visited our shores to alert us to their concerns and asked for our help."

("Climate Change - Our Responsibility to Sustain God's Earth", a Position Paper of the Bishops' Committee for Justice Development Ecology & Peace, November 2005, p19)

"As one of the world's biggest emitters per capita of greenhouse gases, Australians are directly implicated in harming the many innocent peoples of the Pacific whose ecological footprint ironically, is radically lighter than our own."

("Climate Change - Our Responsibility to Sustain God's Earth", a Position Paper of the Bishops' Committee for Justice Development Ecology & Peace, November 2005, p18)

Pope John Paul II urged Australians to live out their "ecological vocations" because, he also said,

"Australians have special responsibility to assume, on behalf of all humanity, stewardship of the Pacific Ocean. The continued health of this and other oceans is crucial for the welfare of peoples, not only in Oceania but in every part of the world".

"Ecclesia in Oceania" Vatican City 2001

"Kirribati and other small nations in the Pacific are looking for a Good Samaritan. At this point in history, we are asking, 'Who will be a Good Samaritan for us?'"

Monsignor Michael McKenzie,
Catholic Earthcare Climate Change
Conference, Canberra, 19 November
2005



answering the calls

“...We must conclude that we are still betraying the mandate God has given us; to be stewards called to collaborate with God in watching over creation in holiness and wisdom...”

Pope John Paul II & Patriarch Bartholomew I , 10 June, 2002

What is our response to those many calls?

We make a Christian Response in Love:

We can know God personally through Jesus - a personal God - he sets our relationship to the community of life”

*Bishop Chris Toohey
ABC Radio, 7th December 2005*

“At the same time the human recognises that he is the one who receives the message of love inviting him to responsibility . . . as stewards of the earth to cultivate and protect it. From this fact there comes . . . their ‘ecological vocation’; which in our time has become more urgent than ever.”

*Pope John Paul II
Italy, August 25th 2000*

We work towards Ecological Conversion:

“It is necessary, therefore, to stimulate and sustain the ‘ecological conversion’ . . . protecting the radical good of life in all its manifestations and preparing an environment for future generations that is closer to the plan of the Creator”

Pope John Paul II, 17 January 2001

“I believe ecological conversion is about seeing with new eyes after a change of heart.”

*Bishop Chris Toohey
ABC Radio, 7th December 2005*

We find individual and community ways to live out our Ecological Vocation in our response to the call to be co-creators:

“Revelation teaches that men and women are created in the ‘image and likeness of God’ (Genesis 1:26) and thus...enables them, by the work of their hands to reflect God’s own creative activity. In a real way they are meant to be ‘co-creators’ with God, using their knowledge and skill to shape a cosmos in which the divine plan constantly moves to fulfilment.”

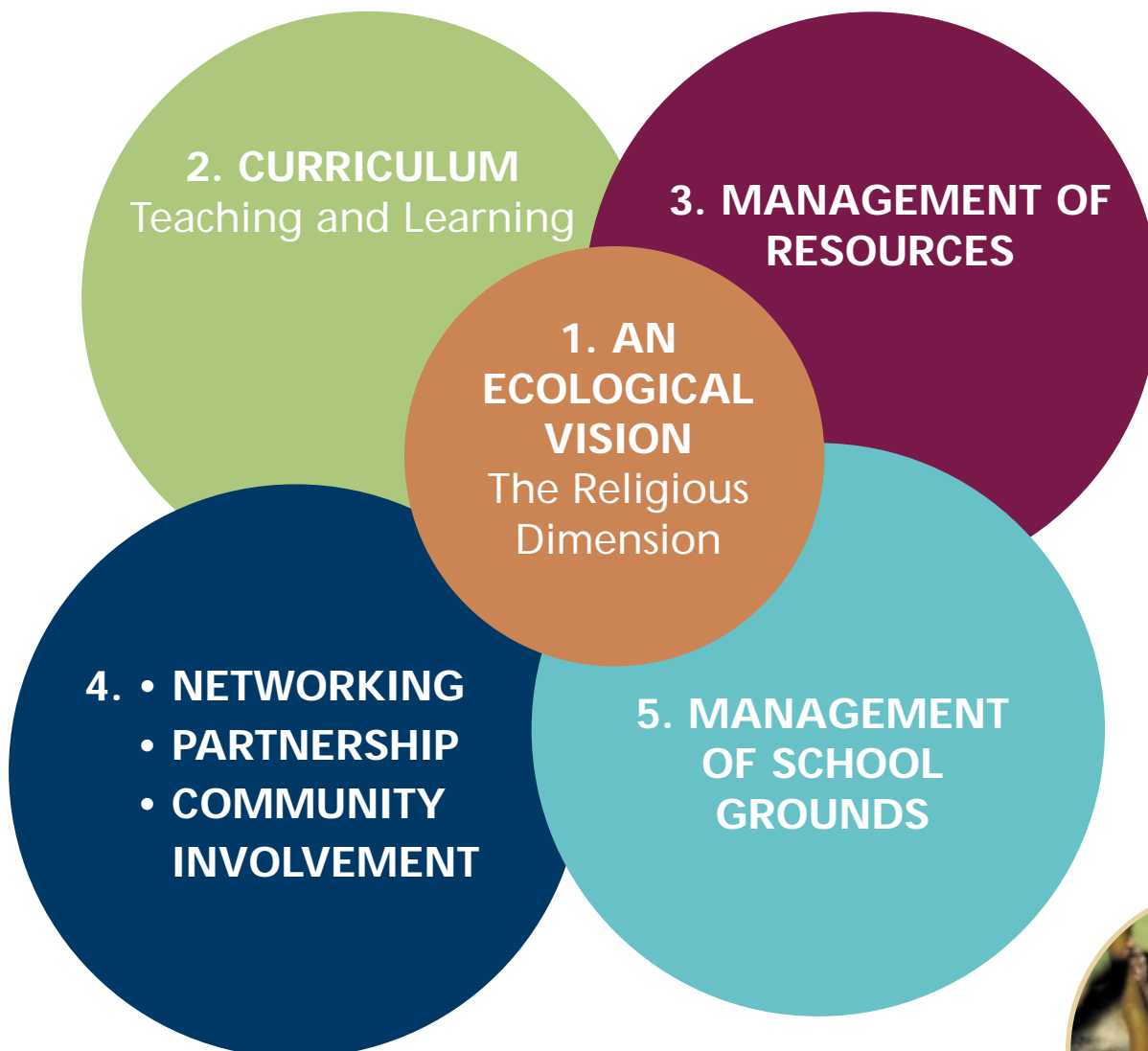
*Pope John Paul II
Address, 8 November 2004*



clarifying the vision

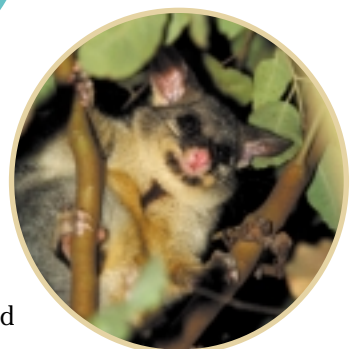
Policy and planning as a whole school

The development of School Policy and Planning for 'ecological conversion' can be seen through the following lenses:



Catholic education for ecological sustainability is not just the responsibility of the few or a particular department; it requires the involvement of the whole school. It should be embedded in all aspects of the school's operations-

administration, curriculum, teaching and learning, the physical surrounds, relationships with local community and outreach and engagement with others beyond the local community.



