



Careers  
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CAREERS IN *Careers in*

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# Introduction

Environmental careers cover a broad range of occupations, all connecting work practices with environmental processes – at local or global levels. As our society becomes more aware of the economic importance of a sustainable environment, the demand for expertise in fields involving the management and protection of the natural environment, monitoring the impact of human activity upon the environment, and rehabilitation or restoration of the environment, are growing. This growth occurs across both the public and private sectors.

Environmental careers are often multidisciplinary in nature – which makes them rewarding and interesting. The range of career options in both the public and private sectors is extensive and in no way restricted to a specific area. Basic scientific skills and environmental experience can lead to jobs such as: botanist, zoologist, soil scientist, meteorologist, environmental engineer, hydrologist, forester, policy officer, campaign officer, communications manager and marine biologist. See page 3 for more information on careers.

It is also possible for graduates from virtually any discipline to become involved in environmental

careers, for instance via journalism or political roles, and vice versa. This information booklet is written primarily for those who have studied, or intend to study towards, a science or engineering qualification, however the advice section would be useful for all those interested in an environmental career. See page 4 onwards for more information on relevant occupations.

As mentioned above, a career as an environmental specialist benefits from a strong scientific or environmental studies background, but most important is an interest in the environment. The most appropriate tertiary qualifications are either broadly-based science degrees or specific vocational degrees such as geography, social studies, engineering, forestry or marine biology. Secondary school studies in maths, chemistry, biology or physics are usually important prerequisites for course entry, depending upon the particular degree program. See page 10 for more information on training.

As existing industries and government policies require strong environmental practices, the increase in the number of environmental jobs is extensive, and will continue to be so in the future. It is important that these jobs are filled by enthusiastic, competent graduates with strong scientific or environmental studies skills. Environmental careers are rewarding and are there for the taking – but there is competition. This booklet aims to help you get your foot in the door first by offering advice on graduate, volunteer and vacation programs to boost your skills, lengthen your CV and get you noticed by potential future employers!



# Environmental Careers

In recent years there has been a growing interest in caring for the environment. The development of new government services, private businesses and community activities is indicative of this interest and future growth expectations. Correspondingly, there has been a growth in career options for those wishing to work in the environmental field. Environmental careers encompass a broad range of work which can include, but is certainly not limited to, some or all of the following activities:

- Management, conservation and rehabilitation of the environment
- Environmental monitoring and protection, and environmental impact assessment
- Researching the impact of human activity and natural processes on the environment
- Development of environmental plans and policies

There are a diverse array of courses and tertiary programs which will give you the skills you require to look for a career in a field related to the environment or sustainability. With many new trains of environmental thought, new courses are available each year. This work is generally multidisciplinary, encompassing diverse fields such as geography, biology, agriculture, engineering, geology, management, policy and planning, and many more. Interest in and an aptitude for the sciences are important for those wishing to enter the field, however there are non-science based environmental careers. See page 10 onwards for more information on appropriate training and qualifications.

Environmental careers cover a broad spectrum of employment opportunities. Some of the occupational fields that are relevant to those with tertiary qualifications in the environmental include:

- Agricultural Adviser
- Agronomist
- Aquaculture Technician
- Botanist
- Conservation Officer
- Ecologist
- Environmental Chemist
- Environmental Consultant
- Environmental Engineer
- Environmental Scientist
- Farmer
- Field Assistant
- Fisheries Officer
- Forester
- Geographer
- Geologist
- Horticulturist
- Hydrologist
- Marine Biologist
- Meteorologist
- Park Ranger
- Policy officer
- Research Officer
- Soil Scientist
- Technical Officer
- Urban Planner
- Waste Education Officer
- Zoologist

Some of the main employers of graduates from environmental courses are:

- Agriculture departments
- Catchment management authorities
- Conservation departments
- Engineering consultants
- Environmental consultants
- Environmental protection agencies
- Federal, state and local governments
- Fisheries / wildlife departments
- Forestry / land management organisations
- Government research organisations
- Manufacturing companies
- Mining companies
- Non-Government Organisations (NGOs)
- Non-Profit groups
- Petroleum companies
- Universities
- Water supply departments
- Zoological gardens





# Main Areas of Work and Relevant Occupations

There are many different work areas in which an environmental graduate can look for employment. One of the distinctions of an environmental career is that it can be very broad, with many different possibilities; therefore there are no definitive main areas of work which can be identified. We have instead given you a description of what sort of work and background is required for the public and private sector, and highlighted three main career options from both.

