



# A New Legend

The story of the Berowra Creek Community Contract



*The building of a local history such as this requires great generosity from all involved. In the telling of the story people relive past events, reunite with the people they struggled with, and against, and they re-visit old photographs, diaries and personally-held collections of official and unofficial documents. All these resources were entrusted to our care, and we wish to acknowledge the following people for their significant contributions.*

*For the community: Fritz Schroeder, Betty Bailey, Jean and Lyn Bolton, Peter Butcher, Jacque Recsei, the Honourable Stephen O'Doherty, Paul Fredrickson, Phil Packham, Jocelyn Howell and Roger Campbell with special thanks to Fritz Schroeder, Jean and Lyn Bolton and Roger Campbell for additional documentation and illustrations.*

*For Hornsby Shire Council: Councillor Margaret McMurray, Councillor Graham Orr, Councillor Stephen Pringle and professional officers Peter Kemp, David Green, Ross McPherson and Graham Brookes, with special thanks to ex-Councillor Barbara Baker for her on-going support and additional documentation, ex-Councillor Chris Meany for additional documentation and illustrations, and Councillor William Blunt for overall project support and guidance.*

*For the Department of Urban Affairs and Planning: Barbara Callcott and Petula Samios; For Sydney Water: Owen Karsen, Kel Taylor and Peter Keane; For the Environment Protection Authority: Shane Barter; for the Hawkesbury-Nepean Catchment Management Trust: Peter Davey; for National Parks and Wildlife Service: Greg Wallace; and for Department of Land and Water Conservation: Michael Dean, to whom we owe special thanks for fearlessly leading us through the jungles of legislation.*

*The Berowra Catchment Management Committee's Coordinator, Daylan Cameron provided on-going project support and feedback, as well as illustrations, documentation and important contacts.*

*The text in this book is created from oral reporting, which has been verified with a variety of documentation provided by those who actively participated in the creation of the Community Contract. A list of the documentation is included in the bibliography at the end of the text. All poetry in the text is the work of Bob Adamson, local resident and poet who so generously offered unlimited access to his anthology "The Language of the Oysters".*

*"... you  
begin to understand  
that the river  
is like a blank page  
you enter it  
differently: shape  
it as you would  
a new thought  
first vaguely  
with phrases  
then sentences  
until finally  
its language  
starts talking".*

*from "The Speaking Page"  
by Bob Adamson*

# A New Legend

## THE STORY OF THE BEROWRA CREEK COMMUNITY CONTRACT

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Published by the Berowra Catchment  
Management Committee, 1998

*with the support and assistance of the*

Hawkesbury Nepean  
Catchment Management Trust.



*Produced by CultureShift*



SUSAN GOFF: ..... *Project management, publication design, research and authorship;*  
JENNIFER SHANLEY: ..... *Graphic design and art production;*  
SABRINA PANAROTTO: ..... *All photography unless otherwise stated;*  
VIRGINIA VAN EWYK: ..... *Text editing and supportive communications strategies.*

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The title of this text is drawn from Bob Adamson's poem of the same name.

Disclaimer: All efforts were made to ensure the accuracy of the text. The Berowra Catchment Management Committee apologises for any inaccuracies.

## INTRODUCTION

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Imagine clean water in our creeks and rivers.  
Imagine a community realising this dream.

*How would we begin such a journey?*

*Which paths would we tread?*

*How far would we go?*

This is the story of such a journey – the story of Berowra Creek and the creation of the Statement of Joint Intent – Community Contract (the Community Contract). It is a tale of partnership, dedication and the creation of a new relationship between a river and its community. It is a portrait of maturing values acting for the public and environmental good.

The story is presented by the Berowra Catchment Management Committee (BCMC), to acknowledge the commitment of the Berowra Catchment community and its government agencies, and so that their story can inspire, guide and encourage community members from other catchments.

While the Berowra Creek Community Contract focuses on the issue of water quality, it has been widely recognised as an important model for formalising action to promote a single issue in a public forum. All its creators recognise that as an instrument of participatory decision making, the Community Contract has made important gains in resolving local environmental concerns.

As we follow the human story of the Community Contract, we also write for the Catchment itself, whose spirit we braid into the history which is never far away from the beauty of Berowra Creek and the mighty Hawkesbury-Nepean River.



## 1. *The Source*

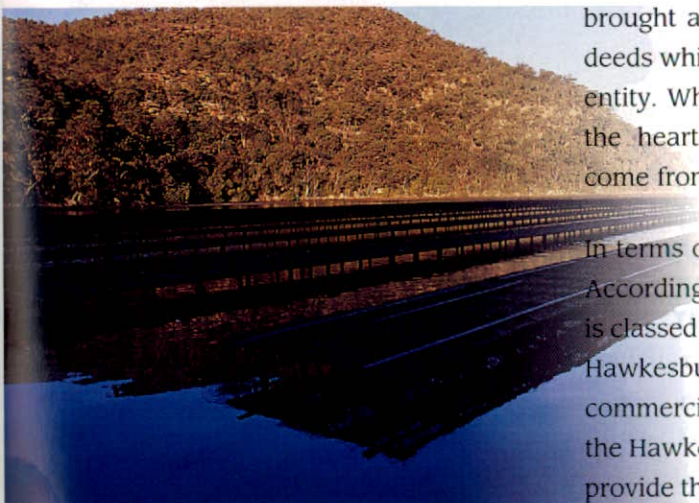
### LEGEND: NAMING THE PROBLEM

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To find the start of the Berowra Creek story is like trying to find the beginning of the Creek itself. When you think you have discovered it, further scrutiny reveals some other event, person or commitment to environmental good which precedes it. As one narrator said, you could trace it back to the first clean water legislation of late last century, and even then there would be older stories about the people and the issues which brought about that event. It is a trickling of thoughts, conversations and deeds which quietly build up over the years to become a visible and audible entity. What was it that inspired the gathering voices? What power lay in the hearts and minds of the advocates of change, and where did it come from?

In terms of human usage, Berowra Creek is an economic asset to Sydney. According to local environment group SHURE, Calabash Bay on the Creek is classed as a fish breeding ground, and the whole Creek is regarded as the Hawkesbury's best bream fishery. The annual value of the Berowra Creek's commercial catch is estimated at \$215,214. As well, an important part of the Hawkesbury's oyster industry is accommodated by the Creek's ability to provide the most consistent conditions for the final stages of oyster growth. Berowra Creek has been a favourite recreational resource since late last century, providing facilities for bush walking, camping, boating, fishing, fine eating and until recently, swimming.

The Berowra Catchment lies about 40 minutes north of Sydney's central business district, defined by the Hawkesbury-Nepean River to the north and the ridge-line roads of the Pacific Highway, Pennant Hills Road, Castle Hill Road and the Old Northern Road on its east and north-western limits. Its



38,000 hectares are home to approximately 80,000 people and many thousands of hectares of National Parks and bushland reserves.

The urban areas in the south and south-east are largely sewered, but rural areas and townships rely on septic disposal systems. There is pressure for increased development in existing urban areas as well as on rural and semi-rural land.

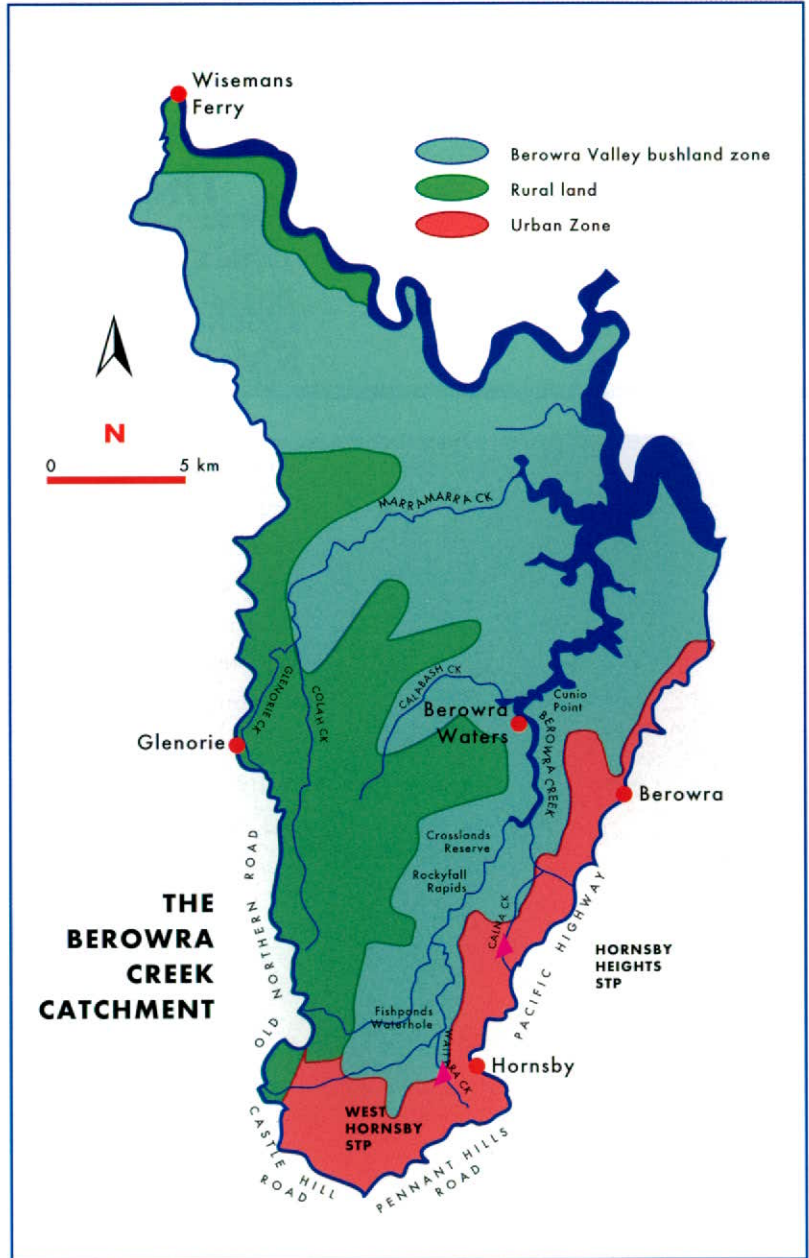
Berowra Creek is a major tributary of the Hawkesbury-Nepean River. It is 26 kilometres long, a freshwater creek above Rocky Fall Rapids, and influenced by tides below that point as it becomes an estuarine ecosystem.

