

GIS Environmental Consultants

Company Profile



Table of Contents

1	Professional Expertise and Services.....	3
2	Typical Projects.....	6
3	Clients	8
4	Quality Assurance	9
5	Occupational Health and Safety.....	9
6	Animal Ethics	9
7	Insurance Cover.....	9
8	Licences and Accreditations	9
9	Professional Memberships.....	10
10	Company Structure	11
11	Staff Profiles.....	11
12	Capability	12
13	Examples of Recent Projects	14

please direct all enquiries to:

Nicholas Skelton

Director – GIS Environmental Consultants

Phone: 9939 5129

Fax: 9401 0715

Mobile: 0419 438 672

Email: ecology@ecology.net.au

Web: www.ecology.net.au

45 Austin Avenue, North Curl Curl, NSW 2099

1 Professional Expertise and Services

GIS Environmental Consultants was founded in 1993 by the Director, Nicholas Skelton. Since that time, the consultancy has grown by successfully providing expert scientific services in the areas of ecology and environmental management to a wide range of clients. The consulting group comprises of an integrated team of environmental scientists, incorporating specialists in botany, zoology, bush regeneration, Geographical Information Systems (GIS), environmental legislation, mapping, and Aboriginal Archaeology. The collective expertise of this established team is exceptionally well suited to the provision of environmental services for planning and environmental management projects.

Our company philosophy recognises the need for accurate and appropriate information about natural resources to enable informed decisions to be made and to allow planning for effective resource management and conservation. We have extensive experience in providing appropriate and justifiable recommendations for management of bushland throughout the Sydney Basin. Our company goals are to provide our clients with accurate information, to analyse our findings using the most appropriate scientific methods and to provide practical justifiable management solutions that enable our clients to meet both their own objectives and their legal obligations. This we achieve by dedicating an appropriate team with the required expertise and experience for each project. On each project the same staff work in both field and office to ensure consistency and quality within projects.

Services offered by GIS Environmental Consultants:

- Flora and Fauna Surveys
- Species Impact Statements (SIS)
- Threatened Species Assessments
- Modelling Distributions of Threatened Species
- Bushland Management Planning (BMP)
- GIS data capture, analysis and map production
- Vegetation Mapping
- Environmental Impact Assessments (EIA)
- Reviews of Environmental Factors (REF)
- Feral Animal & Weed Control
- Translocation of Endangered Communities and/or Species
- Bush Regeneration
- 7 & 8-part Tests of Significance
- Environmental Monitoring and Reporting
- Tree Surveys
- Interpretation of Environmental Legislation
- EPBC Referrals
- 3A Permit Applications

GIS Environmental Consultants have strong working relations with specialist consultants covering areas as diverse as:

- Aboriginal Heritage Assessment
- Bush Fire Protection
- Bush Regeneration
- Tree Surgery
- Tree Lopping
- Plant Propagation
- Wetland Design and Construction
- Geology
- Landscape Architecture

GIS Environmental Consultants specialise in the environments of the greater Sydney region, although we have also undertaken projects in other parts of NSW.

1.1 Fauna Survey

GIS Environmental Consultants are equipped and licensed for surveying and trapping of all animal groups.

Fauna survey techniques and equipment include:

- Spotlighting
- Bird watching
- Hair tube trapping
- Elliot trapping, Cage trapping, Pitfall trapping
- Ultrasonic bat detection (Anabat)
- Stag watching
- Identification of tracks, scats, nests and scratches
- Call playback and Triangulation
- Targeted searches for threatened species and habitat suitability
- Hollow investigation
- Habitat mapping

1.2 Flora Survey

Flora survey techniques include:

- Comprehensive plant species lists
- Vegetation mapping
- Vegetation community classification
- Threatened species distribution
- Tree surveys
- Quadrat and transect surveys
- Multivariate analysis
- Weed surveys/mapping
- Habitat modelling
- Weed density and resilience assessments

1.3 Impact Assessment

We can provide the following impact assessments and reports:

- Environmental Impact Assessment (EIA)
- Environmental Impact Statements (EIS)
- Review of Environmental Factors (REF)
- Species Impact Statements (SIS)
- 7 & 8 part tests of significance of impact on a threatened species
- Bush Fire Hazard Impact Assessment
- Stormwater Impacts – effects of stormwater outlets on bushland vegetation

1.4 GIS Services (Geographical Information Systems)

We have fully capable GIS systems compatible with the software packages: ArcView, MapInfo, AutoCAD, ArcInfo, and ArcGIS. We can convert between any coordinate systems or GIS formats.

