



# Biodiversity Action Plan

Prepared	Reviewed	Version	Amendments
Feb 2008		one	

## Introduction

The decline in Australia's biodiversity is considered to be one of the key environmental issues of our time. Penrith City Council is committed to the conservation of the unique natural areas and biodiversity within the local and regional area. This commitment is reflected in the 2005 – 2009 Council's Strategic Plan – The Competitive Edge, Annual Management Plans, and the Penrith Biodiversity Strategy adopted by Council in 2003.

This Plan provides specific actions to implement the strategic objectives of the Penrith Biodiversity Strategy. A Biodiversity Working Group has been established with representatives from various Council departments to monitor and review the implementation of this Plan.

## Biodiversity Goals

The actions in this plan address Council's established biodiversity goals that are based around the following five themes:

- Biodiversity Conservation and Protection
- Integrating Biodiversity Conservation and Natural Resource Management
- Managing Threatening Processes
- Improving our Knowledge
- Community Involvement

## Review and Monitoring Actions

The aim of this plan is to integrate high priority actions into Council's Annual Management Plan. The priority of actions will be reviewed annually with consideration of the relevant organisational objectives. The Plan identifies lead departments responsible for implementing the specific actions. The implementation of actions and performance against this plan will be regularly monitored and reported through Council's established reporting processes. The Plan is considered a dynamic document and will need to remain flexible and adaptable to change.

## Abbreviations

City Works Manager (CWM)

Information Management & Technology Manager (IMTM)

Local Planning Manager (LPM)

Development Services Manager (DSM)

Waste & Community Protection Manager (WCPM)

Parks Construction & Maintenance Manager (PCMM)

Environmental Health Manager (EHM)

National Parks and Wildlife Service (NPWS)

Hawkesbury River County Council (HRCC)

Environmental Planning Manager (EPM)

## Biodiversity Conservation and Protection

### 1.1 Identify important biological diversity and threatening processes.

	Actions	Comments	Indicator	Priority	Responsibility
1.1.1.	Develop a biodiversity GIS layer based on existing information (public & private).	Upgrade existing GIS maps by developing mapping layers showing vegetation corridors, riparian corridors, surrounding land uses & stormwater treatment systems. Overlay layers with aerials and zones to identify gaps, key threatening processes and prioritise management actions to protect and enhance biodiversity assets.	Biodiversity GIS layer complete & priorities identified.	High	EHM, IMTM
1.1.2.	Collect data from local surveys, Flora & Fauna Reports and integrate DBMS with GIS.	Investigate systems for biodiversity data capture, storage and display. Data from local surveys, Flora & Fauna Reports (DA's) and sighting will be stored in an Access database and displayed on GIS.	Biodiversity database created.	High	EHM, IMTM, LPM
1.1.3.	Establish program for students to implement data entry.	Investigate opportunities to work in conjunction with school, TAFE and University to enable data entry into DBMS.	Database maintained and up to date.	Low	EHM
1.1.4.	Identify opportunities for the establishment of roadside and habitat corridors.	Roadsides including 'paper roads' and areas of continuous habitat will be prioritised by conservation significance criteria. Future management opportunities will be identified that protect and enhance biodiversity assets.	Priority habitat corridors identified.	Medium	EHM, IMTM, PCMM
1.1.5.	Identify regional weed mapping opportunities.	Work with Hawkesbury River County Council, Hawkesbury Nepean Catchment Management Authority and the National Parks and Wildlife Service to investigate opportunities for regional and local weed mapping.	Weeds of National Significance infestations mapped.	Medium	EHM, NPWS, HRCC

### 1.2 Improve the standard of management and protection of biodiversity.

	Actions	Comments	Indicator	Priority	Responsibility
1.2.1.	Review and Amend Local Environmental Plan (LEP).	Develop the Citywide Penrith LEP to include zones for the conservation of biodiversity and recommendations from the Fauna and Flora Corridor Study. Review the TPO definitions considering both urban and rural requirements and amend to include all vegetation.	City wide LEP contains biodiversity provisions.	High	LPM, EHM
1.2.2.	Review and Amend Development Control Plan (DCP).	Develop the Citywide Penrith DCP to include tighter controls on threats to biological diversity.	City wide DCP contains biodiversity provisions.	High	LPM, EHM

