

COOKS RIVER VALLEY ASSOCIATION

ANNUAL REPORT 2014/15



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In Memory of Richard Grayson

Financial Report

A financial report has not been included in this Report because of the sudden death of Richard Grayson, CRVA Treasurer. An annual financial report will be furnished separately.

Cooks River Valley Association Annual Report 2015

Executive committee for 2015

President	John Butcher
Vice-president	Peter Munro
Membership Officer	Peter Munro
Secretary	Jennifer Newman
Treasurer	Richard Grayson
Publicity Officer	Ann Leahy
Committee members	Nadia Wheatley
	Julie Corkery
	Drew Simmons

Achievements in 2015

Restoration of the River

CRVA has continued to lobby politicians and government bodies to take the necessary action to restore the river to health. Following the state election CRVA representatives met with newly elected member for Summer Hill, Jo Haylen, to discuss pollution problems in the river. The meeting resulted in a Notice of Motion urging State Government action to help restore the river to health.

Container Deposit Legislation

The Mudcrabs have continued to conduct regular river clean-ups including on Clean-Up Australia Day and the CRVA has continued to campaign for a container deposit scheme. The campaign led by the Boomerang Alliance has had some success as the NSW state government has agreed to introduce such a scheme in some form.

Canterbury Bowling Club

The CRVA has supported the community campaign to save the bowling club and associated open space and parkland to save the bowling club site from the Canterbury Council proposal to rezone from Community Land to Operational Land, and to rezone part of the site for possible residential use.

Masterplan for Cooks River parklands

The CRVA has raised concerns with Canterbury Council about ad hoc developments in Gough Whitlam and Waterworth Parks and has called for all river catchment councils to work through the Cooks River Alliance to develop a masterplan for all the Cooks River parklands which will respect the ecology of the river valley and also cater for the active and passive recreation needs of park users.

Richardson's Lookout Marrickville Peace Park

The CRVA supported the proposal initiated by the Gallipoli Centenary Peace Campaign for Marrickville Council to nominate Richardson's Lookout as a Peace and Reconciliation Park to recognise that site's association with WW1, to acknowledge the Frontier Wars, and also the Sorry Day reconciliation events organised by Marrickville Residents for Reconciliation. In April 2015 Marrickville Council agreed to name the site "Richardson's Lookout Marrickville Peace Park" The designation "Peace and Reconciliation Park" was rejected by the Geographical Names Board as being too long. Temporary signage has been erected and negotiations are continuing about the text of permanent signage and also the date and format of the official launch.

Fatima Island

The CRVA has led an ongoing campaign to stop the continuing erosion of Fatima Island. This led to Marrickville Council commissioning consultants to prepare a "Fatima Island Erosion Assessment". Council resolved to adopt a natural response of tree planting to hopefully stabilise the island and prevent further

erosion. A decision about a longer term response would be made after the review of the Council's Biodiversity Strategy and Action Plan. Fatima Island is also included with Kendrick Park in Marrickville Council's Cooks River parklands Masterplan which is currently being developed. The CRVA supports the "Boulder Rock Revetment" option outlined in the Erosion Assessment Report. This would involve the expenditure of about \$450,000 for a functional life of over 50 years.

Council Committees

The CRVA has representatives on *Canterbury Environmental and Sustainability Committee* and the Council's *Recreation Committee*, as well the *Canterbury Arts & Library Committee* and *Greenway Steering Committee*.

There are also CRVA representatives on Marrickville Cooks River Committee and there has been CRVA involvement in the development of the masterplan and plans of management of Marrickville Council Cooks River parklands and also in consultation about the council's review of its Biodiversity Strategy and Action Plan.

The CRVA also has a good working relationship with the Cooks River Alliance of Cooks River catchment councils.

The CRVA has worked with the local Public Health Unit of the Department of Health to address health issues associated with river recreation activities. This collaboration has led to a Beachwatch assessment of potential swimming spots nominated by CRVA, aimed at achieving the CRVA goal of making the river safe for swimming.

CRVA members have also participated in community action opposing plans for the Westconnex motorways.

We in the CRVA see ourselves as Cooks River People Caring for Country in the Cooks River Valley. Updates on our ongoing work to achieve our objectives of Restoring Our River and Connecting Our Community are provided in the body of this annual report.



Little black cormorant drying wings



Cormorants on boat harbour boom

Rosedale Reserve: Summary of major activities in 2014-2015

Russell Cail

The Rosedale group consists of a core of 10-15 regulars. Our routine activities are centred around removing cestrum, weeding the ubiquitous farmer's friends/cobblers pegs (*Bidens pilosa*), asthma weed and papering and mulching the areas that we clear, ready for planting. Our other task is removing dead wattle trees, many of which have reached the end of their natural life (it is now over 10 years since Rosedale was first planted). The highlights of the past year have been:

With all the rain over the past 12 months the plants (and weeds) have all survived and thrived. The gardens are looking great at the moment.

In October 2014 Canterbury Council installed a table and shelter in Rosedale Reserve and an interpretive sign in Chris Bartlett's garden (section 10). We prepared Chris's commemorative garden in the form of semi-circle and used a log to form a rustic seat to make the sign the focus.

Tuesday 14th October a huge storm caused the river to flood above the fence and wash away a lot of mulch from sections 5-8. Something of a set back after all our hard work the previous month, plus a lot of rubbish was deposited. This required quite a bit of work to clean up and repair the damage.

In December we hosted the Mudcrabs' Christmas party. The Mayor of Canterbury (Mr Brian Robson) unveiled Chris Barlett's commemorative sign and we officially "commissioned" the table and shelter. We had some volunteers plant *Acacia myrtifolia* and *Goodenia* species in the garden.

