

State of the Environment Report

WAGGAWAGGA
Diverse City

City of Wagga Wagga
State of the Environment Report 2009/10



City of
Wagga Wagga

Living in Wagga Wagga gives you all the services and facilities of bigger cities with none of the ‘big city’ drawbacks.

There are *diverse choices* and opportunities here in every sector – health, education, agriculture, business, sport, recreation, arts and culture.

This way of life is further enriched by our environment – the magnificent Murrumbidgee River, our cultural heart, a rich rural landscape and our City’s heritage. We have much to be thankful for and to offer others.

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Purpose of the State of the Environment Report

The 2009-2010 Supplementary State of the Environment (SoE) Report covers the reporting requirements outlined in Section 428 of the Local Government Act 1993. SoE Reports are either supplementary or comprehensive. Comprehensive reports must be completed for the year ending after each Council election and supplementary reports are prepared in the remaining years.

Under Section 403 of the Local Government Act 1993, the SoE Report should guide the development of the following year's Council Management Plan. In particular, the Council Management Plan must contain "a statement of the principal activities that the Council proposes to conduct" and that the statement must include:

"Activities to properly manage, develop, protect, restore, enhance and conserve the environment in a manner that is consistent with and promotes the principles of Ecologically Sustainable Development (ESD requires the effective integration of economic and environmental considerations in Council's decision-making processes)."

In order to better achieve these goals Council has recently developed and endorsed the 'Wagga Wagga Environmental Sustainability Strategy 2009-2013'. The Strategy's aims and objectives have been developed to incorporate the outcomes of research and community engagement during its development and are integrated with a number of key documents including the SoE Report and Council's Strategic Plan.

The Strategy aims to improve the sustainability of the local environment, balance the needs of the built and natural environments and ensure development strengthens the connection between the community and the natural environment to create a sense of place and enhance community well-being.

Importantly, the objectives also reflect the integration of environmental sustainability with Social, Economic and Governance considerations.

The Strategy highlights the important role environmental sustainability plays in place making and the objectives are aligned with the State of the Environment themes of Land, Biodiversity, Water, Waste, Climate Air & Energy, Heritage, Sustainable Wagga Wagga.

A number of key initiatives as outlined in the Environmental Sustainability Strategy are to be actioned by Council in the future. Key actions described in this report are presently being implemented by Council.

Continuously improve systems and practices at Wagga Wagga City Council to become a leader in *sustainable* environmental management

Wagga Wagga Environmental Sustainability Strategy Objective



Strategic Environmental Directions

The Wagga Wagga City Council's Community Strategic Plan Our City ... Our Tomorrow 2008-2018 states the following strategic outcomes for the environment are:

- 3.1 An integrated approach to water resource management
 - 3.1.1 Facilitate research and planning including Global Water Smart City to ensure water conservation, reuse and efficiency
 - 3.1.2 Develop and promote partnerships with key stakeholders
- 3.2 A sustainable built and natural environment
 - 3.2.1 Maintain a contemporary Local Environment Plan and vision for the Wagga Wagga Local Government Area
 - 3.2.2 Promote the principles of ecologically sustainable development
 - 3.2.3 Promote stewardship and best practice land use policies to protect the environment and enhance the economy
 - 3.2.4 Encourage development that protects biodiversity and natural ecological processes
- 3.3 Sustainable management of natural resources
 - 3.3.1 Manage waterways and land use to minimise detrimental environmental impact
 - 3.3.2 Protect, enhance and rehabilitate native vegetation and ecosystems to enhance biodiversity
 - 3.3.3 Support and promote the improvement of ambient air quality
 - 3.3.4 Encourage the community to participate in programs to enhance the environment
- 3.4 Promote environmental sustainability
 - 3.4.1 Minimise the ecological footprint of, and reduce resource consumption within, the Wagga Wagga Local Government Area through greater energy efficiency and renewable energy technologies
 - 3.4.2 Minimise waste to landfill through reduce, reuse and recycle strategy
 - 3.4.3 Reduce greenhouse gas emissions across the Local Government Area
 - 3.4.4 Facilitate community education for the achievement of a sustainable environment.

In order to help achieve these goals Council has developed the Wagga Wagga Environmental Sustainability Strategy 2009-2013.

The Strategy aims to improve the sustainability of the local environment, balance the needs of the built and natural environments and ensure that development strengthens the connection between the community and the natural environment to create a sense of place and enhance community well-being.

ESD Principles

Wagga Wagga City Council is committed to the principles of Ecologically Sustainable Development (ESD). The Local Government Act of 1993 defines ESD as the effective integration of environmental, economic and social considerations in the decision-making process.

ESD can be achieved through implementing the following principles:

1. The precautionary principle - where there are threats to serious or irreversible environmental damage, a lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

- careful evaluation to avoid, wherever practical, serious or irreversible damage to the environment, and
- an assessment of the risk weighted consequences of various options.

The precautionary principle requires decision making to give the environment the benefit of the doubt.

2. Intergenerational equity - the present generation should ensure the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations (that is all generations may use or expect to benefit from the nation's resources).

3. Conservation of biological diversity and ecological integrity should be a fundamental consideration.

4. Improved valuation, pricing and incentive mechanisms - environmental factors should be included in the valuation of assets and services, particularly for the following:

- polluter pays (those who generate pollution and waste should bear the cost of containment, avoidance or abatement);
- the users of goods and services should pay prices based on the full cycle costs of providing the goods and services, including the use of natural resources and assets and the ultimate disposal of waste; and
- environmental goals should be pursued in the most cost effective way by establishing incentive structures, including market mechanisms which maximise benefits or minimise costs in the development of local solutions and responses to environmental problems.



Key Pressures

Key pressures on 'Land' in the WWLGA include:

- Urban development
- Urban and dryland salinity
- Floodplain management
- Agricultural practices
- Climate change
- Contaminated land
- Sedimentation and erosion

Key Indicators

Population statistics for the Wagga Wagga LGA

| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| Population | 57,400 | 57,950 | 59,908 | 60,857 | 61,656 | 62,580 | 62,904 |
| Increase | 195 | 550 | 1,958 | 949 | 799 | 924 | 324 |

Source: ABS website.

Development applications and construction certificates issued for the Wagga Wagga LGA

| Year | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of approved Develop. Applications | 1,486 | 1,316 | 1,138 | 1,204 | 908 | 845 | 919 |
| No. of Construction Certificates issued | 1,302 | 1,131 | 949 | 1,001 | 773 | 678 | 643 |

Source: WWCC records. Amended development applications excluded.

Standing Water Level changes for groundwater in the Wagga Wagga LGA

| Year | SWL increased | SWL decreased | SWL stable | Piezo dry | Total piezos |
|-----------|---------------|---------------|------------|-----------|--------------|
| 2006-2007 | 21 | 55 | 30 | 62 | 168 |
| 2007-2008 | 34 | 63 | 10 | 62 | 169 |
| 2008-2009 | 40 | 67 | 7 | 65 | 179 |
| 2009-2010 | 60 | 47 | 11 | 60 | 178 |

Source: WWCC records.

Develop sustainable built environments for current and future generations through *effective* land management and planning

Wagga Wagga Environmental Sustainability Strategy Objective



Diverse City

Key Actions

Activities are focussed towards the land objectives in the "Wagga Wagga Environmental Sustainability Strategy 2009-2013". The activities carried out during the 2009-2010 financial year are listed below.

LAN1 Through the DCP, ensure Site Environmental Management Plans are undertaken for new developments

Development Control Plan 2010 (clause 2.7) includes important site Cut and Fill controls to avoid adverse extents of site damage. The Development Control Plan also includes a range of other environmental controls (including provisions for protection of trees and controls on native vegetation cover in certain zones). Environmental Management Plans are created and required at development application stage for certain developments - Council's new Guidelines and Checklists make provision for the reinforcing of this requirement as appropriate.

LAN2 Through the DCP, ensure appropriate environmental risk assessments are undertaken for new developments

The guiding principles of the Development Control Plan 2010 are to protect and enhance the natural environment. To ensure these principles are met a Statement of Environmental Effects addressing the environmental impacts of the proposed development is required to be submitted with a Development Application.

LAN3 Through the relevant EPI's, create open space corridors between developments for walkways and bike paths

Within the objectives of the draft Bomen Urban Release Area the Development Control Plan includes integrating walkways and cycleways into the design of the industrial estate

LAN4 Through the relevant EPI's, establish vegetation screening between rural and urban areas

This issue has received particular coverage in the draft Bomen Urban Release Area Development Control Plan, which includes specific requirements for private developer created landscape buffer zones between Bomen and all eastern land and between private development and the Olympic Highway.

LAN5 Develop an Environmental Sustainability List of Considerations for Development Applications to be assessed against

This is addressed under the S79C heads of consideration provisions of the Environmental Planning and Assessment Act 1979. Development Control Plan 2010 (clause 1.5 Guiding Principles. GP1 Sustainability) reinforces the requirement for development applications to address the environmental impacts of the development.