## Public Sector

Broadly speaking, environmental careers in the public sector are focused in the areas of environmental management, research, regulation and policy development. The public sector is very diverse, consisting of all three levels of government as well as the relevant governmental organisation associated with each one.

National data on the destinations of graduates in 2002 showed that the public sector was the most significant employment area for graduates, with 40 percent of graduates taking up positions in areas such as forestry, soil science, parks & wildlife management, urban planning, and environmental science. Relevant occupational titles include Forestry Officer, National Park Ranger, Wildlife Officer, Agricultural Adviser, Environmental Engineer and Environmental Planner.

The government sector, particularly at the state level, provides a number of services which can offer environmental career options. An important responsibility of governments is to manage our natural environment. In every State of Australia there are departments and authorities established to:

- provide water supply, sewerage and other waste management services to the community
- protect and manage forests, national parks and wilderness areas
- provide support services to the agricultural industry
- provide environmental education and information for the community
- coordinate urban and regional planning



## Careers in Natural Resource Management and Policy Formation

Legislation has been enacted to protect the environment and regulate human activities to minimise impact on the environment, and also to develop new policies. Departments and agencies have therefore been established to enforce this legislation, their titles normally incorporating elements associated with environmental protection or planning. They have a dual role - both to monitor the environment and to provide policy advice to governments so that legislation keeps pace with changes to the level and breadth of human activity. Meteorologists perform an important role in monitoring weather conditions whilst Environmental Officers are employed by regulatory agencies to investigate, research, analyse and evaluate the environmental impact of specific proposals and activities. Some duties could include water and catchment policy, environmental protection authority, pollution level policy, or marine national parks legislation.

## Careers in Environmental Research

Another area of work within the public sector is environmental research. The CSIRO is the most prominent government body which conducts such research. State bodies overseeing agricultural, fisheries and forestry practices also employ people to undertake research and the nation's universities are significant players in academic research and teaching. Graduates interested in this area could be employed as Research Assistants and those with higher

qualifications as Research Scientists or officers. These careers can be rewarding both from an academic point of view and also as a contribution to better environmental management. All State and Government bodies investigating natural resources and the environment have research officers, scientists and managers.

## Careers in Local Government

Local government is one of the biggest employers of environmental studies graduates, offering extremely varied positions. Environmental Jobs in Local Government have been increasing steadily in the last few years in response to both global and local issues. Local Governments answer to their community and this is affected by the groundswell of importance being placed on local environmental issues. Qualifications for environmental careers in Local Government can include urban planning, engineering, (environmental) science and policy formation, but these are not exclusive. An Environmental Officer in local government has a position with a broad array of environmental duties, especially focused on the formation of environmental policy. A Waste Management officer is responsible for increasing community awareness of issues like litter and encouraging recycling. An Environmental Planner is involved in writing strategic plans for the organisation and a good knowledge of environmental issues is very important for such a role. Revegetation and planning for conservation in parks and gardens is another big area of employment.







## Private Sector

The private sector represents a large and diverse area of potential environmental careers, with 32.3% of environmental science graduates in Australia being employed in industry in 2002. This is especially likely to grow in the future as the private sector takes the lead in many areas of environmental work. We are entering a new age of corporate responsibility where shareholders are now demanding a triple bottom line approach to management and operations, and consumers are voting via their spending choices. This means corporations are not only looking at profit (the financial bottom line), but incorporating the issues of environmental protection and social equity.

Within the private sector there are many areas for environmental specialists. Large and small private companies, especially those involved with petrol, oil, and mining, as well as all multinational companies are having to incorporate sustainable practices (social, economic and environmental) into all levels of their operations. Utilising the best environmental graduates, these companies must ensure their impact on the environment is kept to a minimum (or in some cases that it actually become positive) as they obtain and utilise our natural resources.

Another important part of the triple bottom line theory is communicating an organisation's achievements to government and to the ever-attentive public (that is, consumers). Having strong skills in policy, research, team work, science and communication can get you a career in public sector policy and lobbying in the corporate responsibility arena.