- GIS data capture, manipulation and analysis.
- GPS surveys including +/- 1m accuracy.
- Perform spatial and database analysis, statistical testing, and GIS modelling.
- Set up new GIS systems and training.
- Download field GPS points into the GIS system.
- We can produce full colour maps in A1, A2, A3 and A4 size.
- Maps can be produced as .PDF Adobe Acrobat files or for intranet and internet use.
- We can provide fly through 3D views.
- We can provide data to overlay on Google Earth

1.5 Bushland Management

We provide the following services:

- Bushland Management Plans
- Environmental Management Plans
- Bush regeneration
- Weed control
- Revegetation
- Tree Surgery
- Propagation of provenance plants
- Weed mapping
- Soil Translocation of Endangered Communities

1.6 Monitoring

We provide the following monitoring services:

- Quadrats and statistical testing
- Photographic inventories
- Supervision of construction works
- Certification for DA conditions
- Comparison of weed mapping
- Bushfire mapping
- Historical vegetation mapping

2 Typical Projects

GIS Environmental Consultants have successfully completed over 460 projects in the last 5 years alone. Projects range in size from expert opinion for Court and pre-purchase constraints assessment, to Regional vegetation mapping and long-term strategic planning. Some examples of previous project types are given below. A more comprehensive list of recent projects we have completed is available on request.

2.1 Flora and Fauna Inventory Studies

Flora and Fauna Survey of Dobroyd Head, Sydney Harbour NP, NPWS.

Flora and Fauna Survey of North Head, Sydney Harbour Federation Trust.

Flora and Fauna Survey of Woolwich Dock and Parklands, and Cockatoo Island Sydney Harbour Federation Trust.

Manly Council Bushland Reserves Flora and Fauna Survey and Resource Inventory.

Vegetation mapping of 4 National Parks in the NPWS Bathurst district.

Vegetation survey of the Beecroft Peninsula, Jervis Bay.

Vegetation mapping of Pittwater LGA.

Aquatic plant species lists for the wetlands of the Hawkesbury-Nepean region.

Manly Lagoon exotic vegetation management strategy, report and maps prepared for Manly and Warringah Councils.

Aquatic and riparian vegetation in forests of the Morriset Forestry district.

2.2 Bushland Management

Bushland Management Plan War Veteran's Retirement Village, Collaroy.

Bushland Management Plan, residential subdivision at Observation Point.

Vegetation Management Plan for Kurnell, Energy Australia.

2.3 GIS Mapping and Analysis

GPS and GIS data capture and mapping for the Manly Scenic Walkway, Manly Council.

Setting up a GIS system for the Upper Parramatta River Catchment Management Trust.

GIS analysis and map production for the Green Corridors Management Strategy for the Upper Parramatta Catchment.

Modelling Ecological Impediments to Development, Ingleside.

Modelling and Mapping the Vegetation of Pittwater.

2.4 Flora and Fauna Impact Assessment

Environmental Impact Assessment for pipe relining of sewer mains in the Greater Sydney Metropolitan Area and the Blue Mountains.

Review of Environmental Factors (REF) for an electricity power line easement in Sydney Harbour National Park, North Head, Manly.

Stormwater Impact Survey for Manly Council's Bushland Reserves.

Species Impact Statement – Duffy's Forest Vegetation Community at Austlink Park, Belrose. Commercial development site - Warehouse and Offices.

Flora and Fauna Impact Assessment and Monitoring Program for a Solid Waste Tip at Badgerys Creek.

Flora and Fauna Impact Assessment for a stormwater detention dam, fire breaks and water storage pond at the RSL Veterans Retirement Village, Narrabeen.

2.5 Land and Environment Court

Testimony and Statements of Evidence for Council, Applicants as a Court appointed Expert:

- RSL Veterans Retirement Village, ats. Warringah Council
- Formston & ors ats. Pittwater Council
- Catholic Church ats. Warringah Council
- Mutch & ors ats. Valuer General
- Kozman ats. Valuer General
- Anderson ats. Pittwater Council
- Fowler ats. Pittwater Council
- Oosthuizen ats. Sutherland Shire Council
- Harris ats. Willoughby Council
- Bamfield ats. Baulkham Hills Council
- Carstans ats. Pittwater Council
- K & V Weston ats. Pittwater Council
- LSR Developments Pty Ltd ats. Sutherland Shire Council
- Warringah Council and Duffys Forest Residents Association ats. Maxwell and Corbett
- Gretch and Payten Holdings ats. Manly Council
- Jambin Pty Ltd ats. Pittwater Council
- Monavale Corporation Pty Ltd ats. Pittwater Council
- Lang ats. Pittwater Council

3 Clients

Our clients range across both the public and private sectors, and include: national, state and local government authorities, non-government organisations, community groups, commercial enterprises, and private landholders. The projects we have completed range in size from advice on threatened species to surveys of large National Parks and groups of Local Government Areas.

