

# North Sydney Boys High School



## Environmental Management Plan

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North Sydney Boys High School

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## Principal's Statement

North Sydney Boys High is committed to the preservation and conservation of the environment. Through defined strategies, actions and outcomes, the School Environmental Management Plan serves as an evolving project to ensure that our school demonstrates leadership in the crucial area of defending and protecting our environment and educating for global citizenship.



## About North Sydney Boys High School

### School vision/mission statement

Students and teachers of North Sydney Boys' High School will work collaboratively with the wider school community in order to exemplify a sound knowledge base of, and quality practices in, the imperative area of environmental sustainability. Through an encouraging and supportive process that recognises student commitment, leadership and contribution, environmental programmes will encourage links between, and create long lasting learning opportunities for, students, teachers and the local community.

### School vision and goals for the environment

North Sydney Boys' High School, having collected baseline data on its current environmental impact in June 2007, now aims to ameliorate these impacts through a School Environmental Plan Management Plan. The SEMP will be embedded into the curriculum and embraced by current and future structures within the school.

### School profile and background

North Sydney Boys' High is located adjacent to the North Sydney Central Business District (CBD). Academically selective, with a school population of 900, in 2007 it draws from primary schools across Sydney. It has a vibrant, happy and busy community of young men of diverse backgrounds and aspirations. 75% of students are from non-English speaking backgrounds. Over 40 languages, apart from English, are spoken at home. Within such a diverse community, individual experiences of environmental impacts and management are varied.

### About the local environment and community

NSBHS is located in the North Sydney Council Local Government Area, an area covering 10 square kilometres, and incorporating a Central Business District (CBD) for commercial use and two high-density mixed-use centres (St Leonards and Milsons Point).

Source: <http://www.northsydney.nsw.gov.au/www/html/4127-snapshot-of-north-sydney.asp>; June 24 2007



Eighty six percent of the population in the North Sydney LGA is over the age of eighteen. The population is highly mobile. Nearly half of all residents rent and, over a five-year period, over sixty five percent move to a new address. The dwelling density is higher than in most other parts of Sydney and is increasing - seventy one percent of residents live in medium-density housing (units, townhouses, semis and terraces) compared to the Sydney SD's twenty nine percent.

North Sydney has a high level of daytime visitors - some 63,345 people travel to North Sydney for work, and of the 15,000 students attending schools and tertiary institutions, only one in five live in the area. North Sydney Boys' High is one of these schools.

The principal commercial activities in the North Sydney CBD, one of the largest in Australia, employ 63,345 persons in the following industries: property and business (38%); finance and insurance (10%); Communications (7%); retail (6%); manufacturing (5%) and, all at 4%, accommodation, cafes and restaurants; health and community services; wholesale trade; and education. At the 2001 Census unemployment was a low 3.5%, compared with Sydney SD's at 6.1%

Potential developable land over the next 10 years is expected to bring an additional 6,545 residents and 11,306 workers to the North Sydney community. The proportion of the population over 65 years is expected to rise by 5.2% by the year 2022.

The current residential population is an increase of 5.1% since 1996 and 12% since 1991.

Source: <http://www.northsydney.nsw.gov.au/www/html/4127-snapshot-of-north-sydney.asp>; June 24 2007

### School management and planning (including curriculum) priorities

The NSBHS Strategic Plan 2007-2009 recognises the following core values:

- provision of excellence in teaching and learning
- provision of high quality and broad ranging academic, cultural, sporting and social opportunities
- development of independence, fulfilment, leadership and social responsibility
- valuing and developing the school's traditions, while supporting change for improvement
- encouraging our community to support the future directions of the school

The Plan prioritises the following strategic directions for 2007-2009

- encouragement and recognition of personal best
- consistent structures and policies across the school
- addressing underachievement
- teaching and learning

The SEMP therefore reflects both our core values and strategic directions and will be fully integrated into management priorities by 2010



This plan fits into Whole School Planning through the following:

- The school's strategic management plan
- Part of the school annual plan
- Reported on in the school annual report
- Integrated with school administration and management procedures
- Integrated with curriculum programs
- Consultation with Student Representative body
- Consultation with Parents and Citizens or Friends organisations
- Links to regional education and local government planning
- Links to extra-curricular activities for students
- Other

School environment education team

Name: NSBHS Environmental Management Team (SET)

Number of people:

The team includes:

- Teachers
- Parents
- Parents and Citizens/friends association
- Elected Student Representative body
- Executive staff

The NSBHS Environmental Management Team aims to cater for the diversity and individual priorities of the school community, seeking to make decisions based on consensus. The Student Environment Group meets at least once per week, with extended meetings occurring at times relating to planning and implementation processes. The Environmental Management Team meets as necessary. The Team seeks advice, and bring ideas back from, existing school community structures: executive; teachers; administration; SRC; Falcon Foundation; School Council; Auxillary; and Parents and Citizens. A SEMP priority is to utilise these existing structures and collective expertise. It is envisaged that the Team will increase in size as the SEMP is implemented.



### School environment education achievements and new priorities

Prior to the SEMP process, NSBHS has implemented a number of processes to ameliorate environmental impact; including the installation of two 22,000 litre water tanks and planting of native species.

In February 2007 NSBHS became a pilot school for the Global Communities for Sustainability project which led to a school environmental audit in June. The audit has produced baseline data for the SEMP.



## About this plan

Across the focus areas the goals of this plan are

### Curriculum

- Audit environmental planning and management outcomes in curricula
- Review outcomes based on identified goals for NSBHS resource and ground management - the SEMP
- Embed identified SEMP goals into curricula by 2010

### Resource management

- Establish impact baseline data through an environmental audit of NSBHS
- Identify methods of reducing impacts through utilisation of: existing school community expertise
- Identify methods of reducing impacts through research
- Develop plans to reduce impacts through reduction, reuse and recycling of resources
- Establish an annual monitoring programme
- Establish an biennial audit
- Facilitate resource management through application for funds from government and appropriate sponsorship

### Grounds management

- Establish biodiversity baseline data through an environmental audit of NSBHS grounds
- Consider the environmental impact of all grounds planning and management
- Increase biological diversity through planting of locally endemic or appropriate native plant species
- Provide old growth dependent species with roosting and nesting sites through the use of artificial hollows
- Inform neighbouring properties of the ground management goals and the impact of feral species on native animal species
- Plan and construct student learning spaces

### Whole school planning

- Integrate environmental management into whole school planning and management processes by 2010.



### School community participation

- Establish clear mechanisms for liaison between the School Environment Team and NSBHS executive; teachers; students; SRC; administrator; Falcon Foundation; Old Falconian's Union; School Council; Auxillary; Parents and Citizens
- Establish clear mechanisms for establishing partnerships, and networking with, the wider community



This plan addresses the following issues and topics

- Energy
- Water
- Biodiversity
- Materials: purchase
- Materials: reduction and reuse
- Learning spaces
- Networking
- Integration into NSBHS curricula
- Integration into NSBHS planning and management processes

### Energy

Description: Use of electrical energy

#### Outcome

1. Reduction in energy consumption
2. Increase in use of renewable energy sources both from the energy grid and through the installation of solar panels

#### Indicators

Reduction in energy use ascertained by analysis of energy bills  
Use of Green Energy providers  
Solar panels installed

#### Timeframe

2007-2010

### Water

Description:

#### Outcome

Reduction in water use from mains system  
Increase in on site water collection  
Reduction in production and impact of stormwater

#### Indicators

Reduction in water use through analysis of water meters and bills  
Installation of water tanks  
Analysis of stormwater through drain inspection

#### Timeframe

2007-2010



**Biodiversity**

Description:

Outcome

Increase biodiversity

Indicators

Increased number of endemic and/ or native plants

Use of artificial hollows by old growth dependent animal species

Greater neighbour awareness of impact of feral species on native animal species

Timeframe

2007-2010

**Materials: purchase**

Description:

Outcome

Minimisation of environmental impact of goods purchased by school, including social impact

Indicators

Goods purchased have been evaluated for ecological and social impacts of production; energy efficiency; durability; ability to be reused and recycled;

Timeframe

2007-2010

**Materials: reduction and reuse**

Description:

Outcome

Reduction in use of materials

Increase in reuse and recycling of materials

Indicators

Analysis of bills for purchase of materials

Analysis of data relating to reuse of materials

Analysis of bills for recycling of materials

Timeframe

2007-2010

**Learning spaces**

Description: Creation of quiet, shaded spaces in the school grounds

Outcome

Creation of shaded outdoor learning spaces for individuals, small groups and classes

Indicators

Learning spaces built and utilised

Timeframe

2008-2010



### Networking

#### Description:

#### Outcome

Consolidation of existing partnerships and networks  
 Creation of new partnerships and networks  
 Increased awareness and participation within and beyond the NSBHS community

#### Indicators

Increased involvement of school and wider community

#### Timeframe

2007-2010

### Integration into NSBHS curricula

Description: Integration of SEMP across the curricula

#### Outcome

All Faculties share responsibility for SEMP implementation

#### Indicators

NSBHS Faculties recognise, and share responsibility for, SEMP outcomes

#### Timeframe

2010

### Integration into NSBHS planning and management processes

Description: SEMP is an integral component of NSBHS planning and management

#### Outcome

SEMP is an integral component of NSBHS planning and management

#### Indicators

SEMP implementation is entrenched in NSBHS planning and management, independent of individual expertise and/or commitment

#### Timeframe

2009

### Actions to promote and celebrate progress

- Reported in the school annual report
- Regular updates in the school newsletter
- Stories for local media: newspapers, television or radio
- Relevant displays and events at school
- Showcased on the school website
- Awards or badges for those involved
- Promoted at school assemblies
- Grants and competitions applied for



## Action Plans

### Energy

#### Indicators

- Reduction in energy use ascertained by analysis of energy bills
- Use of Green Energy providers
- Solar panels installed

Strategy	Action	Monitoring	Project Management	
<b>Resource Management</b>				
Audit energy usage	Biennial environmental audit incorporated into science, mathematics and English programmes	SET; SEG	Timeframe	2007-2010
			Resources	North Sydney Council; SCRAP; school community
			Responsibility	SET; SEG; HODs
Encourage energy saving practices	Maximise use of natural sources of light Minimise use of artificial light Determine sources of heat loss and natural ventilation in all rooms Minimise use of air conditioners, fans and heaters Maximise use of natural ventilation e.g. windows, doors Maximise use of roof insulation	all students and staff	Timeframe	2007-2010
			Resources	SEG
			Responsibility	SEG; SET; all staff
Retrofit energy appliances	Audit and retrofit appliances	SET	Timeframe	2009-2010
			Resources	Government funding
			Responsibility	SET, HODs
Use alternate energy	Investigate roof access to solar, wind energy Install solar panels Install wind turbines		Timeframe	2008-2010
			Resources	Government funding
			Responsibility	SET



## Water

### Indicators

- Reduction in water use through analysis of water meters and bills
- Installation of water tanks
- Analysis of stormwater through drain inspection

Strategy	Action	Monitoring	Project Management	
<b>Resource Management</b>				
Audit water usage	Biennial environmental audit incorporated into science, mathematics and English programmes	SET, SEG	Timeframe	2008-2010
			Resources	North Sydney Council; SCRAP; school community
			Responsibility	SET; SEG
Encourage water saving practices	Installation of "turn it off" plates in bathrooms	SEG, SET	Timeframe	2008
			Resources	Metal plates
			Responsibility	SEG, SET
Retrofit water appliances	Retrofit appliances	SET	Timeframe	2009
			Resources	Government funding
			Responsibility	SET
Harvest rainwater	Installation of rainwater tanks to supplement existing		Timeframe	2008-2010
			Resources	Government funding
			Responsibility	SET