We have been able to take great advantage of the ideal weather conditions over the last 12 months and undertaken a lot of planting. Our major plantings were concentrated in 2015:

- Planted 30+ x *lomandra* along the path in sections 2, 3 and 8.
- March planted *Melaleuca nodosa* and *M. thymifolia* in sections 9 and 11
- Papered and mulched and planted 60-70 *Gahnia clarkei* along the fence below #8.
- May, planted bracken- *Pteridium esculenum* (6 plants at about 2 m intervals just below the crest of the slopes behind sections 2 and 3).
- Planted 5x *Melaleuca stipoides* on slopes down in sections 1, 2 and 3.
- Planted ~10x *Indigophera australis* (grown from seed) in sections 3 and 4.
- Planted ~ 15x *Pultenaea villosa* ~10x *Kunzea ambigua* and 5-6 *Hakea serica* in Section 9.
- June, papered, mulched and planted 25x native sedge (*Carex appressa*) down the bottom of section 15.
- July, planted 2x *Callistemon rigidus* and 3x *C. linearis* behind section 8. Planted 5x *Petrophile pulchella* in section 4 near path and 3x *Platyace lanceolata* and 5x *Olearia microphylla* in section 3 and 2x *Goodenia hederacea* and 5x *Ozothamnus diomifolius* (sago bush).

Early this year we pegged logs horizontally across the slopes behind sections 1, 2 and 3 to help stabilise them. This was followed up with heavy mulching of the slopes. The idea seems to be working well.

The severe storms in April blew quite a few plants (some of which were quite well established) around very badly. We staked the worst affected plants with strong stakes to prevent further damage.

In May we took delivery of our leaflets advertising what we do. We had been working on them for some time.

We have had several lots of tadpoles in the “frog ponds” over the past 12 months. We are not too sure how many have survived the depredations of the skinks and birds but some adult marsh frogs have been seen.

We have now almost finish clearing the area from section one East towards the Korean club. It was hosting a large mass of weeds that were beginning to invade our part of the site. The worst weeds being [balloon vine](#) (*Cardiospermum grandiflorum*), morning glory (*Ipomoea indica*) and madeira vine (*Anredera cordifolia*).

We have widened and mulched the walking trail in preparation for our 10th anniversary of the Mudcrabs’ involvement at Rosedale in August

Finally a word of warning, we thought that the self-sown cherry tomatoes in section 4 were a nice novelty but they quickly became a major pest! They seem to grow rampantly under all conditions!



There's a track winding back...

Our future plans are to continue planting and weeding with the main focus on sections 12-15 now that sections 1-11 are fairly well under control (touch wood!!). We are also hoping to have the assistance of some “work for the dole” people organised through Canterbury Council and Max Employment as part of a trial Federal Government program.

The Rosedale Group would like to thank Peter Goss and Canterbury Council and the CRVA for their help and provision of plants and tools. Joy and I would also like to thank all our dedicated and enthusiastic volunteers who do such great work. Our wonderful volunteers put in 435 hours at our regular working bees (plus a lot of informal time) and collected 199 bags of rubbish not to mention quite a few truck-loads of sticks, branches and cestrums, etc.



Cris Bartlett's commemorative garden



Tranquil river scene at Rosedale

Wave Rock (Marrickville Golf Course) Bush Regeneration Site

Peter Munro

The Mudcrabs Wave Rock site, tucked away in the Marrickville Golf Course on the edge of the Cooks River, is now just 3 years old. The site has had a dedicated group of volunteers who work mid-week on this beautiful sandstone outcrop. This work is strongly supported by Marrickville Council and assisted by the golf course staff.

The site has been so successful that it is now being expanded by more than 50%, thanks to a grant attained by Marrickville Council. Planting in this extended section will begin in September 2015.

The site has a beautiful collection of sandstone heath plants just coming into spring flower. It provides a beautiful backdrop to the riverside track widely used by the community and is a vital extension of the riparian zone.

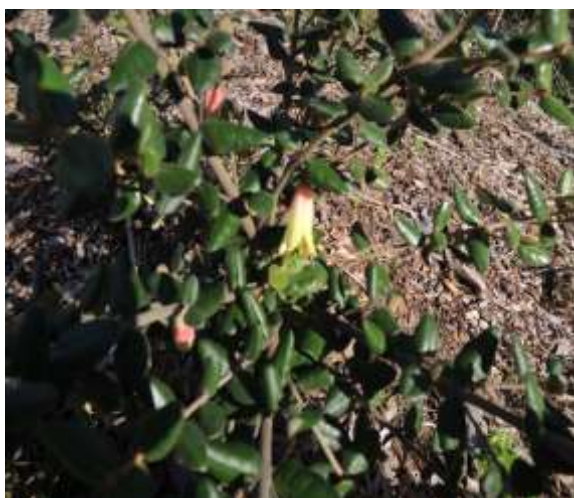
Some of the beautiful flowering plants from the site are shown here:



Hardenbergia violacea (purple twining pea)



Wahlenbergia gracilis (Bluebell)



Correa reflexa (native fuchsia)



Persicaria discipiens (slender knotweed)

Foord Avenue site, Hurlstone Park

Liz Millen

Each month about a dozen people turn out to keep the weeds at bay and to plant out new patches. We've welcomed extra help this year from some younger Mudcrabs doing their Duke of Edinburgh awards. This year we have focused most attention on the western end of the site and have planted hundreds of new plants which are growing well. What a lot can change in a year! It's hard to remember the thickly weeded bramble patch that used to be there. The madeira vine is persistent, and every month we need to remove dozens of shiny green shoots. By scraping away dirt covering the sandstone at the top of the site, we've discovered what looks like a small pool to capture water and have made this into a feature.



Working bee



New rain garden built

The area closest to the river, below the bicycle path, is growing better than we expected, and most plants even survived the flooding during torrential rains last October. In fact, we got a good dump of mulch left behind by the water.

At the top of the cliff the bushes are getting quite dense and now attracting more birds; we've seen white cockatoos, black cockatoos, magpie larks, currawongs, wagtails, miners, doves, corellas and more. Still no blue wrens...



