



City in Late Afternoon: Duncan Staples - Warringah Art Exhibition entrant



State of Environment Report 2010-2012

End of Term Report 2010-2012

State of Environment Report 2010-2012

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This State of Environment Report (SOE) outlines progress towards achieving our environmental objectives, as they are outlined in the Strategic Community Plan (SCP). Its purpose is to report to the community in an integrated way on a range of strategies and programs for both the natural and built environment. This report and Council's recent Environmental Sustainability Strategy 2012 mainstream the Council's environmental reporting, enabling a better focus on achieving these objectives.

Since 2006 regional SOE reports were prepared by The Shore Regional Organisation of Councils (SHOROC). With different statutory requirements, they covered the environmental sectors of air, water, land, biodiversity etc. Regional reporting will continue in SHOROC's new Health of the Region Reports, including the condition of the environment, starting in 2012.

New Statutory Requirements

Amendments to the NSW Local Government Act 1993 (assented to on 1 October 2009) reformed the way councils in NSW prepare and report on strategic/corporate plans and budgets. The changes align the SOE to environmental objectives in the community strategic plan.

Warringah implemented the new framework on 22 June 2010 when it adopted the Strategic Community Plan 2010. As a result this report covers a two year period from 1 July 2010 to 30 June 2012.

In accordance with S428A of the Local Government Act this report:

- Updates trends in each environmental indicator
- Identifies all major environmental impacts (being events and activities that have a major impact on environmental objectives).

A New Format

The report is framed around 8 goals and 15 environmental strategies from the SCP. Some goals have a primary focus on the sustainability of the natural or built environment (1.1, 1.2 and 3.2), while for others it is a secondary consideration. Each is outlined in the tables following, along with the indicators, level of Council's influence and progress over the last two years.

Progress for each indicator is shown as:




Movement towards sustainability



Stable (no change)



Movement away from sustainability

The tables give a snapshot of the achievements and future directions. More detail is available in the Annual Report for each strategy, indicators and their trends (Section 3). In Section 4 the key contributing service areas and programs are highlighted with this SOE icon . As the SOE Report covers two years, any key programs from 2010-2011 are included in this Appendix, rather than the body of the Annual Report 2011-2012.

A Practical Approach

Across the 15 environmental strategies, Council has a moderate to high level of influence over 10 indicators. For others, it has only the ability to educate the community or influence stakeholders. So a practical approach is used to develop the initiatives, selecting from a range of tools to suit the nature of each goal, e.g.:

- Legislation and enforcement
- Strategies, policies and plans
- Science, research and best practice
- On-ground works
- Education, community engagement and advice
- Partnerships with other councils, agencies, researchers and volunteers.

Overall Progress

Overall there is good progress made against most of our environmental objectives over the last 2 years. The only notable impediments relate to the role and timing of the State government in urban planning, with implications for our LEP and Housing Strategy, and the region's infrastructure planning (Goal 3.2) and transport planning (Goal 3.3). Goal 5.2 also shows that Council's total energy use is slightly elevated, partly due to increased use in some of our operations and also a result of energy provision for street lights over which we have little control.




The overall success in relation to these goals results from systematic and innovative approaches, effective partnerships and focussed delivery on quality projects. A number of Council's sustainability projects have also received industry recognition or awards listed on page 9. Council continues to build on these achievements, with recent initiatives or ongoing programs for each goal.



Fish Flies at the Quarry: Eunice McAlister - Warringah Art Exhibition entrant

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Living Environment

| Goal 1.1 Protecting the natural environment so it is healthy and diverse – page numbers 38-41 | | | | |
|---|--|-----------------|--|--|
| Strategy | Indicator | Influence level | Progress | Key Services |
| I.1.1 Maintain the diversity of natural environments at their current levels or better | Health of bushland | Moderate |  Over 5 years | Natural Environment Parks Reserves and Foreshores |
| I.1.2 Manage Warringah's catchments, waterways and marine environments in a sustainable way | Water quality | Low |  | Roads Traffic and Waste Strategic Planning Good Governance |
| I.1.3 Ensure Council is recognised as a leader in corporate sustainability | Environmental friendliness plus awards | Moderate-High |  | |

