Cooks River Sustainability Initiative

Planning Munni Street Subcatchment

NSW Environmental TRUST

COOKS RIVER FORESHORES Working Group

CITY OF SYDNEY

OurRiver
cooks river sustainability initiative

Contents

Front Cover: “The Junction”, Newtown c. 1912, SRC8309, City of Sydney Archives.

Introduction - The Cooks River Sustainability Initiative

The Cooks River Sustainability Initiative is about communities, businesses and councils working together in a new way for long term improvement of the Cooks River Catchment.

Partnership

The Cooks River Sustainability Initiative is a partnership between eight councils within the Cooks River Catchment which are Ashfield, Bankstown, Canterbury, City of Sydney, Hurstville, Marrickville, Rockdale and Strathfield Councils.

The goals of the Initiative are to:

- Improve the quality of water that flows to the Cooks River
- Create new relationships within and between councils and the community that will provide ongoing long term benefits for the Cooks River
- Develop a Vision and Action Plan for six local subcatchments

The Cooks River catchment (area outlined in black) is approximately 100 square kilometres and is made up of many smaller subcatchments.

The Cooks River Sustainability Initiative is currently working on six subcatchments, named Ashbury, EC East, Munni Street, Rookwood Road, Strathfield South and Upper Wolli Creek.

Why is this Initiative unique?

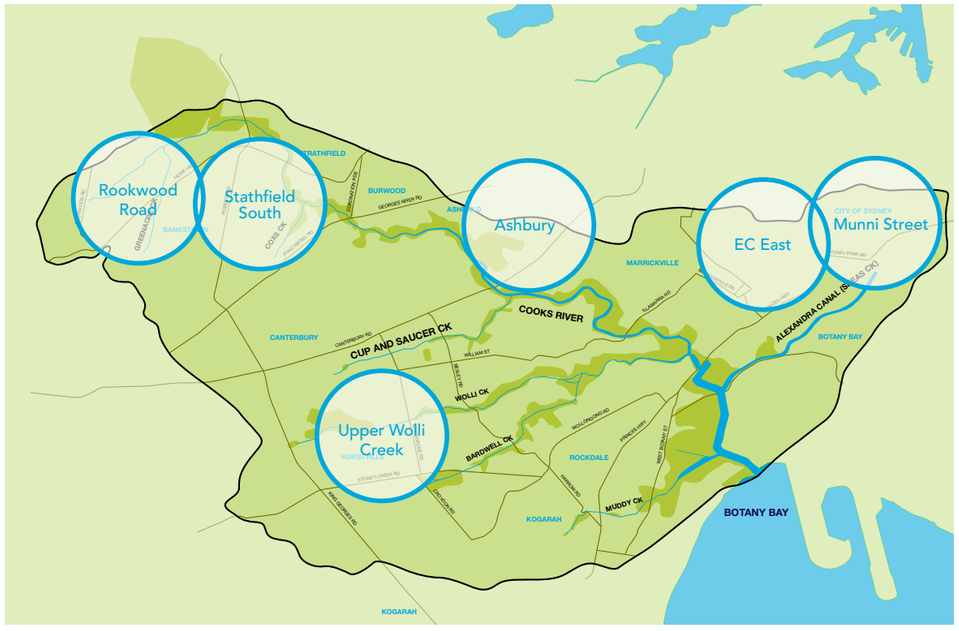
The Cooks River Sustainability Initiative acknowledges and builds on previous work and studies completed by other government agencies and community groups. It is however, taking a new approach to improving the long term health of the Cooks River. This includes:

- Planning at a neighbourhood or subcatchment scale, working in partnership with local people to ensure solutions represent local ideas, knowledge and values;
- Undertaking detailed social, physical and organisational research to ensure that the solutions and strategies developed are appropriate for the subcatchment and its community.

How is this Initiative being funded?

The Initiative is funded from 2007 to 2010 through the NSW Environmental Trust's Urban Sustainability Program.