LAN6 Review the Development Application Submission Checklist to include environmental considerations

Council's Development Application Submission Checklist includes a requirement for applicants to undertake environmental assessment for all development applications in the form of a Statement of Environmental Effects or Environmental Impact Statement.

LAN7 Continue to control erosion and sedimentation on Council worksites

Council has developed a Risk Assessment matrix to assess activities which may cause environmental harm such as erosion. These activities are assessed and appropriate mitigation measures are implemented to prevent soil transportation from the work sites. Council is working with Soil Conservation to combat sediment into natural water courses including Lake Albert, Crooked Creek and Marshalls creek

LAN8 Continue to implement and enforce the control of erosion and sedimentation on building and development sites

Council continually and proactively encourages the implementation of sediment and erosion control measures for development/building sites through conditions of development consent and ongoing education. Enforcement action is undertaken as appropriate.

LAN9 Continue to update and maintain the contaminated land register

Council maintains a potentially contaminated sites register and identifies this on 149 certificates.

LAN10 Continue to develop initiatives to ensure contaminated land is rehabilitated

The adoption of the requirement for a Statement of Environmental Effects with the Development Application lodgement identifies any possible contamination which may be present so it can be assessed with the proposed development in accordance with the State Environmental Planning Policy No. 55.

LAN11 Continue to implement the rear of block drainage program in the Wagga Wagga urban area

Council has a rolling program budget for the removal of rubble pits and the installation of rear of block drainage. Council has a proposed program to complete rear block drainage works in Mount Austin and then continue in Koorngal to reduce groundwater infiltration from stormwater discharge.

LAN12 Continue to develop and implement salinity community education initiatives

Council staff actively work with members of the community and schools to educate and raise the awareness of the cause, problems and management strategies that will address salinity. Council staff also run educational salinity tours with school children and have produced a salinity tour booklet.

LAN13 Develop and implement sustainable gardening community education initiatives

Council staff have participated at events such as the Wagga Garden and Leisure Show and supported and promoted Sustainable House day. These events promote sustainable gardening. Council also provide information on water conservation in the garden on its web page. Council provided support to the Inaugural Sit Joseph Banks Medal for sustainable gardening.

LAN14 Develop and implement community gardens in local neighbourhoods across the WWLGA

Council has adopted a Community Garden Policy to support the establishment of two community gardens currently in the Wagga Wagga Local Government Area.

LAN15 Continue to improve management systems at public open spaces

The Wagga Wagga LEP 2010 has made a commitment to protect and enhance public and open spaces. To achieve this goal Council staff are continually striving to improve the management strategies for Open Public Spaces. Council is investigating strategies to reduce water usage and improve energy efficiency at recreational grounds. In the native vegetation areas there are ongoing strategies to improve both the aesthetic and biodiversity values within these land parcels. Council staff have developed a general Plan of Management for open space areas

LAN16 Form partnerships with key stakeholders to develop and implement land management and planning research initiatives

Through partnerships and working groups with the CMA, DECCW and REROC, and the revision of the LEP and DCP the Council staff are actively developing and implementing strategies to improve the quality of land, water and biodiversity in our Local Government Area.



Key Pressures

| Key pressures on 'Biodiversity' in the WWLGA include: |
|--|
| <ul style="list-style-type: none"> • Clearing of native vegetation • Degradation of remnant native vegetation • Climate change impacts • Direct and diffuse water pollution • Exotic flora and fauna species • Urban development |

Key Indicators

Property Vegetation Plans for the Wagga Wagga LGA

| Year | No. PVPs | Area (ha) | % LGA |
|-------------|----------|-----------|-------|
| 2005 – 2006 | 4 | 2,043 | 0.4% |
| 2006 – 2007 | 32 | 17,045 | 3.5% |
| 2007 – 2008 | 88 | 43,005 | 8.8% |
| 2008 – 2009 | 23 | 11,728 | 2.4% |
| 2009 - 2010 | 3 | 1,426 | 0.29% |

Source: Murrumbidgee CMA.

Note: The PVP area shown in the table above represents the area of cadastre lots on which the PVPs reside and it does not represent the actual area that is revegetated under these PVP agreements.

Tree Management Applications submitted in the Wagga Wagga LGA

| Year | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 |
|------------------|---------|---------|---------|---------|---------|---------|---------|
| No. applications | 366 | 417 | 414 | 380 | 289 | 286 | 306 |

Number of threatened species newly detected/ reported in the Wagga Wagga LGA

| Year | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|-------------|-----------|-----------|-----------|-----------|-----------|
| No. Species | 7 | 6 | 11 | 6 | 8 |

Source: WWCC and DECC.

Effectively manage the natural environment so that *biodiversity* is understood, enhanced and protected

Wagga Wagga Environmental Sustainability Strategy Objective



Key Actions

Activities are focussed towards the biodiversity objectives in the "Wagga Wagga Environmental Sustainability Strategy 2009-2013". The activities carried out during the 2009-2010 financial year are listed below.

BIO1 Map identified threatened and endangered species across the WWLGA using GIS

The GIS Map has been finalised and new records are added on an annual basis or as they are supplied to Council. During the year there were 202 additional records of Threatened Species in the LGA. Included in these were records of eight species not previously recorded in the LGA. The eight new species are: Small Pale Green Lilly, ; Dwarf Bush-pea, ; Spotted Harrier, ; Little Eagle, ; White-fronted Chat, ; Flame Robin, ; Scarlet Robin, ; Varied Sittella, . There are now 49 threatened species (all taxa) and five Endangered Ecological Communities recorded in the LGA.

BIO2 Continue to map revegetation across the WWLGA using GIS

Land revegetated under various revegetation projects is recorded on GIS including Property Vegetation Plans (PVP). In 2009-2010 three additional PVPs were recorded in the LGA and across the LGA PVPs now reside on 15.44% of the LGA.

Property Vegetation Plans sit with the land and when land parcels, are sold the conditions of the PVP are transferred to the new owner of that land. Council keep records of all land parcels that have a PVP and this information is passed on to prospective buyers of that land. However, specific details of the particular PVP are only available from the Murrumbidgee Catchment Management Authority.

BIO3 Develop a Biodiversity Plan for the WWLGA incorporating wetland and wildlife corridor management

Council continues to seek funding to complete this project. The foundations have been laid with provisions in the LEP 2010 and mapping of the wetlands by the Murrumbidgee Catchment Management Authority.

This Biodiversity Plan project follows on from these previous studies: "Wagga Wagga City Council Roadside Vegetation Survey", (1999); "Biodiversity Planning Pilot Project (Report)", (2002); and "Rapid Survey of Wagga Wagga City Council Land to Assess Production and Conservation Values", (2004).

BIO4 Develop Conservation Management Plans for land zoned for conservation

A draft Conservation Management Plan has been prepared for the E2 areas under Council management in the Lloyd Urban Release Area.

Council has prepared a general Plan of Management for all open reserve areas and specialised Plans of Management for Crown Land, e.g. Pomingalarna Park, North Wagga Flats.

BIO5 Continue to lobby for increased funding for the management of conservation areas

Council has been successful in applying for funding to implement conservation and management projects on Council managed lands. Projects implemented include Natural Area Restoration Team (MCMA funded), Willow Removal Project (MCMA funded), Glossy Black Cockatoo (Environmental Trust funded), and National Green Jobs Corps Projects.

BIO6 Increase the area of native vegetation managed for biodiversity conservation across the WWLGA

The Local Environment Plan (LEP) 2010 and Development Control Plan (DCP) 2010 contain provisions that increase the area of native vegetation that is managed for biodiversity conservation. Examples are in the Lloyd area (251 ha) and the Bomen Industrial Area.

BIO7 Continue to implement the Companion Animals Management Plan

Council continues to implement the Companion Animals Management Plan to encourage responsible pet ownership and minimise the impact on the environment.

BIO8 Develop responsible pet ownership information to be included in Council's Companion Animals Packs

Council provide information packs to residents which includes a booklet that explains the importance of responsible pet ownership.

BIO9 Develop and implement a Pest Management Plan

A conservation Management Plan has been prepared for the Lloyd Urban release Area. This Plan includes specific activities for pest control in the Conservation area under Council management. Pests on Council managed lands are controlled in line with the recommendations of the Livestock Health and Pest Authority.

BIO10 Continue to implement the Regional Weed Management Strategy

Council is an active member of the Eastern Riverina Noxious Weeds Advisory Group and all activities undertaken are in accordance with the outcomes of the Regional Weed Action Plan (RWAP). The RWAP focus on the four goals of the NSW Invasive Species Plan 2008-2015.