Black cockatoos



Willie wagtail

Ewen Park Bush Site

Sue Bishop, Keith Foulcher, Nadia Wheatley

This year we celebrated the sixth birthday of the Ewen Park Bush Site. It's now difficult to remember this part of the riverside as it was in April 2009, when so many volunteers from the Mudcrabs and the Friends of Ewen Park gathered to plant tiny tube stock into what seemed like a huge area of exposed mulch.



Site before work began in 2006



First working bee on mulched site 2009

The various bush care sites along the Cooks River all have their own unique eco-systems and their own individual post-settlement history. Until about 100 years ago, the Ewen Park site was simply part of a wide alluvial floodplain of the river, known by the early settlers as 'Tea-tree Swamp'. The raised levee bank that is now the main feature of the site's topography was created during the 1920s when the river was realigned to control flooding. Owing to the frequent inundation of the area with salty river-water, there was little natural bush.

Thus at Ewen Park we did not begin with the idea of 'bush regeneration' — of re-creating and restoring the natural environment of the place. Rather, we are trying to build a bush garden for the enjoyment and education of the community of people who visit this part of the river. At the same time, we hope to build the Cooks River community itself, both through the friendships created among the site's volunteers and the use of the site as a walkway and meeting place for local children and adults.

New plantings this year have been concentrated on the western section. We have put in veronica, native geraniums, native parsnip, indigofera, correas, grevilleas, leptospermum, and hakeas, as well as many native grasses. Although the site suffered a battering (including the loss of a number of large swamp mahoganies) in the extraordinary storms of April, this has had the benefit of allowing more sun into some of the under-canopy areas.



Keith and Sue, planting and mulching

Sadly, the site continues to suffer ill treatment and willful vandalism from time to time. It is hard to imagine the mindset of people who pull out or smash mature shrubs and trample the fragile groundcovers. We just continue to plant two new plants for every one that is destroyed.

We would like to thank all the volunteers who have worked on the site this year. Thanks, too, to Nell Graham and Peter Goss at Canterbury Council for provision of plants and mulch. Finally, thanks to the Cooks River Valley Association, which pays for the insurance for our volunteers as well as tools and gloves.

The Friends of Ewen Park

Nadia Wheatley and Sue Bishop

The good news in Ewen Park this year is that it really seems as if the long-promised community building will be going ahead. Although we aren't yet opening the champagne, we are cheered by the fact that Canterbury Council has moved into the design phase for the new multi-purpose community space and kiosk that will replace the old white building that used to be located between Tennent Parade and the Lang Road footbridge. We have been advised that construction will probably start around the middle of next year.

Speaking of construction — over the past six months, the picnic and play area of Ewen Park has been a building site for sewerage works undertaken by Sydney Water. Sue Bishop from Friends of

Ewen Park has been liaising with the organisation and keeping a close eye on proceedings. New turf has finally been laid (rather bumpily) and one of the trees destroyed in the construction has been replaced.

We are also anticipating the arrival of four more trees for the park — two to replace others lost in the picnic area, and two to replace a decaying eucalypt that needed to be removed from the area between the soccer kiosk and the amenities building. We understand that there will be further plantings at the western side of the amenities block, to replace some coral trees.

While this sort of supervision and liaison by FEP goes on behind the scenes, the main public activity of the group continues to be the organisation of volunteer working bees on the Ewen Park Bush site, done in partnership with the Mudcrabs, and supported financially by the Cooks River Valley Association and Canterbury Council. *(See previous report about the Ewen Park Bush Site)*

Background:

The Friends of Ewen Park are a group of people committed to the balanced use of the resources of Ewen Park for varying community needs — both for passive recreation and organised sport. We want local children and adults to enjoy a range of recreational activities in the park. In addition, we believe that the environmental capacity of this flood plain area must not be over-stretched, and the impact of park use should be shared.

From 2005 to 2008, Friends of Ewen Park initiated the campaign persuading Canterbury Council to develop a specific Plan of Management for Ewen Park. From 2013-2014 we were active in the CRVA campaign urging Canterbury Council to honour its commitment to provide a multi-purpose community building at the eastern end of Ewen Park, in accordance with the Plan of Management.

In addition to the community building, this Plan also promised an upgrade of the facilities in the Ewen Park picnic area. These include provision of additional barbecues and shelters and a complete upgrade of the play equipment (including provision of shade cloth), together with landscaping and re-vegetation of eroded mounds. As well, Council's Master Plan provides for a path running between the northern edge of the picnic area and the roadway of Tennent Parade, to enable people using the on-street parking to move safely down to the playing fields, especially at night time.

With more and more families moving into the new apartments that are being built in our area, the picnic area of Ewen Park is increasingly playing a role in the development of community. It is not uncommon to see people setting up in one of the picnic shelters as early as 8 am, in order to be sure to have a place for a



family party, and sometimes the one shelter can host a series of three or four gatherings in a single day and evening. As well, the park's play area provides a space for the kind of free and imaginative play that is a vital part of a child's development.

As our community grows and becomes even more diverse, the Friends of Ewen Park are committed to ensuring that Ewen Park remains a place for everyone.

Cup & Saucer Creek Annual Report 2014-15

Nell Graham (T/L Environmental Strategy City of Canterbury)

In 2014-15 there were eight working bees with 57 volunteers attending contributing to 142 hours of work completed. Due to the volunteers' work, the Wetland is now looking fabulous, and the working bee groups have been able to keep the weeds down and the pathways pruned. In February that was another matter as you can see from the photos below.



Kikuyu creeping over the fence, but not for long!



Volunteers tackling weeds

The usual suspects have been removed including, new shoots of casuarina, balloon vine, removal of weedy grasses and annuals.

This year we also played with the levels of the second pond to try and get some natural regeneration of our water plants, but the swamp hens were having none of that! We will give the pond a better chance this spring with a three month lowering of the water level.

The Wetland has also been doing its job removing sediment from the river, as this aerial shot taken after a storm in November 2014, shows. Note the clay soil colour of the first pond – the sediment settlement pond.