Photo by Tanja Pokrajac



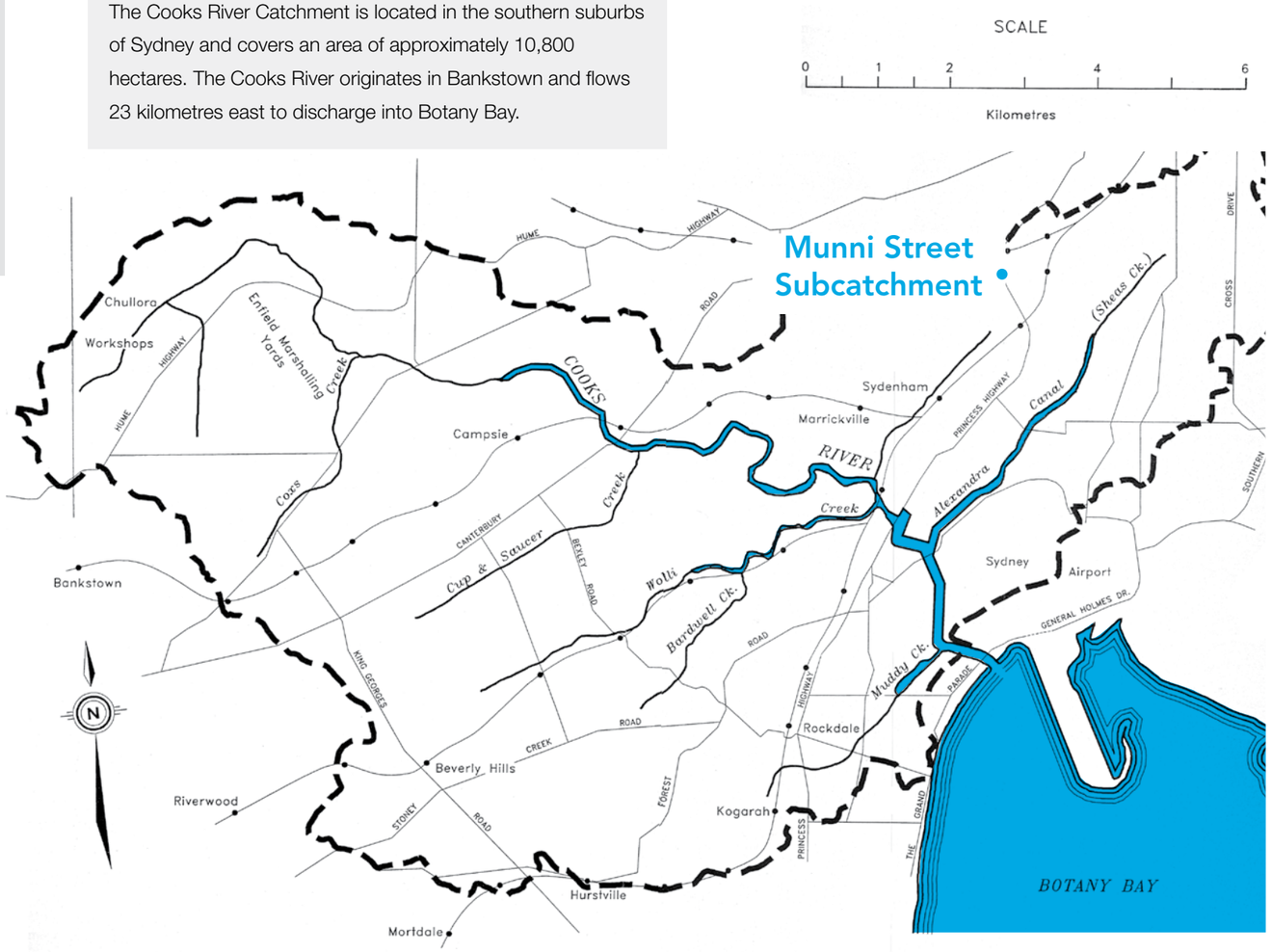
The Cooks River Catchment

There are 8 tributaries to Cooks River:

- Wolli Creek
- Bardwell Creek
- Muddy Creek
- Sheas Creek/ Alexandra Canal
- Cup and Saucer Creek
- Coxs Creek
- Fresh Water Creek

Cooks River Catchment

The Cooks River Catchment is located in the southern suburbs of Sydney and covers an area of approximately 10,800 hectares. The Cooks River originates in Bankstown and flows 23 kilometres east to discharge into Botany Bay.



Water Quality

Cooks River is regarded as one of the most polluted urban rivers in Australia. Discharges of sediments and gross pollutants combined with sewage overflows are significant contributors to the degradation of the river.

Various studies since the 1980s have identified that the river contains high levels of faecal contaminants, elevated concentrations of heavy metals (lead, zinc, mercury, chromium, silver and copper), high levels of nutrients resulting in potential for eutrophication or algal growth and highly contaminated sediments. Water quality with respect to primary and secondary contact recreation is considered poor.

Impacts on Estuarine Environments

There are over 150 sewer overflow points that regularly discharge sewage into the Cooks River after rainfall events. Stormwater runoff and sewer overflows have a negative impact on the River. Pollutants in sewage and stormwater accumulate in the river bed and affect organisms that live in the mud and the animals that eat them. Sediments in stormwater smother water plants and destroy the habitat of riverine animals.

Before European Settlement

Prior to the arrival of the First Fleet in 1788, it is estimated that 1500 Aborigines lived in the Port Jackson/Botany Bay area. The Cadigal and Wangal people had successfully lived along the Cooks River for thousands of years. Over this time, an enormous body of knowledge and special skills were developed to use the life sustaining resources that the Cook's River and the surrounding lands provided.

The Cadigal people spoke the coastal Eora language and are often referred to as the Eora people. Other clans of the Sydney region who occupied different parts of Eora land included the Wangal, the Cammeraygal and the Bidjigal.

There were two major groups to the north and south of the Eora lands; they were the D'harawal and Darug.

Cadigal history, like the history of many Aboriginal clans, is based on oral traditions handed down by many generations over millennia. However, through the invasion, the Cadigal and Wangal nations were dispersed, dispossessed and alienated from their traditional lands.

This information is taken directly from the Cadigal-Wangal Website 2004 http://www.marrickville.nsw.gov.au/cadigalwangal/main.htm

Urban Water Management

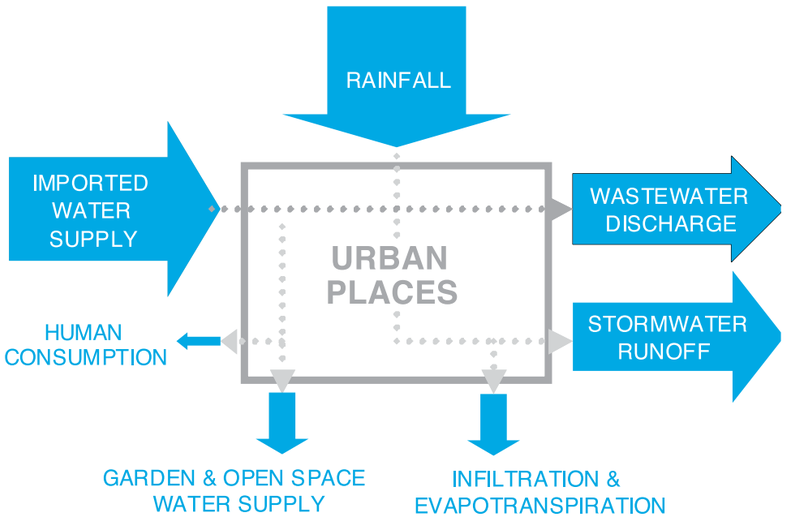
The Cooks River Sustainability Initiative is funded by the NSW Department of Environment and Climate Change Urban Sustainability Grants Program. It aims to plan for managing water sustainably in urban environments such as the Munni Street Subcatchment. The project addresses three problems in conventional urban water management:

1. Technical experts have traditionally been responsible for developing solutions to complex urban water problems. Other thinkers are also needed, such as social scientists and ecologists.
2. The people affected by urban water problems, including residents, businesses, community groups and government departments need to work more closely to identify solutions.
3. Plans are usually designed for whole river catchments and can miss out on practical “locally grown” solutions to urban water problems.

Sustainable urban water management means:

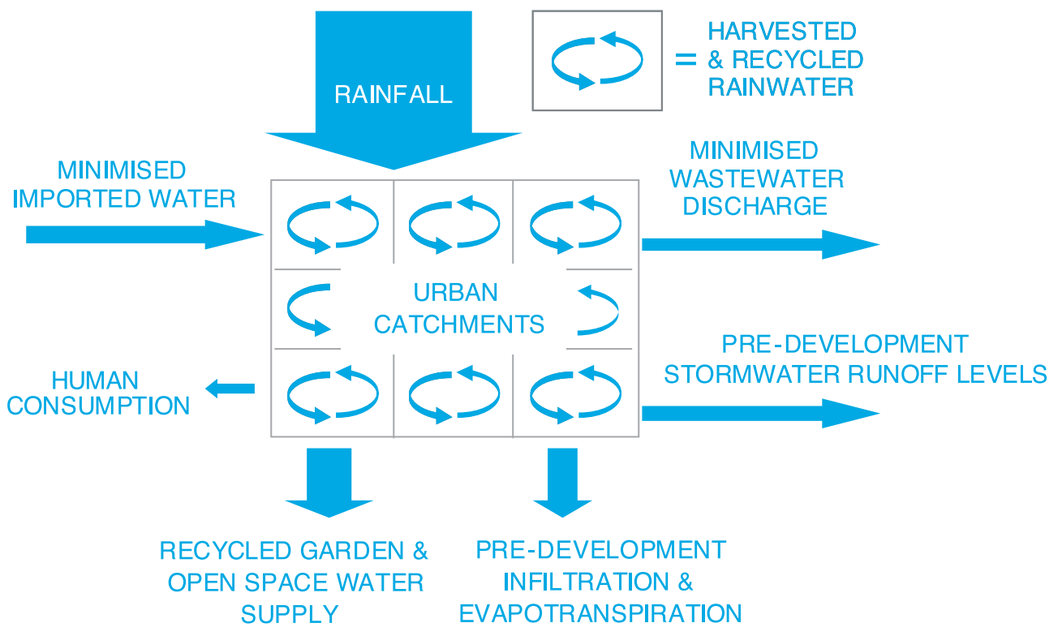
- Reducing the amount of wastewater leaving a catchment that may cause pollution in other areas (e.g. ocean outfalls)
- Reducing the reliance on drinking quality (potable) water brought in from outside the catchment
- Using water appropriately i.e. using potable water for consumption only – not for watering the garden or flushing the toilet
- Reducing the impact of stormwater on waterways

Conventional Urban Water Management



Traditionally, the main goal is flood protection

Sustainable Urban Water Management



Stormwater and wastewater are valued as a resource

The Cooks River Sustainability Initiative is closely aligned to, and will contribute to the objectives of the Sustainable Sydney 2030 Strategic Plan.

Sustainable Sydney 2030 is a vision for the sustainable development of the City to 2030 and beyond. Sustainable development is not just about the physical environment, but about the economy, society and cultures as well, and how addressing each, with bold ideas and good governance, will result in better outcomes for current and future communities.

Sustainable Sydney 2030 has a vision of a Green, Global, Connected City.

GREEN with a minimal environmental impact, green with trees, parks, gardens and linked open spaces, green by example and green by reputation.

GLOBAL in economic orientation, global in links and knowledge exchange, global and open-minded in outlook and attitude.

CONNECTED physically by walking, cycling and high quality public transport, connected 'virtually' by world–class telecommunications, connected to communities through a sense of belonging and social well being, and connected to other spheres of government and to those with an interest in the City.

The 2030 Strategy's Five Big Moves to Transform the City include the following plans relevant to the Munni Street Subcatchment area:

- Public transport corridors from the city to:
  - Green Square and Rosebery
  - King Street, Newtown, and
  - A cross regional corridor connecting Green Square to the east and inner west
- Green Corridors:
  - From Glebe to Rosebery - connecting the Harbour to Rosebery and linking a number of key landmarks along the way.
  - A green corridor along the tributary channels of the Alexandra Canal.
  - King Street to be developed as one of ten Activity Hubs to act as a focus for the City's village communities and transport.

Transformative development and sustainable renewal for:

- Ashmore
- Eveleigh Railway Workshops
- Alexandra Canal

Targets, objectives and actions relevant to water planning in the Sustainable Sydney 2030 Strategic Plan include:

Target 2: By 2030, the City will have the capacity to meet up to 100% of its energy demand and 10% of its water supply.

Objective 2.1: Increase the capacity for local energy generation and water supply within City boundaries.

Action 2.1.1 Plan for green infrastructure in the City.

Action 2.1.3 Increase the use of recycled water. As part of this action, a target has been set in the City of Sydney's Environment Management Plan to to have zero increase in mains water used by Council and across the local government area by 2015, based on 2006 consumption levels and a target of recycling 25% of stormwater generated in the City of Sydney catchment.

Objective 2.2: Reduce waste generation and stormwater pollutant loads to the catchment.

Action 2.2.1 Renew stormwater infrastructure by installing Green Links in key parts of the catchment.

Action 2.2.2 Develope an integrated waste management strategy with Inner Sydney Councils and identify sites for associated processing infrastructure.

A future water vision for the Munni Street Subcatchment will be developed with the community as part of the Cooks River Sustainability Initiative. The vision will complement and contribute to the Sustainable Sydney 2030 Strategic Plan.

For more information about Sustainable Sydney 2030 visit www.cityofsydney.nsw.gov.au/2030/

Munni Street - What Have We Done So Far?

What have we done so far?

- Gained a good understanding of the demographics in Munni Street Subcatchment
- Surveyed residents about their attitudes, knowledge and current behavior in relation to water conservation and use.
- Collected and analysed information about the physical environment in the Subcatchment
- Calculated the water budget for the Subcatchment – this is the amount of water coming in and out of the area (see page 6)
- Involved people from many disciplines in identifying problems and solutions – engineers, social planners, environmental scientists, educators, parks and recreation managers
- Identified potential on-ground water solutions

What is happening with water now?

In 2009:

- 89% of drinking quality water is used for purposes other than drinking and ends up in the ocean as wastewater
- 77 % of rainwater runs directly in to the Cooks River (via the Munni Street Channel and Alexandra Canal). This happens because 78 % of Munni Street Subcatchment is impervious (sealed surfaces that do not allow water to soak in)
- Rainwater runoff from the roofs and streets of Munni Street Subcatchment carries sediments and other pollution to the river
- The level of pollution in the Cooks River is so high that it cannot be used for swimming or fishing 75%-100% of the time
- Alexandra Canal is recognised as one of the most polluted waterways in Australia
- Sydney's dam storage water supply can not be guaranteed in the long term.

What are we doing now?

Residents and other stakeholders are being asked to imagine what water management will look like in Munni Street Subcatchment in 2030. The results will contribute to a community water vision which will be the basis for planning at community forums to be held in May 2009.

Why a community water vision?

In the past the people living and working in the areas affected by water plans have not always been included in the planning process. This has meant that plans have not always been appropriate and/or not supported or fully understood by the main water users and decision-makers.

Including the community water vision in the planning for Munni Street Subcatchment will make use of local knowledge and represent locally generated ideas. This will produce a plan that is tailor-made to local conditions and therefore be more widely accepted and adopted.

How to use this booklet

This booklet presents information about the Munni Street Subcatchment relevant to water planning. To help you take part in the vision and planning sessions think ahead to the year 2030 and as you read this booklet imagine how things may have changed by then. Please make notes of your ideas in this booklet. Some specific questions you might like to think about are included on relevant pages throughout the booklet. These and any other questions you have can be discussed during the vision session.