Examples of previous and current clients

- **Local Councils**

- Blacktown Council
- Hornsby Council
- Manly Council
- Penrith Council
- Pittwater Council
- Sutherland Shire Council
- Warringah Council
- Willoughby Council
- Wyang Council
- Upper Parramatta River Management Trust
- Hawkesbury-Nepean Catchment Management Trust

- **State Government Authorities**

- Department of Public Works
- National Parks and Wildlife Service
- State Forests of NSW
- RTA
- Department of Education
- Department of Commerce
- University of Sydney

- **Federal Government Authorities**

- Sydney Harbour Federation Trust
- Australian Defence Force
- Australian Federal Police
- Environment Australia

- **Private Landholders**

- Names withheld for privacy

- **Community Groups**

- Belrose Open Space Corridor Association
- Friends of Curl Curl Lagoon
- National Parks Association of NSW
- Manly Education Centre
- Nature Conservation Council

- **Commercial Enterprises**

- Australian Museum
- Bonnie Bell
- Energy Australia
- Sydney Water
- Emerald Logic
- GMI Architects
- Hassell Pty Ltd
- Pacific Power
- Pacific Waste Management
- The Salvation Army
- RSL Retirement Villages

4 Quality Assurance

GIS Environmental Consultants maintains ongoing quality assurance procedures as part of our Quality System. We have a strong commitment to quality assurance and recognise that it is an essential part of successful project completion. Adherence to the company's Quality System ensures that we efficiently fulfil our contractual obligations to our clients, and that all products prepared in-house are thoroughly edited and reviewed prior to release. It is a specified requirement of the Quality System that all products prepared in-house are reviewed by peers and the Principal prior to final release.

All staff and regular sub-contractors are familiar with the company quality assurance procedures and the procedures are routinely implemented. Compliance with the procedures is monitored on an ongoing basis through internal auditing of staff on their knowledge of and compliance with company procedures. Through continuous auditing, the quality assurance system is refined to better suit the requirements of both the company and our clients.

5 Occupational Health and Safety

At GIS Environmental Consultants we are familiar with the requirements of the *Occupational Health and Safety Act 2000*, and associated Regulations. GIS Environmental Consultants have specific OH&S policies, plans and procedures in accordance with the Act that are adopted by all staff and sub-contractors. Our Occupational Health and Safety Policy Statement and Fieldwork Safety Guidelines are available on request.

Our staff members have completed the OH&S Course for Construction Sites and have OH&S Green Cards.

6 Animal Ethics

GIS Environmental Consultants minimises the need to capture and the handling of native animals during field surveys and employs alternative survey methods such as hair tubing, Anabat, call recognition, observations and habitat assessments whenever possible.

Where active trapping is necessary GIS Environmental Consultants work in accordance with the Animal Care Guidelines for Wildlife Surveys (1998), the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (1997), the Animal Research Act 1985 and the Animal Research Regulation 1995.

7 Insurance Cover

GIS Environmental Consultants is fully insured for Public Liability and Professional Indemnity. Company insurance details are as follows:

- Public Liability: Five million dollars (\$5,000,000), CGU Professional Risks Insurance
- Professional Indemnity: Ten million dollars (\$10,000,000), CGU Professional Risks Insurance
- Car insurance: Fully comprehensive

8 Licences and Accreditations

NSW Agriculture animal handling and research license
NPWS research collection license

9 Professional Memberships

Professional Association Memberships

Ecological Society of Australia
Environmental Consultants Association of NSW
Environmental Institute of Australia
AURISA (Australian Urban and Regional Information Systems Association)Coast and Wetlands Society
Royal Zoological Society
Royal Botanical Gardens of Sydney
Greening Australia NSW
Frog and Tadpole Study Group

Professional Committees and Other Activities

Warringah Pittwater Bush Fire Management Committee
Manly-Mosman Bushfire Management Committee
Quarantine Station Consultative Committee
Independent Public Hearing Panel (IHAP) for the assessment of Developments for Warringah LGA
Independent Public Hearing Panel (IHAP) for the assessment of Category Three Developments
Ingleside/Warriewood Escarpment Management Committee, Pittwater LGA
Executive Committee of ECA of NSW