Late last century, Berowra Creek was described as a deep water channel. Trading boats in the 1880s sailed as far as Crosslands, a popular picnic spot for Sydneysiders, where timber was harvested for ship building. The channel which was deep enough to allow sailing ships to drop their ballast and load up with timber logs has long since silted up. At the same location today the Creek is little more than 50 centimetres deep at low tide.

While there has always been sand in the Creek, as shown by recurring interests in sand mining, narrators are unsure as to the extent of natural or man-made factors behind the siltation problem. One narrator, pointing across a gully from her house to a recent ridgetop development, described how she did her own test in storm conditions: "I held a hessian sack at the mouth of the stormwater drain with the water rushing into it. It filled with sand within a matter of minutes. That was just one drain, one moment, in one storm."

Urban development over the last twenty years which, prior to the Contract, was not attuned to ecological sustainability, has had a significant impact on the quality of the water in the Creek. It has created such problems as:

- frequent blooms of toxic and non-toxic marine algae in nutrient enriched waters downstream of Berowra Waters;
- high levels of faecal bacteria resulting in a number of areas of the creek system becoming unfit for swimming;
- elevated levels of toxins, such as heavy metals, which can build up in the aquatic ecosystem.



## CATCHMENT CARERS: PEOPLE AND THEIR PLACE

*"We sing  
of the mulloway, our  
mauve-scaled river cod, they  
rise breaking the surface,  
our songs mention  
mulloway-kills and at night  
we eat the rich cream-coloured fish."*

*from "Folk Song"  
by Bob Adamson*



ALGAL BLOOM, BEROWRA WATERS

With the problems of urban expansion, however, also come the people who care about where they live. They observe casually at first, and then begin to take notes and photographs. They may contact services for help, write protesting letters and engage the political system to act on their concerns. Eventually they may become active and committed participants in environmental management programs, providing reliable data and local expertise in decision making about critical issues.

Unsavory smells from the natural waterways became more potent and more common; algal blooms were becoming more substantial and more frequent; run off and sewage overflows in wet seasons became more difficult to manage; frog watchers noted the loss of familiar species; recreational fishermen caught fish with black livers; bush walkers watched weeds intrude into relatively pristine natural reserves; indigenous plants died or were depleted by theft; and locals watched the sea grass retreat under increasingly muddy water.

In the mid to late 1980's, locals began to notice that things were not right in the Creek.

The issue of water quality reached very public proportions when, after the particularly dry and hot summer of 1994, the toxic algal bloom outbreak in Berowra Creek was publicised in the local press.

There had been previous press coverage about algal blooms and fish kills, but the degree of public pressure was not so great, the solutions not so close at hand, the political stakeholding not so high as in early 1994.

How had the issue's value to the community changed?

"I started writing letters in 1979,1980 – when the George's River oyster scare happened. I thought that it could happen here, in the Creek, because I knew the effluent test results I was getting at the sewage treatment plant, were way outside the limits of the licence."

Until his retirement in 1992, Fritz Schroeder was a Chemical Operator at the West Hornsby Sewage Treatment Plant. For over ten years he wrote letters to the Minister for the Environment, the Sydney Water Board and eventually the press, urging review of the plant's capacity and quality of output.

As a whistle blower, the insider's persistent efforts engaged community activists in strategies which lead to structural change. In the instance of the Berowra Creek story, Schroeder's inside information, while limited to the operations of the West Hornsby Sewage Treatment Plant, was recognised as valid by key community environmental activists such as Ana Pollak, Michael Dean and Dr David Hughes. Their collective actions based on this information, as well as increasing public concern, shifted the scope of their

local activism from disparate single issues to an integrated front, encompassing the entire Hawkesbury-Nepean Catchment.

In wet weather, the West Hornsby Sewage Treatment Plant was receiving an inflow ten times its technical capacity, according to Schroeder's confirmed statistics. He accused the Sydney Water Board of failing in two of its responsibilities: policing illegal stormwater connections to the sewer, and adequately maintaining cracked and broken sewer pipes.

Under the Clean Waters Act (1970) administered by the State Pollution Control Commission it was prohibited to pollute water in NSW without a licence. Licences were issued annually to control the quality of discharge with penalties applicable in the event of licences being breached.

The West Hornsby Sewage Treatment Plant had been commissioned with its first licence in 1978. Schroeder reported that in wet weather conditions the plant was releasing outflow into Waitara Creek (a tributary of Berowra Creek) which exceeded the State Pollution Control Commission's licence. He also documented modifications to the plant which caused these unlicensed discharges.

Why did the watchdog State Pollution Control Commission not act to address this situation? Statutory Authorities such as the Sydney Water Board could only be prosecuted with the written consent of the responsible Minister. Commentators such as Beder (1989) argued that the State Pollution Control Commission relied on the Water Board's sewerage system to accept increased loads of industrial waste and therefore the responsible Minister was reluctant to prosecute any breaches of sewage treatment plant licenses.

After failing to find solutions within the system and frustrated with bureaucratic inaction Schroeder turned whistle-blower and wrote to the State Ombudsman. The Minister responsible for the State Pollution Control Commission acknowledged these breaches but responded that the plant would comply with the licence "wherever possible" (Bedford, 17.10.80). The following year the acting Minister wrote that it was "unrealistic" to expect consistent compliance with the licence conditions (Shehan, 4.8.81).

To this day differences of interpretation remain between Schroeder and Sydney Water management. Owen Karsen, Sydney Water's area manager for sewage treatment, argues that in the late 1980s the Water Board took substantive measures to address these issues including a major upgrade to the West Hornsby Sewage Treatment Plant to address reliability, nutrient reduction, treatment of wet weather inflows and improved disinfection. Professional staff were also recruited to improve management and quality control at the facility.

But while the West Hornsby Sewage Treatment Plant received attention to reduce phosphorus, it continued to discharge high levels of nitrogen – a nutrient which was to play a crucial role. In addition the Hornsby Heights Sewage Treatment Plant was discharging nitrogen at even higher levels.

**Integrity:**  
1. Soundness of moral principles and character; uprightness; honesty;  
2. The state of being whole, entire or undiminished.  
Macquarie Dictionary

# CREEK A THIRD SEWER

Mrs Davey said the pollution was particularly evident after rain. She said clouds of silt could often flow down the creek which backs on to the family's home. Daveys believe sewerage overflows and detergents dumped down drains by businesses along Pacific Highway were a major cause. Another resident Rob Salt said he was not surprised water in Berowra Creek, of which Waitara Creek is a tributary, was also polluted. "It's a problem before it even gets to Berowra Creek." Mrs Davey said council and EPA inspectors had visited the creek on several occasions over the years but the pollution was still evident. Hornsby Council environmental scientist Ross McPherson acknowledged the pollution level recorded in the study was "high". He said efforts were under way to identify the various sources of the problem as part of a joint plan to clean up the Berowra Creek system.




For Schroeder and Berowra Creek there was no solution in sight until 1991 when the State Pollution Control Commission was replaced with a new Environment Protection Authority under legislation which invoked the new principles of Ecologically Sustainable Development (ESD). In 1994 the Water Board had no general statutory responsibility to protect the environment. These new laws expressed a community groundswell as environmental consciousness entered the mainstream.

It should be stated that the Water Board's sewage treatment plants were not the sole cause of pollution in the Creek. Narrators also point to Hornsby Shire Council's lack of adequate regulations and policing of urban development and maintenance of septic systems. There was a lack of will power when dealing with developers to enforce even minimum standards of erosion and sediment control. This led to significant levels of pollution of the creeks through siltation, nutrients and bacterial loads.

Elected representatives had to be convinced of the political worth of acting as the legislation stipulated. Such action would reflect real changes to deep-seated views built on the European pioneering tradition.

Indeed it can be concluded that the current Berowra catchment issues stem from the inability of *all* government agencies during the 1970s and 1980s to manage the urbanisation of a highly sensitive catchment with tens of thousands of new residents in an environmentally friendly manner. Only a sustained effort involving several State departments, their Ministers and a local council, could begin to reconcile this long held pro-development culture with changing local expectations.



*"We live here by this  
sliding water, brown by day  
black at night*

*flecked with bats  
and the blue powdery stars.  
Morning, a kingfisher*

*sits, an indigo rock  
knife-shaped, winking  
sun-speckled. There are too*

*many of us here,  
still they keep coming".*

*from "Folk Song"  
by Bob Adamson*

The success of the Community Contract springs from a dynamic between individuals who questioned this culture and who tested their courage to the limits. Years down the track, many were still moved to tears as they recollected their experience with the Community Contract.

The search for integrity describes the difficult changes which individuals and their organisations had to undertake. The result of their efforts is a formalised decision-making environment based on partnership and dedication, reflecting and promoting a new relationship between a river and its community. The Community Contract is the formal and accountable framework of this decision-making environment based on the philosophy of catchment management.

Catchment management reflects the concept of integrity: its "soundness of moral principles and character" is based in clear standards of intrinsic environmental value as well as human utilitarian value. Its "state of being whole, entire or undiminished" is found in its capacity to integrate complex and fragmented issues to achieve an holistic outcome reflective of a healthy, self renewing natural ecology.

In the late 80's, the concept of integrated catchment management was an environmental, political and cultural reality for growing numbers of people. Environmental activists who vocalised community concerns the length of the Hawkesbury-Nepean River, combined their activities and succeeded in raising political awareness of the river's critical state. Their daily

immediacy to the river and subsequent local knowledge ensured that its problems were kept on their agenda. They worked with academics, environmental lawyers, journalists and local politicians, building a groundswell of community pressure which eventually created the context for the formation of the Community Contract.