Munni Street Subcatchment Water Cycle - Now

This page presents an overview of the water cycle in the Munni Street Subcatchment based on data from the Bureau of Meteorology and Sydney Water and stormwater modelling.

The water cycle highlights the extent of potable (drinking quality) water savings that can be made by harvesting and using rainwater, stormwater and wastewater. Stormwater and wastewater reuse also provides an opportunity to reduce the velocity of runoff and to reduce pollutant loads from these sources.

Rainfall
2420 ML/yr
100%

Potable water
1200 ML/yr
100%

Consumed by residents 12 ML/yr
1%

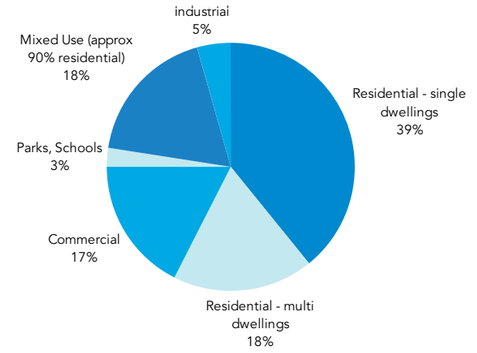
Wastewater discharge
1068 ML/yr
89%

Garden and open space watering
120 ML/yr
10%

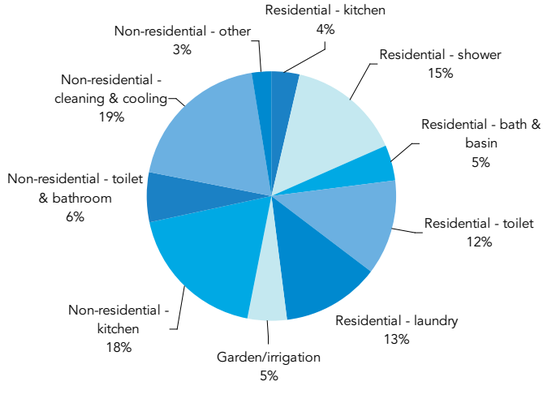
Stormwater infiltration and evapotranspiration
560 ML/yr
23%

Stormwater runoff to Cooks River
1860 ML/yr
77%

Do you think the current water cycle is sustainable? Why or why not?



Consumption by sector



End use consumption

Munni Street Subcatchment Water Cycle – 2030?

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Rainfall
2420 ML/yr

100%

Potable water

? ML/yr

?%

Consumed by residents ?ML/yr

?%

Wastewater discharge
? ML/yr
? %

Garden and open space watering
? ML/yr

Stormwater infiltration and evapotranspiration
? ML/yr

? %

Stormwater runoff to Cooks River
? ML/yr

? %

What should the water cycle look like in 2030?

Munni Street Subcatchment history since European settlement

Year	What Happened
To 1788:	Cadigal people successfully lived in the area for thousands of years
1790s	Nicholas Devine was granted 80 acres in the Erskineville area in recognition of services as a convict overseer.
1830s	Bernard Rochford, Nicholas Devine's servant who had inherited the land, subdivided the estate.
1843	Cooks River Road (now King St / Princes Hwy Newtown) Trust was formed by a consortium of landowners who collected tolls for the next thirty years.
1850s	Brickworks began operating in Alexandria and St Peters and grew into a major industry. By 1890 1.5 million bricks were made in the Alexandria area every day. Alexandria Municipal Council formed from part of the area formerly in Waterloo Municipal Council (itself formed in 1860 out of Redfern Council).
1872	Macdonaldtown Municipal Council was incorporated. Its name was changed to Erskineville in 1893.
1870s	Waterloo and Alexandria areas were known for their Chinese market gardens, and also as sites for 'noxious trades' such as tanning and wool scouring. Eveleigh Railway Workshops began operation and became the largest heavy industry enterprise in Australia.
1887	Excavation of the bed of Shea's Creek commenced to form the Alexandra Canal. Erskineville had the highest mortality of any suburb in NSW, because of poor drainage and sanitation.
1890s	Munni Street Channel is constructed as one of the first in Sydney to provide a separate system for sewage and stormwater.
1938	O'Riordan Street reconstructed as a full-width road and "Green Square" was created at the junction with Botany Road.
1943	Alexandria Council's 75th anniversary book described the area as "the Birmingham of Australia" due to the number of manufacturing firms (an estimated 550 companies). Only one Chinese market garden remained.
1950s	Brickworks operation ceased and the clay pits at Sydney Park were then used as garbage landfill sites. City of South Sydney was formed.
1970s	Green Bans campaign - building unions and community united to preserve open space in Erskineville.
1989	Eveleigh Railway Workshops ceased operations.
1990s	Planning begins to establish Australia Technology Park on the Eveleigh Railway Workshops site.
1996	Work began on Sydney Park following many years of remediation at the site.
2002	Construction commenced on the Transgrid tunnel under Sydney Park.
2004	South Sydney Council amalgamated with City of Sydney.
2008	Construction for the Sydney Water desalinisation pipeline commences near Sydney Park.

Images: Top, then left to right – 1."The Junction", Newtown c. 1912, SRC8309, City of Sydney Archives, 2. Joseph Sargeant Playground, 60 Prospect Street, Erskineville, 1960s, SRC10300, City of Sydney Archives, 3. Flooding in Erskineville - Bridge Street, SRC13427, City of Sydney Archives.

References

City of Sydney City Archivist 25 November 2008, Pers. Comm.

Sharpe, Alan 1999, *Pictorial History Newtown*, Kingsclear Books, Alexandria.

Australian Canal Society, viewed 13 January 2009, http://www.auscanal.org.au/AustralianCanals.php.

ASPECT Sydney for City of Sydney 2006, *Sydney Park Detailed Master Plan analysis*, ASPECT Sydney, Sydney.

Land Use

Subcatchment size: 217 Ha
No. of residential dwellings: 7,154 approx.