Professional Affiliations

Earth Systems Pty Ltd – Environmental Restoration
Holmes Fire and Safety Consulting Engineers - Bushfire Hazard Reduction Planning
Darwala-Lia Archaeological Services – Aboriginal Heritage Assessments
McGregor and Partners – Landscape Architecture, Urban Design
Earth Tech - Engineering
Greening Australia – Bush Regeneration
Apunga – Bush Regeneration

10 Company Structure

GIS Environmental Consultants is an established team of environmental scientists and support staff. Our offices are based in Curl Curl, on Sydney's northern beaches.

The team consists of:

- Nicholas Skelton - Principal - B.Sc. (Hons), M. App.Sc. (Vegetation Management & GIS)
- Ariane Weiss – Project Officer/Field Ecologist/Bush Regeneration - B.Sc., Dip. CLM
- Caroline Metzler – Project Officer/Field Ecologist/Office Administrator - B.Sc. (Com. Hons)
- Kim Caswell – Project coordinator/Field Ecologist - B.Sc. (Environmental Science)
- Marc Stettner – Bush Regeneration Specialist - B.Sc., TAFE Cert III
- Angela Glover – Accounts Manager
- Allison Thorne – IT support and administration – B. Com. (IT)

All members of the team have a minimum qualification of a 4 year Bachelors Degree in a relevant discipline, and most have a second degree or higher degree. Our consultants work in both field and office to ensure consistency and quality within projects.

11 Staff Profiles

Director / Project Manager

Nicholas Skelton

Nicholas has 19 years experience as an environmental scientist and ecologist, having worked both as a consultant and as an employee of several government environmental agencies, including the NSW National Parks and Wildlife Service, State Forests of NSW, and the Royal Botanic Gardens. His formal qualifications include a Bachelor of Science (Honours) from The University of Sydney and a Master of Applied Science (Wildlife Management) from The University of New South Wales. He is currently completing a PhD investigating the distribution of threatened species in the northern part of the Sydney Basin.

Nicholas is a veteran of more than 250 flora and fauna surveys and environmental assessment projects. He has also been an author on 12 published scientific papers and has been a lecturer at The University of New South Wales and the University of Western Sydney.

Nicholas has a great deal of experience in project management, having managed projects of ranging timescales and sizes. Some of these have involved the co-ordination of large-scale multi-disciplinary work and the supervision and organisation of specialist sub-contractors. Nicholas's own areas of expertise include: flora and fauna survey, field survey design, management planning, GIS data capture and analysis and digital mapping. He also has considerable experience in the preparation and presentation of evidence for the Land and Environment court as an expert witness.

Project Officers / Field Ecologists

Ariane Weiss	Ariane Weiss has a Bachelor of Computer Science from the University of Technology of Zurich, Switzerland. She completed TAFE Certificate III in Natural Area Restoration and the Conservation and Land Management Diploma with distinction. During her 3 year studies she worked as a Bush Regenerator in the Lower North Shore. She has extensive project management and computer skills, including GIS. Ariane has participated in many field surveys and research trips. Her work at GIS Environmental Consultants includes field surveys, report writing, mapping and project management.
Caroline Metzler	Caroline has a Bachelor of Science and Communication with honours from the University of New South Wales and majored in Biological Science. She previously worked with AustralAsian Resource Consultants (AARC) in Brisbane as an environmental scientist, specialising on mining and non-mining development and approval projects. Caroline now assists GIS with office administration, field surveys and report writing.
Kim Caswell	Kim joined the team at GIS Environmental Consultants approximately 12 months ago. She has completed a Bachelor of Environmental Science degree from the Australian Catholic University, North Sydney. Since the completion of her degree, Kim has worked as an Asset Management Officer with a local Council doing GIS data collection and analysis. During her time at GIS Environmental Consultants, she has completed a number of Bandicoot and Penguin assessments; she has a sound scientific environmental skill base and is competent in all areas of reporting.
Marc Stettner	Marc is a project officer with GIS Environmental Consultants. He holds a Bachelor of Environmental Science from Griffith University and a Certificate III in Conservation and Land Management (Bush Regeneration). He's been working in Bush Regeneration and Native Vegetation Management in Sydney since 2002. Marc is committed to the conservation and restoration of native bushland, and has an impressive range of skills to support this passion. Marc manages the Bush Regeneration side of the work and contributes to the vegetation management planning.

