

4. Catchment Values

The identification of catchment values for the Cooks River has been the subject of numerous studies and recent community surveys undertaken by Councils, Sydney Water, the Catchment Management Committee, and the Total Environment Centre. Based on this existing information, and on the outcomes of the community and stakeholder consultation undertaken as part of this study. The values of the Cooks River, have been identified, relevant to stormwater management.

4.1 Consultation Process

The community were consulted about their vision for the Cooks River catchment and key stakeholders asked to identify catchment values, stormwater issues, hotspots, causes and options for stormwater management. The community of the Cooks River is diverse, consisting of 400,000 residents and 100,000 commercial and industrial businesses. A number of strategies were used to consult the community, including a questionnaire, briefing paper, community workshop, media release, posters, school newsletters and a letter box drop.

Briefing Paper & Questionnaire

A questionnaire and briefing paper (*Appendix A*) were mailed to over 200 local interest groups, residents, businesses, industries, and local Councillors. Over 300 copies of the questionnaire were also distributed to the local Councils, Total Environment Centre and Catchment Management Committee. The briefing paper provided information on the project and invited interested members of the community to participate in the community workshops.

A total of 75 responses to the questionnaires were received. Many responses indicated a strong interest in preventing pollution of stormwater and improving the water quality of the Cooks River. A diverse range of groups responded, including local environment groups, residents, bicycle and rowing clubs and operators of commercial premises. Respondents provided views on stormwater management, the condition of the River, sources of pollution, and made suggestions for cleaning up stormwater and improving local waterways. The response to the questionnaire is summarised below and the statistical analysis is provided in *Appendix A*.

Perceived Condition of the Waterways in the Cooks River Catchment.

Question C asked members of the community how they perceived the condition of the waterways in the Cooks River catchment. The majority of respondents (61 percent) considered the Cooks River to be no longer a river, but rather an urban drain. Other respondents considered the Cooks River to be a degraded environment with few values (18 percent), while only 10 percent of respondents considered the River to be in reasonable condition with need for improvement in some areas. There were no responses in relation to the river being in good condition with no need for improvement and 11 percent of respondents had no opinion on the condition of the river.

Objectives for the Cooks River

Question B aimed to determine the preferred uses of the Cooks River so as to identify objectives relating to the recreational, ecological, and economic goals.

The protection of aquatic flora and fauna within the Cooks River catchment was the primary objective of the majority of respondents. Most respondents considered visually pleasing waterways suitable for swimming to be the next most important objective. The waterways being suitable for boating, canoeing, swimming, playing and other recreation along the banks was considered the third most important objective, with commercial fishing the least important objective.

Catchment Issues

Question A was designed to determine what was important to the community in terms of the use and condition of the waterways in the catchment. Responses were perceived to be values the community places on the waterways, defined in terms of environmental, health and recreational values.

Most people considered poor water quality and rubbish in the waterways to be the biggest environmental concern for the catchment. Lack of natural features, lack of water plants and animals due to changes to habitat, removal of plants along the river banks and murky/muddy waterways were all considered equally the next most important concern.

Most people considered poor management and inadequate funding of stormwater management closely followed by health risks associated with the recreational use of polluted water the biggest health and recreational concerns for the catchment. Poor visual appearance of the stormwater creeks and channels and the health risks of eating fish and shellfish caught in the river were also reported to be important health and recreational issues. Lack of sporting parks, open space and recreational facilities along the waterways and lastly, loss of economic values due to water pollution (such as decreased property values) were considered the least important health and recreational values for the catchment.

Stormwater Pollution Causes

Question D aimed to evaluate community perception of the likely sources of stormwater pollution.

Runoff and contamination from commercial and industrial areas and sewer overflows, (including illegal connections and leaks from the sewerage system) were perceived to be the most important causes of stormwater pollution. This was closely followed by litter entering the stormwater system and dumping of rubbish into waterways and chemicals from old waste landfills and contaminated sites leaking into the waterways. The next most important causes of stormwater pollution were perceived to be stormwater run-off from roads, railways and airport facilities, then stormwater run-off and sediment from construction activities, and lastly stormwater run-off from residential areas.

A number of additional comments were provided by some respondents in relation to the questions answered. These included views on the planning process, identification of past studies, provision of information on specific causes of pollution locally, and suggested actions for preventing pollution of stormwater. These comments have been listed in *Appendix B* and incorporated in the formulation of options for treating and preventing pollution of stormwater.