## Biodiversity

### Indicators

- Increased number of endemic and/ or native plants
- Use of artificial hollows by old growth dependent animal species
- Greater neighbour awareness of impact of feral species on native animal species

Strategy	Action	Monitoring	Project Management	
<b>Grounds Management</b>				
Undertake grounds planning	Supplement existing planning with input from SET, SEG	SET	Timeframe	2008-2010
			Resources	Best practice guidelines from government and non-government organisations
			Responsibility	SET
Monitor existing grounds projects	Request input in planning		Timeframe	2008-2010
			Resources	
			Responsibility	SET, executive
Develop a wildlife / bushland corridor through the school	Plant and maintain endemic species Install artificial hollows in existing trees	SEG	Timeframe	2007-2010
			Resources	North Sydney Council
			Responsibility	SEG, SET



## Materials: purchase

### Indicators

- Goods purchased have been evaluated for ecological and social impacts of production; energy efficiency; durability; ability to be reused and recycled;

Strategy	Action	Monitoring	Project Management	
Resource Management				
Audit materials purchased and used		SET	Timeframe	2008-2010
			Resources	
			Responsibility	SASS; HODs; Executive
Buy environmentally friendly products	Purchase of appliances/ equipment with minimal environmental impact, changing suppliers if appropriate	SASS, HODs, SET	Timeframe	2008-2010
			Resources	Product information relating to environmental impact
			Responsibility	SASS, HODs, Executive, SET

## Materials: reduction and reuse

### Indicators

- Analysis of bills for purchase of materials
- Analysis of data relating to reuse of materials
- Analysis of bills for recycling of materials



Strategy	Action	Monitoring	Project Management	
<b>Resource Management</b>				
Audit waste	Biennial environmental audit incorporated into science, mathematics and English programmes	SET, SEG	Timeframe	2007-2010
			Resources	North Sydney Council; SCRAP; school community
			Responsibility	SET, SEG
Increase reuse of materials	Investigate ability of materials to be reused both on and off site Prepare a list of materials and actions for reuse For paper: sorting paper at sites of use e.g. photocopiers, staffrooms, classrooms	all staff, all students	Timeframe	2007-2008
			Resources	List of companies that will collect materials for reuse Boxes specifically labelled for reuse of paper
			Responsibility	all staff, all students, SRC, SET, SEG
Improve recycling generally	Investigate ability of materials to be recycled both on and off site Prepare a list of materials and actions for recycling For paper: sorting paper at sites of use e.g. photocopiers, staffrooms, classrooms		Timeframe	2007-2008
			Resources	List of companies that will collect materials for recycling Boxes specifically labelled for recycling of paper
			Responsibility	all staff, all students, SRC, SET, SEG
Implement new bin systems	Waste to be sorted		Timeframe	2008
			Resources	Bins for aluminium cans to be located in grounds, adjacent to canteen
			Responsibility	all staff, all student

## Learning spaces

### Indicators

- Learning spaces built and utilised

Strategy	Action	Monitoring	Project Management	
<b>Grounds Management</b>				
Undertake grounds planning	Plan grounds based on needs of students	SET; SEG; P&C; School Council; Auxillary; Executive	Timeframe	2007-2010
			Resources	School community; government; local businesses
			Responsibility	Executive
Develop outdoor learning areas	Design and construct outdoor areas with recognition of need for quiet, shaded spaces	SET, TAS	Timeframe	2007-2010
			Resources	TAS
			Responsibility	SET, TAS