Gough Whitlam Salt Marsh

Working Bees Reports 2014-15

Nell Graham (T/L Environmental Strategy City of Canterbury)

The Gough Whitlam Saltmarsh was constructed by Canterbury Council in 2007 and consists of small succulent plants that are nourished by the high tides of the Cooks River. Saltmarsh is an important and endangered ecological community that is established on the landward side of mangroves, and provides valuable and rare habitat for fish, crabs and birds.



Working Bee in May 2015 1

In the last 12 months the Mudcrabs and other community volunteers have met monthly to work to remove weeds, plant and conduct monitoring. There were 10 working bees scheduled and three were cancelled due to wet weather, 49 volunteers worked, contributing to 98 hours bushcare.

This year the group have targeted the usual weeds such as Farmers Friends, Plantain and Couch. They continue to remove Casaurina's shoots from the islands and encroaching on the salt marsh. New plantings have also been carried out on the road edge to provide a protective

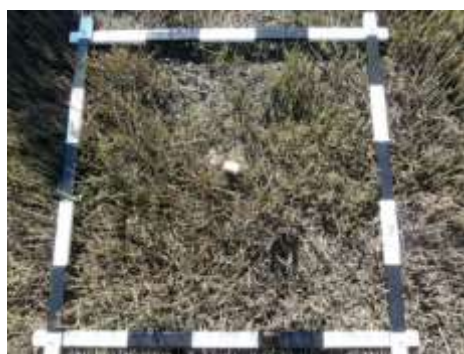
buffer at that vulnerable edge as well as planting on the islands.

Monitoring at the Salt Marsh

Russell Cail

A study of the changes in the percentage cover of the major plant species in the Tempe saltmarsh August 2014 to June 2015

Methodology: A series of 1m² quadrats (see the photo below) were established in the saltmarsh as represented by the yellow dots in the main Figure.



Quadrats for sampling

These quadrats were sampled at approximately three monthly intervals and all the plant species present in each quadrat were recorded and the percentage of the quadrat covered by each species noted.

Only the major species have been plotted

Streaked arrow grass (*Troglachin striata*)

Austral seablite (*Suaeda australis*)

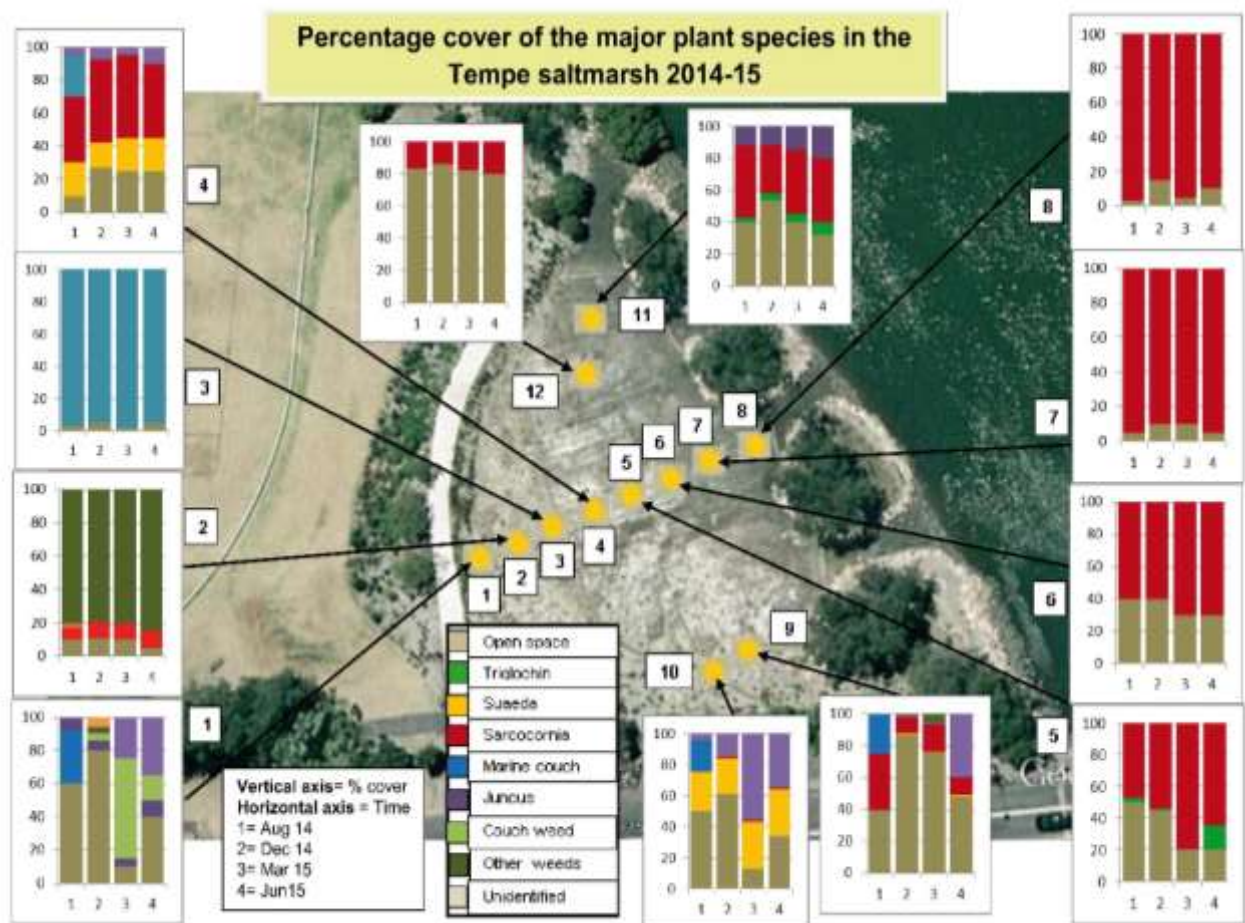
Samphire, beaded glasswort (*Sarcocornia quinqueflora*)

Marine couch grass (*Sporobolus virginicus*)

Common couch grass (**weed**) (*Cynodon dactylon*)

Sea rush (*Juncus kraussii*)

Other points of interest such as crab holes, dead plants (die-back), bare ground, snail shells (dead and living) were also noted, with a view to get a better understanding of changes in both the flora and fauna in the marsh over the long term. The number of crab holes and snails across the whole of the marsh appears to have increased greatly. There have been many observations of wading birds frequenting the marsh. Some attempt was made to correlate some of these changes with climate information from official weatherstations at Marrickville golf course and Mascot airport. * See Tempe saltmarsh table next page



Canterbury Racecourse Clean-Up Site Report 2014-15

Pete & Michelle

This site is the original clean-up site for the Mudcrabs. This mudflat and mangrove site continues to trap rubbish, although in recent years the amount is much less thanks to the gross pollutant traps installed along the river. In early Mudcrab times this site was cleaned every month.