*"... Fish Ponds Creek should have been the perfect picnic spot, if you did not look at it. Icebergs of foam floated past and the acrid smell burned noses and throats."*

### SHALLOWS: EARLY RIVER POLITICS

Lobby groups were forming the length of the Hawkesbury-Nepean River system, raising public awareness about water quality and fighting environmentally-damaging developments.

There were grass roots groups such as "Save the Hawkesbury's Unique River Environment" (SHURE), "The Hawkesbury River Environmental Protection Society" (THREPS) and the "Coalition for the Hawkesbury and Nepean Groups for the Environment" (CHANGE).

Outspoken individuals such as Lorraine Banks and Drs Jocelyn and John Powell, Ana Pollak and Dr David Hughes were supported by dedicated community activists to raise the issue of water quality with local and state politicians. The long-established progress associations and civic groups such as the Pennant Hills District Civic Trust also supported those politicians who made the issue of water quality central to their political platforms.

Environmental lobby groups, spearheaded by SHURE, started to push the issue of water quality with Hornsby Shire Council. At the time SHURE had strong local credibility as a result of its long and successful battle to defeat a major commercial development at Kangaroo Point. This local action had highlighted the lack of information and due process in development proposals, and the existence of considerable community will to change local government's pro-development culture.

Their purpose was to highlight the inadequacy of the legislation and its implementation, and to place the value of the environment at equal (if not prioritised) standing with government-backed development values.



WEST HORNSBY SEWAGE TREATMENT PLANT  
DISCHARGE POINT



## TESTING THE WATERS: LOCAL DATA



ROGER CAMPBELL, STREAMWATCH  
TESTING WITH HIS DAUGHTER

Armed with a Streamwatch kit, local residents such as Roger Campbell and Peter Butcher, took regular tests of Berowra Creek to inform Council and lobby groups of the Berowra Creek's water quality. Yet, while highly polluted effluent from the West Hornsby Sewage Treatment Plant was being released into Waitara Creek during storm periods, the heat of the issue focussed on another area – the loss of traditional recreational access to Berowra Creek at Crosslands. Locals were reporting fish kills, skin complaints from swimming in the water, smells and algal blooms. Multi-million dollar industries such as tourism and aquaculture were under threat.

Crossland's Youth and Convention Centre manager, Peter Butcher, was forced on occasions to disallow swimming in the Creek because of "severe pollution". There was growing public concern that Council was unable to police or enforce pollution standards in the Catchment.

## TURNING HEADS: AUTHORISED QUESTION

Hornsby Shire Council's environmental staff had been communicating with the Sydney Water Board since early 1991, seeking answers about the capacity of the West Hornsby Sewage Treatment Plant and the lack of notification of plant bypass during wet weather. The Councillors did not consider the Sydney Water Board's response to be satisfactory. While the Sydney Water Board described its activities to Council officers in reports, letters and meetings, there was no clear indication of the plant's capacity to service existing or projected populations within the Catchment.

Until the Mitchell McCotter report in 1993, there was ongoing disagreement between the Council and Sydney Water Board as to how population statistics were estimated to determine the treatment capacity of the two sewage treatment plants, and thus Hornsby Shire Council's urban development responsibilities. Complex financial and mathematical issues slowed negotiation over three years. Agreement was reached to share information and operate an early warning system, although there is evidence to suggest that the Sydney Water board did not notify Council of all bypasses.

By 1993 treatment of wet weather inflows, nutrients and disinfection at West Hornsby Sewage Treatment Plant had been improved. However, the Berowra Creek Sewage Treatment Plants had been built and upgraded on the assumption that the Berowra Creek estuary was the same as the rest of the Hawkesbury-Nepean catchment tributaries. The prevailing school of

thought mistakenly assumed that phosphorus was the critical nutrient. Later research by the Sydney Water Board, backed by Council's own studies demonstrated that nitrogen was in fact the critical nutrient for Berowra Creek's estuarine ecology.

An internal options report had been drafted in 1992 to upgrade the Hornsby Heights Sewage Treatment Plant including nitrogen removal, followed by the commissioning of an Environmental Impact Statement. However, there was still no formal inclusion of the nitrogen issue in Sydney Water Board's dealings with Council.

## THE TIDE BEGINS: COUNCIL'S STAKEHOLDING

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Hornsby Shire Council's concern for water quality was given additional impetus by the Amendments to the State Environment Planning Policy No 25 and the State Regional Environmental Plan No 12, introduced in 1991, which imposed urban consolidation and dual occupancy.

The policy changes had gone through an extensive review conducted by Commissioner Simpson, Chairman of the Commissioners of Inquiry for Environment and Planning, who, as cited in the Pennant Hills District Civic Trust Newsletter (3/92), reported the following:

*"Opposition expressed to State Planning objectives being achieved by blanket controls that do not reflect the divergent needs and conditions within the Sydney region is well founded."*

And:

*"A large number of Councils are opposed to increasing density standards, believing that associated increased building bulk and site cover affects with injury the amenity and environment of a locality."*

The Minister for Planning was required to consider recommendations made by the Commission of Inquiry, but was not bound to adopt them. The lack of response to these concerns by the Minister and his Department, and the erosion of local planning powers, were focussed at Hornsby Council around a specific problem. Within Hornsby Shire Council's Planning Scheme Ordinance (1977) was a provision for granny flats, which developers over the years had used as a loop hole to maximise the opportunities of medium density development. In the interests of local amenity the Council now sought to rescind the provision. However, the Minister for Planning had the discretionary powers to disallow a Local Environment Plan.

## PRESSURE GROWS: STRATEGIC PARTNERS

In response to these planning changes, a local community initiative called "Planning Power for People" was formed amongst residents in Cheltenham, Beecroft and Pennant Hills. The purpose of the group was to act as a link between Council and local residents, providing and receiving information regarding planning matters. It also knowingly placed Councillors in a powerful lobbying position between State policy and contradictory local community interests.

At this time, and within the context of its communication with the Sydney Water Board, Council commissioned its own water quality and ecological study of the estuarine section of Berowra Creek (*Water Quality of Berowra*

*Creek at Crosslands reserve between February 18 1992 and February 15 1993, Laxton: 1993).*

Dr Laxton reported that the Creek was suffering from high faecal coliform bacterial concentrations following rainfall in the Catchment. The source was understood to be diffuse pollution from domestic animals and overflow at the West Hornsby Sewage Treatment Plant. Amongst other matters, the report recommended the erection of a notice at Crosslands warning public of the risk of swimming within four days of heavy rainfall.



CHRIS MEANY AT THE SWIM WARNING  
SIGN AT CROSSLANDS

While the general public's significant contribution to water quality deterioration within the Catchment was never denied, it was the Sydney Water Board's responsibility as a point source of pollution which became the focus of local anger (later research showed the sewage treatment plants were responsible for 80% of the nitrogen in the Creek).

A Sydney Morning Herald article (March 1993), based on a leaked confidential report, demonstrated the lack of public confidence in the Sydney Water Board's performance within the whole Hawkesbury-Nepean Catchment. In the absence of State action, local politicians made dealing with the Sydney Water Board their top priority.

Everyone now knew there was a problem, but who would take responsibility?

## POWER FROM WITHIN: LOCAL POLITICAL PLATFORMS

In 1991 Margaret McMurray and seven months later, Barbara Baker, backed by local groups, were elected onto Hornsby Shire Council – traditionally a pro-development Council. While self-admittedly unlikely allies, the two women started to talk and a rapport grew, manifesting a powerful combination of wills, political know-how and a passion for community values.

Cllr McMurray described her early days on Council in terms of frustration and despair: "Repeatedly, in Council meetings, I would ask what was going to be done about the water quality issue and just get blank looks. I was on a Bushland Management Committee. I knew the problems we were seeing in the bush must be related to water quality and building practices. Bulldozers would come in, push over every tree, and grade the soil off into the bush. Stormwater then took that soil straight down into the Creek, spreading weeds, rubbish, domestic animal faeces. Council had to manage its building processes differently."

Former Cllr Baker remembered: "I was a lay person, but I believed and still do, that local government must reflect the community's concerns. In taking on the issue of water quality, I suddenly had to talk about SEPPs, DCP's and REPs – I had to get people with the expertise. I said – 'I'll help you if you help me'. I found barristers with environmental concerns, lobby groups and environmental scientists – you have to know what you are talking about."



DAMAGE FROM URBAN DEVELOPMENT

The challenge for Baker and McMurray was to change the culture within their own Council – a culture which had never questioned the right of development over environmental values. They started with small, clever steps.

After being approached by Schroeder in early 1993, Cllr Baker decided to follow up his concerns.

*... today again, for about the sixth time, run off the home building site . . . then down the drain into the nearby creek."*

She arranged for a Presidential interview which included Fritz Schroeder, Cllrs McMurray, Baker and Gallagher, Dr Laxton and the Shire President, Cllr Pringle.

The purpose was to investigate Schroeder's concerns relating to the West Hornsby Sewage Treatment Plant's chlorination procedures. Lasting for half an hour, it produced very little information, but did identify a list of outstanding issues. A meeting which was arranged with the Sydney Water Board's General Manager to follow up on the issues did not eventuate due to his retirement in April 1993.

Following the interview, Cllr Baker wrote to State MP Stephen O'Doherty expressing her concerns. A meeting was subsequently arranged between the Sydney Water Board, Cllr Baker and Graham Brookes, Hornsby Shire Council's Environment Manager.