Notable progress and any impediments

Warringah has over 3,000 hectares of remnant vegetation outside of National Parks, of which some 60% has very high conservation significance. Around 66% of the bushland is private land or unreserved crown land in which vegetation clearing is possible, the remaining 34% is crown or Council reserves. Over the last five years around 48 hectares of bushland has been lost to clearing. Despite this net loss, there have been significant achievements including:

- Bush regeneration of 700 hectares, plus an additional 30 hectares by Friends of the Bush volunteers.
- Threatened Species finds and recovery affecting 11 threatened species.
- On-ground achievements in managing fire regime, weeds and feral species.
- Increased protection of habitats through Wildlife Protection Areas, fencing and stabilising tracks and creek banks.
- Developed the draft Warringah Biodiversity Conservation Study 2011 (WBCS) and community briefing.
- Council's planning controls seek to direct loss away from areas of higher conservation value.

Water quality for swimming suitability rates as good or very good at all beaches and Manly Dam, though Birdwood Park at Narrabeen Lagoon entrance is rated as poor during wet weather. Overall Council has achieved its target to maintain the current high level of quality, resulting from a more holistic approach and effective partnerships with Pittwater and Manly Councils, Sydney Water, NSW agencies and the community.

The catchments and waterways are viewed and managed as systems with natural processes and impacts, and where possible new projects adopt water-sensitive urban design (WSUD). Key achievements include:

- Protection of Waterways and Riparian Land Policy adopted and being implemented.
- Lagoon and flood studies, research, remediation, Plans of Management and catchment projects.
- Work on stormwater systems including maintenance of existing assets; renewal and upgrades of poor condition or undersized assets and construction of new stormwater infrastructure for flood reduction
- Coastal Erosion Emergency Action Subplan adopted; Beach nourishment with 48,000 m³ of sand to Collaroy-Narrabeen (over 36,000 m³ from the entrance clearance plus 11,800 m³ from development sites).
- Regulatory patrols of Long Reef Aquatic Reserve with National Parks and Wildlife Service and Fisheries and ongoing support for frequent biodiversity monitoring and education conducted by volunteer groups.

Survey results continue to show improvement in the community's satisfaction with the environmental friendliness of our operations. Various Council projects have been recognised through sustainability awards or commendations – page 9. We also adopted Warringah's Environmental Sustainability Strategy, and SHOROC's 'Shaping our Sustainable Future' - a regional 4-year action plan on sustainability.

Ongoing improvements planned

Biodiversity: The WBCS will help prioritise the management of bushland and other vegetation, by focussing on their conservation value and threats. Long term bushland regeneration will seek to maintain good areas and enhance the habitat value of those with moderate conservation value.





Aquatic environments: Both Warringah and Pittwater Councils continue to work with Sydney Water and residents to improve Narrabeen Lagoon's water quality. Warringah is focussing on the ecological health of all our lagoons, collaborating with the NSW Office of Environment and Heritage (OEH) to implement the NSW Estuaries Monitoring, Evaluation and Reporting (MER) program. Applying standard monitoring methods is a scientifically sound basis for developing catchment-scale models, observing trends and comparing with other estuaries. An annual report card will be produced in collaboration with OEH, enabling comparison with OEH estuary health guidelines and with other NSW estuaries. We are also participating in two key research programs along with partner organisations on beach erosion and Cities as Water Supply Catchments.



Water quality is consistently good at Manly Dam and all beaches

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Living Environment

| Goal 1.2 Living in harmony with our environment – page numbers 42-47 | | | | |
|--|---|-----------------|--|---|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 1.2.1 Ensure Warringah's community is recognised as a leader in sustainable living practices | Community water use (aim to reduce) | Low |  | Natural Environment Parks Reserves and Foreshores Roads Traffic and Waste |
| | Community electricity use (aim to reduce) | Low |  | |
| 1.2.2 Build capacity to reduce carbon emissions, increase renewable energy production, increase water saving & catchment management, respond to & reduce the impacts of climate change, enhance sustainability practices | Community waste and recycling (aim to reduce) | Low |  | Strategic Planning Good Governance |
| | Air quality complaints (aim to reduce) | Low |  | |

Notable progress and any impediments

Water and energy consumption by residents has reduced while business use is static. Renewable energy is growing, now with 5.8MW generation capacity of roof top photovoltaics to export energy to the grid. Government incentives or pricing have also contributed to energy-related achievements.