Residential Dwelling Types

7%
Separate Houses

18%
1 storey semi, row,
terrace or townhouse

27%
2 or more storey semi, row,
terrace or townhouse

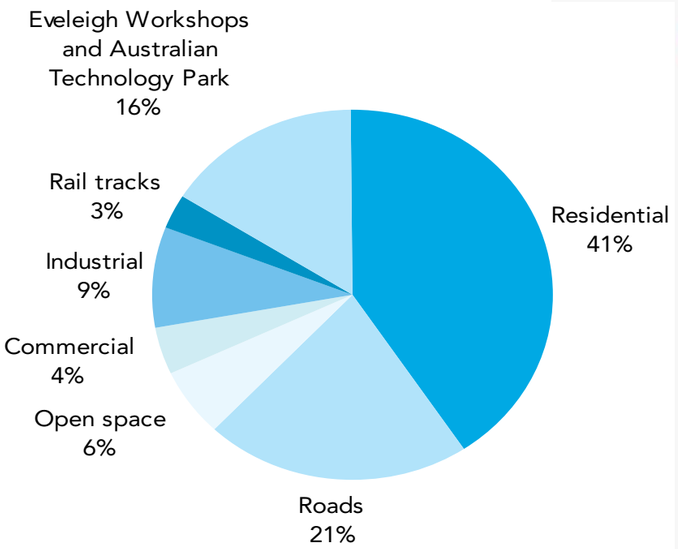
4%
1 or 2 storey block –
flat, unit, apartment

11%
3 storey block –
flat, unit, apartment

32%
4 storey or more block –
flat, unit, apartment

1%
Flat, unit, apartment
attached to shop

* ABS 2006 Census Data



Land use in Munni Street Subcatchment

Pollutants and Hard Surfaces

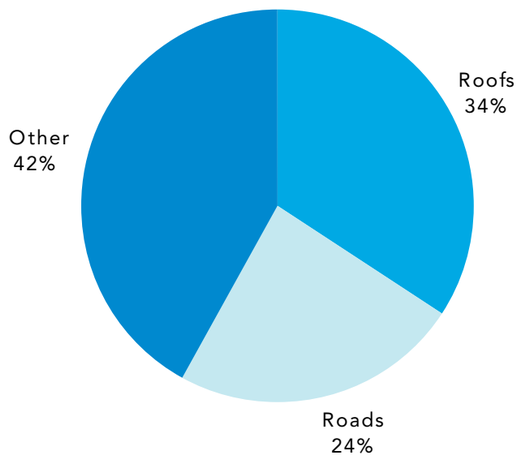
Pollution and surface types in the Munni Street Subcatchment

Approximately 78% of the Munni Street Subcatchment is made up of hard or paved surfaces including roads, pavements, roofs, and railway tracks. These hard surfaces generate approximately 95% of pollutants found in stormwater that flows from the Subcatchment into the Cooks River.

The table below shows the estimated* amounts of pollutants currently found in stormwater in the Subcatchment. The Best Practice Stormwater Targets shown in the table are draft targets set by the NSW Government for new development areas. Based on these targets gross pollutants for example, should be reduced by 90% from the current level of 43,400 kilograms per year to 4,340 kilograms per year.

	Current Estimated Average Annual Pollutant Loads in Munni Street Subtachment (kg/yr)	Best Practice Stormwater Targets (% reduction)	Target Pollutant Loads for Munni Street Subcatchment (kg/yr)
Gross Pollutants	43,400	90	4,340
Total Suspended Solids*	477,000	85	71,550
Total Phosphorus	908	65	318
Total Nitrogen	6,220	45	3,421

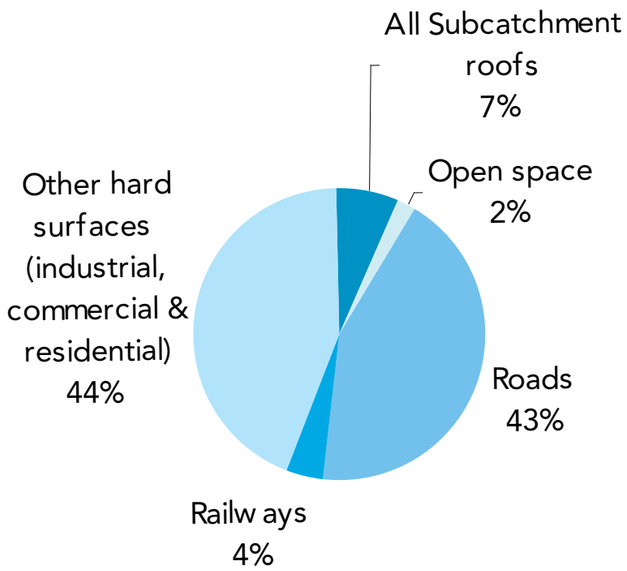
* Estimated with MUSIC modelling software



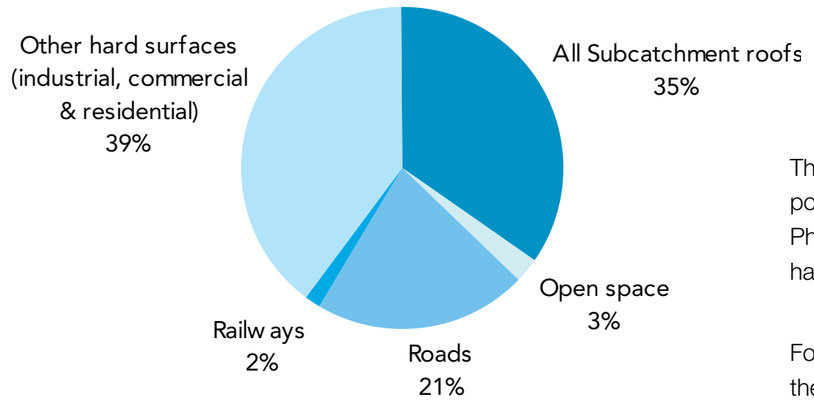
Types of hard surfaces in Munni Street Subcatchment

Water Quality Indicators	What is it?	What are their impacts?
Gross Solids	• Litter • Coarse sediments • Organic matter	• Reduce stormwater drainage capacity • Impact on visual amenity • Impact on aquatic habitats • Impact on water quality indicators such as oxygen demand, hydrocarbons and metals
Total Nitrogen Total Phosphorus	Nutrients from natural and non-natural sources including: • Atmospheric deposition • Soil particles • Human and animal faeces • Plant matter • Fertilizers • Vehicle exhaust	• Nutrients promote growth of aquatic plant life. In large concentrations they can produce algal blooms on the water surface. • Algae are microscopic plants which occur naturally in water bodies. Increased nutrients promote algal growth resulting in a build up of toxins. Toxic algal blooms cause the closure of fisheries, water farming industries and public beaches.
Suspended Solids	• Soil particles • Airborne particles • Sediment from erosion and land degradation • Leaf litter	• Reduce the penetration of light through water impacting on the respiration of aquatic plants • Phosphorus, heavy metals and organic chemicals utilise sediment as the medium for transportation in urban runoff
Lead	Trace metals derived from petrol additive, hydrocarbons, paint	Impacts of metals in water bodies can vary widely. Impacts are affected by complex interactions with biophysical parameters such as pH, dissolved oxygen and temperature.
Zinc	Trace metals derived from vehicle wear, pesticides	
Hydrocarbons	• Mineral oils • Petrochemicals	• Impact on visual amenity • Impact on chemical oxygen demand
Chemical Oxygen Demand	Measure of oxygen demand from chemical oxidation of organic and inorganic material	• Used as an indicator of “general health” of a water body. Organic material uses oxygen in biodegradation and chemical oxidation. • High oxygen demand will limit capacity to support vibrant ecosystems.
Biological Oxygen Demand	Measure of oxygen demand from biodegradation and oxidation of organic material.	
Total Organic Carbon	Total amount of organic material as measured in carbon	Organic matter can impact on: • Biogeochemical processes • Impacts on nutrient cycling • Biological availability • Chemical transport and interactions
Organic Matter	• Leaves • Grass clippings • Human and animal faeces	