SHARPENING THE FOCUS

1. An Ecological Vision - The Spiritual Dimension

Each Diocesan Religious Education Curriculum details specific content in Faith Education, Knowledge, Moral Teaching, Scripture, Prayer, Liturgy and Social Teaching for all levels of schooling. Church documents like the Catholic Catechism, the Compendium of Social Teaching of the (Catholic) Church, as well as documents from the Australian Bishops and Catholic Earthcare Australia will provide the underpinning for a Catholic perspective on ecological education. One of the tasks of Catholic Earthcare Australia is to support Catholic Schools in this purpose. Teachers are encouraged to visit the office of Catholic Earthcare situated on the Good Samaritans' Mater Dei bush property at Camden.

2. Curriculum

There are three areas for development:

1. Utilising teaching/learning opportunities in all Key Learning Areas
2. Professional Development of Staff
3. Community Education.

It is important that Catholic schools:

- identify and integrate those areas of the Religious Education Curriculum that are related to Environmental Education, especially Spirituality, Moral Teaching, Liturgy, Prayer, and Social and Ecological Justice.
- identify and integrate those outcomes that are specific to Environmental Education in the K - 12 N.S.W. Government Syllabuses.
- use the extra-curricula opportunities provided by special events and school community actions to enhance the classroom curriculum learnings.
- conduct an audit of existing environmental education practices and develop a yearly School Environmental Management Plan which incorporates all five Catholic ecological education focus areas.
- plan / co-ordinate / integrate professional development opportunities on the theme of 'ecological conversion' for staff.
- plan / co-ordinate / integrate community education opportunities especially for parents, family and parish.



3. Management of Resources

"We must change our consumption habits...the Earth's resources are finite and cannot be stretched...We are living beyond our environmental capacity We have to face the hard issues of radically changing our habits..."

("Let the Many Coastlands Be Glad" - Page 21, Catholic Earthcare, June 2004)



"Ecological Conversion is to increase our spiritual footprint, and at the same time to lighten our ecological footprint."

Col Brown - Director , Catholic Earthcare Australia
ABC Radio 7th December 2005

Schools should manage their resources from the Principles of Sustainability:

Employ the "Four R's"
Refuse • Reduce • Reuse • Recycle

"Schools can move towards becoming sustainable organisations by committing to identifying , conserving and improving the environmental and heritage values of their school site, and by reducing their ecological footprint. As a starting point they can reduce waste, minimise energy, transport and water usage, increase recycling, encourage biodiversity in the school grounds, conserve the heritage value of the site, use sound purchasing practices and ensure canteen products are

environmentally appropriate. Moving towards sustainability needs to become an important feature of how the school organises its daily operations. The savings made can be used for other sustainability initiatives."

"Education for a Sustainable Future - A National Environmental Education Statement for Australian Schools", Page 11, Australian Government Department of Environment and Heritage, 2005

4. Networking and Linking

Local Community Involvement

Many ecological education developments are best achieved through collaborative action with the local and broader community. This might include partnerships with other educational institutions, local councils, businesses, industry, and community groups and networks.

This links student learning to the workplace and to local environmental and social

issues, and allows students to become active and involved participants.

Schools that have fostered partnerships have sometimes gained access to resources not otherwise available to the school.

Many schools have contributed significantly to community awareness, education and sustainable living practices in their local area through the influence of their environmental projects / activities.

Global Community Involvement

Similarly, Catholic schools have responded to moral / spiritual challenges on a global scale over many years.

The slogan “Live simply so that others may simply live” is integral to the modern Christian life.

Involvement in the earth ministry of Catholic Earthcare Australia, the mission outreach of Caritas, and the local work of St. Vincent de Paul, as well as the specific projects of particular religious congregations (Jesuits in India, Good Samaritans in Kiribati, Edmund Rice Schools in partnership with indigenous communities) and eco-justice activities is applauded and encouraged.





5. Management of school grounds

Physical Surrounds

Schools are often judged by the physical appearance and presentation of the grounds and buildings. Increasing the diversity and extent of vegetation cover in school grounds not only enhances its image of the school but also maximises the potential of these spaces to provide educational, religious and environmental experiences to the students. Many schools have developed their grounds for teaching and learning: (learnscapeing).

Students, staff and parents can be actively involved in the sustainable management of the grounds through activities such as habitat creation, mulching, vegetable gardening, landscaping, productive enterprises and litter reduction. The opportunities are limited only by the imagination and enthusiasm of the school community. The most effective learnscapeing projects are those that have been planned and involve students; parents and the wider community in active participation.

Although schools may be limited in what they can do about the design of their existing buildings, the refurbishing of older buildings should incorporate energy-efficient elements. For most schools it is how they use the buildings that will have the most impact. New buildings should be designed with energy conservation as a priority.

For Catholic schools, the physical surrounds can be symbolic / representative of the school's ecological vocation.

Learnsapes

Learnsapes are places where a learning programme has been designed to permit users to interact with an environment. They may be natural or built; interior or exterior; located in, near or beyond schools; and related to any one of, or many, key learning areas. They must be safe and accessible.

Schools involved in Learnscape projects have increased the diversity of their school grounds and buildings by adding features such as gardens, forests, ponds, shelters and outdoor classrooms. The increased diversity of the grounds and buildings allows for the design of a wider range of learning experiences and the creation of a Learnscape environment.

Learnsapes are gaining worldwide acceptance as valuable pedagogical innovations.

Sources:

*The School Learnsapes Trust 2000,
<http://www.learnsapes.org/>*

"In a sense sustainability is good stewardship through time and in effect a matter of intergenerational justice.

It means that the Earth's resources are to be used with future needs in mind."

Australian Catholic Bishops' Conference ~ "Commonwealth for the Common Good"

implementing the vision

In New South Wales, Catholic schools would do well to be aware of the NSW government's requirements for government schools to develop and implement School Environmental Management Plans (S.E.M.P.s). This planned whole school strategy helps move schools towards more sustainable practices, with a focus on long-term management of ecological issues and the embedding of an ecological ethos into the school's milieu.

Catholic schools are encouraged to visit the Government's website www.sustainableschools.nsw.edu.au to access online School Environmental Management Plans as well as useful tools and links on this topic. Teachers are also encouraged to refer to Appendix 1 and 2 of this document for further assistance in implementing an effective S.E.M.P. Schools successfully implementing the ten step pathway detailed in Appendix 2 will achieve recognition and the status of an "Earthcare school". Of course, once achieved the cycle for ongoing improvement begins again.

Appendix 1 illustrates some detailed steps in becoming an Environmentally Active School and constructing a S.E.M.P. (Whole School Environmental Management Plan).

Appendix 2 offers another possible pathway for schools to achieve the status of an "Catholic Earthcare School".