Air quality complaints increased overall in the last 2 years, reflecting increasing community knowledge about reporting breaches, though these complaints did reduce in the last year. The amount of waste sent to landfill per capita has reduced. Over the last 2 years some 730 tonnes of e-waste has been received and diverted for recycling. The percentage of recycling also continues to improve, and now stands at 56% of all waste. Annual vegetation recycling has increased by almost 38% since the introduction of a fortnightly service using wheelie bins in July 2009.

Key Council programs that have built community capacity to live sustainably include:

- Education for Sustainability events with 1,500 residents involved and 2,000 trees planted
- Hilltop to Headland Environmental Series, educating nearly 7,000 people
- Completed the 'Narrabeen Lagoon: Creating a Sustainable Catchment' project with Pittwater Council, an holistic 3-year project funded by a \$1.9 million grant from the NSW Environmental Trust

- Kimbriki EcoHouse and Garden programs
- Established Warringah's first community garden at Manly Vale
- Waste education of over 10,400 people at 130 events in the last 2 years. Key programs included the Garage Trail Sale, Second Hand Saturday, Household Chemical Cleanup, Fridge Buy Back, Waste to Art, Brush up on your Recycling and schools education
- Twelve new waste recycling stations; and regular chemical cleanouts
- E-Waste ban and campaign with SHOROC, recognised by Excellence in the Environment Waste Avoidance Award 2010 – highly commended
- Love Food Hate Waste campaign - runner up for Environmental Education Award 2012

Council has also initiated programs to responded to climate change including:

- Beach Erosion Monitoring and Forecasting Research Project
- Coastal Erosion Emergency Action Subplan
- Flood studies of Manly and Narrabeen Lagoons
- Coastline and landslip hazard mapping

Ongoing improvements planned

Warringah's Environmental Sustainability Strategy

adopted in June 2012 demonstrates our commitment in taking a lead role in sustainability. It identifies six key outcome areas to transition Warringah to more sustainable living and working, with targets to cut carbon emissions by 40%, food waste by 80% and increase local food production and distribution by 50% by the year 2020. See page 21 for more on this strategy.

Regional Efforts


- **Shaping our Sustainable Future:** Council also supports efforts at a regional level through SHOROC's sustainability action plan, including energy, waste, water, development, transport and climate change.
- **Regional Waste Collection Strategy** was adopted by Council and exhibited on Your Say Warringah in January 2012. This strategy details a simplified collection system which will increase recycling and reduce waste to landfill by composting food waste with vegetation.
- **Kimbriki's Resource Recovery Project** will introduce new processes to supplement existing operations. The new recycling and waste processing facility, planned for 2014-2015, will turn food and vegetation waste into compost which can then be sold as environmentally-friendly products.



Education for Sustainability at Brookvale Show

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Living Spaces

| Goal 3.1 Safe and well maintained public spaces that reflect community needs – page numbers 64-69 | | | | |
|---|--|-----------------|--|---|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 3.1.2 Provide recreational access to natural areas while ensuring the sustainability of the natural environment | Satisfaction with parks and recreation | High |  | Natural Environment Parks Reserves and Foreshores Roads Traffic and Waste Corporate Support Good Governance |

Notable progress and any impediments

Satisfaction with parks and recreation has continued to improve over the last two years.

Recreational access to natural areas has improved to cater for walking, cycling, horse riding and the disabled. These works are environmentally-sensitive with suitable materials such as crushed sandstone or boardwalks, and designed to minimise future problems from ponding, erosion and weed invasion. Where possible they have improved durability, safety, wildlife movement, disabled access and links with facilities and networks. Stage 1 of the Narrabeen Lagoon Multi-use Trail received the Sydney Greenspace award for its environmental sensitivity, quality design and accessibility.

In keeping with the needs of the environment and other users, Council decided not to proceed with a trial of dog swimming at Curl Curl beach, but supported a range of improvements to the nearby dog exercise area. Dogs can still be exercised off the leash at 12 areas in Warringah, including a swimming area at Curl Curl Lagoon.