## Networking



## Indicators

- Increased involvement of school and wider community

Strategy	Action	Monitoring	Project Management	
<b>School Community Participation</b>				
Promote student leadership	Provide opportunities for students to work on the SEMP	SEG	Timeframe	2007-2010
			Resources	NSBHS communication systems
			Responsibility	SEG
Promote environmental citizenship	Provide opportunities for school community to work on the SEMP	SET	Timeframe	2007-2010
			Resources	NSBHS communication systems
			Responsibility	SET, Executive
Support all staff to be involved in the SEMP activities	Embed SEMP into school planning and management with appropriate support		Timeframe	2007-2010
			Resources	
			Responsibility	Executive
Use local information and support resources from community groups	Develop communication with community groups		Timeframe	2007-2010
			Resources	Local Council, NGO websites
			Responsibility	SET, SEG
Promote the school's environmental education activities to community	Develop clear mechanisms for media releases	SEG	Timeframe	2007-2010
			Resources	Staff and student expertise
			Responsibility	SEG
Include the local community in environmental celebration events	Contact links in community when appropriate	SET	Timeframe	2007-2010
			Resources	
			Responsibility	SET, SEG
Participate in local community events	Monitor and participate in local community events	SET, SEG	Timeframe	2007-2010
			Resources	SEG
			Responsibility	SET
Participate in local government programs and events	Monitor and participate in LGA programs and events		Timeframe	2007-2010
			Resources	SET
			Responsibility	SET, SEG
Involve and consult with the student representative body and parent's body	SET to maintain and increase representatives from existing student and parent bodies	SET	Timeframe	2007-2010
			Resources	SET
			Responsibility	SET
Promote student leadership	Support and acknowledge student involvement in the SEMP		Timeframe	2007-2010
			Resources	Existing acknowledgement systems; establish clear awards for SEMP involvement
			Responsibility	SET



## Integration into NSBHS curricula

### Indicators

- NSBHS Faculties recognise, and share responsibility for, SEMP outcomes

Strategy	Action	Monitoring	Project Management	
Curriculum Strategies				
Review teaching programs		HODs	Timeframe	2007-2008
			Resources	
			Responsibility	HODs
Develop and share new teaching programs	Actions will be developed over the life of the plan. Initial priorities will be: to embed the audit and monitoring processes of the SEMP into the Science, Mathematics and English programmes; the development of a website (TAS) and planning of learning spaces (TAS).	SET	Timeframe	2007-2010
			Resources	
			Responsibility	HODs
Implement new teaching programs		HODs	Timeframe	2008-2010
			Resources	
			Responsibility	HODs
Increase collaboration between faculties	SET to have representatives, and therefore input, from all faculties	SET, Executive	Timeframe	2009-2010
			Resources	
			Responsibility	SET, Executive
Integrate environmental education with numeracy, literacy programs	HODs for KLAs to integrate SEMP monitoring and audit into programmes	HODs	Timeframe	2008-2010
			Resources	
			Responsibility	HODs (Science, Mathematics, English)



## Integration into NSBHS planning and management processes

### Indicators

- SEMP implementation is entrenched in NSBHS planning and management, independent of individual expertise and/or commitment

Strategy	Action	Monitoring	Project Management	
<b>Whole School Planning</b>				
Develop environmental friendly purchasing policies			Timeframe	
			Resources	
			Responsibility	
Develop procedures for students and staff			Timeframe	
			Resources	
			Responsibility	
Use the SEMP to identify annual environmental priorities			Timeframe	
			Resources	
			Responsibility	
Integrate the SEMP with the strategic management plan			Timeframe	
			Resources	
			Responsibility	
Integrate the SEMP into the school annual plan			Timeframe	
			Resources	
			Responsibility	
Report on achievements in the school annual report			Timeframe	
			Resources	
			Responsibility	
Consult students			Timeframe	
			Resources	
			Responsibility	
Include all staff: teaching, canteen, SASS and grounds			Timeframe	
			Resources	
			Responsibility	

## Community and environment network

These organisations will join in our environmental meetings and activities:

Name of Organisation	Type of Organisation	Contact Details	Type of Assistance
	NSW local government	North Sydney Council	SEMP audit funding, expertise in environmental management
	NSW non-government organisation	Total Environment Centre	Toxic chemicals, waste