BIO11 Strengthen partnerships to coordinate roadside weed management schedules with the RTA and landholders

Council works with other land managers on a regular basis in regards to issues in a cooperative manner to achieve a more consistent approach across the region. State agencies such as Forestry NSW, National Parks and Wildlife, ARTC and the RTA work in-conjunction with Council to reduce the impacts of priority species in the Riverina. Examples of this are the red guide post marking system in place on the Sturt Hwy to prevent the spread of Chilean Needle Grass ().

BIO12 Develop and implement initiatives to reduce weed invasion and restore native habitat at public open spaces

Council inspects high risk pathways as per the Regional Grants outcomes on a regular basis. These include creeks and waterways, the Murrumbidgee River and all highways and main roads present in the Local Government Area. Weeds staff also work closely with community groups and other agencies to implement programs and source funding in a cooperative manner to protect high value conservation areas. Projects include the Willan's Hill Native Vegetation Enhancement Project aiming to protect the remnant from woody weeds species and Greencorps Roadside Vegetation.

The Conservation Management Plan for Lloyd includes specific weed management procedures as does the management Plan for Pomingalarna Park. Weed removal and control has been a major objective of the Malhangilanna River Restoration project over the past four years.

BIO13 Continue to develop and implement noxious weed education initiatives

Staff attend both Henty and Griffith Field days as part of a regional effort to promote the impacts of invasive weed species on urban and agricultural areas and on our environment. Regular talks and presentations are also undertaken from year 10 school level through to undergraduate University level. Council weeds staff are also actively involved in the local promotion of weeds attending initiatives such as the Little Big Day Out and the Small Farm Field Days at a more local level.

BIO14 Review guidelines in relation to grazing significant vegetation areas

Council currently restricts grazing of significant vegetation areas and this will be reviewed in conjunction with developing the Roadside Management Plan.

Property owners who wish to graze livestock along roadsides must apply to Council for a permit. These permits contain specific conditions for grazing that reflect the status of the roadside vegetation and the intensity of the grazing.

BIO15 Review the Roadside Management Plan

This review is currently in progress, and it is anticipated that the Roadside Management Plan will be completed before June 2011.

BIO16 Develop partnerships with key stakeholders to propagate more endemic and native species

Council staff are cooperating with TAFE staff in the propagation of Drooping Sheoak and other local tree and shrub species. Council already works with several local partners where possible to grow indigenous species.

BIO17 Develop and implement initiatives to promote the planting of more endemic and native species across the WWLGA

Council staff are participating in the Communities in Landscapes project managed by Landcare NSW. This project is working with individual farmers and rural communities to provide better ways to maintain their agricultural productivity and still preserve the natural resources, especially biodiversity, for future generations.

Council staff work collaboratively on projects with Wagga Wagga Urban Landcare other Landcare groups.

BIO18 Continue to increase endemic and native tree plantings in Council gardens, parks and open spaces

Council staff planted more than 500 trees and shrubs in the Jubilee park area and the National Green Jobs Corps team planted more than 1,400 trees, shrubs and ground cover plants in the Gregadoo Waste Management Centre. Where it is relevant Council's landscape architect selects local indigenous species for park landscapes.

The annual National Tree Day is a major activity when the general public and Council staff get together to plant about 1,500 native trees and shrubs on Council open spaces.

BIO19 Through the relevant EPIs, continue to encourage endemic and native tree plantings in new developments

Since October 2000, Council has maintained a policy to maintain minimum native vegetation cover on Rural Residential and Small Lot holdings. This policy was known as DCP 2005, Ch. 29, and it is incorporated under Section 5 "Natural Resource and Landscape Management" in the Development Control Plan 2010.

Clause 5.9 of LEP 2010 addresses the need to preserve existing trees. Wagga Wagga Development Control Plan Lloyd Urban Release Area, includes Objective 02 -encourage landscaping that is compatible with the prevailing conditions and character.

BIO20 Continue to implement the National Tree Day initiative annually

National Tree Day continues to grow in popularity and its success is a positive community activity. In July 2009, 25 schools within the Local Government Area planted 2,080 native seedlings. The main community event was attended by 63 volunteers who planted approximately 1,400 native seedlings at a site to the east of Wagga Wagga.

BIO21 Continue to implement the Wagga Wagga City Council Tree Preservation Order

Council employs one full time officer to implement the Tree Management Policy.

During the past year Council staff processed 306 applications made under the Tree Management Policy. These applications were assessed against the Tree Management Policy and the Native Vegetation Act to achieve their determination. Of these applications 273 were approved.

Outside residential areas the Native Vegetation Act, 2003, also applies and landowners who want to remove native trees must also obtain approval from the Murrumbidgee Catchment Management Authority that administers this Act.

BIO22 Through the relevant EPIs, continue to increase and improve the connectivity of native vegetation corridors across the WWLGA

The National Green Jobs Corps team removed woody weeds from a 1.5km section of the Old Narrandera Road at Euberta and commenced revegetation with understorey species.

Council staff are involved with the NSW Landcare project "Communities in Landscapes" which aims to bring together farming communities to develop new ways by which biodiversity conservation can be integrated with agricultural production and maintain the woodlands across the landscape.

Clause 7.3 of the Wagga Wagga LEP 2010 addresses the issue of "Environmentally Sensitive Land- Biodiversity" through requirements to encourage the recovery of threatened species and to avoid issuing consent to any development which might adversely affect the "biodiversity values within a reserve including a road reserve or stock route"

BIO23 Form partnerships with key stakeholders to develop and implement biodiversity research initiatives

Council staff actively seek involvement of students from Charles Sturt University on research and monitoring projects relating to native flora and fauna.

The types of studies that Council staff want to develop are: monitoring projects that investigate the long term benefits on wildlife conservation projects; the effectiveness of impact mitigation measures applied to urban development; and in the redevelopment of the old ponds at the Narrung Street Sewerage Treatment Works as a wetland habitat for threatened species and as a area for community use and passive recreation such as bird watching.

BIO24 Form partnerships with key stakeholders to protect threatened and endangered fauna and flora species

Plans are in progress to redevelop the old ponds at the Narrung Street Sewerage Treatment Works as a wetland for aquatic and terrestrial conservation. This project involves several community interest groups and government agencies.

It is anticipated that the Indigenous Community will be an important part in this partnership through actively practicing ecological aspects of Wiradjuri culture.

BIO25 Develop and implement biodiversity community education initiatives

Biodiversity has been the topic of one of Wagga Wagga's Green Guide columns which appears monthly in the Daily Advertiser which has a readership of approximately 6,000 people per day. The annual Spotlighting Walk was held in September 2009 with approximately 30 people taking part in the search for the locally threatened Squirrel Glider. Wagga Wagga City Council also conducted a free plant giveaway to celebrate World Environment Day and the International Year of Biodiversity to promote biodiversity within residents' gardens.

BIO26 Develop and implement community initiatives to monitor native flora and fauna species

Council staff are keen to involve community groups in monitoring native flora and fauna species in major reserve areas like Pomingalarna Park, the Lloyd Conservation Area, and in the redeveloped Narrung Street Sewerage Treatment ponds.

BIO27 Develop and implement initiatives to enhance native bird populations

Throughout the year the River Restoration Project built on the work of previous years of enhancing the riparian corridor along the Murrumbidgee River through the urban area. An additional 15 ha of willows and woody weeds was cleared and 4 ha was revegetated with native plants and grasses. In July 2009 Council staff received the final report on Birds in Backyards project for which Council hosted workshops in May 2009.

Council staff are currently implementing a habitat restoration and enhancement project for the endangered Glossy Black-Cockatoo on Pomingalarna Park.

BIO28 Continue to actively manage fire risk on Council land

Council has a delegate on the local Bushfire Committee which meets twice a year and outlines the annual hazard reduction program which is carried out during spring each year.

This is an on-going management with maintenance of fire breaks by grading or slashing. Fire breaks are incorporated in the Conservation Management Plan for the new Lloyd subdivision.

BIO29 Research the feasibility of developing ecotourism opportunities across the WWLGA

On the 18th September 2010 the Riverina and South West Slopes Nature Based Tourism Group launched the Bird Trails of the Riverina & South West Slopes at the Leeton Bird Fair. These Bird trails cover 13 Local Government Areas, including Wagga Wagga.

The booklet "Bird Trails of the Riverina and South West Slopes of NSW" is available from the Visitor Information Centre in Wagga Wagga, participating Councils, and on the website: www.riverinabirds.org.au.