Shared trails are being extended to provide a route around Narrabeen Lagoon starting with the multi-use trail (about 1,000 m), linking to the new South Creek cycleway (2,600 m) to new paths at Dee Why Creek (400 m) and on to Dee Why Lagoon and beach. Jamieson Park was improved with better paths and links (300 m), new barbeques and restoration of 1 km of trail. Tracks, paths and a boardwalk also connected the regional Greenlink Track and Bicentennial Coastal walk at Long Reef Headland, by Fishermans Beach and onto other local reserves (200 m). Access around Curl Curl Lagoon was improved by connecting new paths (330 m) with trails to the beach.

Trail condition and management at Manly Dam has been improved, including a new 50m boardwalk and an 8km Aboriginal self-guided walk with interpretive signage and accompanying map. The track is also now closed to mountain bikes in wet weather to preserve its condition. Research into mountain biking is assisting to plan appropriate opportunities for this growing sport in Warringah, in partnership with users, other Councils and National Parks. Horse Trails have improved through research and partnership with the community, with \$260,000 spent over the last two years to connect routes in Terrey Hills/Duffys Forest area.

Ongoing improvements planned

Continuing initiatives include:

- Continuation of the Narrabeen Lagoon Multi-use Trail (Section 2).
- Implementation of Bike Plan, Pedestrian Access and Mobility Plan, and Multi-use Trails Strategy.
- Planning for mountain biking opportunities: Our recently adopted Mountain Biking Research and Directions paper identified opportunities for new tracks and linkages. This aims to increase the number and quality of authorised trails, and take pressure off bushland areas from unauthorised trail access. The popularity of off road cycling continues to grow, and improving the network of trails depends on further research and agreement of other land owners and managers.



Narrabeen Lagoon Multi-use Trail Stage 1

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Living Spaces

| Goal 3.2 Socially and environmentally responsible urban development – page numbers 70-71 | | | | |
|--|---|-----------------|--|--|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 3.2.2 Ensure housing development is sensitive to the natural and built environments | No indicator The goal is subjective and changes occur over a long period of time | Moderate-High | The progress is based on strategic programs achieved | Compliance Services Natural Environment Parks Reserves and Foreshores Strategic Planning Good Governance |
| 3.2.3 Ensure buildings and landscaping are suitable for their immediate environment and reflect community values | | | | |
| 3.2.5 Ensure ESD principles are incorporated and prioritised in planning strategies/ policies | | | | |
| 3.2.6 Plan appropriately for future developments with a focus on working towards the reduction of emissions and resources consumption, including water, in our suburbs | | | | |

Notable progress and any impediments

It is difficult to quantify achievement against this goal because what counts as 'responsible development' is largely subjective and also such changes only occur over a long period of time. However, Council's planning and development strategies and its policies are designed to guide development in Warringah towards greater social and environmental sustainability.

These include Warringah's new Local Environmental Plan 2011 (LEP) and Development Control Plan 2011. A notable impediment was that the State government excluded lands in Oxford Falls Valley and Belrose North from the new LEP 2011, which leaves Warringah with two operating LEPs at present.

Work commenced on a new Housing Strategy for Warringah. In June 2011 Council resolved to withdraw the draft housing strategy and undertake no further work on it until the new State government confirms Warringah's dwelling target of 10,300 and provides a commitment to funding additional infrastructure to support the new development.

Other initiatives have included:

- Heritage Plan
- Commenced the review of the Warringah Public Spaces Design Guidelines

- Compliance enforcement with building approvals and sediment and erosion control
- Commenced the Dee Why Urban Form Study and Dee Why Masterplan review, including water sensitive urban design. Designs for upgraded stormwater capacity to address flooding risks.
- Masterplanning for North Narrabeen coastline, Collaroy Accessibility Precinct and surf club upgrade
- Research into Cities as Water Supply Catchments
- Coastal Erosion Emergency Action Subplan adopted
- Flood studies of Manly and Narrabeen Lagoons completed
- Protection of Waterways and Riparian Land Policy completed