A Whole School Approach

Schools implementing a whole-school approach to ecological education for sustainability typically indicate the following key points as important for success:

- active participation of the school leadership team from planning through to implementation;
- a vision of future directions for the school, shared with the school community;
- sustainability principles embedded in school policies;
- an implementation group or committee drawn from the school community including teachers, non-teaching staff, parents, students and specialist advisors, to give ownership to all sectors in the school and a structure to ensure that the workload is spread;
- starting with a clear overview of school operations (waste, water, energy, grounds and canteen), school policies, curriculum, and teaching and learning, before moving on to action planning;
- moving at a rate that is compatible with the school's ability to change; and
- keeping the school and local community informed and ensuring that successes are celebrated.

*Education for a Sustainable Future,
Page 12*



An Environmental Audit CD accompanies this document and has been designed for Catholic Schools who wish to collect data and develop whole-school policies.

QUALITY TEACHING AND LEARNING

Teaching and learning

The key elements of vibrant ecological education teaching and learning is a content and pedagogy that engages students at many levels.

Effective teaching and learning takes account of students' lives, their interests and their individual learning differences. Ecological and sustainability education particularly attracts students at risk of disengaging with learning, the 'gifted' learners and those in need of special learning support.

There are numerous ways of incorporating ecological and sustainability education into the curriculum. How these are developed will depend upon a school's particular situation. A diversity of approach is encouraged.

Quality teaching

For the purpose of promoting Quality Teaching and Learning, the NSW Government has introduced for its schools a "mandatory" framework set out below. Many Catholic schools have embraced this strategy as it leads to higher quality outcomes for students. We commend this model of teaching and learning in the areas of ecology and sustainability to those Catholic schools which have not yet adopted the strategy.

ITS INTELLECTUAL QUALITY

- 1.1 Ensures Deep Knowledge
- 1.2 Develops Deep Understanding
- 1.3 Contains Problematic Knowledge
- 1.4 Concerned with Higher-order Thinking
- 1.5 Uses Metalanguage
- 1.6 Involves Substantive communication

THE QUALITY OF THE LEARNING ENVIRONMENT

- 2.1 Displays Explicit Quality Criteria
- 2.2 Involves Engagement by Students
- 2.3 Sets High Expectations
- 2.4 Offers Social Support
- 2.5 Contains Students' Self-regulation
- 2.6 Employs Student Direction

THE SIGNIFICANCE OF THE LEARNING

- 3.1 Teaches Basic Knowledge
- 3.2 Draws on Cultural Knowledge
- 3.3 Involves Knowledge Integration
- 3.4 Employs Inclusivity
- 3.5 Offers Connectedness to other Subjects
- 3.6 Contains Narrative

Adapted from the "Quality Teaching Framework - Classroom Practice", N.S.W. Department of Education & Training, May 2005



resourcing the vision

Making ecological connections:
Drawing on the wisdom of others



(See Appendix 3 for a list of valuable websites in the above areas)

sustaining the vision

EVALUATING / MONITORING / REPORTING

Staying in touch

A. To assist schools, in the words of Pope John Paul II to 'stimulate and sustain the ecological conversion', we would recommend a careful study of the chart in Appendix 1. The chart has been adapted from the NSW government's DET Environmental Policy for Schools - "Steps in Becoming an Environmentally Active School". We have included in the chart two additional columns specifically designed for Catholic schools, namely "Community Involvement" and "Religious Dimension". This chart may be used for planning, implementing, monitoring and evaluating the school's progress towards more ecologically sustainable operations.

B. Another framework for measuring a school's growth in ecological awareness can be found in the Appendix (Indicators for a Sustainable Future) to the Australian government document, "Educating for a Sustainable Future- A National Environmental Education Statement for Australian Schools" accessible at <http://www.curriculum.edu.au>. This framework enables schools to measure certain aspects of change in areas like school staff participation, curriculum innovation, progress of the management plan, water consumption, electricity consumption, waste minimisation and management, prudent use of school grounds and resources and car pooling.

C. A number of catholic schools have participated in the Sustainable Schools Programme piloted in NSW and Victoria. The programme seeks to integrate existing fragmented environmental educational programmes and projects (such as "Energy Smart Schools", "Waste Wise", "Waterwatch", "Waterwise" and "Landcare") into more integrative programmes. For further information on this ecological programme which considers the interrelated, interdependent and

integral relationships between the school's curriculum, management and physical environment, visit www.deh.gov.au/education/nap/neen/projects.html#sustainable and www.gould.edu.au/article.asp?6834

D. "Our environment: It's a living thing" is a project funded by the NSW Government to serve as an overarching environmental education programme to motivate and encourage people to adopt ecologically sustainable lifestyles. The mentoring component of the project invited community educators to participate in a professional development programme for sustainability, to equip them in turn, to educate and prepare others for change in the workplace and broader community. For more detail visit <http://www.environment.nsw.gov.au/index.htm>

E. For inspiration and ideas, make contact with other eco animators who have initiated projects in catholic schools. Many ecologically active schools are listed in Appendix 5.

F. Contact Catholic Earthcare Australia or visit its website for the latest resources, contacts and funding opportunities. www.catholicearthcareoz.net/