Key Pressures

| Key pressures on 'Water' in the WWLGA include: |
|---|
| <ul style="list-style-type: none"> • Urban development • Industrial activities • Diffuse pollution • Direct pollution • Rural activities • Groundwater extraction • Ageing infrastructure • Water management issues • Increasing evaporation and decreasing rainfall |

Key Indicators

Water source and consumption figures for the Wagga Wagga LGA

| Years | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| Litres/person | 251,000 | 265,000 | 224,000 | 248,000 | 198795 |
| Megalitres (Total) | 15,016 | 16,102 | 13,800 | 15,549 | 12505 |
| Percent from River | 23.7% | 39.3% | 28.8% | 34.9% | 31.9 |
| % from Groundwater | 76.3% | 60.7% | 71.2% | 65.1% | 68.1 |

Integrate management strategies to encourage water conservation and enhance and protect *water* quality

Wagga Wagga Environmental Sustainability Strategy Objective



Murrumbidgee River Water Level data measured at Wagga Wagga

| Year Mean | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Level (m) | 1.52 | 1.85 | 1.16 | 0.82 | 0.92 | 1.14 |
| Discharge (ML/day) | 5,900 | 8,049 | 4,094 | 2,352 | 2,846 | 3,913 |
| EC (us/cm) | 133.6 | 142.6 | 161.4 | 143.1 | 126.1 | 147.9 |

Source: DWE.

Sewerage Treatment Works, water data for Wagga Wagga LGA

| Year | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|-------------------------|-----------|-----------|-----------|-----------|-----------|
| Total Inflow (ML) | 4,523 | 4,703 | 4,270 | 4,464 | 4,814 |
| % Discharged to River | 87.7 | 87.3 | 90.7 | 94.7 | 95.3 |
| % Reused for irrigation | 12.3 | 12.7 | 9.3 | 5.4 | 4.7 |

Key Actions

Activities are focussed towards the heritage objectives in the “Wagga Wagga Environmental Sustainability Strategy 2009-2013”. The activities carried out during the 2009-2010 financial year are listed below.

WAT1 Develop and implement an Integrated Water Cycle Management Plan

Council, in conjunction with Riverina Water County Council (RWCC), Greater Hume Shire Council, Lockhart Shire Council and Urana Shire Council completed an Integrated Water Cycle Management (IWCM). Council has taken the necessary steps in the management of sewer, reuse and stormwater to not have to undertake any further assessment.

WAT2 Audit and benchmark Council's water use

Council has allocated funding for 1020/11 to engage a consultant to conduct a Water Audit. This Audit will identify Council's water usage and areas where water saving measures can be implemented.

WAT3 Develop and implement a Water Savings Action Plan for Council facilities

Upon completion of the Water Audit, Council will proceed with implementing the water savings recommended within the report.

WAT4 Continue to investigate opportunities to incorporate Water Sensitive Urban Design (WSUD) principles on redevelopment sites and Council's capital projects

Council is investigating opportunities to incorporate WSUD principles where possible on new subdivisions.

WAT6 Develop and implement water wise nature strip initiatives

Council have been liaising with Riverina Water County Council to develop guidelines for landscaping nature strips and will be updating the current policy.

WAT7 Continue to improve irrigation strategies at Council parks, gardens and open spaces

Council's Parks staff continue to upgrade irrigation systems through the annual capital works program.

WAT8 Through the relevant Environmental Planning Instruments (EPI's), ensure new developments are consistent with WSUD principles

The Aims of the Local Environmental Plan 2010 include (1.2(2)(b) - promote development that is consistent with principles of ecologically sustainable development. In addition, Wagga Wagga Development Control Plan 2010 includes: (Subdivision 7.2.5) a requirement for a Water Sustainable Urban Design Strategy for any development proposed to include more than 10 lots and; (section 9) requirements for Grey Water Reuse systems

WAT10 Through the relevant EPI's, ensure new developments have minimal watered areas

The Lloyd Development Control Plan, which will be adopted as a chapter in the Wagga Wagga Development Control Plan 2010, includes provisions which restrict the proportion of permeable land on every proposed residential site. In addition, an objective of the Development Control Plan is to restrict the average size of such lots across this water sensitive area, to reduce potential for wastage of water, and includes “water restriction” provisions.

WAT11 Review and continue to implement Council's Effluent Reuse Strategy

Council is licensed to use recycled water on several major areas including the Cricket Ground, Bolton Park, Robertson Oval, Wiradjuri Oval, and Rawlings Park.

WAT12 Review and continue to implement Council's Stormwater Management Plan

Council has adopted a Stormwater Management Plan. The recommended actions in the plan will be funded by the Section 496A Stormwater Management Service Charge which was also adopted by Council in 2010. The Stormwater Management Plan includes several projects aimed at improving environmental outcomes, community consultation, education, installation of gross pollutant traps and environmental monitoring of stormwater systems and outlets.

WAT13 Through the relevant EPI's, ensure ground water recharge is reduced in new developments

The Lloyd Development Control Plan includes identified recharge areas. These areas will be subject to processes that reduce ground water recharge.

WAT14 Through the relevant EPI's, ensure water run off is connected to piped stormwater systems in new developments.

Pipes Stormwater systems is identified as a priority for new developments to prevent groundwater recharge.

WAT15 Through the relevant EPI's, implement water quality treatment devices in new developments

The Stormwater Management Plan includes several projects aimed at improving environmental outcomes, community consultation, education, installation of gross pollutant traps and environmental monitoring of stormwater systems and outlets.

WAT16 Continue to conduct regular sewage and stormwater pipe asset condition audits

The Stormwater Management Plan identifies the need to have an ongoing CCTV inspection program of stormwater infrastructure. Sewage infrastructure has an inspection program in place.

WAT18 Continue to install and maintain gross water pollutant traps

The new Stormwater Management Plan has identified the need to install gross pollutant traps on all major stormwater outlets to improve the quality of stormwater discharge.

WAT19 Continue to monitor the urban salinity piezometer network

As part of Council's commitment to monitoring salinity levels, Council staff regularly check the salinity piezometers for ground water heights and salinity concentrations. The annual salinity report details the current status of salinity.

WAT20 Develop and implement initiatives to promote, enhance and protect stormwater quality

Erosion and sediment control measures have been implemented in a number of high risk areas.

WAT21 Continue to implement the Sewer 2010 Program to manage Council's sewage treatment systems in an environmentally friendly manner

The sewer 2010 project to upgrade of both Koorngal and Narrung Street Sewage Treatment Plants has been completed and will result in a higher quality of effluent leaving the plants. Both treatment plants have been commissioned and are operational.

WAT22 Continue to implement the On Site Sewage Management Plan

Council is responsible for the approval, maintaining of a register and monitoring the effectiveness of On Site Sewage Systems (septic tanks) within the Local Government Area. This program is implemented through the On-Site Sewage Management Plan in accordance with best practice guidelines and legislative requirements, and was previously adopted by Council in 2001. The purpose of the management plan is to:

- Ensure sustainable on-site management of domestic sewage and effluent water
- Protect and enhance the quality of public health and the environment
- Prioritise resources for the efficient regulation and monitoring of On Site Sewage Systems

WAT23 Form partnerships with key stakeholders to develop and implement water management and conservation workshops for community, business and industry

Council, in partnership with key stakeholders, have held workshops at the Civic Theatre (Peter Andrews) and with the CSU Water Forums.

WAT24 Form partnerships with key stakeholders to develop and implement water quality and water conservation research initiatives

Council has several water management initiatives occurring at the moment which involve partnerships with key organisations. Council completed the IWCM Evaluation Study in 2010 which involved Riverina Water County Council (RWCC), Greater Hume Shire Council, Lockhart Shire Council, Urana Shire Council and the Department of Water and Energy. Council is continuing to be a member of the project steering group for RWCC's detailed IWCM strategy. Council is apart of a series of projects currently being done by the University of Sydney Institute of Sustainable Futures and involving Brisbane City Council, the National Water Commission, RWCC, CSIRO, Wide Bay Water and Sydney Water. Council is also apart of the 5C's project with Charles Sturt University which is in its infancy. Council is also a partner in REROC's Strengthening the Five C's Project with Charles Sturt University which is in its infancy

WAT27 Develop and implement a Lake Albert Management Plan

Council adopted the Lake Albert Management Plan 2009-2015 in February 2010 and is available on Council's website. Implementation of the management plan actions are progressing in consultation with the Lake Albert Community Committee and Reference Group consisting of community representatives and State Government agencies.

WAT28 Form partnerships with key stakeholders to revegetate stream banks using native riparian vegetation

In partnership with the Murrumbidgee Catchment Management Authority Council has continued the Malhangilanna River Restoration project to restore native vegetation and habitats along the Murrumbidgee River. With the assistance of a National Green Jobs Corps team, Council has restored native vegetation along Boiling Down Creek in the Gregadoo Waste Management Centre.

WAT29 Research the feasibility of developing and implementing initiatives to reduce water wastage

Automatic irrigation systems have been redesigned to operate more at night and more efficient. Trials being conducted on stabilising unsealed roads will aid maintenance and save on gravel and water usage.