1.2.3.	Review standard conditions of consent applied to development applications.	Review standard conditions of consent and develop conditions to ensure biodiversity issues are included and enforced and linked with DCP.	Standard conditions of consent reviewed & updated.	Medium	<b>EHM, DSM</b>
1.2.4.	Review and enhance Councils internal management of vegetation.	Develop best practice procedures for Council staff to ensure the protection and enhancement of habitat.	Best practice procedures developed and education program implemented.	High	<b>PCMM</b>
1.2.5.	Improve the process and policy of the Significant Tree Registry.	Develop the process including the assessment criteria for assessing significant trees and review the information stored on the database. Create a policy whereby Significant Trees are listed on section 149 planning certificates.	Significant tree process improved and linked planning certificates.	Medium	<b>PCMM</b>

### 1.3 Implement the provisions of the Environmental Planning and Assessment Act relating to listed threatened species, endangered ecological communities and critical habitats.

	<b>Actions</b>	<b>Comments</b>	<b>Indicator</b>	<b>Priority</b>	<b>Responsibility</b>
1.3.1.	Review Council assessment practices in relation to threatened species.	Develop process to ensure that flora and fauna assessments for development applications complete '7- part tests' that include all known occurrences of species and ecological communities listed under the <i>Threatened Species Conservation Act 1995</i> .  Ensure SIS are prepared where proposals are likely to cause a significant impact on a species or ecological community listed under the <i>Threatened Species Conservation Act 1995</i> .	Development assessment practices reviewed and updated.	High	<b>EHM, DSM</b>
1.3.2.	Review Local Plans of Management to include the recommendations of recovery plans.	Review Councils Plans of Management and include the recommendations of Threatened Species and Endangered Ecological Communities Recovery Plans as they are released.	Plans of Management are consistent with recommendations of recovery plans.	Low	<b>EHM, PCMM</b>

#### 1.4 Establish and expand a comprehensive, adequate and representative system of conservation reserves covering Penrith's biodiversity.

	Actions	Comments	Indicator	Priority	Responsibility
1.4.1.	Review the adequacy of the existing conservation reserve system in Penrith.	Prioritise remnant vegetation patches in Penrith by analysing survey work completed during the <i>Remnant Native Vegetation Survey completed in 1995</i> . Create criteria that will identify remnants that are potentially biodiversity 'hot spots'. The criteria are to include community values and consider ongoing maintenance.	Significant vegetation remnants prioritised by conservation value.	Medium	EHM, LPM, PCMM
1.4.2.	Identify areas suitable for the expansion of the conservation area system.	Use geoprocessing techniques on existing maps to ensure all native vegetation communities are represented in Penrith's 'green web'. Identify key bushland areas for potential conservation or rehabilitation work. Those significant areas found to be contained on private or public land will be the focus of future incentive programs.	Conservation of viable biodiversity rich habitats that form part of the city's 'green web'.	Medium	EHM
1.4.3.	Identify areas within Penrith that would serve to protect biodiversity through connectivity or are good examples of native habitat	Use geoprocessing techniques to identify potential habitat corridors including along waterways and roadways. These areas will be prioritized to direct future conservation or rehabilitation work.	Habitat corridors mapped and classified according to criteria.	Medium	EHM, PCMM, IMTM
1.4.4	Secure biodiversity outcomes through the Release Area planning process.	Explore opportunities to conserve biodiversity through the release Area planning process, including the implementation of the Sustainability Blueprint for Urban Release Areas.	Area (ha) protected.	High	EPM, EHM