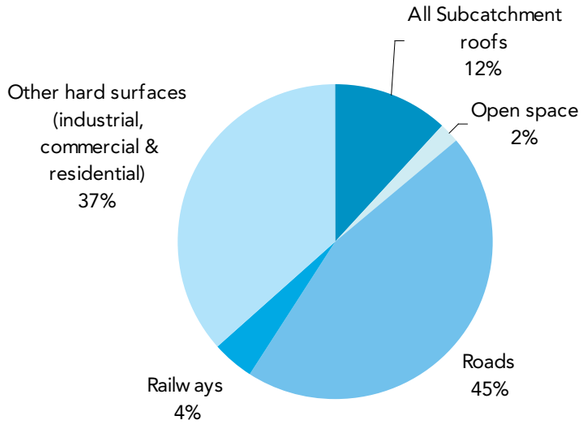
Pollutants and Hard Surfaces



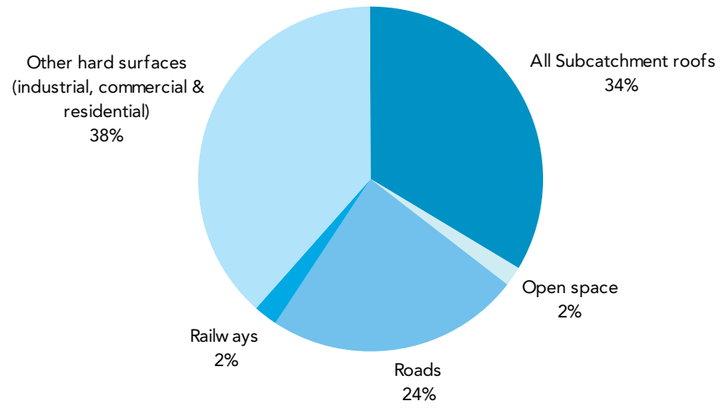
Total Suspended Solids



Total Nitrogen



Total Phosphorous



Gross Pollutants

The pie charts on this page show the amount of pollution (Total Suspended Solids, Total Nitrogen, Total Phosphorous and Gross Pollutants) generated by each hard surface type in Munni Street Subcatchment.

For example, 35% of Total Nitrogen that is washed from the Subcatchment into the Cooks River comes from roofs, followed by 21% from roads.

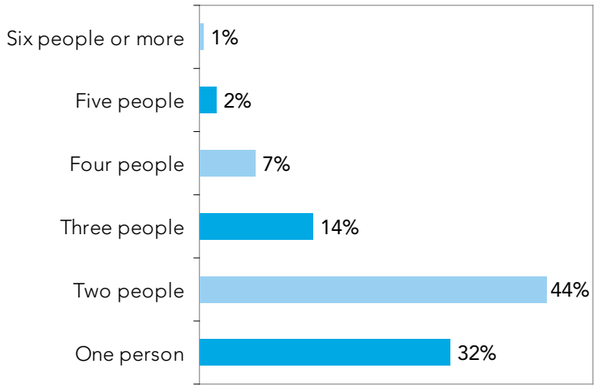
The amount of pollution coming from these hard surfaces could be reduced by collecting and treating stormwater. This water could then be re-used where appropriate thereby reducing the need for drinking quality water from Sydney's main water supply.

Social Characteristics

Key Statistics

- Population – 14,484 residents
- Origin – 32% born overseas; United Kingdom (6%) followed by New Zealand 4%
- Languages spoken at home – 17% non-English, no non-English language is spoken at home by more than 1% of the Subcatchment population.
- Religion – 42% Christian, 32% no religion
- Travel to work - car (44%), train (28%), walk (12%), buses (9%), bicycle, motorbike or a scooter (5%).

Household Types

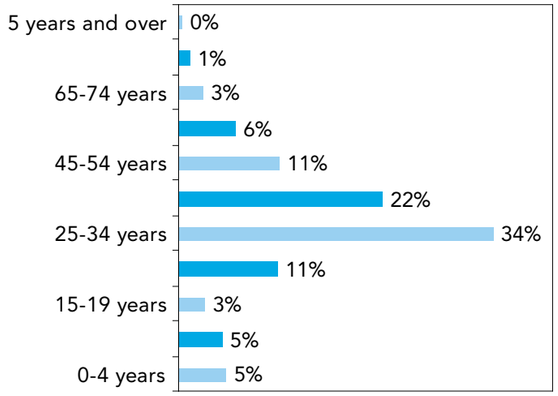


- 63% of residents have never been married
- 59% of families are couples with no children
- 21% of families are couples with children under 15

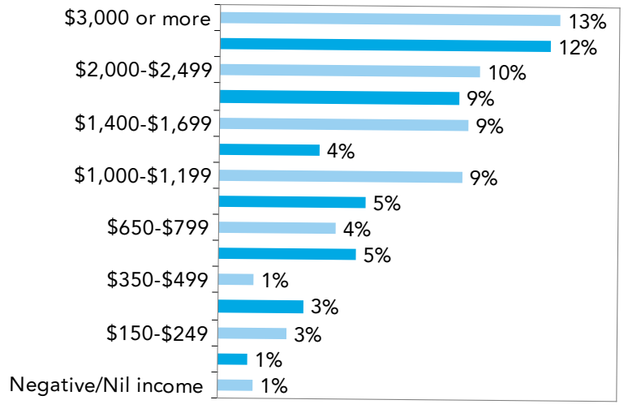
Education

- Current attendance (2006): 32% of residents
- Non-school qualification (2006): 67% of residents (over 15yrs) have a non-school qualification.
- 35% have a Bachelor degree or higher
- 17% have an Advanced Diploma, Diploma or Certificate