WAT31 Form partnerships with key stakeholders to develop and implement the Wagga Wagga Global Smart Water City initiative

Council is a part of a series of projects currently being done by the University of Sydney Institute of Sustainable Futures and involving Brisbane City Council, the National Water Commission, RWCC, CSIRO, Wide Bay Water and Sydney Water. Council is also apart of the 5C's project with Charles Sturt University which is in its infancy. Council is also a partner in REROC's Strengthening the Basin project.



Minimise our environmental impact by utilising alternative technologies and implementing effective *waste management* strategies

Wagga Wagga Environmental Sustainability Strategy Objective



Diverse City



Key Pressures

| Key pressures on 'Waste' in the WWLGA include: |
|---|
| • High rates of solid waste to landfill |
| • Low rates of recycling of various waste streams such as construction and demolition and organic waste |
| • Liquid waste disposal options |
| • Special waste disposal options |
| • Rural waste management facilities |
| • Effluent reuse options |

Key Indicators

Types and volumes of waste received at the Gregadoo Waste Management Centre

| Waste (types) | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Commercial/Industrial | 33,008 | 23,736 | 19,197 | 18,559 | 21,156 | 8171 |
| Building/demolition | 8,733 | 10,720 | 19,550 | 23,662 | 29,963 | 40,933 |
| Junee Kerbside | 652 | 417 | 679 | 285 | 644 | 596 |
| Kerbside Garbage | 9,734 | 10,213 | 10,360 | 10,405 | 9,913 | 10,067 |
| Other Garbage | 3,132 | 3,215 | 3,689 | 4,291 | 3,113 | 6059 |
| Greenwaste | 8,165 | 8,983 | 8,251 | 7,947 | 7,746 | 8824 |
| Totals (tonnes) | 63,143 | 57,280 | 61,508 | 64,806 | 72,535 | 74,650 |

Waste sent to landfill or recycled in the Wagga Wagga LGA (kg per person)

| Waste Stream | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Recycled | 147 | 158 | 141 | 162 | 162 | 173 | 190 |
| Landfilled | 1082 | 1089 | 956 | 1011 | 1051 | 1159 | 1187 |

Source: WWCC.

Key Actions

Activities are focussed towards the waste objectives in the “Wagga Wagga Environmental Sustainability Strategy 2009-2013”. The activities carried out during the 2009/2010 financial year are listed below.

WAS1 Continue to implement the Landfill Environmental Management Plan (LEMP) to reduce the environmental impact of the Gregadoo Waste Management Centre

The LEMP is aligned with Council’s Strategic Plan and provides a single point of management for landfill operations. Council has been proactive in the strategic planning and management of solid waste with all regulatory requirements and minimising the environmental impacts during the operation of the Gregadoo Waste Management Centre.

WAS2 Continue to provide effective waste management solutions and recycling facilities at the Gregadoo Waste Management Centre and local transfer stations across the WWLGA

Council’s solid waste facilities includes the Gregadoo Waste Management Centre which is licensed to accept 100,000 tonnes of waste per annum, three rural landfills and four rural transfer stations. The rural landfills are located at Galore, Currawarna and Humula and the transfer stations are located at Tarcutta, Mangoplah, Uranquinty and Collingullie. All operational licence conditions were complied with for the year with no major environmental or OH&S incidents recorded for any of the Waste Management Facilities. Processes for the recycling of mattresses and computers have been implemented along with improved recycling services at the rural facilities.

WAS3 Continue to conduct Tip Free Days at the Gregadoo Waste Management Centre

Council Continues to offer “Tip Free Days” at the Gregadoo Waste Management Centre. The free entry days are part of a commitment by Council to encourage householders to dispose of any extra domestic waste or recyclables, possibly resulting from a yard cleanup, as well as to discourage the illegal dumping of waste. On average over 800 vehicles attend the Gregadoo Waste Management Centre on each of the tip free days disposing of over 900 tonnes of waste. The tip free days were aligned with cleanup Australia Day and Clean up Wagga Wagga Day.

WAS4 Audit Council's waste and recycling facilities from a business operations perspective

A preferred tenderer has been accepted to undertake an audit of waste and recyclables collected kerbside and received at the Gregadoo Waste Management Centre. The first stage of the audit is scheduled to commence in November 2010 and is intended to capture waste data enabling Council to better manage waste into the future by Resource Recovery, measuring performance comparisons with other local governments and providing the essential framework for conducting future performance reviews and future infrastructure developments.

WAS5 Continue to promote recycling services across the WWLGA

Council actively promotes waste minimisation to reduce the amount of material sent to landfill. To achieve this goal Council provides the community with three different waste collection services: general waste, mixed recycling, and green waste.

WAS6 Continue to encourage more green and organic waste recycling at the Gregadoo Waste Management Centre

Council operates a three bin kerbside collection service which includes a greenwaste bin collected on a fortnightly basis. All sorted greenwaste disposed direct to the Gregadoo Waste Management Centre is stockpiled and chipped for reuse. Pricing controls have also been implemented at the waste management centre to encourage the sorting and reuse of greenwaste and other recyclables.

WAS7 Continue to use organic waste as top fill at the Gregadoo Waste Management Centre, quarries and scarred landscapes

Greenwaste that is separated and chipped at the Gregadoo Waste Management Centre is reused as daily cover in lieu of clean fill and to rehabilitate the site. Council’s Parks and Recreation Section also stockpile and chip greenwaste generated from the maintenance of its open space for landscaping.

WAS8 Continue to improve commercial and industrial recycling services

Facilities for receipt of recyclables including Construction and Demolition (C&D) wastes, garden organics and scrap steel and other metals are provided at the Gregadoo Waste Management Centre. Recyclables are also received at the regional transfer stations and landfills.

WAS9 Form partnerships with key stakeholders to develop and implement alternative waste management and technology research initiatives

Council Officers are working closely with the Riverina Eastern Region of Councils (REROC), industry and current service providers on the preparation of a scoping document into the suitability and viability of alternative waste technologies for Wagga Wagga. Subject to the outcomes of the scoping document, it is intended to proceed to developing a business case for the implementation of alternative waste technologies in the 2011/12 financial year.

WAS10 Research the feasibility of entering into more regional contracts for the collection of recyclable materials

Materials collected from the kerbside recyclables collection service are processed at a material recovery facility (MRF) located at Chaston St, Wagga Wagga. This facility is operated by Kurrajong Waratah under a sub-contract arrangement with the contractor that provides the kerbside collection service. Recyclables collected at the Gregadoo Waste Management Centre, Council’s other landfills and transfer stations are also transported to the MRF for processing. Council has also entered into agreements for the recovery and recycling of mattresses, tyres, engine oil, gas bottles, batteries and scrap steel.

WAS11 Research the feasibility of a recycling depot in the Wagga Wagga urban area

There are currently no plans to establish a new Council operated recycling depot in the City of Wagga Wagga. The Gregadoo Waste Management Centre includes expanded opportunities for recycling in a well managed and controlled environment.

WAS12 Form partnerships with key stakeholders to develop and implement public place recycling systems

Council Officers have applied for funding from the NSW Environmental Trust to install stations for the disposal of recyclable materials along the main shopping thoroughfare. The outcome of the funding application will be known by January 2011. Subject to the availability of funding it is intended to install the disposal stations including one recycling and one general waste bin at key locations along the main shopping strip in Wagga Wagga. This will be supported by an educational and media campaign to encourage the community to make use of these facilities.

WAS14 Continue to provide recycling systems for Council staff and the community at Council facilities

Council provides recycling systems at community events and within Council facilities.

WAS15 Through the relevant EPI's, develop a "No Waste" DCP for new developments

The Wagga Wagga Development Control Plan 2010 includes in its Guiding Principles the principle "to support waste minimisation strategies".

WAS17 Continue to develop initiatives to reduce paper used in Council business

Council continues to adopt methods to reduce paper consumption, through meetings online, utilisation of ECM.

WAS18 Develop and implement waste reduction community education initiatives

The City of Wagga Wagga participates and promotes Clean Up Australia Day programs locally and works alongside the Wagga Wagga Tidy Towns Committee to coordinate Clean Up Wagga Day. Further waste reduction education has been focused within schools. The City of Wagga Wagga and SITA Environmental Solutions co-fund Keep Australia Beautiful's Waste Watchers program in schools within the local government area. The City of Wagga Wagga also participated in Planet Ark's inaugural National Recycling Week Big Aussie Swap. Ladies were invited to participate in a clothing and accessories Swap Party to promote the theme of waste avoidance and recycling.

WAS19 Develop and implement plastic bag reduction initiatives

Council has developed and implemented a plastic bag exchange program that allows residents to swap 10 plastic bags for one reusable shopping bag. This program has been very successful and is run throughout the year.

WAS20 Continue to improve e-waste management strategies and services

Council currently provide an e-waste recycling service further reducing material being sent to landfill. Other recyclers in the Wagga Wagga LGA are also implementing this service.