Ongoing improvements planned



- **Warringah LEP excluded lands:** Council is working with the Department of Planning and Infrastructure to decide the future of these environmentally sensitive lands, and ensure a consistent planning instrument applies across Warringah to assist in streamlining the planning system.
- **Warringah Housing Strategy:** The Metropolitan Plan from the previous State government is under review, with an updated Plan due in 2013. This will detail housing and employment growth targets in Sydney, with housing likely to focus in greenfield sites and metropolitan areas well-served by public transport.
- **Dee Why Town Centre Master Plan Review:** A review of the master plan for Dee Why is underway, encompassing an extended area from Dee Why RSL in the north to Stony Range Reserve in the south. Several design options are under development for discussion with the community in late 2012.



Dee Why Town Centre Masterplan area

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Living Spaces

| Goal 3.3 Safe, convenient and accessible transport options – page numbers 72-75 | | | | |
|--|----------------------------------|-----------------|--|---|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 3.3.1 Create efficient movement networks which support and encourage walking and cycling, integrated with adequate green spaces | Mode of transport – walk & cycle | Moderate |  Over 5 years | Natural Environment Parks Reserves and Foreshores Roads Traffic and Waste Strategic Planning |
| 3.3.2 Integrated land use and transport planning to provide convenient transport services and efficient movement around Warringah resulting in reduced demand for travel in private cars | Mode of transport – car use | Low |  Over 5 years | Corporate Support Good Governance |

Notable progress and any impediments

Census figures show that since 2001 there has been an increase in the proportion of residents using public transport, predominantly buses. Data from the Bureau of Transport Statistics shows a marked increase in active transport such as walking and cycling. There is still however a high reliance on private motor vehicles at about 75% in 2011, though it did drop 2% due to an apparent increase in car pooling (as passenger trips increased from 25% in 2007 to 28% in 2011).

Improvements to trails and connections that have enhanced walking, cycling, horse riding and disabled access is outlined Goal 3.1. Improvements to footpaths and cycleways are guided by our Bike Plan and Pedestrian Access and Mobility Plan (PAMP). In the last 2 years Council has completed 7.1 km of new footpaths, 4.5 km of repaired or renewed footpaths and over 13 km of new cycleways. Collaboration between several services has ensured that these initiatives are coordinated and aligned to enhance access to natural and green spaces. The Strand Dee Why streetscape was upgraded for pedestrian and dining use, linking with the beach, playground and lagoon areas. New green spaces have also been created, linking with pedestrian/cycle networks at Green Street Brookvale, Dumic Place Cromer and the Community Garden at Manly Vale.

A range of programs have contributed to Integrated landuse and transport planning including:

- Warringah Local Environmental Plan 2011 and Development Control Plan 2011
- Masterplan review for Dee Why Town Centre
- Brookvale/Dee Why Major Centre Transport and Accessibility Study
- SHOROC strategies and plans addressing transport – Shaping our Future, and Shaping Our Sustainable Future
- Ongoing discussions with State government on transport and infrastructure needs, including feasibility study for Bus Rapid Transit.
- Environmental Sustainability Strategy

Ongoing improvements planned


- **Local networks:** Continuing with priority works in the Warringah Bike Plan (2010) and Pedestrian Access and Mobility Plan (PAMP) 2011.
- **Warringah Sustainable Transport Strategy:** Currently under preparation, this strategy will complement the SHOROC Regional Strategy and will seek to increase the proportion of travel trips in Warringah that are undertaken by foot, bicycle or public transport.
- **Transport Master Plan:** The NSW Government is developing a new long term Transport Master Plan, due for release in 2012-2013. This will detail how they will tackle the transport priorities for NSW. The four SHOROC councils have agreed that this region's construction priorities are a bus rapid transit system and targeted road upgrades for our major arteries. Council will continue to urge the government to commit funds for immediate construction of this critical infrastructure in the new Masterplan.