Office Administration / Accounts

Ally Thorne	Ally is responsible for the IT infrastructure and office administration, she has been with us for 7 years.
Angela Glover	Angela is responsible for book keeping and accounts.

12 Capability

GIS Environmental Consultants are equipped to undertake a wide range of environmental projects. A short list of company equipment available for use during fieldwork and report preparation occurs below.

Field equipment

- Spotlights
- Hair tubes
- Elliot traps
- Cage traps
- Ultrasonic (Anabat II) bat detectors

- Call playback equipment and tape recorders
- GPS units (Global Positioning Systems)
- Clinometers/Compasses etc.
- Digital cameras (10 mega pixel resolution)
- 4WD Vehicles
- Camping equipment

Office equipment

- Extensive professional reference library
- Subscriptions to more than 8 professional journals
- Extensive reference herbarium
- Fauna call identification reference library
- Networked computer system 100BT
- 3 Lap top computers
- 8 Personal Computers
- Computer software (including Arcview, Map Info, statistical analysis programs etc)
- Desktop publishing facilities
- 2 Scanners
- 3 black and white laser printers
- 1 colour laser printer
- 2 A3 colour printers
- 5 CD burners
- Photocopier
- Fax
- Internet access
- Email

13 Examples of Recent Projects

Some recent reports completed by GIS Environmental Consultants between 2001 and 2005:

<i>Year</i>	<i>Type of Work</i>	<i>Location</i>	<i>Locality</i>	<i>Report Pages</i>	<i>Area (ha)</i>	<i>No. Plant Species</i>	<i>No. Fauna sp recorded</i>
2005	Flora & Fauna Assessment	Kennedy Creek	Appin	26	4.3	122	22
2005	Flora & Fauna Impact Assessment	Northern Beaches TAFE	Brookvale	22	<1	60	2
2005	Tree Report	Riverview Rd	Clareville	19	0.1		0
2005	Assessment of Ecological Constraints	Maybrook Ave	Cromer	4	<1		
2005	Flora & Fauna Impact Assessment 1	Captain Cook Drive	Kurnell	13	<1	28	2
2005	Flora & Fauna Impact Assessment 2	Captain Cook Drive	Kurnell	21	<1	26	3
2005	Flora & Fauna Impact Assessment 3	Captain Cook Drive	Kurnell	19		14	7
2005	Flora & Fauna Impact Assessment	Hebron Rd	Lower Portland	22	26		30
2005	Bandicoot Impact Assessment	Addison Rd	Manly	13			1
2005	Penguin Impact Assessment	Addison Rd	Manly	4			1
2005	Bandicoot Impact Assessment	Bower St	Manly	14	<1		1
2005	Bandicoot Impact Assessment	Cliff St	Manly	12	<1		1
2005	Bandicoot Impact Assessment	Craig Ave	Manly	11			1
2005	Bandicoot Impact Assessment	Darley Rd	Manly	10			1
2005	Bandicoot Impact Assessment	Osborne Rd	Manly	12			1
2005	Bandicoot Impact Assessment	Oyama Ave	Manly	14	<1		2
2005	Bandicoot Impact Assessment	Wood St	Manly	11	0.1		1
2005	Flora & Fauna Impact Assessment	Darley St	Mona Vale	18	0.1	29	7
2005	Flora & Fauna Impact Assessment	Bungen Head Rd	Newport	35	<1	83	34
2005	Ecological Sustainability Plan	Grandview Dve	Newport	19	0.1	67	9
2005	Flora & Fauna Impact Assessment	Grandview Dve	Newport	23	0.1	67	9
2005	Flora & Fauna Impact Assessment	Oxford Falls Rd	Oxford Falls	13	0.65	24	3
2005	Ecological Sustainability Plan	Crane Lodge Place	Palm Beach	21		38	
2005	Species Impact Statement Update	Seaforth Oval	Seaforth	63	2.7	88	25
2005	Flora & Fauna Impact Assessment	Chisholm St	Turrumurra	15	0.129	30	6
2005	Flora & Fauna Impact Assessment	Whale Beach Rd	Whale Beach	20	0.1	52	0
2005	Bushland Management Plan	Morella Rd	Whale Beach	17		20	0
2004	Flora & Fauna Assessment	Pittwater Road	Bayview	9	0.1	25	0
2004	Update of building certificate application	Morgan Rd	Belrose	2	1.52		
2004	Flora & Fauna Assessment	Sydney Harbour NP	Dobroyd	133	75	444	225
2004	Bushland Management Concept Plan	Bibbenluke Ave & Wyong Rd	Duffys Forest	41	23.4		
2004	Bushland Management Plan	Bibbenluke Ave & Wyong Rd	Duffys Forest	25	23.4		
2004	Works Protection Program	Bibbenluke Ave & Wyong Rd	Duffys Forest	45	23.4		
2004	Flora & Fauna Impact Assessment	Booralie Rd	Duffys Forest	29	3.2		21
2004	Flora & Fauna Assessment	Killawarra Rd	Duffys Forest	27	5.2		17
2004	Flora & Fauna Assessment Addendum	Caladenia Close	Elanora Heights	34	2	76	25
2004	Flora & Fauna Assessment	Coorong/Neverfail Trail	Ku-ring-gai Chase NP	34	0.3		
2004	Threatened Species Impact Assessment	Addison Rd	Manly	9	<1		
2004	Threatened Species Impact Assessment	Bower St	Manly	7			1
2004	Flora & Fauna Impact Assessment	Bruce Ave	Manly	13	<1		
2004	Flora & Fauna Impact Assessment	Carey Street	Manly	11	<1		1
2004	Env. Assessment & Recommendations	Manly Cove	Manly	25		18	24
2004	Little Penguin Monitoring	Oyama Ave	Manly	1			1
2004	Court Appointed Expert Witness	Herbert Ave	Newport	24	<1		
2004	Flora Survey	Sydney Harbour Federation Trust	North Head	163	385	586	
2004	Flora & Fauna Assessment	Florida Rd	Palm Beach	23	0.1	84	25
2004	Species Impact Statement	Seaforth Oval	Seaforth	57	2.7	88	25