appendix 1

STEPS IN BECOMING AN ECOLOGICALLY ACTIVE SCHOOL

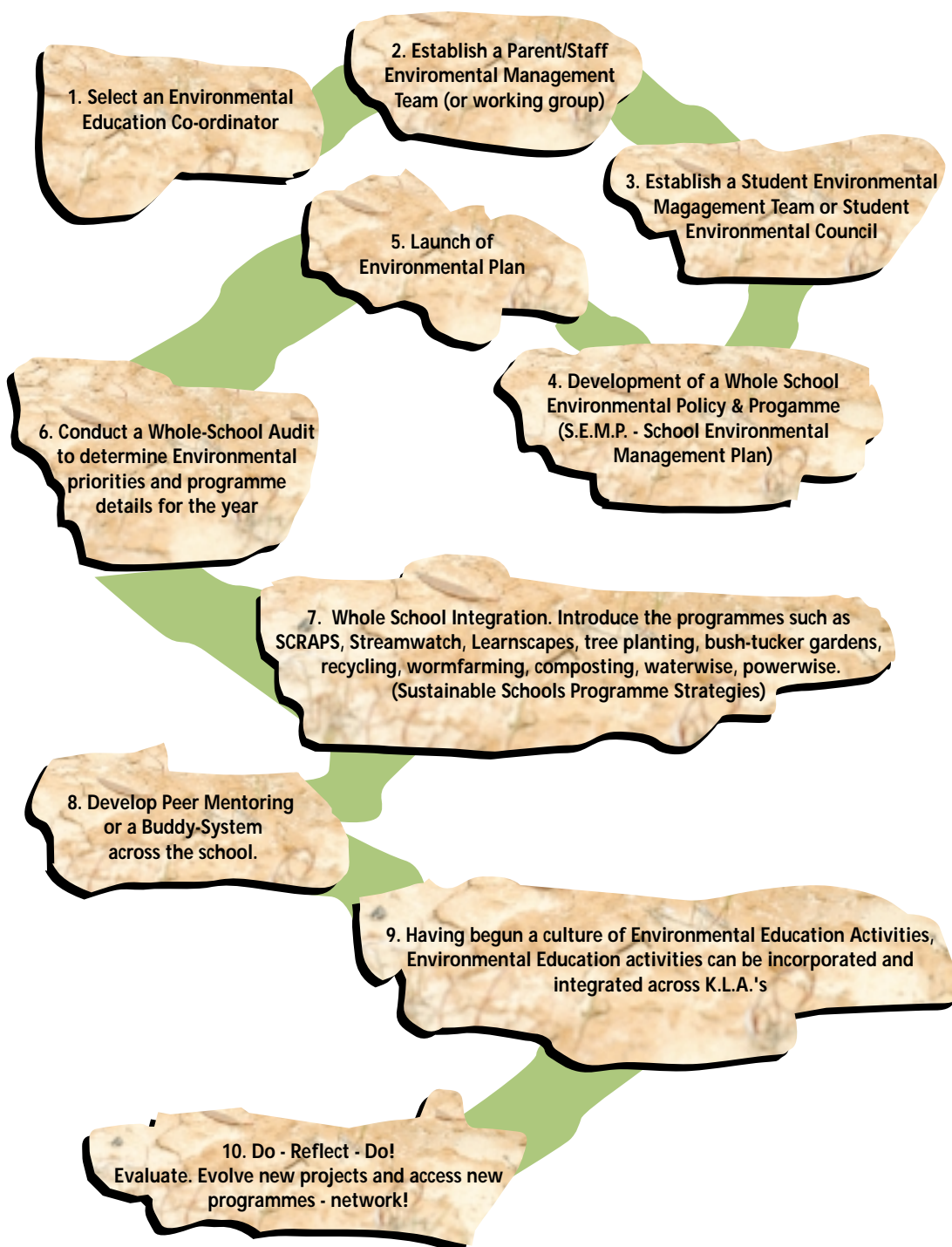
Step	Whole-School Planning	Curriculum	Management of Resources	Management of School Grounds	Community Involvement	Religious Dimension
Pre-Awareness	Lack of interest in environmental education (EE) at ancillary, teacher and executive level.	Commitment to environmental issues in T & L programmes is low or non-existent. Topics are taught in an ad hoc and unplanned way. No classroom programmes in place to address curriculum objectives in E.E.	EE and environmental issues are not considered in any school purchasing, resource use or waste management.	There is no consideration of the environmental impact of the use of school grounds. There is no consideration given to using the school grounds for E.E.	Absence of community involvement. Little opportunities for school-based environmental projects.	Absence of: • Prayer/Liturgy for the Environment • Response to Environmental refugees. Little awareness of Church's call to Ecological conversion.
1. Awareness	Individual teachers, ancillary and/or executive are concerned about the lack of support for E.E. and wish to take action. Staff participates in an E.E. inservice.	Individual teachers programme for E.E. where mandated by the syllabus. Some environmental issues may be discussed in other subjects.	Individual teachers promote E.E. activities in resource management. There is little executive support for efforts towards 'best practice' in management of resources. Purchasing is ad hoc and does not consider ecological sustainable development.	Ad hoc landscaping of school grounds takes place. No long-term plans. Strategies for school grounds are based only on such issues as equipment, shade, safety and seating.	Exploration of: • community resources for environmental education • funding opportunities for school-based environmental projects.	Ad-hoc use of environmental prayer/liturgy. Individual responses to Environmental Refugees/Mission Appeals Elementary understanding of where Environmental education fits in Catholic school ethos.
2. Planning	A formal school environmental co-ordinator and management committee are established and objectives determined. A student Environmental Council is established.	E.E. is being taught in the mandatory syllabuses and, to some extent, in other areas. A subcommittee is formed to conduct an audit.	A subcommittee is formed to conduct an audit. Subcommittee includes teachers, ancillary staff, students and community members. The subcommittee considers student involvement in the audit. Joint planning with external providers begins.	School grounds subcommittee is formed. The committee consists of teaching and ancillary staff, along with students and community members.	Development of register of community resources for environmental education. Identification and planning of school-based environmental projects.	Whole school planning of: • Prayer/Liturgy/ special feasts for the environment • Staff development with a focus on Creation theology
3. Early Implementation	Audits are under way (See "Towards An Environmental Future" - A Catholic Earthcare Audit.) Policies and practices begin to reflect the views promoted by the E.E. committee.	Specific concepts and content are integrated into particular KLA subjects and year programmes. Opportunities for E.E. to be included in management of resources and management of school grounds being explored. The subcommittee conducts an audit.	Audit is under way and provides information for developing strategies to reduce the school's resource use and waste production. Students participate in the auditing process.	The subcommittee conducts an audit of the school grounds. Students participate in the auditing process.	Opportunities for links with local government and Non-government organisations, Caritas, St Vincent de Paul Society, etc.	Opportunities for links with Church agencies (e.g. CEA and Caritas). Establishment of special environmental days on school calendar. Development of service projects for environmental refugees/Missions.
4a. Consolidation	Audits have been carried out in all focus areas and subcommittees are developing action plans.	The audit identifies current E.E. requirements of mandatory syllabuses and opportunities to integrate E.E. into other KLAs, and the management of resources and school grounds. Action plans are being formulated. Most students meet several environmental education objectives.	The audit has been completed. The subcommittee begins to examine programmes and practices in the management of resources. E.E. opportunities are explored. An action plan is developed in purchasing, resource use and waste management.	Audit reveals relevant environmental issues. Subcommittee develops an action plan based on achievable objectives.	As above + Application for Environmental Grants. Involvement in School Greening Competitions (requiring community resources).	As above + Embedding of Scriptural Catholic teaching about ecology, sustainable living, creation theology and creation spirituality across KLAs.