WAS21 Develop and implement illegal dumping and littering community initiatives

Council has circulated flyers in areas with incidents of regular dumping and has distributed "Dob in a Dumper" educational material to raise the community awareness of this problem

WAS22 Continue to investigate illegal dumping and littering incidents and complaints

As part of their responsibility Council staff continue to respond to incidences of illegal dumping and littering in accordance with the Customer service Charter.

WAS23 Continue to promote the Keep Australia Beautiful Awards Program annually

The Wagga Wagga Tidy Towns Committee has submitted five entries in this year's Keep Australia Beautiful competition. This year Wagga Wagga has entered the following categories:

- Overall Tidy Towns Sustainable Communities Award
- Cultural Heritage Award - The restoration of Sun Flower House
- Litter Prevention & Waste Minimisation Awards – Enhancing our City and Environment
- Wildlife Corridors and Habitat Conservation Award – Draft LEP Bio- Certification
- Schools Environment Award - Turvey Park Public School, Waterwise Native Garden

Wagga Wagga has a long standing association with the Keep Australia Beautiful Awards being involved from the inception of the program. Wagga Wagga City Council first submitted an entry in the Keep Australia Beautiful Awards in 1982.

WAS24 Continue to implement the Clean Up Australia Day initiative annually

Council is committed to continuing with the Clean Up Australia Day initiative and recognises the positive impacts that this community supported program has on the environment

WAS25 Lobby State Government for container deposit legislation

Council has endorsed its support for the Local Government and Shires Association of NSW(LGSA) campaign for the introduction of Container Deposit Legislation (CDL).

The LGSA are campaigning for the introduction of a deposit/refund system on beverage containers. They predict recycling of drink cans and bottles would increase by more than 20% if a 10 cent refund scheme was introduced in NSW, which would significantly reduce the amount of litter polluting the environment



Improve air quality and reduce the impact of climate change by educating the community and reducing *energy consumption* and greenhouse gas emissions

Wagga Wagga Environmental Sustainability Strategy Objective



Diverse City

Key Pressures

Key pressures on 'Climate, Air and Energy' in the WWLGA:

- Increasing temperature and decreasing rainfall
- High energy consumption (CO2 emissions) from households, business and industry
- Agricultural activity
- Industrial activity
- Bushfire management
- Odour and noise pollution

Key Indicators

Climate data for Wagga Wagga

| Year | Rainfall (mm) | Temperature (C) | |
|-------------|---------------|-----------------|------|
| | | Min | Max |
| 2005 | 513.0 | 9.1 | 23.2 |
| 2006 | 267.2 | 8.4 | 24.4 |
| 2007 | 466.4 | 10.1 | 23.9 |
| 2008 | 467.2 | 9.0 | 22.9 |
| 2009 | 357.2 | 10.1 | 24.2 |
| Annual Mean | 558.3 | 8.4 | 22.3 |

Source: Bureau of Meteorology.

Air Quality Exceedances for Wagga Wagga

| Year | Exceedances |
|-----------|-------------|
| 2005-2006 | 11 days |
| 2006-2007 | 57 days |
| 2007-2008 | 20 days |
| 2008-2009 | 28 days |
| 2009-2010 | 21 days |

Exceedances = number of days when particle matter in the air exceeded the National Environment Protection Measure of 50ug/m³ Source: DECCW website.

Total CO₂ emissions for Wagga Wagga City Council

| Year | Electricity & Gas | Streetlighting | Fuel | Total CO _{2-e} Tonnes |
|-----------|-------------------|----------------|------|--------------------------------|
| 2007-2008 | 10163 | 2843 | 2016 | 15,022 |
| 2008-2009 | 9969 | 3109 | 2370 | 15,448 |
| 2009-2010 | 11,975 | 3245 | 2135 | 17,355 |

Key Actions

Activities are focussed towards the climate air & energy objectives in the "Wagga Wagga Environmental Sustainability Strategy 2009-2013".

The activities carried out during the 2009/2010 financial year are listed below.

CAE1 Develop and implement a Bike Plan for the WWLGA

Council has recently developed the Bicycle Plan 2010 that promotes the health, social, economic and environmental benefits replacing motorised transport with the bicycle.

CAE4 Develop and implement a Pedestrian Access and Mobility Plan for the WWLGA

Council adopted its first ever Pedestrian Access and Mobility Plan in 2009. The prioritised works program is currently being actioned and has attracted \$78,000 funding from the Roads and Traffic Authority.

CAE5 Through the relevant EPI's, ensure new developments are pedestrian friendly

The Aim of the Wagga Wagga Local Environmental Plan 2010 (1.2(2)(d)) is to coordinate development with the provision of public infrastructure and services. In addition the Local Environmental Plan Guiding Principles include GP4 ii, "to enhance opportunities for community connection". The Development Control Plan clause 7.2.2.

CAE6 Develop and implement initiatives to promote walking to work

Wagga Wagga City Council promotes the National Walk to Work initiative and hosts a healthy breakfast for employees on the day.

CAE11 Audit Council's energy use and greenhouse gas emissions

Council completed a level 3 energy audit on four of Council's top ten energy consuming sites; Oasis, Airport, Civic Centre and Civic Theatre.

CAE12 Review after hours lighting requirements and implement energy saving strategies at Council facilities

The energy audit has identified energy saving strategies that will be implemented over the next 18 months.

CAE13 Continue to implement the Wagga Wagga City Council Street Lighting Management Plan

Council has signed with Country Energy a Service Level Agreement that continues to add energy efficient street lighting in suburban development. Priorities are identified within Council's Street Lighting Strategy.

CAE15 Continue to implement the Earth Hour initiative annually

Council participates and promotes the Earth Hour initiative and acknowledges the public awareness that this activity creates in the community.

CAE16 Continue to research the feasibility of installing alternative energy generation technologies at Council facilities

Council is continuing to investigate opportunities for alternate energy generation technologies. At this stage two Council facilities have been fitted with photovoltaic cells; Uranquinty Hall and Fernleigh Road Depot.

CAE17 Continue to implement energy efficient lighting retrofits at Council facilities

Retro-fitting of energy efficient lighting at Council facilities is an output of Council's Energy Savings Action Plan.

To date Fernleigh Road depot has replaced the workshop fluorescent lighting with Greenline Highbay Lights. Bolton Park Stadium replaced 20 existing 1000 watt light fittings with new energy efficient light fittings.

CAE22 Research the feasibility of implementing power factor correction upgrades at Council facilities

The energy audit carried out on Council's top four energy consuming buildings found that power factor correction was feasible at the Airport and the Civic Theatre.

CAE23 Program Council computers and office equipment to operate on energy saving systems

In December 2010 Council will begin the Staff Engagement module of the DECCW Sustainability Advantage Program. Part of the Staff Engagement module will be to roll out a communication campaign on staff energy efficiency which addresses the programming of Council computers

CAE25 Develop and implement initiatives to minimise greenhouse gas emissions associated with Council's fleet

A driver efficiency training program has been developed and will be rolled out to the staff that use heavy machinery.

CAE26 When reviewing Council's electricity contracts ensure there is a requirement to purchase renewable energy

On renewal of Council's contract with Country Energy the Civic Centre building incorporates 100% renewable energy Green Power from 1 July 2010.

CAE29 Develop and implement initiatives to promote energy saving practices for households, businesses and industry

Council has worked in conjunction with REROC on offering the DECCW energy efficiency for small business program to Wagga small businesses, and participated in program to give away energy efficient light bulbs to the community.

CAE31 Form partnerships with key stakeholders to develop and implement climate change education initiatives

In partnership with the CROW (Climate Rescue of Wagga), Council 's Library has been providing the community with Home Energy Audit Kits. These kits identify areas where improved practices can result in a saving in power, money and carbon emissions.

CAE32 Continue to investigate air pollution, noise and odour incidents and complaints

Council staff continue to address and investigate air pollution, noise and odour incidents. In 2011 Council staff will implement strategies to improve air quality as part of the Clean Air project.

CAE33 Form partnerships with key stakeholders to develop and implement air pollution reduction initiatives

The Department of Environment and Climate Change in conjunction with the EH Graham Centre for Agricultural innovation (an alliance of Charles Sturt University) have commenced a two year

project to investigate the seasonal high levels of particle air pollution within the Riverina region. The collaboration will look at strategies to improve air quality and includes the appointment of a project officer for two years to be based at the EH Graham Centre in Wagga Wagga.

CAE34 Continue to improve dust control strategies on Council worksites

Dust control strategies are implemented to minimise worksite dust generation.

CAE35 Develop and implement dust control education initiatives for business and industry

Council also informs the development industry on a regular basis via industry newsletters and media articles which are designed to educate industry stakeholders with regards to dust control strategies.

CAE36 Continue to implement the Wagga Wagga City Council Smoke Free Area Policy

Council continues to implement the Smoke-Free Outdoor Area Policy which prohibits smoking on sportsgrounds, parks, covered bus and taxi ranks, and within 10m of a children's playground.