Community Workshops

Three community workshops were held to discuss values and objectives for the catchment and to identify issues effecting stormwater quality. The workshops were held on the following dates:

- 6.30pm Thursday, 19 November at Strathfield Community Centre;
- 10.30am Saturday, 21 November at Petersham Town Hall; and
- 6.30pm Monday 23 November at St Georges Rowing Club.

More than 60 community stakeholders participated in these workshops identifying catchment values, management objectives and stormwater pollution hotspots. A complete list of the representatives from local environment and community groups, local businesses and residents who have been involved in the development of this Plan are identified in *Appendix C*.

Informing the Community

The community within the Cooks River catchment were informed of the development of the Stormwater Management Plan through media, letterbox drops and public displays.

Six local newspapers ran stories on the preparation of the Stormwater Management Plan for the Cooks River, including one ethnic community newspaper, *El Telegraph*. Some of the articles published are included in *Appendix D*. The thirteen Councils within the catchment each published workshop dates and details of the Plan in the Council column of their local community paper.

Posters advising of the project and inviting community involvement were displayed at Council offices and the Cooks River Catchment Management Committee office, as well as at libraries and notice boards throughout the catchment.

A large number of primary and secondary schools are located within the Cooks River catchment. District education officers were interested in involving school children in the development of solutions to stormwater pollution. Details of workshop dates and the preparation of the Stormwater Management Plan was forwarded by the District Office to all schools for inclusion in the schools Weekly Newsletter.

A letter box drop of information sheets, targeted 1,500 residences, commercial and industrial properties along lower reaches of Wollie Creek and the Cooks River. The information sheets were designed to generate interest in the project and invite community involvement from those most likely to benefit from improvements in the Cooks River.

It is anticipated that these community groups will continue to be informed of progress with the Stormwater Management Plan and will be invited to be involved in its implementation.

Public Exhibition

The community provided further input to the development of the Cooks River Stormwater Management Plan at the Cooks River Festival and during a launch of the Draft Plan. The display of the draft document enabled the community to discuss stormwater issues and management options with Council representatives.

The Draft Plan was on public exhibition during March and April, 1999, at all 13 Council offices and at the Cooks River Catchment Management Committee office. Formal submissions on the Draft Plan were received from:

- Mr Atkin;
- Rockdale Wetlands Society;
- Bankstown Council;
- Auburn Council;
- Botany Bay Council;
- Rockdale Council;
- South Sydney Council;
- Randwick Council;
- Ashfield Council;
- Strathfield Council;
- Hurstville Council;
- Marrickville Council;
- Canterbury Council;
- Environment Protection Authority;
- Sydney Water Corporation; and
- South Sydney Development Corporation.