## Careers in Manufacturing

Organisations involved in manufacturing or downstream processing offer career options in areas such as environmental monitoring. These options are usually linked to engineering functions as they relate to environmental licensing procedures, monitoring

compliance with environmental standards and improving performance. Environment technology innovation is growing quickly, and new techniques include the use of biological processes as a means of waste management as well as innovative renewable energy options. With the rise of environmental standards and labelling for greater market share or contractual obligations, there is a high demand for environmental officers knowledgeable in environmental auditing.

## Careers in Environmental Consulting

Consultancy involves an organisation 'selling' their specialist services to other organisations. For many this is the most cost-effective method of meeting environmental obligations. The actual work that an environmental consultant performs therefore changes considerably depending on the organisation and its particular circumstances. Some activities environmental consultants can undertake include:

- preparation of environmental impact statements or environmental audits
- monitoring and providing advice on water/soil quality management
- monitoring pollution and testing emissions controls
- waste management audits
- licence compliance monitoring and reporting provision of environmental information
- data analysis and management

Environmental consulting can result in much local travel as well as the possibility of travel overseas. You need to be competent in report writing and meeting deadlines, and a strong science, management or engineering background is preferred. In the future, environmental consultants will most probably be part of a certified practising association, to ensure the highest possible standards are applied in the industry. This will mean that academic backgrounds are even more important than in the past.





## Careers in Resources Industries

The primary resources industry is very large in Australia, and is mostly looking to employ graduates in geo-sciences or geographical information systems. People are predominantly employed to identify and explore ore deposits within the natural environment, as well as to make the sector more environmentally friendly through environmental technology development management.

More recently, the sector has also started to focus on the rehabilitation of mined areas. This offers opportunities for those with a background in disciplines such as biology, soil sciences, geography,

ecology, or geology. Environmental rehabilitation career options also exist in other organisations whose business may have an adverse effect upon the environment. This work can also involve environmental management, educational and public relations functions within the community.

## Careers Influencing Policy Formation

In addition to working for government agencies and corporate policy teams, there are other options for influencing environmental policies – from outside government or the private sector. Some career opportunities of this kind include working for organisations established to influence government policies and community opinion, including conservation groups (for example the Australian Conservation Foundation or Environment Victoria) and industry associations (such as the Environment Business Australia or the Environment Institute of Australia and New Zealand). Typical activities within these types of organisations would include: conducting research into environmental issues, preparing reports and information for public awareness, promoting and publicising the views of the organisation, and lobbying government bodies through the preparation of submissions. Again, strong science, education, policy, team work, critical analysis and communication skills are highly sought after in such positions, and the career pathways here can be extensive and rewarding.



# Career Pathways

There are many and diverse entry points to your dream environmental career just as there are many ways to develop it. These include looking 'outside the square' – for example getting involved in volunteer work, community groups, attending events, networking and so on. Because there are a variety of environmental career options, it is difficult to identify a standard career entry point and subsequent pathways. We interviewed eight environmental professionals about how they got to where they are, and why they do what they do! The two centre pages of this booklet have the results of these interviews and the next section features their advice on how to get your environmental career going.

## Environmental Chemist – Private Company

**Key duties:** Manage water treatment business. Provide advice to clients on water quality issues.

**Qualifications:** Bachelor of Science (Hons), Earth Sciences – Monash University; Ph.D, Earth Sciences – Monash University

**Graduate programs:** Research Associate – Centre for Green Chemistry, Monash University; Hon. Research Associate – School of Geoscience, Monash University

**Vacation work:** Chemist with Hoechst Australia – Polymer Chemistry

**Previous experience:** CSIRO Exploration and Mining – 5 years – Research Scientist; Mine Geologist – KiaOra Gold WA; Exploration Geologist – PNC Exploration; Geologist – BHP Minerals

**Which industries do graduates from your background tend to end up in?** Mining and exploration

**Why did you choose a career in an environmental field?**

The opportunity to cross from the mining and exploration sector to the growth sector of the environment provided for an interesting change in career path.

## Environmental Monitoring Scientist – Parks Victoria

**Key duties:** Develop monitoring programs for Parks Victoria. Improve integration of conservation objectives, management actions and monitoring outcomes of those actions.

**Qualifications:** Bachelor of Science – University of Melbourne; Master of Science (Ecology and Management) – University of Adelaide

**Volunteer work:** Field Assistant – Possum tracking, birds of prey, seagrass mapping. Turtle and Fisheries management: Centro Ecologico Akumal, Oaxaca and Guymas.