#### 1.5 Effectively manage conservation reserves.

	Actions	Comments	Indicator	Priority	Responsibility
1.5.1	Review adequacy of Plans of Management identify as significant areas.	Review Councils Plans of Management to include the goals and aims of the Penrith Biodiversity Strategies.	Biodiversity Strategy objectives reflected in Plans of Management.	Medium	PCCM, EHM, IMTM
1.5.2	Lobby the government to prepare, implement and review management plans for significant habitat on government owned land	Encourage government to review or create individual plans of management for land containing significant habitat that is located in Penrith.	Plans of Management created for State managed reserves.	High	EHM, PCMM

## 1.6 Strengthen off-reserve conservation of biodiversity.

	Actions	Comments	Indicator	Priority	Responsibility
1.6.1	Investigate mechanisms to encourage private land owners to conserve and protect biodiversity.	Investigate and develop programs that protect and enhance the condition of significant areas. Management planning, covenants, rate relief, grants and programs such as Biobanking will be investigated. Programs will be developed in conjunction with an education and awareness program for landowners and managers.	Incentive program developed and implemented.	Medium	EHM, LPM, HNCMA
1.6.2	Support State government actions to monitor and evaluate listed Threatened Species and Ecological Communities.	Review and if appropriate implement the recommendations of Threat Abatement Plans for species and communities listed under the <i>Threatened Species Conservation Act 1995</i> and the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .	Threat Abatement Plans are considered during the Development Application process.	High	EHM
1.6.3	Promote the conservation of biodiversity.	Develop a biodiversity education and awareness program. Local media and the Council website will be used highlight the benefits native plants in gardens.	Education & awareness program developed and implemented.	High	EHM, PCMM
1.6.4	Asset Management projects and maintenance practices to consider biodiversity.	Review Asset Management procedures for environmentally sensitive areas including the completion of a REF for all activity types.	Procedures include appropriate protection measures & follow best practice/ number of activities assessed.	High	CWM, EHM, PCMM.

## Integrating biodiversity conservation and natural resource management

### 2.1 Develop and implement integrated policies for the ecologically sustainable use of biodiversity.

	Actions	Comments	Indicator	Priority	Responsibility
2.1.1	Ensure Biodiversity Strategy and high priority actions are included in annual Management Plans.	Ensure the Biodiversity Strategies and Action Plan is successfully linked to the Strategic Plan and Management Plan.	Biodiversity Actions in Management Plans.	High	EHM
2.1.2	Develop and implement local sustainable land use policies in cooperation with	Develop and promote standards and guidelines for minimal impact agricultural and other ecological sustainable practices.	Standards & guidelines developed for sustainable practices &	Low	EHM

	State government, relevant industries and non-government organisations.		provided to relevant industry groups.		
2.1.3	Ensure development assessment procedures consider biodiversity conservation.	Review development assessment practice notes to ensure they are up to date and consistent with relevant legislation and current best practice.	Development assessment procedures contain appropriate biodiversity conservation provisions.	High	<b>EHM, DSM</b>

## 2.2 Conserve biodiversity through the adoption of ecological sustainable management practices in agriculture, rural water use, tourism, recreation and other activities.

	Actions	Comments	Indicator	Priority	Responsibility
2.2.1.	Identify and capture information on land uses within Penrith LGA.	Investigate the potential for creating a procedure and database of the different rural land uses in Penrith.	Rural land uses identified.	Low	<b>EHM</b>
2.2.2.	Develop appropriate strategy to identify and manage the impact of recreation/tourism activities in natural areas.	Develop appropriate management strategy that identifies impacts on biodiversity and encourages groups to follow appropriate codes of conduct in natural areas.	Code of conduct developed & promoted.	Medium	<b>EHM</b>
2.2.3	Encourage landholders, government agencies and industrial organisations to incorporate biodiversity conservation objectives in farm or property management and catchment planning.	Provide a property management planning or farm planning package for landholder in conjunction with State government and industry.	Number of packages developed and distributed to appropriate landholders.	Medium	<b>EHM</b>

## Manage Threatening Processes

### 3.1 Monitor, regulate and minimize activities identified as key threatening processes.

	Actions	Comments	Indicator	Priority	Responsibility
3.1.1.	Determine biodiversity indicators for annual reporting.	Results will be used to evaluate change and monitor the effectiveness of the Biodiversity Action Plan.		High	<b>EHM</b>
3.1.2.	Monitor and review management practices.	Review relevant Council policies and procedures to ensure they respond appropriately to threatening processes and the Biodiversity Action Plan.		High	<b>EHM, PCMM</b>