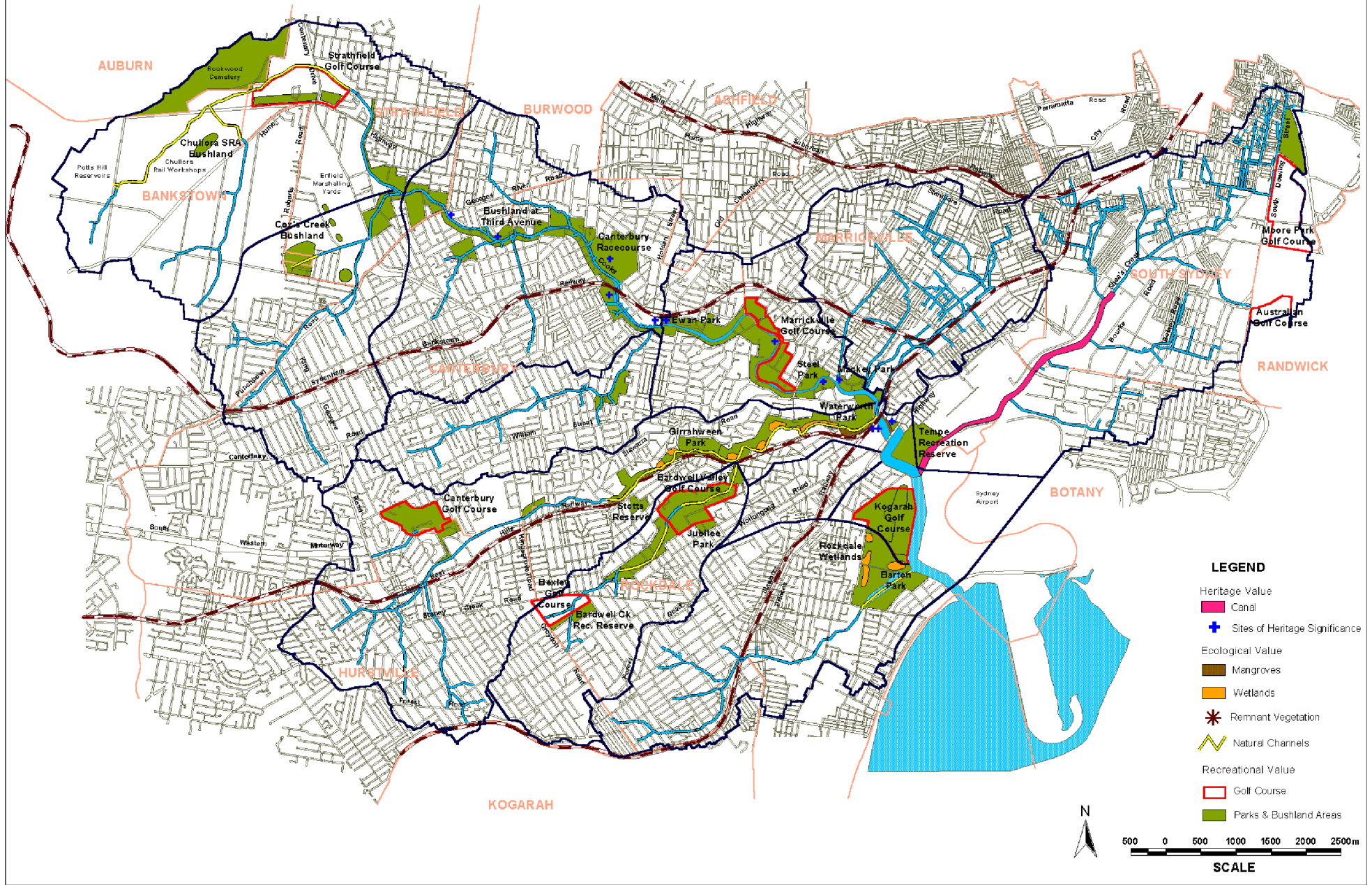
In many cases, the issues raised in these submissions provided further detailed information which issues included in the Final Stormwater Management Plan.

Incorporating the Outcomes

The residents and community groups within the Cooks River catchment have experienced the Cooks River in many states, some with memories of pollution problems and modifications to the River spanning 25 years. This wealth of knowledge gained from the community consultation process, enabled identification of

Figure 6

Cook River Catchment Values



the community's values and objectives for the Cooks River, and provided the basis for the development of actions for stormwater management.

4.2 Values of the Cooks River

The key values of the Cooks River, as identified through the consultation process, include ecological, recreational, amenity, health and economic values.

4.2.1 Ecological Values

The natural aquatic habitats of the Cooks River have been significantly modified, such that the river now provides only limited habitat for aquatic and riparian species. The aquatic habitats of ecological value that remain along the Cooks River are illustrated in *Figure 6* and include:

- areas of natural creekline in the lower section of Wolli and Bardwell Creeks and the upper reaches of the Cooks River, where the natural bed and channel of the river has not been modified with concrete lining or steel piling;
- areas of remnant mangrove forest and wetlands in the tidal sections of the River which provide habitat for waterbirds and aquatic species; and
- areas along Muddy Creek where recent plantings of mangrove stands has been successful and aquatic species are recolonising.

The natural terrestrial habitats within the Cooks River catchment are even more limited with only areas such as parklands and golf courses containing remnants of the original vegetation of the area. The terrestrial and riparian habitats of ecological value are also illustrated in *Figure 6* and include:

- areas of the remnant endangered Cooks River Clay Plain Scrub; and
- areas of remnant riparian vegetation along Wolli Creek, including patches of open forest, scrub, grass and sedgeland.

The ecological values of these remnant riparian habitats are being improved through bush restoration works.

4.2.2 Social Values

The social values identified for the Cooks River include heritage, recreational and aesthetic values. The heritage and cultural significance of the Cooks River has been assessed in a number of reports and there are many heritage sites protected by Council Local Environment Plans.