CAE37 Continue to implement the Wood Smoke Reduction Program

Council has continued to implement its wood smoke reduction program aimed at educating the community on the environmental and health effects of wood smoke and at promoting the efficient operation of wood heaters. The Wood smoke Reduction Program aims to:

- Encourage residents to take up cleaner alternatives to wood heating,
- modify the way residents use wood heaters in order to reduce smoke output, and

increase awareness in the community regarding proper wood heater use and health problems associated with wood smoke

CAE38 Adopt a framework for climate change risk assessment associated with Council business

The Local Environmental Plan 2010 aims include 1.2(2)(b) promoting development consistent with the management of climate change.

We have been conducting extensive analysis into gravel resource usage across the LGA. With further work, these analyses should be able to produce a model that will provide information on cost (monetary and environmental) as well as climate change impact.



Effectively manage *heritage* and *aboriginal culture*
so it is understood, enhanced and protected

Wagga Wagga Environmental Sustainability Strategy Objective



Key Pressures

Key pressures on 'Heritage' in the WWLGA include:

- System for recording of heritage sites
- Inadequate procedures to assess the impact of development on culturally significant sites
- Low level of community awareness of cultural heritage
- Urban development
- Vandalism

Key Indicators

Frequency of Aboriginal Heritage site types for the Wagga Wagga LGA

| Site Category | No. sites | Site Feature | No. Features |
|---------------|-----------|--------------------------------------|--------------|
| Open sites | 1 | Burials | 1 |
| Open sites | 29 | Artefact (stone, bone, shell, glass) | 39 |
| Open sites | 6 | Earth Mound/Shell Artefact | 7 |
| Open sites | 5 | Earth Mound/Hearth | 6 |
| Open sites | 1 | Quarry | 1 |
| Open sites | 36 | Scarred Tree | 36 |

Source: AHIMS database search.

Heritage Listed Sited for the Wagga Wagga LGA

| Database Reference | 2003-2004 | 2008-2009 | 2009-2010 |
|--|-----------|-----------|-----------|
| No. of items on the Schedule of Items of Environmental Heritage (DCP) | 50 | 258 | 258 |
| No. of buildings on the RAIA NSW Chapter Register of 20th century buildings of significance (DCP 2005) | 74 | 74 | 74 |

Source: WWCC Register Search

Key Actions

Activities are focussed towards the heritage objectives in the “Wagga Wagga Environmental Sustainability Strategy 2009-2013”.

The activities carried out during the 2009-2010 financial year are listed below.

HRT1 Continue to map significant heritage sites across the WWLGA

As part of the Local Environmental Plan 2010 development process, the mapping of significant heritage sites have been updated and this process is ongoing.

HRT2 Develop and implement heritage community education initiatives

Community education regarding heritage is an ongoing process with Heritage Advisors holding public workshops and applicants wishing to undertake development within designated heritage areas being referred to the Council's Heritage Advisors prior to development consent being issued.

HRT3 Continue to implement the Heritage Grant funding initiative annually

A number of initiatives were held such as the Eco Warrior competition in the Museum of the Riverina as well as the Mawang Festival over June, July and August 2009 - a three month festival exploring cultural heritage from an indigenous perspective. These styles of events shall be continually implemented as they become available.

HRT6 Continue to provide heritage advice and information to owners of heritage properties

Council offers a heritage advice service and assist owners of properties in heritage areas by providing preliminary advice on development proposals

HRT7 Continue to deliver heritage programming at Council's cultural facilities

All of Council's cultural facilities celebrate cultural heritage at both the local, state and National level. In 2010 Council held the Mawang (Altogether) Biennial Winter Festival from June – August 2009 which incorporated 17 exhibitions over the 4 cultural facilities celebrating both contemporary and Indigenous cultural heritage.

HRT8 Continue to provide heritage cultural collection advice to public and private collections

The Museum of the Riverina, in conjunction with a community working committee, assisted in the support, advice and development of the Aviation Heritage Centre at Forrest Hill in 2009-2010.

HRT9 Review the Wiradjuri Heritage Study

Discussions have been held with the Department of Aboriginal Affairs, with support from DECCW, around the development of priority sites for significance, for interpretation and documentation. The development of these priority sites is an extension of the Wiradjuri Heritage Study 2002.

HRT10 Develop and implement initiatives to partner the local Aboriginal community in environmental projects

Through the River Restoration Project Council has engaged members of the indigenous community in natural resource management. The aim of this project is to increase the knowledge and skills of the land managers and the wider community to protect and respect heritage sites and to incorporate cultural heritage values in natural resource management.

HRT11 In partnership with Aboriginal Elders and other key stakeholders develop cultural heritage and environmental business opportunities for the Aboriginal community

WWCC and the CMA were involved in a local weaving project as part of cultural heritage development.

Between 2008 – 2010, the Women of Wagga Weaving Project was developed that included weaving projects, cultural exchange and education in relation to cultural techniques, plant gatherings and to culminate in a final exhibition for late 2010.

An Emerging Indigenous Curator position was developed as part of the Wagga Wagga Art Gallery and funded by Arts NSW in June 2010.

HRT12 In partnership with Aboriginal Elders and the Aboriginal Lands Council provide interpretive signs at Aboriginal sites

An initial meeting has been held between a wide number of government and university stakeholders about Charles Sturt University's Indymarra Project in relation to interpretive signage.

HRT14 Develop and implement heritage training to selected Council staff

Aboriginal cultural awareness training was delivered at the corporate level through 2009/10. Three Council employees from the Planning Directorate have successfully completed the Fundamentals of Heritage training course.



Promote environmentally sustainable principles for

healthy living through community initiatives

Wagga Wagga Environmental Sustainability Strategy Objective



Diverse City



Key Pressures

Key pressures on a 'Sustainable Wagga Wagga' include:

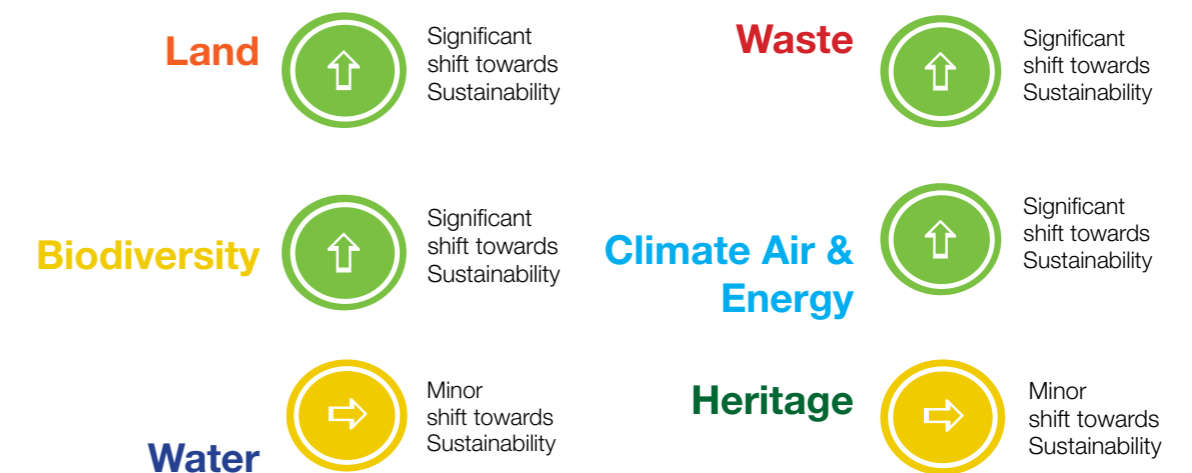
- Balance of Environmental, Social, Economic and Governance priorities
- Relationship building between key stakeholders
- Enhanced general roles and responsibilities of Councils
- Unfunded mandates and cost shifting
- Climate Change impacts
- Financial impacts
- Balance between the built and natural environments
- Community expectations

Key Indicators

Overall Summary of Key Environmental Indicators

The following is an overall summary of how the Wagga Wagga Local Government Area is performing in terms of environmental sustainability for the SoE themes of Land, Biodiversity, Water, Waste, Climate Air and Energy, Heritage.

The ratings are based on the various 'Key Environmental Indicators' in each section, and are given an overall rating for sustainability based on those broad trends. It is important to note that there are no set parameters for exactly what can be classed as fully sustainable. Therefore, these ratings are subjective, and are shown to provide a broad indication only.



Key Actions

SWW2 Through the Master Plan development and implementation, ensure Riverside Wagga Wagga demonstrates leadership in ESD principles

Riverside Wagga Wagga is a partnership between Wagga Wagga City Council and the NSW Land & Property Management Authority. Riverside Wagga Wagga will instigate development of passive and active recreational spaces, social and cultural facilities, as well as commercial outlets along one of the City's most attractive natural resources - the Murrumbidgee River.