### 3.2 Ensure incentives and controls are in place to retain and manage native vegetation.

	Actions	Comments	Indicator	Priority	Responsibility
3.2.1.	Assess and monitor the current rate and distribution of clearing of all vegetation communities in Penrith.	Develop a process to use the information obtained in tree removal applications or other methods such as aerial photo time series to assess rate of tree removal.	Area (ha) cleared.	Medium	<b>EHM, PCMM, IMTM</b>
3.2.2.	Ensure that planning controls relating to vegetation clearing adopts a holistic approach to biodiversity conservation in Penrith.	Develop the Citywide Penrith DCP to include tighter controls on threats to biological diversity.	City wide DCP contains biodiversity provisions.	High	<b>LPM, EHM</b>
3.2.3.	Ensure assessment practices remain contemporarily.	Ensure that assessment criteria relating to land clearance includes biodiversity conservation, land protection, water management, and landscape values.	Assessment practices reviewed and updated.	Medium	<b>EHM, LPM, PCMM, CWM</b>
3.2.4.	Explore and facilitate carbon and biodiversity offset schemes.	Investigate opportunities for Biobanking and carbon credit schemes to protect, enhance and maintain identified significant habitat areas in Penrith.	Area/number of Biobanking sites established.	Medium	<b>EHM</b>
3.2.5.	Investigate and develop an incentive program for reserving core vegetation and associated linkages.	Develop an incentive program which considers rate relief, grants, covenants, management agreements and other initiatives in conjunction with relevant authorities and agencies.	Number of companies/individuals participating.	Medium	<b>EHM, LPM,</b>

### 3.3 Effectively manage introduced plants and animals to reduce their spread and competition with native species.

	Actions	Comments	Indicator	Priority	Responsibility
3.3.1.	Prepare an introduced animal and plant species management plan in consultation with State agencies.	Work with relevant State agencies to implement Introduced Plant and Animal Species Management Plan with information from Threat Abatement plans including the appropriate consideration of the plan during development process.	Introduced animal & plant management plan created.	Low	<b>EHM, PCMM, WCPM</b>
3.3.2.	Prepare and implement the Introduced Animal and Plant Species Management Plan on Council land and through the development approval process.	Ensure conditions of consent are applied to developments for the control of introduced species identified in the Introduced Animal and Plant Species Management Plan.	Introduced animal & plant management plan implemented.	Low	<b>EHM, PCMM</b>
3.3.3.	Assist relevant authorities to control	Identify the priority weed threats and work with Hawkesbury River County Council and other relevant	km of river controlled/area treated.	High	<b>PCMM, EHM</b>

noxious weeds.	authorities to control those outbreaks.			
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### 3.4 Introduce a fire management regime that that maintains biological diversity.

	Actions	Comments	Indicator	Priority	Responsibility
3.4.1.	Ensure all planning instruments contain appropriate conditions regarding integrated biodiversity and fire management provisions.	Revise planning instruments to communicate the retention of native vegetation, soil and habitat protection in those areas that are considered to be prone to wildfires. Encourage ecological burning where possible.	Ecological burning is used as a land management tool where appropriate.	High	LPM, EHM
3.4.2.	Review Local Plans of Management to include provisions from the Rural Fires Act 1999.	Ensure all appropriate Local Plan of Management have Bush Fire Management Plans.	All appropriate Local Plans of Management have bushfire a management component.	Medium	EHM, PCMM