Step	Whole-School Planning	Curriculum	Management of Resources	Management of School Grounds	Community Involvement	Religious Dimension
4b. Further Consolidation	<p>Action plans have been finalised in all focus areas and have been passed onto the school environment management committee.</p> <p>The environment management committee has integrated and prioritised the action plans.</p> <p>A school environmental management plan has been formulated and implemented.</p>	<p>The action plan has been passed onto the environment management committee, prioritised and integrated into the school environmental management plan.</p> <p>Teaching and learning programmes are in place in all stages to ensure sequential development of environmental objectives in mandatory syllabuses.</p> <p>T & L programmes in place which articulate opportunities to address all the E.E. objectives.</p> <p>Opportunities for environmental education associated with special events, programmes, management of resources and school grounds are incorporated into T & L programmes. Students meet most curriculum objectives successfully.</p>	<p>The action plan has been passed onto the environment management committee, prioritised and integrated into the school environmental management plan.</p> <p>The school environmental management plan is being followed, purchasing is being integrated and on-going data collection is used to evaluate the effectiveness of the plan.</p> <p>The school staff, students and community members participate in activities that exemplify "best practice".</p>	<p>The action plan has been passed onto the environment management committee, prioritised and integrated into the school environmental management plan.</p> <p>The school environmental management plan is in place and strategies are progressively implemented. Evaluation and review structures are established.</p> <p>The school community is improving the grounds. Grounds are being used as a teaching resource.</p>	<p>As above +</p> <p>High profile. Environmental Educators invited to address school community.</p> <p>Marketing of school as "green" within local community.</p>	<p>As above +</p> <p>Outreach to other Catholic Schools in Diocese as part of school's ecological mission.</p> <p>Involvement in diocesan-wide environmental service projects.</p>
5. Sustainability	<p>The school shows commitment to a school environment management plan as part of the school management plan. Effective action plans are in place and are regularly reviewed.</p> <p>Objectives for all focus areas are being met. Progress is reported in the school's annual report.</p> <p>The school is a model for others to follow and a logical and holistic plan is evident. Individual teachers, ancillary and/or executive are concerned about the lack of support for E.E. and wish to take action. Staff participates in an E.E. inservice.</p>	<p>The school has effective environmental education integrated into all stages and KLAs, where appropriate. The mandatory curriculum is taught effectively and opportunities are maximised for E.E. including special events, special programmes, and management of resources and school grounds. School demonstrates that it has implemented programmes that address all E.E. curriculum objectives. Programmes are based on environmental citizenship and personal action. Curriculum model is an inspiration for other schools.</p>	<p>All objectives for management of resources are achieved: purchasing, resource use and waste management are integrated across the whole school. "Best practice" is employed emphasising sustainability of resources and minimal environmental impact. Learning opportunities for students are incorporated. Progress is visible and is reported. The school management of resources is an example for students and the broader community to follow.</p>	<p>Objectives relating to school grounds are fully met. Management is consistent with the principles of ecological sustainable development. Grounds are developed to enhance environmental education. Progress is reported and the school environmental management plan is reviewed. School community demonstrates personal commitment to the school grounds. The school grounds are a diverse learning environment that has positive impacts on locals and global environments and is a model for others to follow.</p>	<p>As above +</p> <p>Local and National networking.</p> <p>School witnesses to the community with exemplary environmental profile and marketing.</p> <p>Sustained outreach to social justice projects.</p>	<p>As above +</p> <p>Continued integration of religious education and environmental education in whole school planning.</p> <p>School communication, liturgy, prayer, reflect a whole school commitment to an ecological vocation.</p>

appendix 2

ONE SCHOOL'S ECOLOGICAL PATHWAY

Follow this pathway to become an accredited "Earthcare" school



Created by Dorrigo High School

appendix 3

WEBSITES AND RESOURCES: RELEVANT TO ECOLOGICAL EDUCATION

SOURCES FOR CREATION SPIRITUALITY / LITURGY / PRAYER / THEOLOGY AND JUSTICE ACTION can be found on the C.D. that accompanies this document: "Towards Environmental Futures - An Environmental Audit" compiled by Paul Lucas for Catholic Earthcare Australia.

N.S.W. GOVERNMENT - SCHOOL ENVIRONMENTAL MANAGEMENT PLANS
www.sustainableschools.nsw.edu.au

DEPARTMENT OF ENVIRONMENT & TRAINING N.S.W.
www.curriculumsupport.nsw.edu.au/enviroed/

A2.E2. - AUSTRALIAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION (AAEE)
www.afsse.asn.au/aaee/

RIVER MURRAY URBAN GROUP www.murrayusers.sa.gov.au

KIDZONE - Environment ACT <http://www.environment.act.gov.au/kidszone>

KIDS AND SCHOOLS - State Forests of N.S.W. <http://www.forest.nsw.gov.au/sfkids/>

COASTAL ENVIRONMENT CENTRE <http://www.mhl.nsw.gov.au/www/cec.html>

YOUR ENVIRONMENT AT HOME, WORK AND PLAY
<http://www.environment.act.gov.au/yourenvironmenthwp>

WORLD ENVIRONMENT DAY - Department of the Environment and Heritage (Aus)
<http://www.deh.gov.au/events/wed/>

WATERWATCH AUSTRALIA - COMMUNITIES CARING FOR CATCHMENTS - Department of the Environment and Heritage (Aus) <http://www.waterwatch.org.au/>

WASTE SERVICE NSW HOME PAGE - Waste Service N.S.W. <http://www.wasteservice.nsw.gov.au/>

URBAN STORMWATER PROGRAM - Environment Protection Authority (N.S.W.)
<http://www.epa.nsw.gov.au/stormwater/usp/index.htm>

SMOGBUSTERS <http://www.smogbusters.org.au/>

RIBBONS OF BLUE - Water and Rivers Commission, Natural Heritage Trust
<http://www.wrc.wa.gov.au/ribbons/index.html>

AUSTRALIAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION (A.A.E.E.) - AUSTRALIAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION (A.A.E.E.) <http://www.aeea.asn.au/~aaee/>

ENVIRONMENTAL EDUCATION FOR A SUSTAINABLE FUTURE - Department of the Environment and Heritage (Aus) <http://www.deh.gov.au/education/>

ENVIRONMENTAL EDUCATION DATABASE - Environment Australia Strategic Development Division
<http://www.environet.ea.gov.au/education>

EARTH WORKS - LIVING WITH LESS WASTE - Environment Protection Authority (N.S.W.)
<http://www.epa.nsw.gov.au/earthworks/index.htm>

ARICINTERNET <http://www.cate.mmu.ac.uk/>

THE SUSTAINABILITY EDUCATION CENTRE <http://www.sustainabilityed.org/>

SOCIAL ASPECTS OF SUSTAINABLE DEVELOPMENT
<http://www.un.org/esa/agenda21/natinfo/countr/austral/social.htm>

TEACHING FOR A SUSTAINABLE WORLD
<http://www.deh.gov.au/education/publications/tsw/index.html>

ENVIRONMENT AUSTRALIA - EDUCATION AND TRAINING IN CLEANER PRODUCTION
<http://www.deh.gov.au/industry/corporate/eecp/publications/pubs/educatio/pdf>

AUSTRALIA'S ENVIRON NET / EDUCATION PATHWAY
<http://www.deh.gov.au/industry/environment/index.html>

ENVIRONMENT AUSTRALIA: ENVIRONMENTAL EDUCATION - ENVIRO ED
<http://www.deh.gov.au/education/>

PLANTS FOR PLAYSPACES <http://kidswafensw.org/playsafety/>



Includes listings of suggested shade trees, shrubs, wind breaks, screening, fragrance, play props, bush tucker and edible plants and an extensive poisonous plants list.