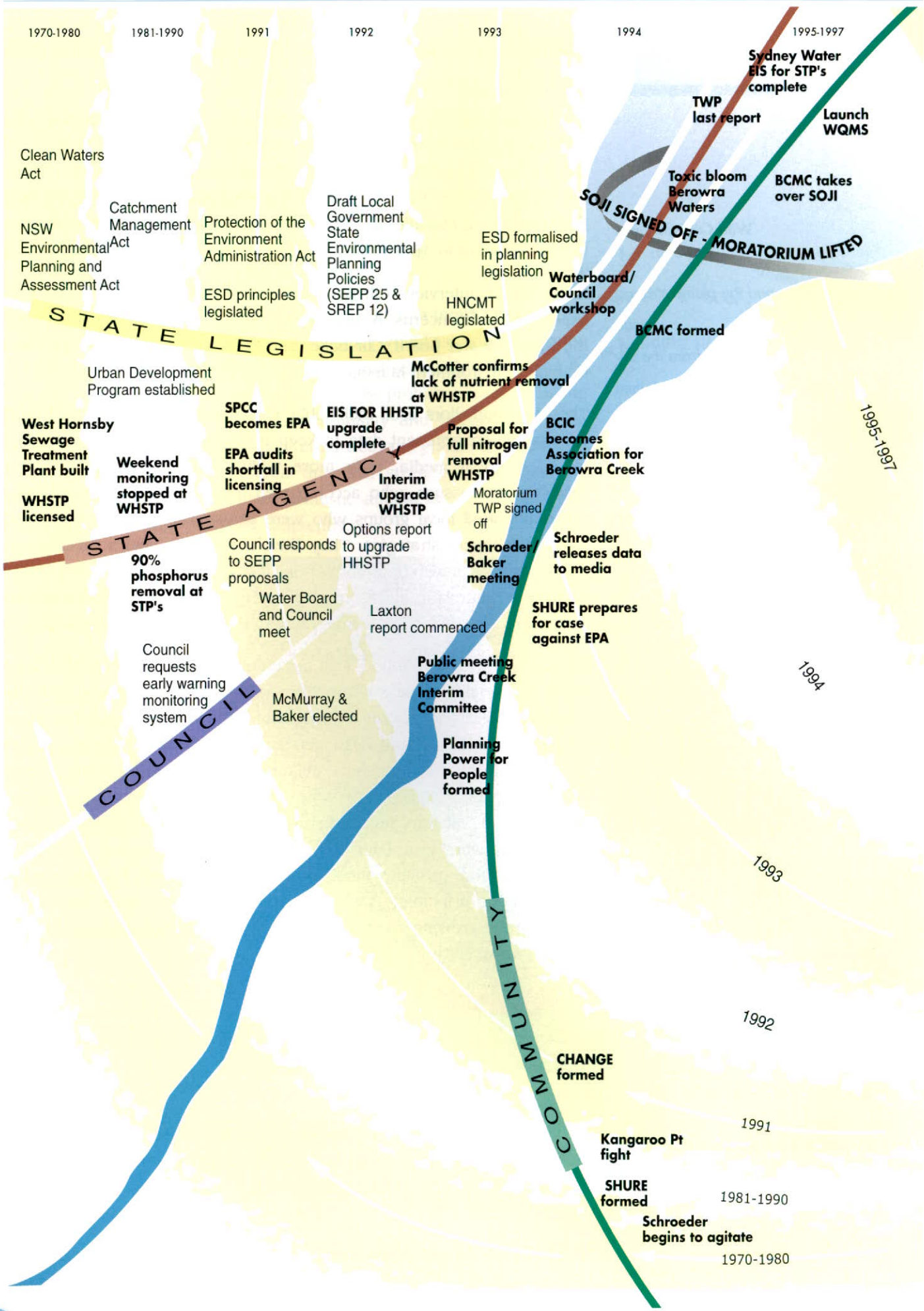
The two Councillors used their lobby group contacts and received local state-of-the-environment data to keep them on top of the issues. They talked to local media, now more willing to publish stories about environmental issues, who accompanied the Councillors on site visits. They supported local groups who were galvanising public opinion and forming lobbying strategies. They then made it Council's business to represent this new community front as a means of resisting State government intrusion into Council planning powers and responsibilities. They forged the first link towards a system of government with integrity.

Hornsby Shire Council found itself poised on the edge of a critical turning point. The quality of the water in Berowra Creek was being independently monitored, and scientifically investigated; there was by now a history of frustration, confusion and misunderstanding between the Sydney Water Board and the Council; there was still no clear indication about the sewage treatment plant's capacity to cope with population increases leaving Council in a vacuum regarding urban planning strategies; Council's planning powers had been significantly reduced under new State legislation; and possibly most significantly, Ecologically Sustainable Development principles had been introduced into State legislation reflecting the growing community concern for environmental health and residential amenity.

### **Wild Colonial Boys**

*"Musk ducks and the plump Wonga  
pigeon  
were knocked from the sky  
in blood sport, left to rot, then  
afterwards  
in firelight were the games,  
all various forms of gambling. In the  
mist  
you'd hear knuckle-bones rattle  
in their cotton pockets; or darned  
in conversation, obscene words,  
slurred  
by badly brewed alcohol; never song  
but garbled recitations, coughed half-  
chants.  
Whatever fed the imagination  
was like a yellowness, it showed  
in diverse activities; from plucking  
ducks to the way they slept in  
postures  
of loose decadence. The river  
was a flood of their refuse, a smear of  
thick  
waste through the countryside.  
After storms and at low tide you'd see  
the details of their hate; the score, a  
tally  
and what they called their stake;  
the sacred remnants of the ancient  
tribe's estate."*

by Bob Adamson





## 2: *Mid-stream*

### THE FULCRUM: A MORATORIUM

Supported by the burgeoning environmental movement and resisting the intentions of State environmental planning policies, Cllrs Baker and McMurray gained the political upper hand by urging Hornsby Shire Council to place a moratorium on the processing of development applications in the West Hornsby Sewage Treatment Plant's Catchment. The moratorium was put in place on July 1st, 1993.

Within the Council Chamber, a series of agreements had been won to delay development applications in the Catchment area of the West Hornsby Sewage Treatment Plant until the plant was able to cope with the additional loads.

Water quality statistics provided by the Sydney Water Board and Council's own research demonstrated that deterioration in water quality was due to a mix of factors. These included urban planning and development practices, general community water use habits, and most significantly discharge from the West Hornsby Sewage Treatment Plant. These findings gave strength to Council's demand to the Sydney Water Board to change its operations and facilities to satisfy Council's concerns.

"We did a very radical thing. We put our jobs on the line and we had to be prepared to take on legal action if it came to it." Cllrs Baker and McMurray described the first steps towards the Community Contract with vivid memory of the threats and political embarrassment, recalling their courage in the face of the State's power to sack Council.

"We had strong opposition from some Councillors but were supported by most. This degree of risk taking and commitment was only possible



because it was an apolitical Council. The trust between the Councillors was truly amazing.”

## A NEW COURSE: OVERCOMING BARRIERS

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Developers started to complain. Council’s administrative branch insisted that the Councillors themselves answer the developers’ questions. Once the moratorium was in place, Council was faced with two mountains to climb:

- [i] to set standards for water quality; and*
- [ii] to change the culture between and within agencies and local government.*

Water quality standards could not be addressed without a cultural change, and the cultural change itself centred around water quality standards.

The Councillors looked to legislative requirements to assist them in their task of setting water standards. They had assumed that the Environment Protection Authority, (which replaced the State Pollution Control Commission as an outcome of the Protection of the Environment Administration Act 1991) would set the standards for water quality. The 1970 Clean Waters Act had set up an optional process under which standards could be set by the State Pollution Control Commission. However, by 1992 these standards had been set for only a few waterways, and Berowra Creek was not one of them. So far the Environment Protection Authority had acted no further on the matter.

The other legal resource for the Councillors, which could have identified impacts and proposed measures to deal with water pollution, was the environmental planning legislation, which outlines the requirement for assessing the impact of development. However, the two Berowra Creek Sewage Treatment Plants were completed the year before this legislation was enacted (1979), thus, the environmental impact of the plants on Berowra Creek was never assessed.

Moreover, while an environmental impact statement was now required for upgrading the plants, because sub-division is not “designated development”, the on-going urban development of the Berowra Creek Catchment did not receive the same level of assessment as the plants themselves. Both the EIS and the ordinary development assessment process were considered by environmentalists and their local government representatives to be seriously deficient as they did not take account of the cumulative impact of development, or a catchment’s ecology. The 1979 Environmental Planning & Assessment Act does not include the principles of Ecologically Sustainable Development, because it predates the Bruntland Report (1987) which formulated these principles.

While Ecologically Sustainable Development (ESD) first appears in New South Wales legislation in the 1991 Protection of the Environment

Administration Act, the planning legislation did not refer to these principles until 1994, when an amendment to the regulation required consideration of ESD principles when preparing an EIS (but not for other types of development, including sub-division).

With no legislated obligation, the only legal or political leverage available to the community and its elected representatives in setting parameters for development in the Creek which were consistent with ESD principles, was to pressure the Environment Protection Authority to exercise its discretionary powers under Section 12 of its Act. However in 1993, the Environment Protection Authority's activities in Berowra Creek were focussed on licensing and not on the need for Ecologically Sustainable Development.

### CATCHMENT MANAGEMENT: A LEGISLATED CONTEXT FOR CHANGE



WILLIAM BLUNT

Since the early 1990's, committees established under the Catchment Management Act 1989 had been operating throughout the State under the umbrella of "Total Catchment Management". The only coordinating body in the Hawkesbury-Nepean was the Nepean Hawkesbury Catchment Management Council, initially formed as the Joint Councils River Committee – an amalgamation of local council representatives which was considered to be under-resourced and overly-focussed on symptoms rather than causes.

The local community action group, SHURE, was also active in CHANGE, which was a coalition of environmental groups for the length of the Hawkesbury-Nepean river system. After some very difficult deliberations, CHANGE decided to support the Hon. Kevin Rozzoli's Private Members' Bill to create the Hawkesbury-Nepean Catchment Management Trust.