### 3.5 Minimise and control the impacts of pollution on biological diversity.

	Actions	Comments	Indicator	Priority	Responsibility
3.5.1.	Monitor the impacts of pollutants on biodiversity in particular on aquatic systems.	Develop and implement a Water Health Strategy that monitors impacts on biodiversity and in particular aquatic environments.	Macroinvertebrate numbers increased.	High	EHM
3.5.2.	Review existing Council policies for the control of point and non-point sources of pollution.	Comment and review Council policies including OSSM, development control on industrial development, policy on auditing industrial agricultural and commercial premises, pollution incident response, storm water management and other relevant policies.	Councils policies reviewed to ensure measures are in place to lessen the impact of pollutants on biodiversity.	Medium	EHM
3.5.3.	Investigate education and awareness program for pesticides and hazardous chemicals use.	Investigate an education and awareness program for the use of farm chemicals and information on integrated pest management systems.	Number of landowners reached/number of workshops.	Medium	EHM
3.5.4.	Review Councils Pollution Incident Response Standard Operational Plan.	Review Councils response to dealing with pollution incidents.	Pollution Incident Response Standard Operational Plan developed.	High	EHM

## Improving our Knowledge

### 4.1 Provide the knowledge and understanding of Penrith's biodiversity essential for its effective conservation and management.

Actions	Comments	Indicator	Priority	Responsibility
4.1.1. Promote community participation via the internet and local newspaper.	Biodiversity represented in the Council network news paper and website. Publish regular article outlining biodiversity issues & actions.	Number of media types used/ adverts released/hits on web page.	High	EHM, PCMM
4.1.2. Foster a relationship with educational institutions providing research opportunities in biodiversity conservation.	Investigate opportunities with tertiary institutes to improve our knowledge. Develop relationship with schools and community groups to assist with biological surveys and data entry.	Number of students involved.	Medium	EHM
4.1.3. Create a community resource on Penrith's biodiversity.	Liaise with the library to establish a biodiversity resource section in the technical library and ensure the Council website has resources for community use.	Number of people using resource.	High	EHM

## Community Involvement

### 5.1 Increase public awareness and involvement in the conservation of biological diversity.

Actions	Comments	Indicator	Priority	Responsibility
5.1.1. Assist Community to develop biodiversity targeted environmental education and awareness programs.	Develop a biodiversity awareness program that targets schools, industry and the community.	Number of schools, industries and community groups participating.	Medium	EHM
5.1.2. Identify and support businesses, Landcare or similar Community groups by providing equipment, materials and knowledge to promote and conserve biodiversity.	Identify and list active community organisations and inform them of funding opportunities by way of the PCC website, email shots, and offering assistance. Work with the HNCMA to encourage the formation of community groups for areas high in biodiversity or resilience.	Number of community groups focused on biodiversity conservation.	High	PCMM, EHM
5.1.3. Prepare and distribute educational material at	Create a calendar of events to target education and	Number of events	High	EHM, PCMM

	various public events.	awareness efforts throughout the year such as: Threatened Species Day, Biodiversity Month, National Tree Day, Council Open Day etc.	where biodiversity material has been distributed.		
5.1.4.	Provide formal recognition of groups or individuals within the community who are 'biodiversity champions'.	Recognise those who volunteer time for biodiversity conservation in the local media and investigate the opportunity for formal recognition.	'Biodiversity champions' recognised.	Medium	PCMM, EHM

## 5.2 Increase biological diversity conservation education in Council staff training.

	Actions	Comments	Indicator	Priority	Responsibility
5.2.1.	Continue Council Parks Construction & Maintenance staff training in bushland maintenance.	Create procedure for establishing 'no mow' zones to protect regeneration work and to allow for recruitment of native species in parkland. Procedure for 'no mow' zones to be reinforced with a bushland friendly maintenance manual. Rotate Parks Construction & Maintenance staff with bushland regeneration team.	Number of staff members trained, area of no-mow zones established.	High	PCMM, EHM
5.2.2.	Develop training with Council staff that deal with the assessment of Development Applications.	Revise assessment procedures for development applications and other assessment work including consideration of threatened species and habitat linkages. Develop approvals practice notes.	Number of staff members trained.	Medium	EHM
5.2.3.	Biodiversity Working Group to facilitate internal training and awareness programs.	Biodiversity Working Group will be used to initiate training ideas and programs for greater awareness of biodiversity issues and biodiversity knowledge.	Number of internal training session held.	High	EHM