2004	Flora & Fauna Impact Assessment	Mona Vale Rd	Terrey Hills	29	1.7	56	5
2003	Flora & Fauna Survey	Tania Park	Balgowlah				
2003	Bushland Management Plan	Narabang Way, Austlink Park	Belrose	23	0.1		
2003	Works Protection Program	Narabang Way, Austlink Park	Belrose	21	0.7		
2003	Expert Evidence for Court	Bakers Rd	Church Point	40			
2003	Biodiversity Impact Assessment	McCarrs Creek Rd	Church Point	36	0.8	76	25
2003	Bushland Management Concept Plan	McCarrs Creek Rd	Church Point	24	0.8		
2003	Aborist Report	Chisholm Ave	Clareville	37	1.2		
2003	Update Flora & Fauna Survey	Chisholm Ave	Clareville	3			
2003	Flora & Fauna Survey	Sydney Harbour NP, Dobroyd Head	Dobroyd	127			
2003	F&F Assessment & Managem't Recs	Killawarra Rd	Duffys Forest	21	0.2	<20	5
2003	Bandicoot Survey & Weed Management	Killawarra Rd	Duffys Forest	11	0.2		
2003	Flora & Fauna Survey	Carnarvon Drive	Frenchs Forest	19	10.0		6
2003	Review of Environmental Factors	Allworth Dr, Ku-ring-gai NP	Garigal	47	46.8		
2003	Review of Environmental Factors	Yiremba Pl, Garigal NP	Garigal NP	56	21.7		
2003	Flora & Fauna Survey	Woolwich Dock and Parklands	Hunters Hill	57	7.4	91	44
2003	F&F Assessment & Managem't Recs	Old Ferry Rd	Illawong	25	1.2	108	6
2003	Bushland Management Plan	Lane Cove Rd	Ingleside	9	0.4		
2003	Review of Environmental Factors	Cicada Glen	Ku-ring-gai Chase NP	46	18.0		
2003	Review of Environmental Factors	Coasters Retreat	Ku-ring-gai Chase NP	54	60.8		
2003	Review of Environmental Factors	Currawong Beach	Ku-ring-gai Chase NP	44	14.1		
2003	Review of Environmental Factors	Elvina Bay	Ku-ring-gai Chase NP	54	50.4		
2003	Review of Environmental Factors	Lovett Bay	Ku-ring-gai Chase NP	53	38.4		
2003	Review of Environmental Factors	McCarrs Creek Rd	Ku-ring-gai Chase NP	46	100.0		
2003	Flora & Fauna Impact Assessment	Bruce Ave	Manly	13	<1		
2003	Species Impact Statement	Addison Rd	Manly	24	0.1		
2003	Bandicoot Impact Assessment	Addison Rd	Manly	9	<1		
2003	F&F Assessment & Managem't Recs	St Patrick's Estate	Manly	11			
2003	Bandicoot Impact Assessment	Bower St	Manly	17	<1		
2003	Bandicoot Impact Assessment	Bower St	Manly	14	<1		
2003	Natural Assessment	Forty Baskets	Manly	34		214	49
2003	Natural Assessment	Little Manly Cove	Manly	32		86	35
2003	Natural Values Assessment	Manly Cove	Manly	27		18	24
2003	Natural Values Assessment	North Harbour	Manly	32		38	23
2003	GIS/GPS Walkway Mapping	Manly Coastal Walk	Manly	n/a			
2003	Herbarium & Plant Identification	Manly LGA	Manly	n/a			
2003	Flora & Fauna Survey	Various Reserves	Manly	250	50.0	633	103
2003	Species Impact Assessment	Osborne Rd	Manly	13	0.1		
2003	Bandicoot Impact Assessment	Reddall St	Manly	11			
2003	Preliminary F&F survey Stage 1	Wakehurst Parkway	Narrabeen	3		35	0
2003	Preliminary F&F survey Stage 2	Wakehurst Parkway	Narrabeen	3			
2003	Installment of Soil Water Level Bores	Montego Cay	Narrabeen	n/a			
2003	F&F Assessment & Managem't Recs	Montego Cay	Narrabeen	13			
2003	Monitor Ground Water levels	Montego Cay	Narrabeen	20	4.0		
2003	Survey for Threatened Flora	Montego Cay	Narrabeen	n/a			
2003	F&F Assessment & Managem't Recs	Prince Alfred Pde	Newport	25	<1	37	
2003	Fauna Survey	North Head	North Head	129	385.0		134
2003	Tree Survey	Collins Beach	North Head	3		26	
2003	Flora & Fauna Survey	Kierle Park	North Manly				
2003	F&F Assessment & Managem't Recs	Cynthea Road	Palm Beach	19	<1	44	7
2003	Bushland Management Plan	Observation Point	Palm Beach	49	0.6	137	
2003	F&F Assessment & Managem't Recs	Pacific Rd	Palm Beach	6			
2003	Flora & Fauna Survey	Seaforth Oval	Seaforth	22	8.7		
2003	Flora & Fauna Impact Assessment	Chisholm St	South Turrumurra	17	0.1	31	6