DAYLAN CAMERON

Within the Berowra Creek community, local residents had been talking to each other about the critical state of the Creek for several years. Strong local networks were forming, and informal meetings around weekend barbecues created a growing neighbourhood commitment to action. Eventually, locals organised for a public meeting at Berowra Creek, on the 16th of February 1993. To the organisers' delight, the meeting was attended by over 100 people. Speakers included the Hon. Kevin Rozzoli and State MP Stephen O'Doherty, as well as a panel including Dr David Hughes, Mr Graham Brookes (Manager of Hornsby Council's Environment Branch) and Mr John Cauchi from the Nepean Hawkesbury Catchment Management Council.

The meeting requested that once Rozzoli's Trust had been formed, the Minister establish the Berowra Catchment Management Committee to enable the long term and strategic management of the Catchment.

Stephen O'Doherty, who had received complaints about Council's actions, eventually acknowledged the moratorium as an essential lever to deal with long-standing problems. Given the growing confidence in Total Catchment Management philosophy, he also suggested to the Trust that such an approach be used in Berowra.

According to O'Doherty, Robert Webster, then Minister for Planning, had already been working towards a coordinated approach to managing water issues and catchment ecologies. Rozzoli's Bill offered the possibility of a departmental answer to the difficulties in the Berowra Creek Catchment.

### **TECHNICAL WORKING PARTY: PARTNERSHIP INITIATED**

---

The Department of Planning was to play a leading role in establishing coordinated management of the catchment, which should be understood within the policy background of the Urban Development Program. Established in 1981 in response to a major land supply crisis, the Program promoted a more strategic approach to releasing land packages on Sydney's fringes, and also encouraged infill developments in Sydney's urban communities.

Once a year, the Department of Planning met with developers, Council representatives and infrastructure authorities such as the Sydney Water Board, to monitor and discuss its urban release areas. At the 1993 gathering, Hornsby Shire Council announced its proposed moratorium on development in the West Hornsby area.

Sensitive to the urgency of the issue, Barbara Callcott, Deputy Manager of the Department of Planning's Sydney North Team, and a qualified mechanical engineer, offered to chair a private meeting to resolve the problem. When it became apparent that a single, informal event was not going to resolve the issues, the Department reported to Minister Webster. Aware of council and community concerns, the Minister met with the Mayor of Hornsby in October 1993 resulting in agreement to form the Technical Working Party (TWP). The working party was to be chaired by the Department of Planning, and to include the Sydney Water Board and Hornsby Shire Council represented by its General Manager, the Mayor, and Cllrs Baker and McMurray. The moratorium remained in place until the signing of the Statement of Joint Intent – Community Contract for Berowra Creek, six months later.

The Minister requested that the TWP report on the nature and causes of the pollution problems of concern to Council, the current capacity of the West Hornsby Sewage Treatment Plant, and its ability to handle additional loads as a result of urban development. Its first meeting was held in November 1993.

## SETTING STANDARDS: THE BOTTOM LINE

The TWP quickly stumbled against its first impasse. There were no statutory water quality standards to gauge the capacity of the land for development. Neither the Sydney Water Board nor the Environment Protection Authority would take sole responsibility for the problem.

*"Just under the surface  
mullet roll in the current,  
their pale bellies catch the sunken  
light, the skin  
of the river erupts*

*above the purling fish.  
The sky hangs over  
the boat a wall of shuddering  
light smudging the wings  
of a swamp harrier".*

from *"Meshing Bends in the Light"*

Bob Adamson

The Sydney Water Board, which had been considering water quality guidelines since 1992, had developed a "Clean Waterways" program, proposing a twenty year plan and including water quality objectives. The Board had also prepared a draft document to classify the waterways based on a draft proposal from the State Pollution Control Commission, which had put forward a set of standards developed by the Australian and New Zealand Environment and Conservation Council (ANZECC). The fact that the Sydney Water Board was working with ANZECC to develop its guidelines was, however, not made available to the TWP.

Without standards, an agency could always meet its licensed obligations without considering the impact of those obligations on a specific local ecology. It was agreed that the ANZECC guidelines for assessing water quality had not yet been utilised in Australia. The TWP would have to set precedents because it was believed that water quality in the Creek was unacceptable and that there was a need to meet water quality objectives using appropriate target levels. Members of the working group suggested 10mg of nitrogen/ L .

With regard to the sewage treatment plants, it was also suggested that a list of five options be created. Accordingly the Sydney Water Board created an Options Paper and costed and developed it with community consultation.

The reorientation of development and planning towards sustaining water quality in local natural waterways would require a shift in values by individuals within government authorities, individuals who would then devolve that change within their organisations. It was a shift which was created through a tough partnership which was eventually forged from the tense negotiations within the TWP's sessions.

## THE WATERSHED: COMMITMENT FORGED

Over six months, twenty-four people of very diverse backgrounds became involved in a unique exchange, with Barbara Callcott of the Department of Planning in the Chair. Ms Callcott recalls –

"The meetings were very heated, outspoken. When it got very difficult, the

Minister met with the parties himself. I was very impressed with his genuine preparedness to clean up the Creek. Having the Councillors on the group made it unusual from the start. They were the driving force for the Council – their single-minded concern was to clean up the Creek.

We learned about sewage treatment plants, we walked around the Catchment, we photographed the water and development sites. It was obvious that this was a substantial problem and that no single organisation was to blame. The TWP could handle the immediate problems, but we needed something else for the long term work – the idea of the Statement of Joint Intent emerged from the meetings. “

Making the TWP work required understanding and translating the specific languages of each technical discipline. Constantly changing representation from the various departments made progress slow. Only the strong co-operation between those who understood the critical nature of the issue to the local community ensured an acceptance of shared responsibility for water quality.

Initially, the Environment Protection Authority and the newly-formed Hawkesbury-Nepean Catchment Management Trust were not included in the TWP. During 1993, the local environment group SHURE, with Sydney lawyer Michael Mobbs investigated legal grounds to challenge the Environment Protection Authority for not carrying out its charter by remaining inactive on the cumulative impacts of development within the Berowra Creek Catchment. As a result, SHURE delivered a report illustrating the relationship between nitrogen levels and algal blooms in Berowra Creek to the Environment Protection Authority.

The Environment Protection Authority and the Trust were invited into the TWP to assist in drafting water quality standards. A sub-committee with technical expertise met formally 16 times in 6 months, and participated in over a dozen additional site inspections. Intense negotiations enabled the eventual adoption of the ANZECC 1992 National Water Quality Management Strategy indicative concentration values for aquatic ecosystem protection.

**RIVER ALGAE BLOOM SCARE**  
 Green groups support Council  
 Wednesday, February 2, 1994  
 Phone: 476 5111

The Creek was reaching overload point. Between 1991 and 1994, nine algal bloom events had been noted by locals. Early in the hot, dry summer of 1994, a toxic bloom crisis took place which was unusual and particularly dense, with a heavy scum on the surface of the Creek. Locals who waded into the water suffered ulcers. The bloom was lethal to aquatic life: there was a major fish kill, and mussel and barnacle deaths were noted. The issue was high on the local community's agenda and prominent in the

*“Paint flaking from the belly of an old clinker.*

*The boys with their rods, prawns and blood-worms rubbed through their hair,*

*tasting the westerly around Snake Island –*

*and you sleeping, curled around the stern.*

*The mountains everywhere, skirts of the mangroves,*

*then at Dangar’s jetty, an octopus sucking for its life at the end of a line.*

*Blue wrens hovering for invisible insects, a shag*

*hunched on the wing. The trim park patched there among scribbly gums,*

*houses, a wash-shed, and a backyard there*

*Lemon-grass drying in the sunlight.”*

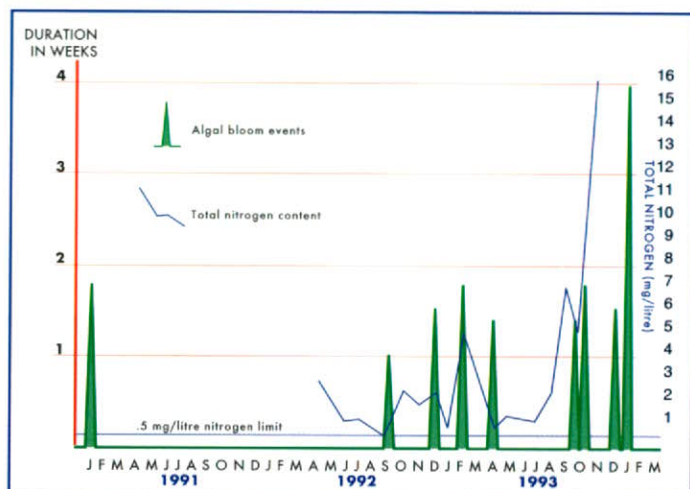
*from “Songs for Juno”  
 by Bob Adamson*

**THE CATALYST:  
 TOXIC BLOOM**

Graph courtesy of SHURE

media. The TWP was researching the issue, and the moratorium was still in place.

While in 1993, concerns about the West Hornsby Sewage Treatment Plant had been the catalyst for Hornsby Shire Council to establish the development moratorium, one year later, the TWP's research had identified three major sources of pollution in the Creek:



FISH KILL AT BEROWRA WATERS

- [i] sediments washing from poorly controlled building sites;
- [ii] nutrients from diffuse stormwater sources as well as the 20 licensed point sources in the Catchment including the two sewage treatment plants;
- [iii] and faecal contamination, from the same sources.

TWP members concluded that the Creek was under "severe ecological stress", that reduction of pollution and better management of building sites would return the Creek to good health, and that while the sewage treatment plants had adequate capacity for dry weather conditions, further research was needed for wet weather.

They also stated that any new urban developments should be planned with a view to "protect the natural creek lines", "reduce stormwater loading during rain events" and to "effectively manage water quality by reducing both nutrients and sediments entering the creek system."