Age Distribution



Weekly Household Income

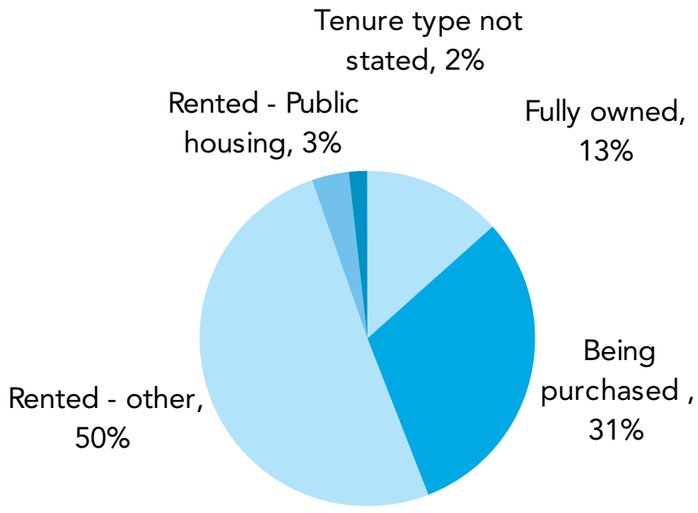


Employment

Of the active labour force (1,208 residents):

- 60% are employed full time
- 26% are employed part time
- 6% are unemployed

Photo: http://www.flickr.com/photos/ryanscottdavis/



Household Tenure

All data sourced from the Australian Bureau of Statistics 2006 Census

Munni Street Community Water Survey

Who answered the survey?

Total responses: 972 (14% of households)

Gender	60% female 40% male
Birthplace	67% Australia 6% United Kingdom
Language	96% speak English at home
Education	66% University qualification 12% TAFE or trade qualification
Age	34% 30-39years 25% 40-49 years 16% 20-29 years 16% 50-59 years
Household Type	35% Couple with no children at home 26% Single person living alone 20% Couple with children at home 12% Share accommodation with non-family
Tenure Type	41% Being purchased 30% Rented – other 27% Fully owned 3% Rented – public housing
Dwelling	51% Semi-detached, terrace or townhouse 35% Flat, unit or apartment 15% Separate house
Time in Current Residence	25% 0-1 year 56% 1-10 years 20% 10 or more years
Household weekly income before tax	68% $1,000 or more 20% $1-$799

Knowledge of urban water systems

1. In my council area, the rainwater in the street drains normally goes:

-54% to the nearest waterway

-37% to the sewerage system

2. From the list below, which would normally end up in the street drains?

Water From:	% Responses	
Driveways, footpaths	87	Correct
Rainwater from the roof	80	Correct
Other paved areas	81	Correct
Water from the garden	74	Correct
The washing machine	17	Incorrect
The kitchen sink	17	Incorrect
The shower	16	Incorrect
The toilet	10	Incorrect

3. On average, how many litres of water does a typical household use per day?

-64% underestimated daily water use

-18% chose the correct range (300-400L per day in 07/08)

-18% overestimated daily water use

Behaviour

Of 972 people that responded to the survey:

1. Rainwater Tanks

-58 people answered this question indicating that they currently use water from their rainwater tank.

-93% use it for the garden, 36% for washing the car and 33% for toilet flushing.

2. Greywater Systems

-277 people answered this question indicating that they currently reuse greywater.

-89% use it for the garden, 34% for toilet flushing, 13% for washing the car.

-11 households have a greywater and/or treatment system installed.

3. Water Saving Devices

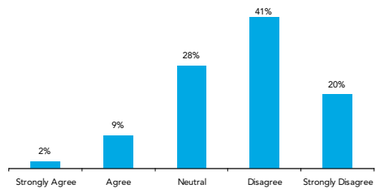
-82% have water saving devices such as water saving showerheads, tap aerators and toilet flush water savers.

Receptivity to using rain and recycled water

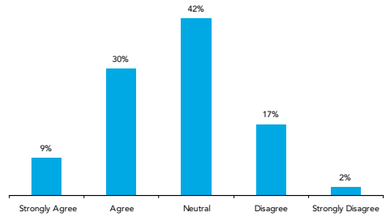
The percentage of people who would consider using rainwater and greywater and how they would use it.

	Rainwater	Greywater
Watering Garden	93	88
Washing Car	72	62
Flushing Toilet	83	84
Washing Clothes	64	18
Showering	46	5
Other	3	2
Would not use	1	2

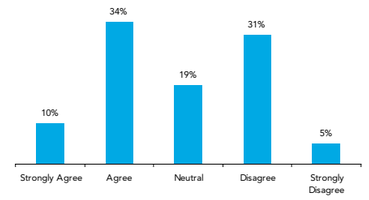
Attitudes



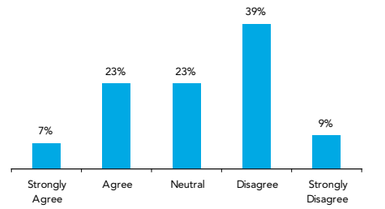
a) 'Jobs are more important than the environment'



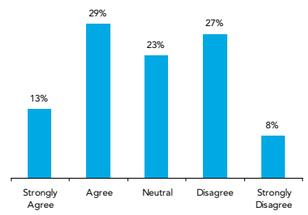
b) 'Access to a healthy natural environment is more important than access to community facilities'



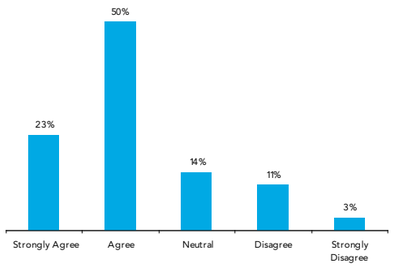
c) 'My daily activities have little negative impact on the waterway environment'



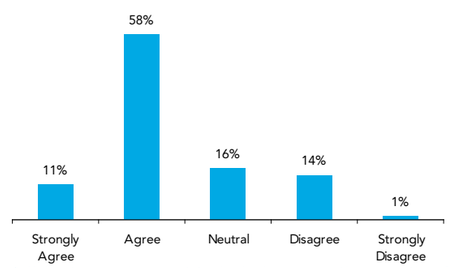
d) 'Government agencies should have the main responsibility for the waterway environment rather than the individual.'



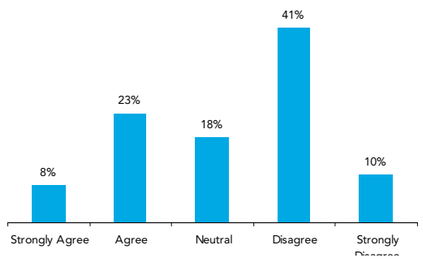
e) 'We should aim for the same waterway conditions as before the Europeans arrived over 200 years ago.'



f) 'I would reduce my shower time by half to save limited water resources.'



g) 'Most people want to help improve the health of the waterway environment.'



h) 'Laws are more effective than education for protecting the waterway environment.'