2003	Flora & Fauna Survey	Cockatoo Island	Sydney Harbour	43	17.9	123	23
2003	Flora & Fauna Impact Assessment	Mona Vale Rd	Terrey Hills	29	1.7	56	5
2003	Flora & Fauna Impact Assessment	McCarrs Creek Rd	Terrey Hills	26	<1	87	28
2002	Bushland Management Plan	Alexandra Cres	Bayview	31	0.1		
2002	Vegetation Assessment, Duffys Forest	Guardian Parade	Beacon Hill	5	0.1		
2002	Expert Evidence for Court	Red Hill	Beacon Hill	n/a			
2002	Bushland Management Plan	Minna Close, Austlink Park	Belrose	22	0.1		
2002	Works Protection Program	Minna Close, Austlink Park	Belrose	17	0.1		
2002	F&F Assessment & Managem't Recs	Minna Close, Austlink Park	Belrose	25	0.1	62	29
2002	Species Impact Statement	Minna Close, Austlink Park	Belrose	29	0.1		
2002	F&F Assessment & Managem't Recs	Minna Close, Austlink Park	Belrose	27	0.1	74	29
2002	Species Impact Statement	Minna Close, Austlink Park	Belrose	28	0.1		
2002	F&F Assessment & Managem't Recs	Morgan Rd	Belrose	21	1.5		
2002	Bushland Management Concept Plan	Cabarita Rd	Careel Bay	30		27	
2002	Tree Survey	Cabarita Rd	Careel Bay	28		27	
2002	F&F Assessment & Managem't Recs	Cabarita Rd	Careel Bay	37	1.1		
2002	F&F Assessment & Managem't Recs	Chisholm Ave	Clareville	37	1.2		
2002	Bushland Management Plan	Veterans Village Collaroy	Collaroy	56	4.0		
2002	Water Quality Monitoring	Veterans Village Collaroy	Collaroy	5			
2002	Assessment of Urban Interface	Dobroy Head (Sydney Harbour NP)	Dobroyd		64.6		
2002	Assessment of Path Condition	Dobroy Head (Sydney Harbour NP)	Dobroyd		64.6		
2002	Forest Management Plan	Montego Cay	Green haven	33			
2002	Water Level Monitoring	Montego Cay	Green haven				
2002	Weed Control Plan	Montego Cay	Green haven	33			
2002	Statement of Evidence	Pacific Highway	Heathcote	14	< 0.1		
2002	F&F Assessment & Managem't Recs	Boronia Rd	Ingleside	30	0.9		
2002	Threatened Species Survey	Lucas Heights Nuclear Reactor	Lucas Heights	n/a			
2002	F&F Assessment & Managem't Recs	Addison Ave	Manly	13	0.1		1
2002	F&F Assessment & Managem't Recs	Addison Ave	Manly	8	0.1		1
2002	Penguin & Bandicoot Impact Statement	Addison Rd	Manly		0.1		
2002	Penguin Survey	Addison Rd	Manly	8	0.1		
2002	Bandicoot Impact Assessment	Bower St	Manly	11	0.1		
2002	F&F Assessment & Managem't Recs	Bruce Ave	Manly	10	0.1		1
2002	Bushland Management Concept Plan	Chisholm Ave	Manly	18	2.0		
2002	F&F Assessment & Managem't Recs	ChisHolm Ave	Manly	26	2.0		
2002	Stormwater Impact Survey	Manly Stormwater	Manly	25			
2002	Flora & Fauna Survey	Seaforth Unmade Road Reserves	Manly	6			
2002	F&F Assessment & Managem't Recs	North Head	Manly	4			
2002	Penguin & Bandicoot Impact Statement	Oyama Ave	Manly	10	0.1		
2002	Species Impact Statement	Oyama Ave	Manly	12	0.1		1
2002	F&F Assessment & Managem't Recs	Pickering Point	Manly	3	1.5		
2002	F&F Assessment & Managem't Recs	Nareen Parade	Narrabeen				
2002	F&F Assessment & Managem't Recs	Grandview Dve	Newport	6	0.1		
2002	Bushland Management Concept Plan	Prince Alfred Pde	Newport	18	0.1		
2002	F&F Assessment & Managem't Recs	Prince Alfred Pde	Newport	34	0.1		
2002	F&F Assessment & Managem't Recs	Barrenjoey Rd	Palm Beach				
2002	Tree Survey & Propagation of trees	Observation Point	Palm Beach				
2002	Flora & Fauna Survey	Landsville	Penrith				
2002	Flora & Fauna Survey	South Western Sydney	South-west Sydney				
2002	F&F Assessment & Managem't Recs	Kinma School, Coolowie Rd	Terrey Hills				
2001	Issues Report, Review & Meetings	Forest Way Belrose	Belrose	10	8.5		
2001	Works Protection Program	Narabang Way, Austlink Park	Belrose	18			
2001	Bushland Management Plan	Narabang Way, Austlink Park	Belrose	20	25.0		
2001	Supervising Construction Works	Narabang Way, Austlink Park	Belrose	n/a			