Callcott recalls that Hornsby Shire Council quickly responded to the obvious need to change its operations. The Sydney Water Board made its monitoring data available to the group, and both organisations released scientists to conduct research to help understand the problems. By this time, the Sydney Water Board had largely dealt with its wet weather capacity problems,

phosphorus treatment and disinfection. The upgrade project also included partial nitrogen removal. Management practices were improved and bypasses reduced. However, nitrogen loads were still too high. During 1993-1994 the plant operators, having identified the issues, rearranged their tank operations, introduced new processes and applied best practice management. In that initial period, bypasses were reduced and phosphorus loads cut. However, the issue of nitrogen was still in question.

On receipt of the final report in February 1994, Minister Webster assured the TWP that he was prepared to take the political responsibility for the resolution of difficult issues. On the 27th April, 1994, the Department of Planning, Hornsby Shire Council, the EPA, the Sydney Water Board and the Hawkesbury-Nepean Catchment Management Trust signed the Statement of Joint Intent – Community Contract for Berowra Creek.

## THE COMMUNITY CONTRACT: COMMITMENT FORMALISED

The Statement is a list of obligations which the working party created with the assistance of Robert Ball, General Manager of Hornsby Shire Council. On 28 February 1994, Ball worked with the group to draft the obligations on a white board, as a means of clarifying each agency's agreed responsibilities. The Community Contract describes how the signatories agree to work together to achieve the ecologically sustainable development of the Catchment and the rehabilitation of the Creek itself; to secure the recreational and aquaculture use of the Creek; and to restore the health of the estuarine ecologies. These objectives are consistent with the ANZECC standards.

Statutory bodies would take responsibility for itemised shared and individual obligations within a mutual understanding of the complexity of water quality issues and the recognition that their management is a collective responsibility resulting from the Australian tradition of coastal settlement.

All parties agreed to prepare and implement a long term water quality management strategy which included a range of nutrient reduction measures to be implemented immediately, as well as research activities such as "catchment combing" to identify sources of pollution, and a co-operative monitoring program to measure effectiveness of changes.

Each authority took on particular obligations within the joint responsibility of a water quality management strategy.

For Sydney Water, the Community Contract, has provided a forum for regular communication with councillors and community representatives, access to good quality local data, and has established it as a trustworthy and environmentally responsible organisation oriented towards community concerns. The Corporation considers Hornsby Shire Council's Catchment Remediation program as essential to Sydney Water's success – so integrally bound are the strategies.

The Department of Planning agreed that it would not introduce any planning measures that are incompatible with the ecological sustainability of Berowra Creek. The Department entered into partnership with the other signatories to ensure the rehabilitation of the Creek. This position increased the status of the Department's commitment to statutory roles implied within the Community Contract's obligations.

A new Environment Division with a water catchments branch was established by Hornsby Shire Council – the first Council to do so in Sydney.



MINISTER SIGNING STATEMENT OF JOINT  
INTENT – COMMUNITY CONTRACT



Environmental scientists recruited by the Division provided data and incorporated models to inform the TWP's thinking about water quality management strategies. The Environment Division evolved with the Community Contract and the community's expectations which spearheaded cultural changes within Council's administration.

Hornsby Shire Council committed to a range of strategic interventions funded by a special levy called the Catchment Remediation Rate. A Five Year Plan based on computer modelling was developed to estimate the effectiveness of structures such as constructed wetlands, gross pollutant traps, sediment traps and creek remediation works in reducing stormwater pollution. 48 sites for remediation work were identified throughout the Shire. It was proposed that if just 11 wetlands were to be built in the Catchment alone, there would be a 40% reduction in total nitrogen run off.

The Hawkesbury-Nepean Catchment Management Trust's strategy was to look at the tasks of each signatory, the different topics covered within each task and the best ways of communicating with its community.

The Environment Protection Authority agreed to undertake a catchment survey and water quality monitoring program with Council and the Water Board. The Authority also played a key role in drafting the Water Quality Management Strategy which detailed the ongoing implementation of the community contract.

The Community Contract staged the "Cleaner Berowra Creek" public exhibition throughout October and November of 1994. The TWP made available to the public the following documents:

1. Sydney Water's Sewage Treatment Options Study
2. Hornsby Council's Draft Soil and Water Management Code
3. Hornsby Council's Draft Urban Runoff Management Code
4. Hornsby Council's Draft Urban Drainage Design Manual
5. Issues Report on the Remediation of Council's Stormwater System
6. HNCMT's Draft Public Education Strategy
7. Draft Water Quality Management Strategy (prepared jointly)
8. Background Information Document.



MINISTER FOR THE ENVIRONMENT  
NEW SOUTH WALES

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Please quote. 83683  
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Hon K H Hozzoll MP  
Speaker  
Member for Hawkesbury,  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000

RECEIVED  
SPEAKER'S OFFICE  
17 FEB 1994  
Dec EU 17-2-94 LD

At the conclusion of the exhibition stage, Barbara Callcott handed the chair over to Peter Yates from the Environment Protection Authority.

In June 1995, the Minister approved the options to be investigated by the EIS for the Community Contract, and in August of that same year, the Director of the Department of Urban Affairs and Planning issued the "Director's Requirements". The Community Contract had evolved from a series of reports, to a long term strategic partnership to manage water quality in Berowra Creek. It had adopted a holistic management approach by integrating each agency's core business into an overall water quality strategy, which would itself be assessed for its environmental impact.

Dear Mr Hozzoll,

refer to your representations of 22 December 1993 on behalf of the Berowra Catchment Committee, Mr H L Bolton, PO Box 35, Berowra Heights NSW 2082, concerning the impact and the impact this may have on waterways.

The Government has endorsed a strategy to control the growth of algae. This strategy is...

### 3: Confluence

#### CLEAR WATERS: POLITICAL TRANSPARENCY

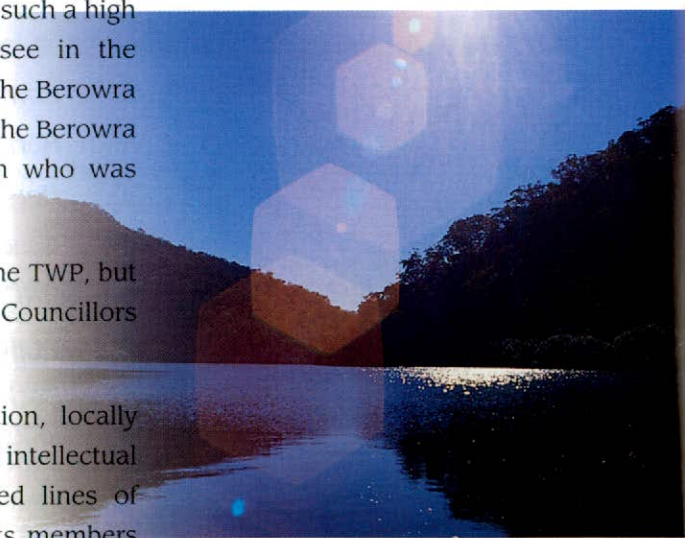
Having completed its technical task, the TWP stayed in place while an appropriate management body was found to take on the long term responsibility of overseeing the SOJI process and the implementation of the Water Quality Management Strategy.

To find the the key community body which set the standard for such a high degree of public participation and accountability as we see in the Community Contract, we need to look back to 1993, and meet the Berowra Creek Interim Catchment Committee. This group resulted from the Berowra public meeting in early 1993. It was chaired by Lyn Bolton who was supported by his wife and Committee secretary, Jean.

There was no reciprocal membership between this body and the TWP, but membership of the Interim Committee by several Shire Councillors provided a strong support in Council for the work of the TWP.

The Interim Committee was a working model of co-operation, locally originated, locally accountable and able to access political and intellectual "capital" to address its single issue concerns. It established lines of communication with Council and the Sydney Water Board, its members carried out research, daily monitoring of water quality, embarked on a drain mapping project, commented on proposed developments and voiced their concerns and advice to Council. They ran public meetings and established strong links with local media.

This local representation of residents devoted to the health of the Creek successfully filled some of the gaps between agencies, tiers of government and community. They put on the table issues such as point source pollution, real ecological impact of development and public accountability for agency actions.



## **SUSTAINABILITY: LONG TERM SUPPORT**

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As soon as the Hawkesbury-Nepean Catchment Trust was in place (Oct 1993), its Chairman, Robert Crawford responded to the Interim Committee's request to be included in the Trust's framework. Under the Catchment Management Act, (1989) the Trust extended an open invitation to the public to apply for membership of the Berowra Catchment Management Committee.

The Berowra Catchment Management Committee (CMC) was officially appointed in July 1994, and included many of the community members of the Berowra Creek Interim Catchment Committee.

William Blunt, founding Chairman and later to be elected as a Hornsby Shire Councillor, describes his first contact with the Trust: "I had lived in the Catchment for 20 years, played in it as a kid, bushwalked with my father and over the years developed a concern for environmental issues. I was concerned that we needed to move forward. I put up my hand to assist. Some time later I was appointed Chairman of the Berowra CMC by the Minister for Land and Water Conservation."

Blunt described how the group crowded into a tiny room for its first meeting, and how each person put forward their thoughts about the Committee's future. They determined that water quality was to be their priority issue, followed by the overall health of the Catchment environment. Everyone realised that they were in for the long haul.

"As Chair, I wanted to build on the work of the TWP and create a committee where people could talk to each other. The TWP was necessarily a confidential forum - we were now in a position to be open to the public".

Blunt, and his fellow committee members, working closely with the CMC Coordinator Daylan Cameron, found that they trod a delicate line between the responsibilities of the TWP and the Committee's charter, aware that the Committee was being observed to see whether it would take an "issues based" or more strategic approach. The TWP's final report, submitted in September 1995 to the new Labor Government's Urban Affairs and Planning Minister, Craig Knowles, made the recommendation that responsibility for review and management of the Community Contract's activities should be formally handed over to the Berowra Catchment Management Committee.

The Berowra CMC formed a SOJI-Sub-Committee and on 26 October 1995 met to formulate its Terms of Reference. These responsibilities recognised key aspects of committee management including facilitation of information exchange and activities; reporting criteria; monitoring and supporting participants' progress towards their contract objectives and Ecologically Sustainable Development within the Catchment; allocation of resources;

and overseeing the implementation, public reporting and periodic review of the Water Quality Management Strategy.