Aboriginal occupancy of the Cooks River area is known from a number of finds including middens (large numbers of discarded shells), two stone axes, and remains of a dugong. Marks on the dugong bones indicate the presence of Aborigines in the area at least 7000 years ago (Hyder 1997). The Darug people claim traditional ownership and consider the Cooks River to have been of value to the Aboriginal

people as a food providing ecosystem. In its current state, however, Aboriginal people see the Cooks River as a waterway of low value as it can no longer be used for drinking, fishing, swimming, camping, or hunting. The Aboriginal heritage values of the Cooks River which remain include an open camp site and two midden sites, which are identified on the National Parks and Wildlife Service register.

The Cooks River flows through the first European settlement and the oldest industrial area in Australia. The Alexandra Canal has been assessed as having historic, technological, scientific and aesthetic significance in a detailed report undertaken by Sydney Water (Casey & Low Associates 1993). The Canal is a rare example of canal construction and its sandstone pitched walls, characteristic of the nineteenth century, were built by unemployed relief workers.

Key items of heritage value along the foreshore of the Cooks River (illustrated in *Figure 6*) from Botany Bay west are:

- concrete block embankments built in the 1930's as depression relief work;
- Tempe House built in 1836 and listed by the Australian Heritage Commission on the Register of National Estate;
- Kendrick Park middens, discarded oyster and other crustacean shell used by the Aboriginal people;
- Warren Mansion remains are the stone pillars at Richard's Lookout;
- Sewer Aqueduct at Marrickville was built in the early 1880s;
- Marrickville Golf Course previously known as Riverside Park, was a favourite picnic spot around the 1900's;
- ASC Sugar Mill built in 1841 is listed on the Register of National Estate;
- Row of Canary Island Palms at Tasker Park;
- Canterbury Racecourse operating since 1871;
- Memorial Fountain at Ford Park constructed in the 1930s; and
- St Ann's Church (Clouston 1997).

The Cooks River is also valued by the community for its recreational potential. As illustrated in *Figure 6*, the parklands along the Cooks River provide an almost continuous green corridor. These foreshore parks and golf courses provide a visually pleasing environment and offer recreational opportunities for residents and visitors to the area.

The estuarine waterways are utilised for boating but are unsafe for swimming, and on occasions, unsafe for secondary contact recreation. Residents noted the potential to improve visual amenity, and in particular improve unsightly sections of the stormwater system so water views can be enjoyed by residents.

In its current state, the Cooks River is unsafe for swimming, consuming fish caught in the River, and at times, boating. In addition, the steel piling walls in some sections of the River make it difficult to climb out of the waterway.

4.2.3 Economic Values

The Cooks River is considered to have low economic value in its current state as commercial fishing within the river is prohibited and the water quality is unsuitable for aquaculture. Residents noted that the scenic value of the River is low in many areas and could be improved to assist property values.

Groundwater is still used as cooling water by a few industrial premises within the catchment but there is currently limited onsite detention and reuse of stormwater.

4.2.4 Assessment of Values

The values of the Cooks River were evaluated at a number of workshops with community and stakeholder groups. Priorities were assigned to each value on a high, medium and low basis. *Table 4.1* represents the agreed prioritisation of values for the Cooks River catchment.

Table 4.1: Summary of Catchment Values of the Cooks River

Catchment Values	Value
Ecological Values:	
Remnants of the original vegetation and creeklines of the River	High
The presence of native water birds, fish and aquatic flora and fauna	High
Visually attractive riparian vegetation along the river banks (weed free)	High
The existing wetland areas and intertidal zone which attract large numbers of waterbirds	High
Remnant vegetation and native animals of special conservation value such as the endangered Cooks River Clay Plain Scrub Forest, and birds protected on international treaties	High
Natural creek banks as opposed to concrete and sheet piling	Medium
Social Values:	
Boating and secondary contact recreation throughout the catchment	High
Swimming in the tidal mouth of the River	Medium
Swimming in freshwater tributaries	Medium
Fishing and consumption of fish caught in the River	High
Recreational areas with water features which are visually pleasing (ie not concrete lined drains)	High
Walking and bike tracks following the River with no visual pollution (that is, no murky water or floating litter)	High
Facilities and use of waterways with environmental education and awareness themes.	High
Economic Values:	
Commercial fishing and oyster farming	Low
Property values improved by waterway location or with views of waterways	Medium
Stormwater suitable for reuse	Medium

Figure 8

Potential Pollution Sources and Identified Hotspots