THE SUSTAINABLE LIVING COMPETITION <http://www.sustainableliving.com.au/competition/>

WEEDBUSTERS http://www.weeds.crc.org.au/for_schools/weedwipeout_flash.html#

ECOTUDE WEBSITE <http://www.powershousemuseum.com/ecotude/index.asp>

SYDNEY WATER'S "WATER SCHOOL" <http://www.sydneywater.com.au/EnsuringTheFuture/WaterSchool/>

THE WASTEWATER CHALLENGE GAME

<http://www.sydneywater.com.au/EnsuringTheFuture/WaterSchool/WastewaterChallenge.html>

THE WATER-SAVER CHALLENGE GAME

<http://www.sydneywater.com.au/EnsuringTheFuture/WaterSchool/WaterSaverChallenge.html>

THE RIVER RAID GAME

<http://www.sydneywater.com.au/EnsuringTheFuture/WaterSchool/RiverRaid.html>

SECONDARY SCHOOL <http://www.education.melbournewater.com.au/content/secondary/secondary.asp>

YARRA VALLEY WATER'S "WATER SCHOOL" <http://www.yvw.com.au/waterschool/>

'SAVE H2O ... THE WAY TO GO' - INTERACTIVE ONLINE ACTIVITIES (A.B.S.)

http://www.myinternet.com.au/edu/water_year/index.html

SOUTH EAST WATER EDUCATION http://www.southeastwater.com.au/sewl/index.asp?link_id=30.440

IT'S BUCKETING DOWN GAME

http://www.southeastwater.com.au/games/education_kidsroom_bucket.asp

FUN WEBSITE FOR KIDS <http://www.bugsurvey.nsw.gov.au/>

ENVIRONMENT AUSTRALIA (DEPARTMENT OF THE ENVIRONMENT & HERITAGE)

<http://www.deh.gov.au>

ENVIRONMENT AUSTRALIA BIODIVERSITY GROUP <http://www.deh.gov.au/biodiversity/>

AGRICULTURE, FISHERIES AND FORESTRY AGENCY <http://www.daffa.gov.au>

AUSTRALIAN HERITAGE COMMISSION <http://www.ahc.gov.au>

BUREAU OF METEOROLOGY <http://www.bom.gov.au/>

GREAT BARRIER REEF MARINE PARK AUTHORITY "REEF GUARDIANS" PROGRAMME

www.gbrmpa.gov.au

I.U.C.N. (THE WORLD CONSERVATION UNION) <http://www.iucn.org>

UNITED NATIONS ENVIRONMENT PROGRAMME <http://www.unep.org>

WORLD WIDE FUND FOR NATURE (W.W.F.) <http://panda.org>

AUSTRALIAN & NEW ZEALAND ENVIRONMENT & CONSERVATION COUNCIL (A.N.Z.E.C.C.)

<http://www.deh.gov.au/pcepd/anzec/>

MURRAY DARLING BASIN COMMISSION <http://www.mdbc.gov.au>

C.S.I.R.O. <http://www.csiro.au>

CENTRE FOR RESEARCH ON INTRODUCED MARINE PESTS (C.R.I.M.P.)

<http://www.marine.csiro.au/crimp/>

THREATENED SPECIES NETWORK <http://wwf.org.au/ourwork/species/tsn/>

AUSTRALIAN TOURIST COMMISSION <http://www.australia.com>

UNESCO <http://whc.unesco.org/>

ORIGIN ENERGY'S HOME ENERGY PROJECT - The Home Energy Project encourages students to think about energy use in the home and to develop ideas on how households can be more energy sufficient. Students then communicate these ideas to the wider community. <http://www.originenergy.com.au/about/template.php?pageid=1035>

SECOND NATURE - EDUCATION FOR SUSTAINABILITY - Second Nature is a non-profit organisation that assists colleges and universities in expanding their efforts to make environmentally sustainable and just action a fundamental component of learning and practice. <http://www.secondnature.org/>

THE INTERNATIONAL JOURNAL OF SUSTAINABILITY IN HIGHER EDUCATION - This site puts you at the heart of a global network of practitioners, academics and legislators working on sustainable development in higher education. <http://www.emeraldinsight.com./ijshe.htm>

PROJECTS INTERNATIONAL - LEARNING TO CREATE A SUSTAINABLE WORLD - Projects International (PI) is working to integrate Education for Sustainability (EfS) into English language classrooms around the world. It is achieving this through student-centred, project-based learning that link schools, businesses, and communities. http://www.e-o-n.org/Projects_International/alpha/

ARIC INTERNET - WORLD CLASS RESEARCH AND EDUCATION IN ATMOSPHERIC AND SUSTAINABILITY ISSUES - This site provides an Encyclopaedia, Research and Consultation as well as many other services to assist in education on atmospheric and sustainability issues. <http://www.cate.mmu.ac.uk>

THE SUSTAINABILITY EDUCATION CENTRE - The official homepage of the Sustainability Education Centre of the American Forum for Global Education. It was created in 1995 in response to the growing need for educational materials and professional development focused on sustainability. <http://www.sustainabilityed.org>

SOCIAL ASPECTS OF SUSTAINABLE DEVELOPMENT IN AUSTRALIA - EDUCATION - An informative Website provided by United Nations on the environmental education focuses of the Commonwealth Government of Australia. <http://www.un.org/esa/agenda21/natlinfo/countr/austral/social.htm#edu>

TEACHING FOR A SUSTAINABLE WORLD - A publication on sustainable education placed on the Web by the Commonwealth Department of the Environment, Sport and Territories. <http://www.deh.gov.au/education/publications/tsw/index.html>

ENVIRONMENT AUSTRALIA - EDUCATION AND TRAINING IN CLEANER PRODUCTION - Environment Australia's draft report on Education and Training in Cleaner Production, released in 1997. <http://www.deh.gov.au/industry/corporate/eecp/publications/pbs/educatio.pdf>

AUSTRALIA'S enviroNET / EDUCATION PATHWAY - The Education Pathway contains information on environment-related courses at Australian universities, colleges and training institutions. <http://www.deh.gov.au/industry/environment/index.html>

ENVIRONMENT AUSTRALIA: ENVIRONMENTAL EDUCATION - EnviroED - EnviroEd establishes a national network of environmental education and information programmes, materials and publications, in the interest of education for sustainability. <http://www.deh.gov.au/education/>

CURRICULUM LEADERSHIP 2:21 ENVIRONMENTAL EDUCATION FOR A SUSTAINABLE FUTURE
<http://cmslive.curriculum.edu.au/leader/default.asp?issueID=9691&id=4695>

VICTORIAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION (V.A.E.E.) - Victorian Association for Environmental Education page contains information about professional development, resources and environment clubs. V.A.E.E. supports and promotes the development of environmental education in schools and the community. It does this through delivering its own initiatives and encouraging and supporting individuals and other groups whose environmental education approaches are consistent with its own.
<http://www.vaee.vic.edu.au/>

ENVIRONMENTAL EDUCATION NETWORK - The Environmental Education Network (E.E.N.) is a collaborative effort among educators, the EnviroLink Network and the environmental community to bring environmental education on-line and into a multimedia format. The E.E.N. will act as the clearing house for all environmental education information, materials and ideas on the Internet. Includes separate resources for teachers and students. <http://www.envirolink.org>

DEAKIN UNIVERSITY - CENTRE FOR STUDIES IN MATHEMATICS, SCIENCE AND ENVIRONMENTAL EDUCATION <http://www.deakin.edu.au/education/csmsee/>

NEW VISION FOR ENVIRONMENTAL EDUCATION - For the first time Australia has a nationally-agreed vision for environmental education in its schools. 'Educating for a Sustainable Future: A National Environmental Education Statement for Australian Schools' is the result of extensive consultation, research and development with teachers, communities, organisations, governments and industry groups and is compatible with existing state and territory policies and programmes.
<http://www.deh.gov.au/education/publications/sustainable-future.html>