Continued debates about powers and responsibilities, and persistent pro-development interests meant that the political security of the Berowra Catchment Management Committee, and the Trust itself, remained in question. The TWP made its last report in October 1995. Despite repeated invitations, the Department of Urban Affairs and Planning were reluctant to participate in the ongoing implementation of the Community Contract, until the sub-committee actually convened its meetings in the offices of the Department, in late 1996.

The Berowra Catchment Management Committee acted slowly and wisely, working with the assistance of the Trust, to build community confidence in their operations and to increase their knowledge resources with local research. While some express disappointment with the amount of time it has taken the sub-committee agencies to meet their obligations, there is agreement that the end result has meant a far more comprehensive degree of planning, monitoring and co-operation between agencies. So comprehensive is the Community Contract and its outcomes that the value of the Community Contract process has been recognised by the Healthy Rivers Commission of NSW as being a very desirable model for achieving integrated catchment planning and management on the ground.

## **BEDROCK:**

### **THE VALUE OF THE COMMUNITY CONTRACT**

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So what has been the worth of the Berowra Creek Community Contract?

Participants agree that the Community Contract has produced better information, better decision making, improved management practices and some early signs of improved ecosystems.

The Community Contract has also funded new research, thus increasing agency understanding of the following areas of activity:

- [i] *water quality management programs;*
- [ii] *the ecological sustainability of sewage treatment operations;*
- [iii] *water sensitive urban design;*
- [iv] *contaminated sites;*
- [v] *catchment nutrient modelling;*
- [vi] *sharing data bases.*

As knowledge and understanding of the catchment grows, and the various elements of the strategy are taken up by the community, it becomes easier to distinguish between natural cycles of change and those which are

*“... when the river  
covers a bay  
you know its weight  
soothes  
healing the savaged earth  
and the tide  
begins to make music  
as it covers oysters  
as it climbs  
over the rocks  
its song fills the valley”.*

*from “The Speaking Page”  
by Bob Adamson*

imposed by human habitation and use of the Catchment. Narrators report that builders, for example, more willingly comply with Council's measures. Council's use of pollution traps in drainage systems has reduced rubbish from urban areas running into the Creek, and better designed stormwater systems have dramatically improved downstream water quality.

Local community reports (February 1997 and July 1997) note a reduction in severe algal bloom outbreaks. The sea grass is growing back and it is thought that fish habitat and breeding grounds are beginning to re-establish themselves. People are becoming more aware of their impacts on water quality and what they can do to prevent pollution in their local areas.

However, the water quality in wet conditions remains of major concern and will continue to be so until the plants are upgraded, stormwater practices are improved and the community learns to act in the best interests of the Creek.

With the Trust's support, Hornsby Shire Council has put in place a community education program for on-site sewage disposal systems, but more needs to be done to solve this problem. Sediments are still silting up the Gorge and some fish stocks such as butterflyfish, garfish and jewfish are reported to be in decline.

The Community Contract established a culture of open co-operation where once there was secrecy and competition, coordination where once there were individual actions answerable only to statutory requirements. In this open forum, the agencies feel the pressure of collective expectations on their performance for the duration of the strategy: partnership, dedication and new knowledge at work.

The Community Contract provided funded and resourced commitment for environmental work which had never been done before, and a political process which brought pressure to bear on the technical procedures and availability of information. Agencies brought in new skill bases and began to learn from each other.

For example, the Berowra Creek Estuary Management Committee included work from the Environment Protection Authority and SHURE to demonstrate that the model used to assess hydraulic and pollutant dynamics in Berowra Creek was inadequate. Sydney Water Corporation took responsibility to re-calibrate the model and the work was done to the satisfaction of the community and its local agencies.

The process benefited from direct communication at a local site, with local accountability and resources to aid the process. Change of this magnitude could not take place through the efforts of individual citizens. The moratorium had to be put in place, the issues had to be given local political standing before anything of any long term and comprehensive significance could be done.



## PRINCIPLES:

## THE MEANS OF ACTUALISING THE VALUES

Participants asked "What lessons have we learned?" and created the following list for those who follow in their footsteps.

- *open decision making:*

Signatories make decisions and act within the open forum of the Community Contract;

- *quick turn around:*

Signatories recognise the urgency to act on the issues and commit to an agreed response timeframe;

- *investment in research:*

All signatories have invested in individual and joint research to build databases and develop local planning models or calibrate imported models to local conditions. Council and community share information supported by active networks which monitor and observe the Catchment. Sydney Water Corporation responds to local concerns promptly and openly;

- *alignment with the Catchment Management Committee:*

Management by the Berowra Catchment Management Committee empowers community representatives in overseeing the actions and decisions of council and agencies to ensure they are aligned with local priorities, knowledge and resources;

- *a co-operative problem:*

The acceptance of joint responsibility for water quality issues by all stakeholders realises the opportunity for integrated planning and management, and maximisation of resources to create a collective solution: the Water Quality Management Strategy. Co-operation is sophisticated and embraces cross-agency lines, between community based individuals and groups, with political representatives, coordination bodies and State agencies;

- *shared values:*

Agencies adopted Ecologically Sustainable Development Principles into their core business which created a common language and dedication to environmental values across stakeholders;

- *long term strategies and immediate action:*

Signatories committed to long-term investment and strategies which



COUNCIL & CMC MEMBERS  
ASSESSING A POTENTIAL  
CONSTRUCTED WETLAND SITE

## Sewerage treatment upgrade

SYDNEY Water will release plans to upgrade Hornsby's sewerage treatment plants this year

Sydney Water spokeswoman Angela Ghijnone said an Environmental Impact Statement (EIS) would be released for public comment in June.

"We're now preparing one EIS on options for both plants — West Hornsby and Hornsby Heights," Ms Ghijnone said.

Hornsby Council's environment division executive officer

# Knowles endorses strategy

URBAN Affairs and Planning Minister Craig Knowles has officially endorsed the water quality management strategy for Berowra Creek.

The strategy aims to establish appropriate water quality objectives, improve understanding of the catchment, control point and diffuse sources of pollution and improve community knowledge of catchment activities.

The strategy will be up public exhibit

spanned time-frames beyond political interests, while maintaining local accountability and direct communication for immediate action;

- *single issue focus:*

Concentration on one issue – water quality – focuses energies into a cogent, manageable, accountable resource for immediate and future action. It is also recognised that water quality is one of the best indicators of the health of a catchment.

## THE WATER QUALITY MANAGEMENT STRATEGY

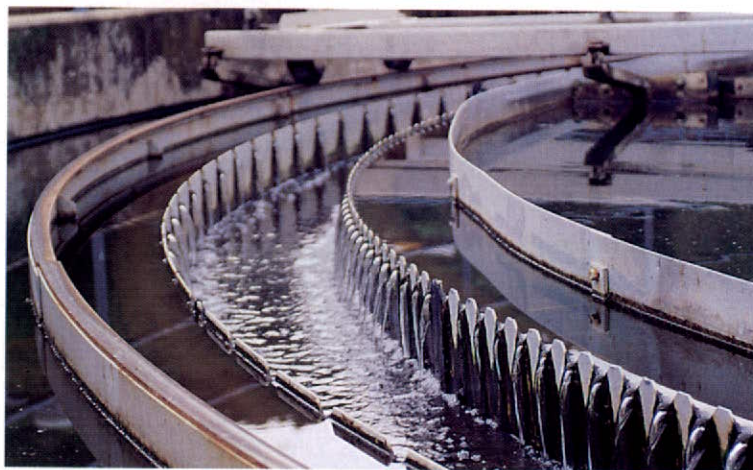
The documented evidence of these principles in operation is the Water Quality Management Strategy which was officially endorsed by the NSW Government and launched by the Community Contract signatories in April 1997.

“This approach represents a whole of government commitment to catchment management in Berowra Creek. It is the first time in NSW where State agencies and Local Government have worked together with the local community to start to clean up a waterway.” So stated the Honourable Pam Allen in the press release for the launch of the three strategies: Berowra Creek Water Quality Management Strategy, Council’s Remediation Program Five Year Plan, and Sydney Water’s Environmental Impact Study for the two Berowra Creek Sewage Treatment Plants.

There are seven objectives to the Water Quality Management Strategy. They embrace benchmark standards for water quality, pollution control activities, and emphasis of the value of knowledge and understanding about the entire Catchment ecosystem: waterways, stream banks and the community. The ten year strategy describes a multi-faceted and realistic front of activity, collectively shared by each of the signatory authorities and the Berowra CMC. The Creek’s potential rehabilitation within the context of ecologically sustainable development is transparently held within the various integrated lines of responsibility.