Council has recently constructed more than 13 km of new cycleways

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Living Spaces

| Goal 3.4 Well maintained public infrastructure that supports sustainable living – page numbers 76-78 | | | | |
|---|---------------------|-----------------|--|--|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 3.4.1 Provide infrastructure that serves current and future community needs, shares the benefits and costs equitably and supports a healthy and sustainable environment | Asset renewal ratio | High |  | Natural Environment Parks Reserves and Foreshores Roads Traffic and Waste Strategic Planning Warringah Aquatic Centre Corporate Support |

Notable progress and any impediments

Since 2009-2010 Council has increased expenditure on renewing existing assets to ensure that they can continue to provide the same level of service for current and future generations. Our annual expenditure on renewing existing assets is well above the level of depreciation as we catchup on a backlog of renewal works. We are one of the few Councils in NSW that is fully funding our asset renewal program.

- Our current Asset Management Plans were developed in 2010, and a draft policy was placed on exhibition in June 2012.

Other initiatives included:

- Works on our roads, kerbs, paths, retaining walls and stormwater system.
- Repairs and renewals to buildings and to light and heavy plant
- Warringah Aquatic Centre: Roof repairs, Masterplan and water, waste and energy efficiency measures
- Upgrades to various amenities, surf clubs, community centres, childcare centres and Brookvale Oval.
- Narrabeen Lagoon Multi-use Trail and work for other trails, shared paths and cycleways
- New Community Garden, Policy and guideline
- New Green Street Park in Brookvale, including bike racks, playground and water refill stations
- Twelve additional recycling stations installed in parks and reserves.
- Masterplans for North Narrabeen coastline, Collaroy Accessibility Precinct and St Matthews Farm

Ongoing improvements planned

Council is preparing an Asset Management Strategy and new Asset Management Plans, to ensure we sustainably manage our assets and build upon the practices currently in place.



Repairs to the Warringah Aquatic Centre's roof

Living Enterprises

| Goal 4.1 Sustaining a strong local economy that provides employment and training opportunities – page numbers 82-85 | | | | |
|--|---|-----------------|--|---------------------------------------|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 4.1.7 Develop strategies, policies and incentives to attract and encourage the creation and establishment of green jobs and industries | No indicator The goal is subjective and changes occur over a long period of time | Moderate | The progress is based on strategic programs achieved | Strategic Planning Good Governance |

Notable progress and any impediments

Warringah has worked with Pittwater Council to establish local and regional economic development programs. Initiatives included a workshop for 70 businesses on opportunities for local industry growth, including green industries, in partnership with Regional Development Australia. Warringah's Economic Development Plan was adopted in October 2011, to support and promote sustainable economic development for existing and new business, and generate jobs growth. It supports the growth of business hubs and clusters while attracting green, clean and innovative businesses. Additional programs that addressed this goal include: Brookvale Employment Lands Study, Dee Why Town Centre Masterplan review, and ongoing green jobs provided through our bush regeneration program.




Ongoing improvements planned

Warringah Economic Development Plan: Through the Plan we will implement a range of action-based local and regional business activities and partnered initiatives over a four-year timetable.



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Living Organisation

| Goal 5.2 An innovative and progressive organisation – page numbers 98-101 | | | | |
|---|--|-----------------|--|--|
| Strategy | Indicator | Influence level | Progress | Key Services |
| 5.2.6 Set in place strategies and policies aiming to reduce as much as possible carbon emissions and resource consumption and minimise the overall ecological footprint of Council operations | Corporate energy use (aim to reduce) | High |  | Cultural Services Natural Environment |
| | Corporate water use (aim to reduce) | High |  | Roads Traffic & Waste Good Governance |
| | Renewable energy use (aim to increase) | High |  | Corporate Support |

Notable progress and any impediments

Energy and water usage for all Council operations includes Warringah Aquatic Centre, libraries, community and childcare centres and other facilities (but excludes street lights). Water consumption fell over the last two years largely due to action on repairing leaks in several sites. Warringah Aquatic Centre is profiled as a high-achiever in Sydney Water's Best Practice Guidelines for Water Management in Aquatic Leisure Centres (2011), highlighting practices that have reduced its water consumption by 65%.

Our goal is to reduce our energy use – in the last 2 years our total energy use has increased by 0.7%, though has decreased by 1.2% per capita as our population has grown. The increases are primarily from the Dee Why library, Warringah Aquatic Centre and Cromer Depot. Some 9,000 street lights, over which we have no control, account for over half Council's energy bill. In partnership with other councils we have influenced Ausgrid to adopt more energy efficient technologies for streetlights in future, to reduce their operating cost and greenhouse emissions.