Over the past year we have had three clean-ups:

1 November 2014 Mudcrabs pulled 35 bags with 1 shopping trolley and larger items

11 April 2015 Mudcrabs pulled 30 bags

8 August 2015 Mudcrabs pulled 63 bags and two shopping trolley, car wheels etc

Predominately the rubbish items picked up from these banks are plastic bottles which have floated in on the tide and become trapped in the mangroves.

Many thanks need to go to the volunteers as this site is not easily worked. The Mudcrabs Research vehicle is a great help as well as other bike trailers and wheel barrows brought by Mudcrab volunteers to help carry the bags and big items the long distance to the street pick up point.



Mangrove clean-ups along Marrickville golf course

Martin Puchert, site coordinator

Mudcrabs continued to remove the litter that washes into mangrove forests on the Cooks River. Martin Puchert led 10 clean-ups of a 500m section of mangroves between the Marrickville Golf Course clubhouse and Wardell Road. A total of 263 bags of litter were collected in the ten clean-ups, plus many larger objects such plastic milk crates and plastic chairs.

Each clean-up typically attracted around 8-12 volunteers and it was pleasing to see at least a few new faces each time. The largest clean-up was on Clean-Up Australia Day 2015, when around 50 willing volunteers collected 54 bags of litter on a very hot day.

In around August 2014 a floating boom was installed near Boat Harbour and it was hoped that this would cut the amount of litter in the mangroves. Surprisingly, the boom has not had much effect on the volume of litter building up in the mangroves. The good news is there is much less visible litter floating down the middle of the river after heavy rain.



March 15, Clean Up Australia Day



Callum and all the rubbish collected 21 September 2014

Fatima Island

Nadia Wheatley

Over 2015, Fatima Island has continued to suffer. Although this last remaining island in the Cooks River has always been subject to tides and floods, changes to the course and flow of the Cooks River over the last century have had such an impact that it is now on the brink of extinction.

While Marrickville Council (which bears legal responsibility for the island) has not adopted any proposal for long-term remediation, the Cooks River Valley Association is currently launching a renewed lobbying effort to save this precious bird sanctuary and heritage site.

The first community event in this campaign will be a public gathering at Kendrick Park, which overlooks the island, on Sunday 11 October 2015.

Background:

Situated on the Cooks River between the Princes Highway and the East Hills railway line, the small natural sandbar now known as Fatima Island provides a microcosm of our nation's diverse cultural heritage — Aboriginal and non-Indigenous, convict and settler, Christian and Muslim.



Fatima Island, convict stone wall now washed away

Although a retaining wall (including recycled convict-hewn rock) was added around 1901, the underlying intertidal shoal is a natural feature of the Cooks River, and indeed there were perhaps as many as 30 such islands in the river at the time of European settlement. Together with two adjacent islands that can be seen in a photograph taken circa 1880, Fatima Island provided a crossing place for the Aboriginal traditional owners of this part of the river. It is no coincidence that a significant midden site is nearby, at Kendrick Park.

The island's name alone resonates with two significant components of our local community. It comes from a Catholic rosary pilgrimage made to the island in 1951, honouring a Portuguese statue of Our Lady of Fatima. This name in turn has provided a familiar reference point for more-recent Muslim community members, because the daughter of the prophet Mohammed was named Fatima.

Following lobbying initiated by the CRVA, in 2014 Marrickville Council commissioned a survey by a team of independent consultants, who noted that, without intervention, the island would disappear within 40 years. The team's recommended solutions included the provision of a boulder revetment wall. At a cost of \$450,000 for a minimum 50 years of 'useful life', this represents a mere \$9,000 per year to save a cultural and environmental icon.

Unfortunately, Marrickville Council rejected this recommendation, deciding rather on a 'natural' solution. This means planting a few trees and delaying a final decision about long term measures until the review of the Biodiversity Strategy and Action Plan has been completed. Meanwhile, the island runs the risk of disappearing into the tides of time.

Over the coming year the Cooks River Valley Association will be urging residents of the new apartment blocks at Wolli Creek to join with long-term community members to save the island.

Summary for Publicity Officer

After more than 12 months of vigorous campaigning to reduce the amount of litter and containers in the river, a rubbish collection boom was installed at boat harbour, just beneath the footbridge next to the Sugar Mill apartment building at Hurlstone Park.

This was installed by Canterbury Council, and the trap is maintained and emptied weekly by Sydney Water. The trap is full every week, and indeed there was so much litter that the truck kept getting bogged in the mud after emptying the trap, due to it being so heavy. Recently Canterbury Council have installed a new clay and gravel path between the boom site and the footpath to prevent this from occurring.