STORMWATER DRAIN SIGNAGE



WEST HORNSBY SEWAGE TREATMENT PLANT, UPGRADED

## THE NEW LEGEND UNFOLDING: POSSIBILITIES

*In the words of the story's creators:*

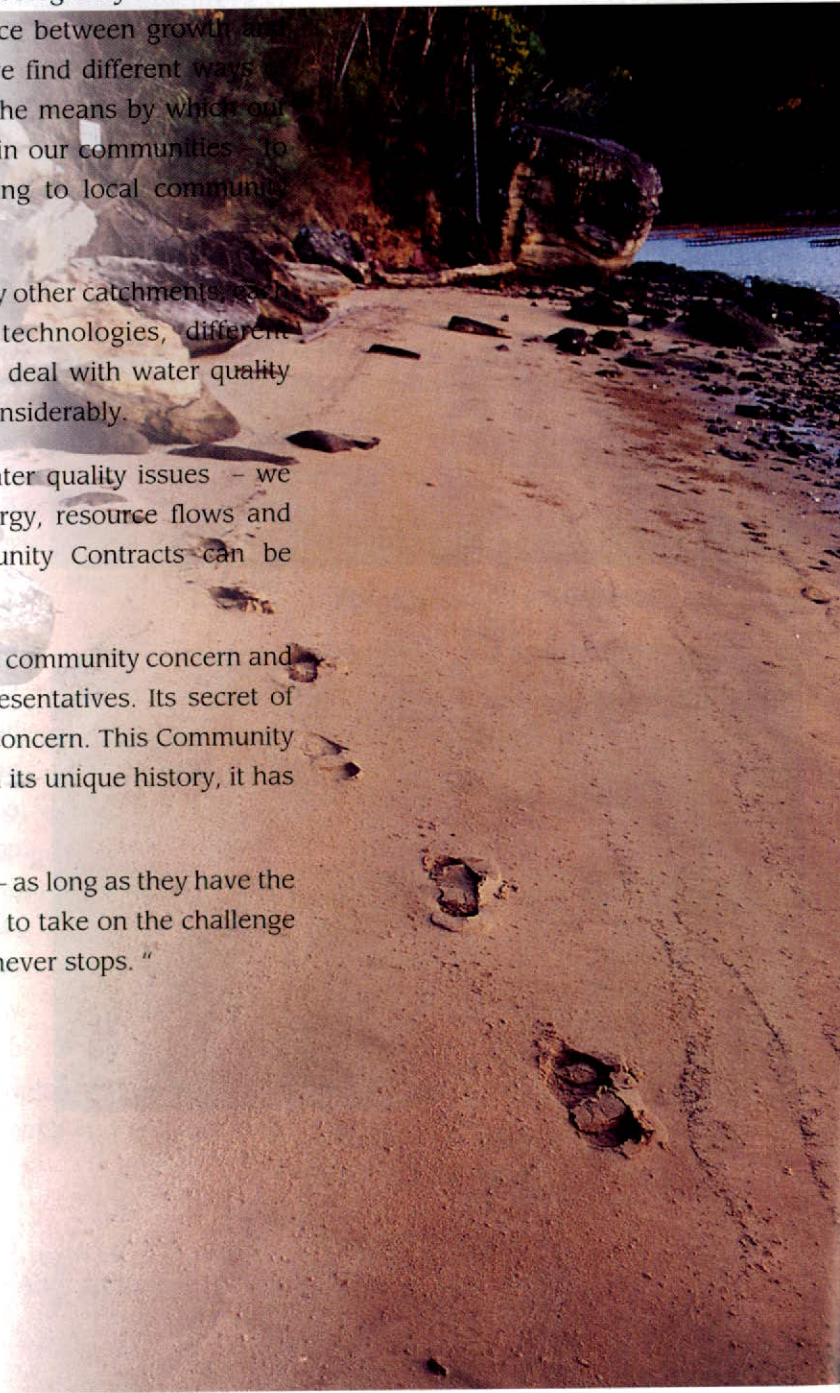
"The Community Contract will stay in place until the water quality standards have been met and maintained. It could then evolve into an Agenda 21 strategy within local government. As long as we seek the remediation of the whole Hawkesbury-Nepean Catchment, local agreements such as the Community Contract will be needed, to monitor the impact of development and negotiate with developers and industry. We need something which sits with and between the agencies and community which can let people know what to expect, to determine what is right and wrong – within ourselves and each other. Ecologically Sustainable Development teaches us that there is a difference between growth and development: as we change the way we live, we find different ways of thinking and living. The Community Contract is the means by which our authorities can stay in touch with this flowering in our communities – to make sure that resources are allocated according to local community values and circumstances.

If the Community Contract model were taken up by other catchments, each reflecting their different ecologies, different technologies, different pressures and communities, the political will to deal with water quality issues over wider domains would be increased considerably.

Community Contracts need not be limited to water quality issues – we have not even begun to look at renewable energy, resource flows and population in the Catchment. Perhaps Community Contracts can be modified to take these issues on board.

Other Contracts should begin the same way – with community concern and pressure being brought to bear on political representatives. Its secret of success lies with the groundswell of community concern. This Community Contract has shown that it is possible. Even given its unique history, it has given hope to the hearts of many of us.

The Community Contract would work for anyone – as long as they have the passion for the issue, have courage, are prepared to take on the challenge and have the resources to keep the effort up – it never stops. "





### A New Legend

*"In a friendless time the mind swims  
out from its body: you become  
all the lives you have ever lived.*

*In this clearing there have  
been camp-fires, though the ashes  
are stone cold now. And the mist  
just above the earth is  
undisturbed. A brown kestrel flits*

*between the sun and the ancient  
dwellings: its shadow a moth  
wondering below the mist's surface.*

*Everything has been like this  
for centuries. Sunlight struggles  
through onto petrified  
branches of charcoal; as I walk  
I create a new legend here*

*my voice moves over the rock carvings,  
my hands net for the moth's  
faint dancing shadow, my eyes  
vanish into the back of my head  
and a small creature stops running.  
The water lies still in granite  
waiting for the chance to sing anew;  
under the mists I become*

*a thousand echoes, sounding for  
the time being. Wherever life emanates  
it's born from my careful presence  
here, treading: mushrooms bloom  
in my footsteps among the ashes now.  
The mind moves ahead of my  
body feeling the new wings, wondering  
if they ever existed before.*

*Its thoughts lift me above the ground,  
I look down at my body, a feeble  
creature moving through my own silence.  
Moss clings to my thighs, the kestrel  
dives into the clearing hooking  
up the creature I taught not to fear."*

By Bob Adamson

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# STATEMENT OF JOINT INTENT

## COMMUNITY CONTRACT FOR BEROWRA CREEK

It is hereby agreed that

Department of Planning  
 Environment Protection Authority  
 Hawkesbury-Nepean Catchment Management Trust  
 Hornsby Council  
 Water Board

*Endorsed,*  
*Peter Webster*  
 27/4/94.

will henceforth work together to achieve, within the framework of the current Urban Development Program, the ecologically sustainable development of the Berowra Creek catchment and the recovery of the environmental health of the Creek.

To this end it is agreed that the initial goal for Berowra Creek at Fishponds Waterhole and downstream shall be consistent with the pursuit of recreational activities such as swimming, canoeing and boating. Furthermore, it is agreed that fishing with confidence and safety and the protection of the shellfish industry are longer term goals. The values to be protected are defined by the Australian Water Quality Guidelines for Fresh and Marine Waters and are characterised as Primary Contact Recreation and Protection of Modified Aquatic Ecosystems for Fish, Crustacea and Shellfish.

It is also agreed that a Water Quality Management Strategy and a Plan of Management to achieve this initial goal will be jointly prepared and progressively implemented. All parties to this agreement will cooperate to ensure that a draft Water Quality Management Strategy for Berowra Creek is prepared and placed on exhibition by end of September 1994.

It is acknowledged that Berowra Creek contains excessive levels of nitrogen and high levels of phosphorus. Accordingly appropriate nutrient reduction measures will be implemented forthwith.

To this end the Water Board will install by end July 1994 measures at West Hornsby Sewage Treatment Plant to endeavour to achieve an arithmetic mean of 20 to 25mg/L Total Nitrogen concentration in the discharged effluent. Also the Water Board will make immediate operational changes to reduce phosphorus and faecal coliform concentrations in discharged effluent from West Hornsby Sewage Treatment Plant and Hornsby Heights Sewage Treatment Plant. Furthermore the Water Board will prepare and exhibit by end September 1994 an options study for Hornsby Heights Sewage Treatment Plant and West Hornsby Sewage Treatment Plant. The options study will propose technically feasible measures for further nitrogen reduction. The options of 15mg/L, 10mg/L and 5mg/L Total Nitrogen (90 percentile) in discharged effluent and pumping effluent out of the catchment are to be specifically considered. The Water Board will prepare and publicly exhibit by end June 1995 an EIS for each of those options which the Technical Working Party established by the Minister for Planning considers feasible and warranting such examination. The Board undertakes that the option approved by the Minister for Planning will be put in operation expeditiously.

Hornsby Council undertakes that it will impose and enforce controls on construction sites so as to significantly reduce the sediment and other pollutants reaching the Creek from these sources. To this end Hornsby Council will prepare and exhibit by end September 1994 a draft Erosion and Sediment Control Code. Hornsby Council will prepare and exhibit by end September 1994 a revised Stormwater Management Code, a revised Stormwater Design Manual and an Issues Report on the remediation of the existing stormwater system. As part of implementing the Water Quality Management Strategy, Hornsby Council will also expeditiously prepare an options study, environmental assessment and an implementation strategy for reducing storm water nutrient ingress to Berowra Creek. Hornsby Council will utilise the principle of water sensitive urban design in its consideration of future developments. The Hawkesbury-Nepean Catchment Management Trust will prepare and exhibit by end September 1994 a draft public education strategy.

The Water Board, Environmental Protection Authority and Hornsby Council shall forthwith commence a catchment survey to identify and quantify sources of pollution so that appropriate remediation and enforcement action can be taken.

The Water Board, Environmental Protection Authority and Hornsby Council shall forthwith establish a cooperative monitoring program for the waterways of Berowra Creek so that the effectiveness of changes can be measured and assessed.

The Department of Planning undertakes that it will not introduce any planning measures that are incompatible with the ecological sustainability of Berowra Creek.



*Gabriele Kibble*  
 G. Kibble  
 Director of Planning

*N. Sheperd*  
 N. Sheperd  
 Director-General  
 Environment Protection  
 Authority

*R. Crawford*  
 R. Crawford  
 Chairman  
 Hawkesbury-Nepean  
 Catchment  
 Management Trust

*P. Broad*  
 P. Broad  
 Managing Director  
 Water Board

*C. Meany*  
 C. Meany  
 Mayor  
 Hornsby Council



On a cool, wet weekend in April 1997, three years after the signing of the Community Contract, a group of people walked through the Berowra Catchment to join many others huddled against the night chill around a camp fire at Crosslands. During the weekend thirty-five people who had played a part in the formation of the Contract participated in small group discussions and interviews to create the text for this book, which is dedicated to their efforts and the health of the Catchment.

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