TODAY SHAPES TOMORROW - ENVIRONMENTAL EDUCATION FOR A SUSTAINABLE FUTURE - This Discussion Paper has been written to ensure that it is meaningful to a diverse range of people. While some stakeholders working in the field may find certain material straightforward, it is included to help as wide an audience as possible appreciate why environmental education is a priority.
<http://www.deh.gov.au/education/publications/discpaper/>

EDUCATING FOR A SUSTAINABLE FUTURE - A NATIONAL EDUCATION STATEMENT FOR AUSTRALIAN SCHOOLS - Educating for a Sustainable Future provides a nationally agreed description of the nature and purpose of environmental education for sustainability through all years of schooling, including a vision and a framework for its implementation. It is intended for teachers, schools and their communities, education systems and developers of curriculum materials. It is also intended as a companion to existing State and Territory policies and programmes and does not replace them.
<http://www.deh.gov.au/education/publications/sustainable-future.html>

CURRICULUM LEADERSHIP 2:21 ENVIRONMENTAL EDUCATION IN WESTERN AUSTRALIA
<http://cmslive.curriculum.edu.au/leader/default.asp?issueID=9691&id=4700>

appendix 4

Environmental diary dates

2005 - 2007 INTERNATIONAL YEARS OF PLANET EARTH

2005 - 2009 DECADE OF WATER

2005 - 2014 U.N. DECADE FOR SUSTAINABLE DEVELOPMENT

2006 GREEN DATES:

2 FEB	WORLD WETLANDS DAY www.deh.gov.au/water/wetlands/day/index.html
4 MAR	SCHOOLS CLEAN-UP DAY www.cleanup.com.au
5 MAR	CLEAN-UP AUSTRALIA DAY www.cleanup.com.au
5 - 12 MAR	SEAWEEK www.mesa.edu.au/seaweb.asp
21 MAR	WORLD FORESTRY DAY www.forests.qld.gov.au/educat/wfd/wfd1998.htm
22 MAR	WORLD WATER DAY www.unesco.org/water/water_celebrations/
22 APR	EARTH DAY www.earthday.net
1 JUN	GEOGRAPHY WEEK
5 JUN	WORLD ENVIRONMENT DAY www.unep.org/wed/2005/About_WED_2005
8 JUN	WORLD OCEANS DAY www.gdrc.org/oceans/oceans-day.html
17 JUN	WORLD DAY TO COMBAT DESERTIFICATION & DROUGHT
28 JUL	SCHOOLS TREE DAY www.planetark.com
31 JUL	NATIONAL TREE DAY
12 - 20 AUG	NATIONAL SCIENCE WEEK http://scienceweek.info.au/
1 SEPT	SAVE THE KOALA AT SCHOOL DAY www.savethekoala.com
4 - 10 SEPT	LANDCARE WEEK www.landcareaustralia.com.au
7 SEPT	NATIONAL THREATENED SPECIES DAY www.deh.gov.au/biodiversity/threatened/ts-day/index.html
21 SEPT	TREES FOR PEACE
4 OCT	FEAST OF ST. FRANCIS www.franciscans.org.au/earthcare
9 - 15 OCT	NATIONAL WEEDBUSTER WEEK www.weedbusterweek.info.au
7 - 13 OCT	NATIONAL RECYCLING WEEK www.planetark.com
4 - 10 DEC	COASTCARE WEEK www.landcareaustralia.com.au

FURTHER INFORMATION CONTACT: www.edna.edu.au/edna/noticeboards



appendix 5

Examples of Ecologically Active Catholic Schools

School	Diocese	Project
St. Mary of Angels, Guyra	Armidale	Understanding Biodiversity - Wet and Dry Environments
St. Mary's Central School, Wellington	Bathurst	St. Mary's Central School Biodiversity Project
St. Joseph's Primary, Eugowra	Bathurst	Bush tucker garden
Our Lady of Good Counsel, Forestville	Broken Bay	Kalliolola Rescue
St. Joseph's Primary School, Narrabeen	Broken Bay	Regenerate coastal vegetation and attract native birds
St. Joseph's Primary School, Boorawa	Canberra - Goulburn	St. Joseph's - Looking forward to a Sustainable Future
John Paul College, Coffs Harbour	Lismore	Restoration of native habitat, construction of outdoor learning space
Our Lady of Victories, Shortland	Maitland - Newcastle	Greening with Gahnias
St. James' Primary School, Muswellbrook	Maitland - Newcastle	W-E-P (Water - Energy - Paper - Waste Minimisation)
St. Mary's High School, Gateshead	Maitland - Newcastle	St. Mary's Sustainable Environmental Project
Holy Family Primary School, Merewether	Maitland - Newcastle	Develop a windbreak garden using local littoral rainforest species: wetland project
St. Columban's Primary School, Mayfield	Maitland - Newcastle	Multi-cultural gardens and learning space
St. Paul's College, Greystenes	Parramatta	Green Corridor
Caroline Chisholm College	Parramatta	A Waterwise Cultivated Eco-system for Sustainable Crop Production
St. Columba's High School, Springwood	Parramatta	Pultenea villifera preservation
St. Francis of Assisi Regional Primary School Paddington	Sydney	The St. Francis Ecologically Sustainable Rooftop Garden
St. Joseph's Primary, Como	Sydney	Revegetation of part of school playground following remediation
St. Jerome's Primary School, Punchbowl	Sydney	Mary MacKillop / Aboriginal Memorial Garden
St. John Bosco College, Engadine	Sydney	Indigenous local area native forest and bird corridor
St. Joseph the Worker (Auburn South) School	Sydney	To create an Australian native garden in the grounds of our school
Xavier High School	Wagga Wagga	Xavier High School & St. Anne's Primary School Wetlands Development
St. Joseph's Primary, Peak Hill	Wilcannia - Forbes	On the Trail of the Lachlan
Saint Lawrence's Central School, Forbes	Wilcannia - Forbes	Saint Lawrence's Native Garden Environmental Development Project
St. Therese's Community Primary School, Wilcannia	Wilcannia	Outdoor learnscape and garden retreat
Mater Dei School, Camden	Wollongong	Learning about creative history in a meditative walk
St. Mel's School, Campsie	Sydney	Creation of a Peace Garden
St. Joseph's School, Charlestown	Sydney	Art Murals, Waste-wise School
St. Mary's School, Erskineville	Sydney	S.C.R.A.P.S. Programme
Catholic College	Wagga Wagga	Salinity Safari: Art in the Wild Competition
Loreto Normanhurst School	Sydney	"Green Team" Leadership Group
St. Patrick's College, Strathfield	Parramatta	Social Justice Group
St. Patrick's College, Campbelltown	Wollongong	Student Environmental Council
St. Joseph's Catholic High School, Albion Park	Wollongong	Sustainable School, 2005 School Environmental Management Plan

Good News Eco Stories from Catholic Schools

St Joseph's Albion Park - EARTHCARE ACTIVE SCHOOL - Management of Resources

Systemic 7-12 - Wollongong Diocese, part of the Sustainable School 2005 Program

St Joseph's has been moving towards an 'Earthcare Active' school for many years, under the environmental leadership of Michael Douglas, who believes that the school is functioning as 'organically' as possible. Management of school resources has been a high priority for St Joseph's as audits of the waste water and energy usage have been carried out for many years. With its ten large rainwater tanks and permacultural principles at work, St Joseph's is a lighthouse to other schools wanting to start the 'ecological conversion' journey.