In May 2015 alone 45 cubic metres of litter was removed from the trap, and since installation in August 2014 more than 200 cubic metres of rubbish has been removed from the trap. The floating arms of the trap also make a handy fishing and resting platform for pelicans and cormorants in particular.



boatharbour in April 2014 after rain - before boom



boatharbour in August 2014 after rain - after boom



Ewen Park in April 2014 after rain - before boom



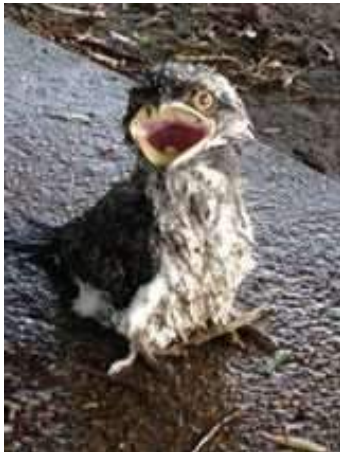
Ewen Park in August 2014 after rain - after boom

Facebook campaigns, emails and letters to council also helped to establish a new fenced area to protect wildlife on the river. Previously at boat harbour, the small grassy peninsula which had once acted as a boat launching site had been an unsafe site for wildlife. Despite regular groups of 10 or more pelicans, cormorants, egrets, ibis in particular, this area was also used by fishermen who often left fishing line behind which would then cause birds to become entangled and injured. Dogs were also a big problem here, as they would routinely run onto this spot to chase the birds, and in some cases resulting in injury of the birds. Two black swans were injured by dogs here and



needed to be removed by WIRES. Canterbury Council have since installed a fence in this area, and this has been tremendously successful. Birds now rest here in peace, safe from dogs and fishermen, and it is also a safe refuge for migratory birds.

The CRVA and Mudcrabs have very active social media sites on Facebook and Twitter. The CRVA and Mudcrabs Facebook pages have a combined following of over 1,000 people who regularly read and interact with stories, photos and events along the river. This is multiplied many times when stories are shared with other groups, and in the case of a story of a pelican rescue, this was circulated to over 24,400 people.



wet tawny frogmouth chick



Ewen Park tawny frogmouth family

Last November, after a very heavy rainstorm I received a message on Facebook that a tawny frogmouth chick had been blown out of its tree in Ewen Park and was discovered by a passing cyclist, wet and squawking in the middle of the bike path. I rushed down to the site and found the chick had been placed in a nearby paperbark tree, but was still a little vulnerable. We moved it to a much higher branch, under the watchful eye of the mother tawny, but by this stage the chick was so panicked that it flapped its wings and managed to make what surely was its virgin flight to a nearby branch. By this stage the word had got around on social media and quite a crowd had gathered to witness this. Afterwards the tawny family, two adults and two chicks cuddled up together on one branch and were doing very well. Word also got around very quickly when an endangered powerful owl was sighted at boat harbour, albeit with the remains of a dead cockatoo in its talons!



Endangered powerful owl, 14/4/15

<http://www.crva.org.au/>

<https://www.facebook.com/CooksRiverValleyAssociation>

<https://www.facebook.com/pages/The-Mudcrabs/136923289836251>

<https://twitter.com/themudcrabs>



Streamwatch and Water Quality Testing

Russell Cail and Ann Leahy

The question everyone asks in relation to the Cooks River is the simplest, and also the most difficult question for us to answer:

"Is the river getting better?"

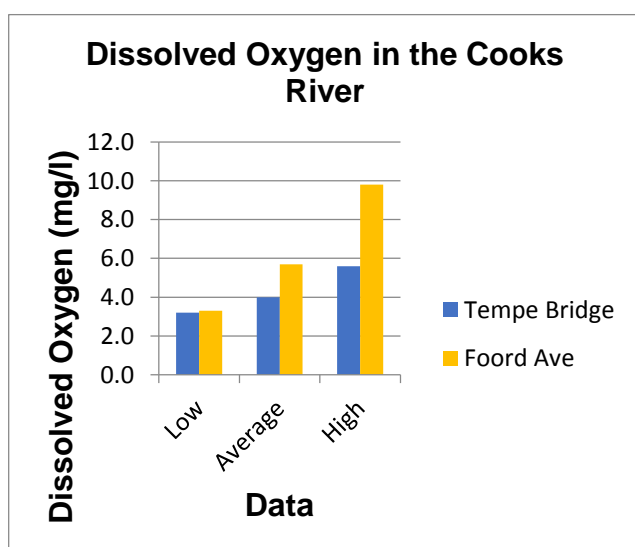
Visually and in terms of the abundance of wildlife the answer is yes. There are increasingly large flocks of birds on the river, pelicans, white faced herons, cormorants, purple swamphens, dusky moorhens, ducks, egrets, masked lapwings and many more. It is a common sign to see flocks of cormorants fishing in a pack and rounding up schools of fish. The mangroves are getting thicker and more abundant, so much so that our testing site at Younger Avenue is now inaccessible and we now need to cross the river to take our samples. Since the joint project by Canterbury Council and Sydney Water of the litter collection boom at boat harbour, the visual pollution, bottles, wrappers, and litter are no longer an everyday sight on the river downstream from the boom. (See before and after photos p17)

However in terms of water quality itself this question is a little more difficult to answer. The graphs below show the results of our Streamwatch tests. In summary we are getting very high readings for Dissolved Oxygen, which is a good indication of life in the river. Phosphates are quite low and pH is usually neutral. Turbidity is variable, and as the river is tidal and varying in salt levels it is difficult to measure electrical conductivity. So yes, the river does seem to be getting a little better using these indicators of health.

Years of testing show predictable results, in that *E. coli* (an indicator of the presence of human pathogens or sewage) are zero in dry weather, but after medium to heavy rain these levels go up to 30 to 50 times greater than the maximum level recommended for human contact. Doesn't sound too nice for swimming!

Two sites are compared in this report, Younger Avenue and the River Canoe Club (RCC) near Tempe Bridge. For simplicity the graphs show RCC as Tempe Bridge.