**Previous experience:** Beach Report Coordinator – EPA; Victoria Seagrass Watch Coordinator; DPI Queensland; Marine Scientist – EPA Victoria

**Which industries do graduates from your background tend to end up in?** Government departments – science agencies, consultancies, water or land management authorities.

**Why did you choose a career in an environmental field?**

Just a love of the environment, a desire to have a positive impact on society, and a role where you can combine field work and desk work.

## Environmental Journalist – Freelance

**Key duties:** Research, development and interviewing for radio and print reports.

**Qualifications:** Bachelor of Arts (Hons), Diploma in Professional Writing and Editing (RMIT)

**Volunteer work:** Australian Conservation Foundation; 3RRR FM and other community radio stations; Oxfam/Community Aid Abroad.

**Vacation work:** Range of jobs from fruit picking to retail.

**Previous experience:** Journalist – Radio Australia; Writing, research and voiceover work for a range of clients including Consumer Affairs Victoria and Melbourne Theatre Company; Freelance writer for internet news agencies; Freelance radio reports for international broadcasters such as Radio Netherlands.

**Which industries do graduates from your background**

**tend to end up in?** Communications fields, teaching, journalism, film and television, publishing

**Why did you choose a career in an environmental field?**

Interest in natural history and in environmental issues. Desire to contribute to environmental protection through awareness-raising.

### Environmental Scientist – Private Company

**Key duties:** Conducting environmental impact assessments, providing environmental advice, preparation of environmental management and rehabilitation plans.

**Qualifications:** Bachelor of Science (Hons) – majoring in Geology; Master of Environmental Science

**Volunteer work:** Wilderness Society Koala on and off for 12 months; Member of Wilderness Society Wilderness Action Group

**Vacation work:** Undertook vacation work for an environmental consultancy that worked in the mining and petroleum sectors.

**Previous occupations/experience:** Countless part-time jobs; Worked as a geologist in Victoria for a couple of years

**Which industries do graduates from your background tend to end up in?** Geologists generally end up working for mining or petroleum companies or for the government but from there often move into the environmental field or into the finance sector (advising on mining stocks).

**Why did you choose a career in an environmental field?**

A passion for the environment plus the fact that environmental work draws on everything: science, technology, social issues and economics – the classic hamburger with the lot!

### Marine Campaign Officer – Non-profit Organisation

**Key duties:** Develop and implement campaign to establish marine national parks in Victoria; develop community awareness of other issues relating to marine management; lobbying.

**Qualifications:** Bachelor of Economics with sub-major in Geography.

**Graduate programs:** Diploma of Education in Geography Method

**Volunteer work:** With various community environment groups over the years

**Vacation work:** Volunteer environment work with community groups

**Previous occupations/experience:** Secondary Teacher; Editor; Environmental Education Writer and Consultant; Senior managerial and administrative positions in environment groups; marketing; publications production; media

**Which industries do graduates from your background tend to end up in?** Commerce-related, teaching

**Why did you choose a career in an environmental field?**

Love of wildlife and the environment and the desire to help protect it; extracurricular activities at uni also showed me how I could do that.

### Catchment and Water Policy Officer – EPA

**Key duties:** Writing policies on waters in Victoria, stakeholder consultation, writing comments on other state and commonwealth policies, and implementation of policies

**Qualifications:** Bachelor of Science (Hons) in Marine Ecology

**Volunteer work:** Marine Discovery Centre, Coast Action; Museum Victoria; Australian Marine Conservation Society; University of Melbourne (for postgraduate students and lecturers) and Monash University.

**Vacation work:** Worked at Leigh Marine Laboratories, Auckland University.

**Previous occupations/experience:** Research Assistant – University of Melbourne; Research Assistant – Museum Victoria; Collection Manager – Crustacea, Museum Victoria; Marine Science Unit, EPA

**Which industries do graduates from your background tend to end up in?** I guess either academic (i.e. go on to do a PhD then post doc stuff), government (my line), or consulting.

**Why did you choose a career in an environmental field?**

My love of the environment, particularly marine.

### Environmental Scientist / Consultant – Private Company

**Key duties:** Lend support to environmental impact assessment work. Waste project generation, communications with associate networks.