The 'go organic' philosophy at St Joseph's has permeated the whole school with an enthusiastic implementation of the SEMP - School's Environmental Management Plan. Fruitful staff development days promoting the theme of ecological conversion have heightened awareness for teachers, students and parents. Social Justice projects assisting the environmental refugees of the Pacific island nation of Kirabati have been running for some time.

Mater Dei Special School, Camden - CATHOLIC LEARNSCAPES ARE ALIVE - A Religious Dimension

Non-Systemic Special School Primary - Wollongong Diocese

The Good Samaritan Sisters under the guiding eye of Sr Monica Sparks have created an amazing Learnscape for students and adults alike, to immerse them in God's creation history. The Cosmic walk/reflection experience gives us an increased understanding of the wonders of the cosmos and the emergence of life. The students of Mater Dei have assisted in the development of the walk with the many artworks along the way including dinosaurs, plants and volcanoes. There are 14 stations to use as reflection points as one 'journeys' through 13 billion years of time. The walk, meandering through a beautiful bush setting, is approximately 1.9 kms (a scale of 1mm = 5,000 years) and takes around 40 minutes to complete. The Mater Dei students have assisted Sr Monica in creating the walk trail and surrounding gardens, using where possible recycled materials and native trees and shrubs. For more information contact Sr Monica on 02 655 4671.



St Mel's Campsie - CREATING A PEACE GARDEN - Community Involvement

Systemic K-6 - Sydney Diocese, funding from the Mercy Foundation

The inner city Catholic school of St Mel's Campsie has won awards in values education for its Cultural Harmony Plan. Part of the Cultural Harmony Plan was to build 'peace gardens' using local indigenous plants to recreate a native habitat, and an area of peace (a sacred place) within the school. St Mel's worked with many organisations to create the Peace Garden including Jenny Neil from Treecreeper Eco Management. The teachers were able to develop a linked curriculum resource to the project that the children enthusiastically followed over the 8 weeks. The students learned that the Cadigal Wangal people were the time honoured custodians of the land situated in the Cooks River catchment. Following completion of the peace garden, an official opening 'smoking ceremony', led by the school's local indigenous friends, took place which was attended by the whole school community. For more information on the Peace Garden and the teaching unit used with the garden development visit www.stmels.campsie.syd.catholic.edu.au/indigenous_habitat/index.htm

Holy Family Primary, Merewether Beach - WETLAND PROJECT - MANAGEMENT OF SCHOOL ENVIRONS

Systemic K-6 - Maitland, Newcastle Diocese

On this small suburban site, the students, guided by the adults working with them, have taken a number of initiatives which have seen wonderful outcomes for their own learning and, just as importantly, for the environment. Much of the inspiration has been Jenny Robinson, whose son Gerry attends Holy Family. Jenny is also at the environmental education officer at Trees Are Newcastle, a community nursery and revegetation centre at Hamilton. Under the leadership of Jenny and Carolyn, a number of projects have taken shape, including the acquisition of a shade house to grow the required seedlings for tree planting projects at Blackbutt, Newcastle University and Kooragang. The school has radically improved its physical surroundings by the introduction of a water-watch programme and the construction of a dynamic on-site wetland learnscape. Both these projects were student suggested and supported. Prior to the creation of the wetlands Hannah Smith described the area as "just a dirt patch, where the grass wouldn't grow. Dirt would blow in your eyes - it just wasn't a nice place to be." Another feature of learning at Holy Family has been the integration of the various projects into the curriculum. Poetry writing, science, religious studies and mathematics have all benefited from the experiences offered by Jenny and Carolyn and supported by the entire school community.

Loreto Normanhurst, Green Team - BOARDERS TO THE RESCUE - Curriculum

Non-Systemic Girls 7-12 Boarding - Broken Bay Diocese, part of the Sustainable School 2005 Program

The Green Team Loreto's Student Environment Group, is a fun-based, student-led group which acts within the Loreto community to create and maintain a sustainable environment through motivation, awareness campaigns and organised activities. New Year 7 students at Loreto Normanhurst were given writing assignments to study the environmental projects occurring within the school. Lucy Brush, a boarder at the school, reported on the school's Green Team for her assignment. For her research Lucy attended the weekly Green Team meetings held on Wednesday lunchtime, to record what activities the Green Team carried out. The Green Team is a student led group which takes on many environmental activities including monitoring of air pollution and bush regeneration (on school grounds and in the local community with the help of Hornsby Council). Other projects include special tree planting days for the whole school and promoting the saving of energy within the school on Snug-as-a-Rug Day. Fundraising for environmental causes happens regularly and the boarders sell in recycled canteen bottles worm juice collected from the school's worm farm on 'Open Day'.

St Therese Community Primary, Wilcannia - US LITTLE FELLAS CAN MAKE A DIFFERENCE - Curriculum

Systemic Girls K-2 - Wilcannia Forbes Diocese, part Eco-School grant 2005, St Francis Earthcare grants

St Therese's is a small school on the banks of the Darling River at Wilcannia. It has an enrollment of 42 students which are predominantly Aboriginal. Patricia McMillan has developed an innovative environmental literacy project within the school called "Us Little Fellas Can Make a Difference". Being a small school has not stopped the school community from becoming an 'Earthcare Active' school as they participate in all the major environmental calendar activities such as Clean Up Australia Day, World Environment Day and Water Week. The school has also developed a school environmental management plan which involves the invaluable help of the parent body to support special landscape projects carried out around the school. The vibrancy of the curriculum, the landscape of the school grounds and the heightened environmental awareness of the school community provides powerful testimony to the school's spirited resolve to be an ecologically active place of learning and living.

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Main front cover photo courtesy Peter Halpin, The Explorer Experience, sourced from explorereexperience.com.au



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From the heart to the hands...



"We are all painfully aware of the fundamental obstacle that confronts us in our work for the environment.

It is precisely this: how are we to move from theory to action, from words to deeds?

We do not lack technical scientific information about the nature of the present ecological crisis.

We know not simply what needs to be done, but also how to do it.

Yet, despite all this information unfortunately little is actually done.

It is a long journey from the head to the heart and an even longer journey from the heart to the hands."

***Patriarch of Constantinople Bartholomew I**
4th Symposium on Religion Science and the Environment
June 2002*



Within a single generation...

"It is not too late. God's world has incredible healing powers. Within a single generation we could steer the earth toward our children's future. Let that generation start now, with God's help and blessing."

***John Paul II and Bartholomew I,**
Joint Declaration on Environment, June 2002*



"Human beings are appointed by God as stewards of the earth to cultivate and protect it. From this fact there comes what we might call their 'ecological vocation', which in our time has become more urgent than ever."

*Pope John Paul II
August 2000*



The human threat to all living things, which is being spoken of everywhere these days, has given a new urgency to the theme of creation.

*Joseph Cardinal Ratzinger 1995
(now Pope Benedict XVI)*



"If you love your native land do not let this appeal go unanswered! . . . devise programmes for the protection of the environment and ensure that they are properly put into effect!"

Pope John Paul II
June 1999