Authorities, land users and community groups

City of Sydney

The Munni Street Subcatchment falls within the City of Sydney Local Government Area. The City manages roads, parks, playgrounds and open space in the Subcatchment. It is also responsible for planning and services such as waste collection.

Community housing organisations

A number of community housing organisations have properties in the Subcatchment.

Housing NSW

Provide social housing options for approximately 3% of residents (Australian Bureau of Statistics Census 2006).

Newtown Precinct Business Association

Provides a unified representation for all businesses in the Newtown Precinct.

Railcorp

Railcorp is responsible for Erskineville, McDonaldtown and Newtown train stations and associated rail infrastructure.

Redfern Waterloo Authority

The Authority has responsibility for revitalising the Redfern-Waterloo area through urban renewal. This includes the Eveleigh Railway Workshops and Australian Technology Park located in the north of the Subcatchment.

Places of worship

Anglican Church – Rochford Street, Erskinville

Catholic Church – Swanson Street, Erskineville

Holy Trinity – Rochford Street, Erskineville

Our Lady of Perputual Succour – Swanson Street, Erskineville

St Lazarus – Cnr Renwick & Dibbs Street, Alexandria

Uniting Church of Australia – Erskineville Road, Newtown

Vajrayan Institute (Tibetan/Australian) – Linthorpe Street, Newtown

Wesley Mission – King Street, Newtown

Roads and Traffic Authority (RTA)

The RTA is jointly responsible for the operation and maintenance of Erskineville Road/Swanson Street, Euston Road, King Street/Princes Highway and Sydney Park Road.

Schools

Erskineville Public School, Newtown Public School, Newtown High School of Performing Arts and St Marys operate in the Subcatchment.

Sydney Water

Owns and is responsible for potable water and wastewater infrastructure and supply of potable water within the Subcatchment.

Transgrid

Owns and operates high voltage electricity transmission network throughout the Subcatchment and the state. This includes the Metrogrid cable which runs beneath the Subcatchment.

Parks, Playgrounds and Reserves	
Erskineville Oval 3.1 ha	Major sporting field used for rugby league fixtures.
Harry Noble Reserve 2.0 ha	Playground and open grassed areas popular with dog owners
Sydney Park 3.7 ha	3.7 ha of this 40ha park falls within the Munni Street Subcatchment including part of Alan Davidson Oval. The oval is used for cricket and Australian rules football.
Hollis Park 0.47 ha	Historic neighbourhood park that includes a fenced playground.
Green Bans Park 0.3 ha	So-named due to lobbying by local residents to save a small recreation area in a suburb with little green space.
Lillian Fowler Reserve 0.23 ha	Enclosed playground with natural shade.
Renwick Street Playground 0.04 ha	Local playground with natural shade.
South Sydney Rotary Park 0.70 ha	Includes a community playground.
Burren Street Reserve 0.04 ha	Enclosed playground.
Ethel Street Playground 0.02 ha	Small local playground.
Flora and Knight Reserve 0.12 ha	Small local playground with natural shade.
Harold Street Reserve (Isabella Hills Rest Area) 0.16 ha	Local playground with natural shade.
Kirsova 2 Playground 0.12 ha	Enclosed playground with natural shade.
Pinkstone Playground 0.02 ha	Playground with natural shade.
Rochford Street Playground 0.07 ha	Local playground.

Sustainable Urban Water Management in Munni Street Subcatchment

The Cooks River Sustainability Initiative planning process is an opportunity to build on existing and proposed Sustainable Urban Water Management initiatives in the Munni Street Subcatchment.

Stormwater Quality Improvement and Reuse Treatment Scheme (S.Q.I.R.T.S)

S.Q.I.R.T.S at Solander Park integrates innovative stormwater solutions with landscape design and incorporates sustainable principles to create healthier environments.

This scheme aims to address:

- flood mitigation and management of water that runs across land after rainfall
- on-site stormwater storage and retention,
- gross pollutant capture (including street litter, vegetation, and coarse sediments)
- stormwater reuse, which allows for over 90% of water used for irrigation within the park to be sourced from reused stormwater

The scheme incorporates:

- comprehensive monitoring of all components, and
- interpretative artworks that aim to educate and interpret the water processes for the community.

Current image of wetland No. 4 at Sydney Park

Artists impression of wetland No. 4 following completion of on-ground works

Sydney Park stormwater and groundwater reuse project

The City of Sydney, Sydney Water, TransGrid and Department of Conservation and Climate Change are working together to explore options for stormwater and groundwater reuse in and around Sydney Park.

One element of the project is to direct stormwater from Munni Channel through biofiltration units in Sydney Park to remove pollutants before the water enters Alexandra Canal. The treated water will be used to provide water for the wetlands and irrigation of Alan Davidson Oval.

Areas for development

Ashmore Precinct

- The Ashmore Precinct is located in Erskineville bounded by Ashmore Street, Mitchell Road, Coulson Street and the Bankstown rail line.
- The existing precinct, although predominantly used for light industrial purposes, has a mix of land uses including commercial, retail and residential. The precinct is characterised by large scale industrial buildings on large land holdings, and includes a number of owner-occupied strata industrial units.
- Since 1998 there have been several development applications for residential development, and the area is now experiencing change.
- Due to the size and complexity of the area City of Sydney prepared a specific precinct Development Control Plan (DCP). The DCP is currently under review as part of the City Plan which is scheduled for public exhibition in 2009.
- The Sustainable Sydney 2030 Strategic Plan (see page 4 of this booklet) has identified Ashmore as an area for transformative development and sustainable renewal.

Residential buildings near the entrance to the Ashmore Industrial Estate.

Eveleigh Railway Workshops & Australian Technology Park

The North Eveleigh site is located adjacent to Redfern Railway Station at its eastern extremity and Macdonaldtown Station to the west. Although still owned by Railcorp railway operations ceased on the site in 1989. Part of the site is currently used by Carriageworks, a contemporary arts centre.

A Concept Plan lodged with the NSW Department of Planning by the Redfern Waterloo Authority proposes use of the site for residential, office/retail, and open space purposes as well as the adaptive reuse of heritage buildings for cultural/community purposes. The plan also aims to connect the site with surrounding residential areas, nearby Australian Technology Park, and public transport with a pedestrian and cycling bridge at Redfern Station.

Eveleigh Railway Workshops, including Australian Technology Park has also been identified for transformative development and sustainable renewal in the Sustainable Sydney 2030 Strategic Plan (see page 4 of this booklet).

An artists impression of North Eveleigh following development