**Qualifications:** Bachelor of Science (Hons) – majoring in Geography and Environmental Sciences

**Volunteer work:** Australian Conservation Foundation, Planet Ark

**Previous occupations/experience:** Myer Electric – 4 years; City of Casey – Waste Management Officer; Envirocom Australia – Waste Education Consultant

**Which industries do graduates from your background tend to end up in?** All over the place, local government, state government. Consultants, non-related fields.

**Why did you choose a career in an environmental field?**

I could not see myself working in any other field. I have a strong interest in working towards a more sustainable planet, learning more about the planet, communicating important messages and getting some work done.

### Environmental Engineer – Private Company

**Key duties:** Consulting; research assistance; report preparation; quality control; office management

**Qualifications:** Bachelor of Engineering (Hons), Bachelor of Science

**Vacation work:** Research Assistant, University of Melbourne (Faculty of Engineering); Engineering Assistant – Connell Wagner (Civil, Traffic and Infrastructure divisions); Environmental Assistant – Earth Systems

**Graduate work:** Environmental Engineer, Earth Systems

**Industries of other graduates:** Mining, agriculture, water resources, renewable energy

**Why did I choose a career in an environmental field?**

Good background in science and mathematics from high school; personal interest in environmental issues; an environmental engineering degree was recommended by others in the field.



# Appropriate Training

There are many different career pathways that people can take to get into their environmental careers of choice. With regard to training there are many tertiary related degrees and specialties, as well as postgraduate study options. There are also many opportunities to obtain training in a more specialised area of interest, from an education facility or a private training organisation. Volunteer work could also be seen as 'on the job training' and will be covered in the section on maximising your career options and potential.

## Undergraduate Studies

Choosing which undergraduate course to take can be daunting for many people. Although it is important to choose a course which you are interested in and which will give you the skills you require, there is always the opportunity to change your course during the degree. Undergraduate degrees are usually quite general for the first couple of years, before you are able to really specialise and look at areas of interest in greater depth. A general list of some environmentally related degrees and specialisations are listed below.



Courses which aid careers in the environment:

- Agriculture
- Applied Science
- Arts
- Ecotourism
- Engineering/ Environmental Engineering
- Environmental Education
- Environmental Health
- Environmental Law
- Environmental Management
- Environmental Policy and/or Planning
- Environmental Studies
- Forestry
- Horticulture
- Journalism
- Natural Resource Management
- Science: Environmental, Marine, Biological

Specialisations which help get the job of choice:

- Biodiversity
- Biology
- Botany
- Chemistry
- Cleaner Production
- Ecology
- Genetics
- Geographical Information Systems
- Geography
- Geology & Geophysics
- Heritage Management
- Hydrology
- Marine Biology
- Soil Science
- Toxicology
- Waste Management
- Water Resources
- Zoology

Some courses relevant to environmental careers are interdisciplinary, and will include units in environmental planning, policy and management in conjunction with studies in one of the biological sciences. In general, technically based, hands-on occupations require a strong background in fundamental science. Entry prerequisites vary, for example a certain number and type of maths and science may be required, but interest and aptitude are also important. As there are a large number of courses offered throughout Australia, check the handbook of each university offering a course in which you are interested, in order to determine its precise structure and prerequisites. You can also search the Government's Ten Fields website - [www.dest.gov.au/tenfields](http://www.dest.gov.au/tenfields) or visit the course search database on *gradlink* - [www.gradlink.edu.au](http://www.gradlink.edu.au) for more course information.

### Science

A degree in Science or Applied Science offers students the opportunity to focus upon a particular area of science. Entry requirements are normally secondary mathematics, however some majors within a science degree may require secondary school chemistry as well. These degree programs give students a sound foundation in fundamental science, allowing specialisation in the major stream of study selected. Majors can include botany, zoology, soil science, plant nutrition and marine biology. Employers who can offer specialist environmental positions often prefer graduates who have completed a four year honours degree in one of these disciplines.

### Environmental Engineering

Environmental Engineering courses require students to have a secondary school background in a number of subjects - maths, physics and chemistry. The course combines units in the biological sciences with engineering units in one or more of the following areas - coastal and marine engineering, hydrology and hydraulics, air pollution and hazardous waste management.

### Natural Resource Management (NRM)

Natural Resource Management can be taken as a course on its own, or in conjunction with similar courses such as horticulture or forestry. Employers can include catchment management authorities, State Government conservation departments, environmental NGOs and universities.