The percentage of GreenPower that Council purchases has steadily grown to 9% of all energy use. In addition, Council generates its own solar power from over 50 kW of photovoltaic panels at Brookvale Oval and Children's Centre, several community centres, Forestville Library and South Curl Curl surf club. It is also our standard practice to install solar hot water systems for any upgrades or new buildings.

Playing fields were upgraded to improve sustainability, water efficiency, landscaping, lighting or multi-use pathways, this includes Cromer Field No. 1, Nolans Reserve at North Manly and Weldon Oval at Curl Curl.

Council's Water and Energy Savings Action Plan has driven efficiencies across our operations. This Plan, coupled with Council's ongoing strategic approach to environmental management, led to the development and recent adoption of Warringah's Environmental Sustainability Strategy.

A new Sustainable Events Policy now directs all of our events and festivals. It guides better practice in terms of waste, water and energy use during events, and also makes a difference in our choices for purchasing, transport, safety, and potential impacts on neighbours and habitats. It is also a guide for other operators who are running events in Warringah.

Some of our innovative projects receiving industry recognition include:

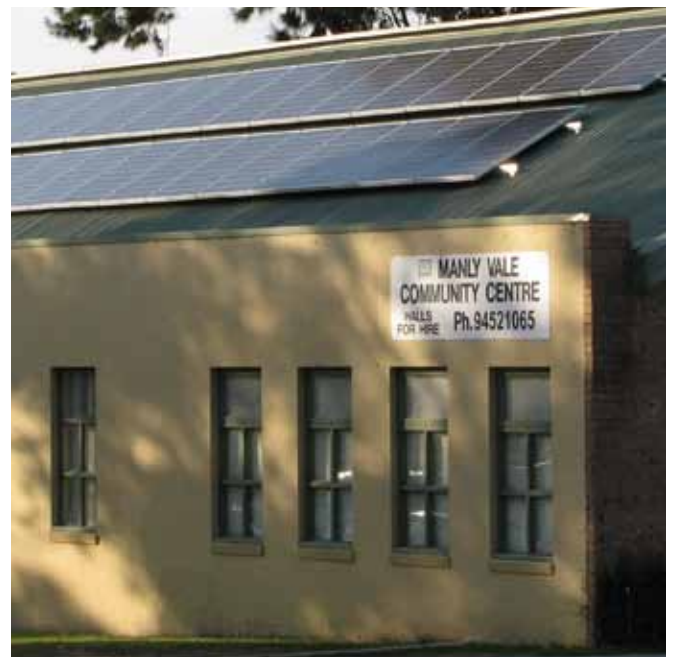
- 2010 Excellence in the Environment Waste Avoidance Award – highly commended – SHOROC e-waste ban and campaign.
- 2011 Sydney Greenspace Award – winner - Stage 1 Narrabeen Lagoon Multi-use Trail for environmental sensitivity, quality design and accessibility.
- 2011 Sustainable Procurement Award – winner - Soy Diesel initiative for Council's diesel fleet, reducing greenhouse gas emissions by 64 tonnes per year.
- 2012 Environmental Enhancement Initiative – Engineering Excellence Award – highly commended – Dee Why environmentally sensitive bioswale (pond and riffle by Dee Why Lagoon).

Further achievements are outlined on page 9.

Ongoing improvements planned

Continuing initiatives include:

- Implementing the Environmental Sustainability Strategy, adopted in June 2012. It demonstrates our commitment in taking a lead role in sustainability and sets ambitious targets. See page 21 for more.
- Updating and implementing the Water and Energy Savings Action Plan for Council operations. This includes funding support that has been offered for solar panels at surf clubs.
- Implementation of Sustainable Events Policy and development of internal procedures.
- Active member of the Street Light Improvement Program to encourage greater use of more efficient and more durable technologies such as LEDs, light emitting plasma and adaptive lighting controls. Trials of LEDs at North Ryde have had encouraging results.



Solar panels at Manly Vale Community Centre