## Evaluation Plan

### Curriculum Goals

- Audit environmental planning and management outcomes in curricula
- Review outcomes based on identified goals for NSBHS resource and ground management - the SEMP
- Embed identified SEMP goals into curricula by 2010

Issue	Strategy	What was achieved?
	Promote environmental citizenship	
Integration into NSBHS curricula	Review teaching programs	
Integration into NSBHS curricula	Develop and share new teaching programs	
Integration into NSBHS curricula	Implement new teaching programs	
Integration into NSBHS curricula	Increase collaboration between faculties	
Integration into NSBHS curricula	Integrate environmental education with numeracy, literacy programs	



### Resource Management Goals

- Establish impact baseline data through an environmental audit of NSBHS
- Identify methods of reducing impacts through utilisation of: existing school community expertise
- Identify methods of reducing impacts through research
- Develop plans to reduce impacts through reduction, reuse and recycling of resources
- Establish an annual monitoring programme
- Establish an biennial audit
- Facilitate resource management through application for funds from government and appropriate sponsorship

Issue	Strategy	What was achieved?
	Audit waste	
	Increase reuse of materials	
Materials: purchase	Audit materials purchased and used	
Water	Audit water usage	
Energy	Audit energy usage	
Energy	Encourage energy saving practices	
Energy	Retrofit energy appliances	
Energy	Use alternate energy	
Water	Encourage water saving practices	
Water	Retrofit water appliances	
Water	Harvest rainwater	
Materials: purchase	Buy environmentally friendly products	
Materials: reduction and reuse	Audit waste	
Materials: reduction and reuse	Increase reuse of materials	
Materials: reduction and reuse	Improve recycling generally	
Materials: reduction and reuse	Implement new bin systems	



### Grounds Management Goals

- Establish biodiversity baseline data through an environmental audit of NSBHS grounds
- Consider the environmental impact of all grounds planning and management
- Increase biological diversity through planting of locally endemic or appropriate native plant species
- Provide old growth dependent species with roosting and nesting sites through the use of artificial hollows
- Inform neighbouring properties of the ground management goals and the impact of feral species on native animal species
- Plan and construct student learning spaces

Issue	Strategy	What was achieved?
Biodiversity	Undertake grounds planning	
Biodiversity	Monitor existing grounds projects	
Biodiversity	Develop a wildlife / bushland corridor through the school	
Learning spaces	Undertake grounds planning	
Learning spaces	Develop outdoor learning areas	



### Whole School Planning Goals

- Integrate environmental management into whole school planning and management processes by 2010.

Issue	Strategy	What was achieved?
Integration into NSBHS planning and management processes	Develop environmental friendly purchasing policies	
Integration into NSBHS planning and management processes	Develop procedures for students and staff	
Integration into NSBHS planning and management processes	Use the SEMP to identify annual environmental priorities	
Integration into NSBHS planning and management processes	Integrate the SEMP with the strategic management plan	
Integration into NSBHS planning and management processes	Integrate the SEMP into the school annual plan	
Integration into NSBHS planning and management processes	Report on achievements in the school annual report	
Integration into NSBHS planning and management processes	Consult students	
Integration into NSBHS planning and management processes	Include all staff: teaching, canteen, SASS and grounds	



### School Community Participation Goals

- Establish clear mechanisms for liaison between the School Environment Team and NSBHS executive; teachers; students; SRC; administrator; Falcon Foundation; Old Falconian's Union; School Council; Auxillary; Parents and Citizens
- Establish clear mechanisms for establishing partnerships, and networking with, the wider community

Issue	Strategy	What was achieved?
Networking	Promote student leadership	
Networking	Promote environmental citizenship	
Networking	Support all staff to be involved in the SEMP activities	
Networking	Use local information and support resources from community groups	
Networking	Promote the school's environmental education activities to community	
Networking	Include the local community in environmental celebration events	
Networking	Participate in local community events	
Networking	Participate in local government programs and events	
Networking	Involve and consult with the student representative body and parent's body	
Networking	Promote student leadership	