### Environmental Planning or Management

The emphasis here is upon fostering environmental improvement through careful strategic planning and management. This entails the management of a government body, NGO or company's internal and external environmental issues, and can occur before, during or after a specific project or as part of an ongoing operational plan. Course subjects which are important here include those that focus on social processes and education, e.g. policy processes, legislation, community development. However a background in broad school subjects ranging over science, arts and humanities are also valuable. The main areas of employment here are in Universities, State and Federal governments, local governments, environmental NGOs and also in the corporate world.

### Honours

Most undergraduate courses offer an honours year. In some courses such as engineering, you can elect to do honours as the final year of a course providing your marks are high enough. In most cases however, honours will be an extra year which you must complete after finishing your degree. The year will often be structured to include a large research thesis as well as a couple of final year subjects. There is often a cut-off mark to get into honours based on your undergraduate marks, and you will also have to find a topic and supervisor. An honours year usually includes some course work and a major piece of research, which you undertake supervised by an academic. Make sure you choose a project you are interested in (and a supervisor you get along with).

Honours adds just one more year to the degree, but can be immensely important in helping you get into your environmental career of choice. It will help you stand out from the pack in the eyes of employers, and with increased competition for positions this is currently very important. It also shows that you are able to run a large project, usually independently. You will can gain field-based skills, develop specialisations, supervise volunteers, and show written and oral communication skills throughout. Because of the greater depth of subject knowledge as well as the discipline required to complete a research project, graduates with an honours degree in science are particularly valued by the consulting industry. Another reason to do honours is that it is necessary to complete in order for you to progress to a PhD, and to get a scholarship you usually need marks above 80 percent.



## Postgraduate Studies

There are a number of options available for undertaking postgraduate studies relevant to environmental careers. Graduates with a broad background in the sciences or sometimes in other disciplines can choose to undertake either graduate/postgraduate diplomas, or masters and PhD programs – either purely by research or by course work at the start (i.e. masters by coursework or alternatively masters or PhD by research). Graduates should consult university handbooks and university career websites and counsellors to determine the content and prerequisites for specific programs.

A graduate diploma is vocationally specific, and will allow you to learn some fundamental skills that are important to enter certain careers. Generally a course leading to this qualification is one year full-time and does not assume a previous knowledge or background in the area.

The postgraduate diploma is also one year full-time. However, it usually requires a specific degree background. As such, the course is intended to build upon the foundation degree and to develop existing skills and knowledge to a greater depth. In terms of career outcomes the postgraduate diploma will be useful preparation for specific, technically-oriented environmental careers, such as a botanist or soil scientist. On the other hand the graduate diploma is more suitable for entry to broad-based environmental careers, such as environmental officer or community education officer roles.

Higher level studies involving Masters or PhD programs usually require a strong background in a relevant discipline. Some candidates bring with them significant work experiences and in some cases might be sponsored by their employers to undertake these studies. At the Masters level you may be able to undertake a coursework degree or else undertake some specific research. The PhD is exclusively a research degree. The duration of studies can range from two to four years full-time, and higher study is often undertaken to further enhance existing career prospects. Graduates seeking to pursue a career in environmental research could be expected to complete studies at

the postgraduate level. Information on postgraduate courses available in Australia can be found on the *gradlink* website – [www.gradlink.edu.au](http://www.gradlink.edu.au) under the 'Postgraduate Study' section.

As you progress through your undergraduate degree, your main area of interest will be developed and defined. Remember, your ideal postgraduate course could be at another university – within your state, interstate or even internationally. Make sure you do an extensive search of all available courses in your chosen career path and then start applying! Often studying at different institutions is looked at favourably by employers as evidence of planning and adaptability.

## Other Training Options

Whilst degrees are important prerequisites for entry to most professional positions, the value of other training to enhance skills and knowledge should not be underestimated. There is a number of short term TAFE training courses available in fields such as land management and landcare technology; these and more can be browsed on the National Training Information Service website - [www.ntis.gov.au](http://www.ntis.gov.au). Government landcare and reforestation programs sometimes include short term community education courses that are very practical and hands-on in their focus. Universities will also open up some courses to the public as one off subjects. For people without much time but looking to increase a certain skill set, these are very worthwhile.

Finally, non-profit environmental organisations can be contacted to see if they offer educational seminars or short term training courses to enhance awareness of environmental matters. Volunteering for these organisations can also provide training in certain areas.