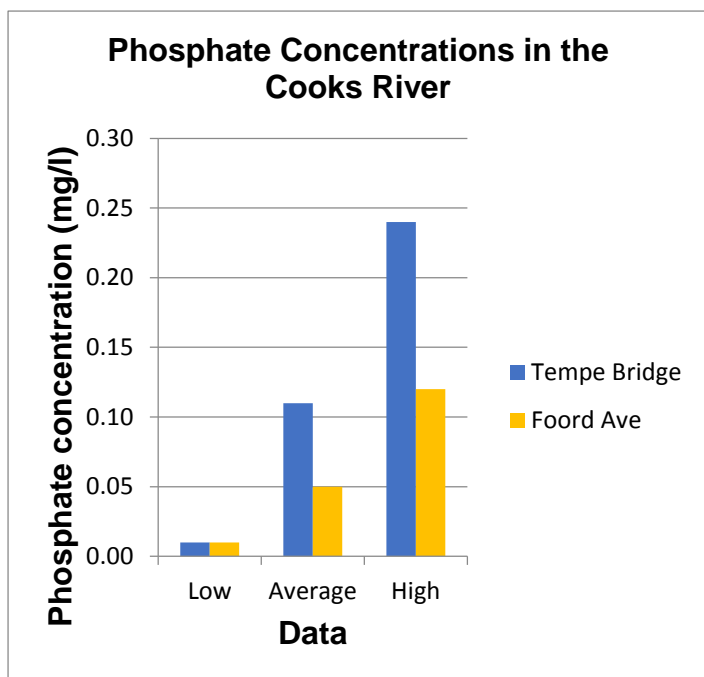
Summary of Streamwatch test results 2014/15:



Dissolved Oxygen (DO)

DO is important to support all marine life, the concentration (mg/l) is affected by both temperature and salinity. In addition soluble phosphates provide nutrients to aquatic plants, excess levels may produce algal blooms, which in turn also reduce dissolved oxygen concentrations. DO at Foord Ave site seems to be higher than expected for reasons unknown. Even minimal levels of DO seem to be adequate to support life forms. There is no obvious algal growth at the Foord Ave site, and the particulate matter seems to be sediment. The bottom line is that this indicates that the river is quite healthy.

- DO levels < 3 ppm are stressful to most aquatic organisms.
- DO levels < 2 ppm will not support fish.
- DO = 5-6 ppm is required for growth and activity of most aquatic organisms.
- The RCC figures are low though. If the figures are correct something is removing the oxygen!



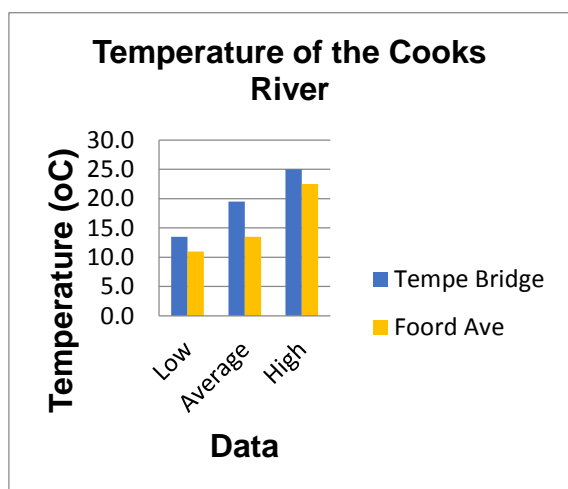
Phosphates

Phosphate concentrations appear to be generally quite low which may explain the absence of algal growth and the good oxygen levels.

The following criteria for total phosphorus were recommended by US EPA (1986):

1. no more than 0.1 mg/L for streams which do not empty into reservoirs,
2. no more than 0.05 mg/L for streams discharging into reservoirs, and
3. no more than 0.025 mg/L for reservoirs.

The Streamwatch group suggests 0.015 mg/l for rivers and dams and upland regions 0.049 mg/l.

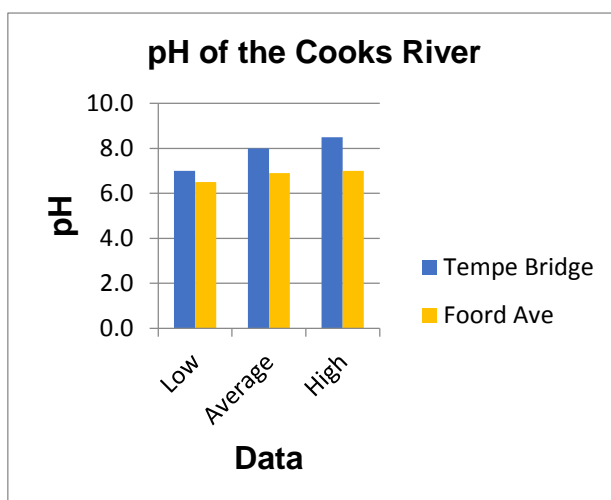


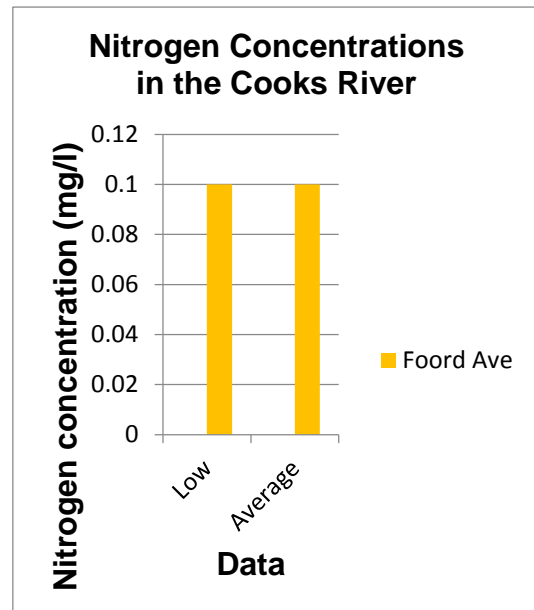
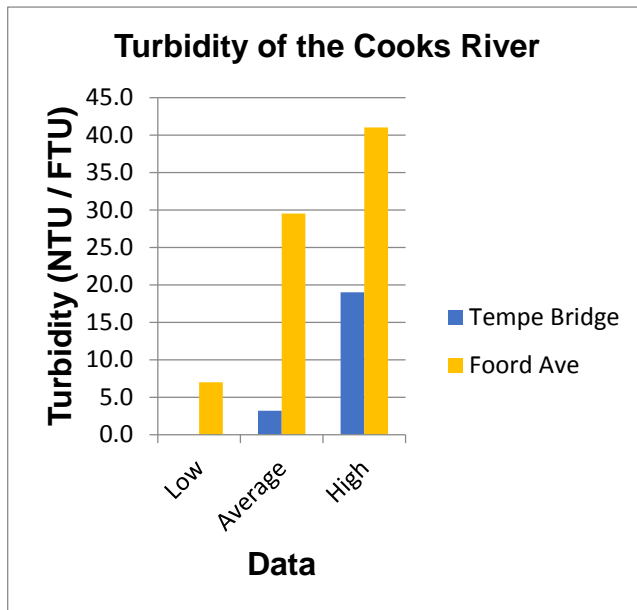
Temperature