The Riverside Wagga Wagga strategic master plan includes objectives which ensure the development is representative of world class, iconic design that incorporates ecologically sustainable design throughout

SWW3 Continue to integrate environmental considerations to Council's economic, social and governance initiatives

Environmental considerations are being considered as part of the development of Council's new Community Strategic Plan, Delivery Program and Operational Plan. The Wagga Wagga City Council Community Strategic Plan 2008 - 2018 - Our City, Our Tomorrow includes goals which relate to the key performance areas of Environmental, Social, Economic, and Governance. Environmental sustainability contributes to and is impacted by each of Council's key performance area goals.

The Wagga Wagga Environmental Sustainability Strategy aim and objectives have been developed in response to the outcomes of the research and are integrated with the Community Strategic Plan goals. Importantly the objectives also reflect the integration of environmental sustainability with social, economic and governance considerations.

SWW4 Continue to consult, survey and plan with the community about environmental sustainability issues

Council has adopted the Environmental Sustainability Strategy 2009/2013 which will give Council and the community direction for implementing environmental initiatives to ensure environmental sustainability of the Wagga Wagga Local Government Area (WWLGA) based on community consultation and research relating to:

- Land
- Climate, Air & Energy
- Water
- Biodiversity
- Waste and
- Heritage

The strategy not only recognises the significant contribution that Council already makes to maintaining and enhancing the environment through its programs, but also provides future direction to ensure the City's sustainability by balancing the needs of the built and natural environments

SWW5 Ensure Council's project management and reporting systems include environmental reporting requirements

Environmental reporting requirements are included in the development of the Project Management framework.

SWW6 Continue to participate in nationally recognised environmental sustainability management initiatives

Council has joined the Sustainability Advantage Program initiated by Department of Environment Climate Change and Water (DECCW). The Sustainability Advantage program will help Council identify what sustainability means to our business, as well as identify and take advantage of opportunities to improve our business and our environmental performance.

Wagga Wagga City Council will undertake four modules as part of the Sustainability Advantage Program. These modules are;

- Resource Efficiency
- Staff Engagement
- Supply Chain Management
- Vision, Commitment and Planning

Council is working with Planet Footprint to encourage energy efficiency practices and awareness at Council's top ten facilities.

SWW8 Continue to explore grant opportunities for programs and initiatives included in the Environmental Sustainability Strategy

Council has applied for numerous grants in the past financial year and was successful in receiving funding for willow removal, revegetation projects, river restoration, and Glossy Black Cockatoo.

SWW9 Continue to explore grant opportunities for the employment of an Environmental Sustainability Officer at Council

Council has appointed an Environmental Sustainability Officer with the position responsible for:

- Education and liaison across Council and the community;
- Research, development and Implementation of environmental projects with a focus on carbon reduction;
- Implementation of Councils Energy Savings Action Plan;
- Implementation of The Cities for Climate Protection and Sustainable Advantage programs;

SWW11 Develop and implement environmental sustainability education initiatives for Councillors and Council staff

Staff have been engaged in office recycling facilities, resource efficiency including Wagga Wagga City Council Paper Reduction targets and involved with Business Clean Up Australia Day.

Council staff are also taking part in the DECCW Sustainability Advantage Program which engages staff on sustainability issues including resource efficiency, staff engagement and vision, commitment and planning.

SWW17 Continue to prepare the annual State of the Environment Report

The state of the Environment (SoE) Report covers the reporting requirements outlined in Section 428 of the Local Government Act 1993 in the following environmental sectors: Land; Air; Water; Biodiversity; Waste; Noise; Aboriginal Heritage; Non Aboriginal Heritage.

SWW18 Promote energy efficiencies at Council facilities

Council is engaged with energy consultants Planet Footprint to assign responsibility to facility managers and use energy consumption information to promote energy efficiency initiatives such as a 'switch it off' campaign.

SWW21 Continue to attend meetings and form partnership projects with key environmental stakeholders and community groups

Council continues to support the work of Climate Rescue of Wagga, Landcare and the Australian Youth Climate Coalition. Council's sustainability team regularly meets with Environmental Advisory

sub-committee groups as well as the Environmental Educators group to discuss potential partnerships and projects.

SWW23 Develop and implement an internal Council Environmental Sustainability Committee

In 2009 a Carbon Reduction Committee was established to support Council's emissions reduction initiatives, and the Paper Reduction Team was created to look at ways Council can reduce its paper consumption.

SWW24 Develop and implement an Environmental Advisory Committee with key stakeholders and community representation

A community Environmental Advisory Committee was formed in 2009 and meets every quarter.

SWW26 Develop and implement a website to educate the community about environmentally sustainable living, community events and activities in the WWLGA

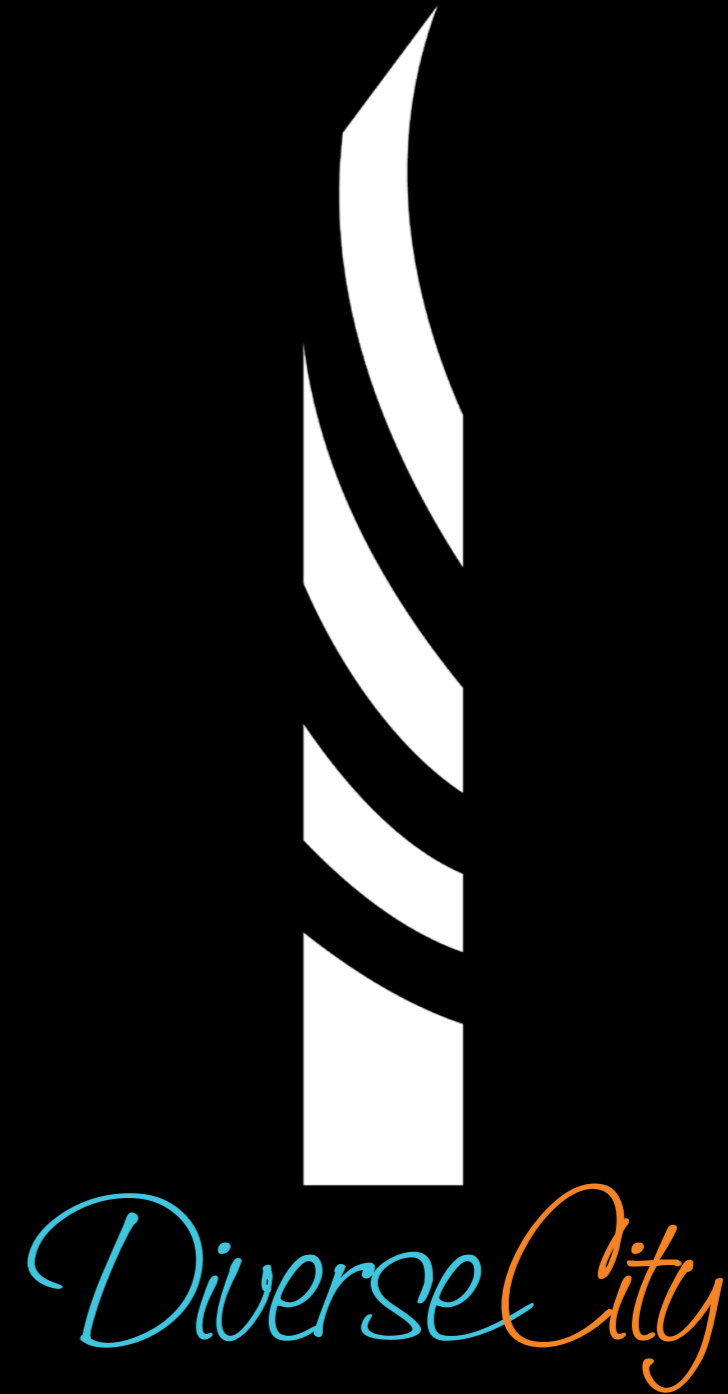
Council's website upgrade has incorporated a focus on environmental sustainability.

SWW30 Form partnerships with key stakeholders to develop and implement community initiatives to encourage environmentally sustainable living

Sustainable House Day was held, where four houses in the Wagga Wagga Local Government Area opened their doors to the public to show how to live more sustainably. Visitors were able to seek information and advice direct from home owners who've put sustainable living into practice about reducing waste around your home, saving water, natural home heating and cooling and more. Information was also available on the government's interest free 'green grants' scheme and solar rebates. Council provided support through promoting the event.

SWW32 Continue to implement the Sustainable Schools Challenge annually

In 2009-2010 Wagga Wagga City Council contributed more than \$5,500 to the 6 schools participating in the annual Schools' Sustainability Challenge. The challenge invites local school students to develop practical projects that will enhance their school environment and promote sustainable practices in our community.





City of
Wagga Wagga

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