2001	Supervision of Works	Bilgola Ave	Bilgola	n/a	0.1		
2001	Tree Survey	Bilgola Ave	Bilgola	9	0.1		
2001	Bushland Management Plan	Bilgola Ave	Bilgola		0.1		
2001	Expert Evidence for Court	McCarrs Creek Rd	Church Point	n/a			
2001	Bushland Management Plan	McCarrs Creek Rd	Church Point	33			
2001	Management Plan	Veterans Village Collaroy	Collaroy	51			
2001	Expert Evidence for Court	Elanora Rd	Elanora	27	0.1		
2001	Frog Survey	Addison Rd	Ingleside	2	1.0		
2001	Bushland Management Plan	Lane Cove Rd	Ingleside	34	16.6		
2001	F&F Assessment & Managem't Recs	Bower St	Manly	8	0.7		
2001	Bandicoot Impact Assessment	Darley Rd	Manly	7			1
2001	F&F Assessment & Managem't Recs	Little Manly Point	Manly				
2001	F&F Assessment & Managem't Recs	Little Manly Point	Manly	15	< 0.1		
2001	Penguin Impact Assessment	Oyama Ave	Manly	9			
2001	Powerline Maintenance	Collins Beach	Manly	47	0.9	99	15
2001	Management Plan	Herbert Ave	Newport	9			
2001	Bushland Management Plan	Collins Beach	North Head	18	0.9	99	13
2001	F&F Assessment & Managem't Recs	Florida Rd	Palm Beach	25	0.1	84	25

A list of projects completed prior to 2001 is available on request. ^g