Water temperatures range from 11° in winter to 25° in summer. The results for the previous 12 months ranged from 15° in winter to 24° in summer. We seem to have had a colder winter this year.

pH levels

The optimum pH to support aquatic life is 6.5 to 8.5. The RCC site is tidal, being quite close to the sea, and reflects pH of seawater (~pH 8), while further upstream the Foord Avenue site, while still tidal, reflects a higher percentage of freshwater and generally sits at a neutral level of 7.



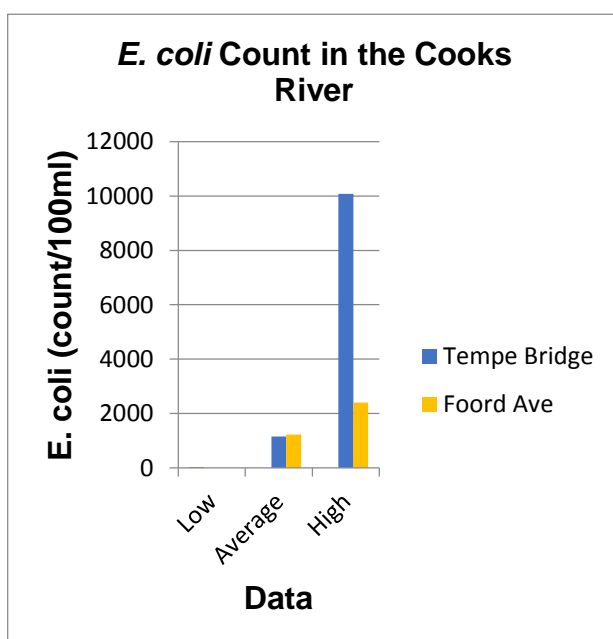


Turbidity:

Turbidity reduces penetration of light and the clarity of the water. It is a subjective evaluation of water quality. The volume of water at the Foord Avenue site is less therefore it is more turbid than the Tempe Bridge site.

Nitrogen:

This is a new test to Streamwatch and had only been measured this year at the Foord Avenue site. Nitrates are a form of nitrogen, which is found in several different forms in terrestrial and aquatic ecosystems. These forms of nitrogen include ammonia (NH₃), nitrates (NO₃), and nitrites (NO₂). Nitrates are essential plant nutrients, but in excess amounts they can cause significant water quality problems. Sources of nitrates include wastewater treatment plants, runoff from fertilised lawns and cropland, failing on-site septic systems, runoff from animal manure storage areas, and industrial discharges that contain corrosion inhibitors. Nitrogen concentrations measured are very low, (less than 0.1mg/l) which is good, it would be troubling if they were high.



E. coli

- Safe levels for swimming = 150 CFU/100ml
- Safe levels for boating or secondary contact = 1,000 CFU/100ml.

Higher rainfall events generally result in higher *E. coli* levels in the river. On one occasion after heavy rain and flooding, *E. coli* levels reached extremely high levels at RCC (Tempe Bridge) site of 10,080 CFU/100ml with the average being approx. 1,200 CFU/100ml. These levels make the water unsafe for swimming or even boating or secondary contact activities, especially after rain.

Membership Report

Current membership of the CRVA is 76 financial members.

Membership numbers have declined over the past two years (90 in 2014; 99 in 2013) but we have had an increase in members signing up for multiple years (some members are financial until 2018).

This decline in numbers may be related to the absence of the big community events (Candles on the River; Container Deposit Event in Steel Park; Non-Swimming Carnival) we had run in 2013 & 2014. These events attracted new members.

More members are making use of the direct deposit facility to pay their membership fees. We have also had an increase in people making donations to the CRVA when they renew their membership.

Peter Munro

Membership Co-ordinator

Tribute to Richard Grayson CRVA Treasurer

"Everything except language

Knows the meaning of existence.

Trees, planets, rivers, time

Know nothing else. They express it

Moment by moment as the universe." Les Murray *"The Meaning of Existence."*

Richard Grayson was truly a Cooks River person. Richard had a deep love of the river. From his home he looked out onto the river every day, he walked the river, he cycled the river, he observed the river and knew intimately the changing moods and movements of the River.

Richard was also a man who liked to make things happen, he knew that the river needed an advocate. Richard joined a group of local residents who had formed the Hurlstone Park Community Group with an agenda of environmental issues related to the river. This group worked with local and state politicians to raise the profile of the river and engage the community into action through a series of forums.

In 2005 the Hurlstone Park Community group merged with the Cooks River Valley Association (known as the CRVA). The CRVA had been around since the 1920s but had ceased to be active. This merger gave continuity to caring for the river back to the 1920s and Richard became the longest serving active member of the CRVA and was our link back to that former group. His knowledge and commitment will be deeply missed.



Richard Grayson (centre) with other members of the CRVA Executive & Linda Burney (Member for Canterbury)

We open each meeting of the CRVA with an acknowledgement of country, where we pay our respects to the indigenous elders and acknowledge their role in caring for the country of the Cooks River Valley. In life, Richard was an active elder in caring for country. At future meetings, each time we acknowledge those elders, we will acknowledge Richard as an elder, we will continue to pay our respects to Richard and the work he has done.

Thank you Richard for your passion, thank you for work, thank you for Caring for Country. May you rest in peace.