Events and seminars are not strictly training and will not add to 'qualifications' on a CV, but the knowledge gathered and networks created can be invaluable. Often these events will involve discussing new concepts and ideas, and will allow you to stay in touch with current issues. The people that you meet and any relationships you develop can also be useful in gaining that vital foot in the door.



# Maximising Your Career Options and Potential

Whilst the skills and knowledge gained from professional education and training are important, most employers generally look for additional skills. The ability to communicate effectively, both in writing and orally, as well as work in team settings will be highly regarded. Additionally, a demonstrated interest in environmental studies or science and the environment, whether through an involvement in community and leisure groups or an active interest in the outdoors, will enhance prospects of employment. Finding relevant vacation employment or voluntary work will also be valuable experience from an employer's perspective.

The number of potential positions for graduates from environmental sciences and studies is finite and so you need to make sure you are in a good position to compete for any vacancies as well as have realistic alternatives available. It is not essential to gain a specifically environment-related position immediately after graduation in order to develop a successful career in the field. Many first jobs can provide a sound foundation of experience that will open up a number of environmental career options. You will obtain a greater understanding of what these options are if you make it your business to contact some of the organisations in your State listed on the last page of this booklet, and find out the many ways in which you can realise your potential. The Careers Advisory Service at your university can also provide you with career advice; see the full listing of careers advisory service contacts on the *gradlink* site at [www.gradlink.edu.au](http://www.gradlink.edu.au). Browse to the section entitled 'How To Find A Job' and look under 'Campus Contacts'.

## Advice from Environmental Practitioners

When interviewing professionals for this booklet we asked what advice they have for graduates who want an environmental career. Almost all respondents suggest that gaining experience in your field through volunteering, vacation work and graduate programs goes a long way. They all agree that environmental career opportunities are growing - but so is the competition amongst graduates, so having items on your CV in your chosen field will give you an advantage. Below are their responses to the question "What advice do you have for graduates looking for a career in a similar field to yours?":

**Environmental Chemist:** "The sector is growing, resulting in increased opportunities. It is important to have a strong science background – particularly in chemistry. In fact it can not be stressed enough, the importance of having a strong science degree behind you."

**Environmental Monitoring Scientist:** "'From little things big things grow'. This is true! Pick up casual and/or volunteer work when available. If you show enthusiasm and do a good job, people want to employ you."

**Radio (environmental) Journalist:** "Study some science units, (I didn't but these days there's more cross-pollination between disciplines and also there are science/communication courses.) Have a few strings to your bow as work may not be continuous in one area, e.g. there is not a huge scope for radio in Australia, although overseas you may have more variety of work. Environmental fields can be full of politics and heightened emotions! Keep a sense of perspective and humour and work sensible hours as much as possible."

**Environmental Scientist:** "Work out your passions/interests, set some goals and aim high and go for it - be active and interested."

**Environmental Consultant:** "Where possible, combine environmental studies with a more specialist discipline like chemistry, biology, engineering, economics or law. Do vacation work, voluntary work – anything to get a foot in the door. Persistence and enthusiasm!"

**Water Policy Officer:** "Do heaps of volunteer work! The saying is true, it is not what you know but who you know."

**Environmental Engineer:** "Try to get vacation work experience before completing your degree, whether or not it is a requirement for your course. This will make it much easier when it comes to seeking employment as a graduate."

**Marine Campaign Officer:** "Volunteer with community groups; get involved with university action groups; look at resource management courses; don't feel bound by conventional views of educational qualifications; be positive about personal skills and experiences that can help entry into environment field."





These are a sample of some points of view, but don't feel inhibited about asking other people you know or meet for advice. A more comprehensive list of career profiles can also be viewed via the Melbourne Environmental Jobs Network website ([www.environmentaljobs.com.au](http://www.environmentaljobs.com.au)).

## Volunteer Work, Vacation Work and Graduate Programs

Volunteer work is really important to enable you to get a foot in the door. The duration and amount of work can be as diverse as the work itself. There are many organisations that will take on volunteers; some will advertise, some won't. It is important to be proactive and approach an employer you may be interested in - this shows initiative. If you are lucky there may be a chance of getting ongoing work with the organisation after some time, and if not the initiative and skills learned will stand out on a CV. You will also find it rewarding in either the work you are doing, or through the chance to find out how organisations actually operate. Non-government organisations are frequently looking for volunteer help.

The story is very similar for vacation scholarships (or summer work), where organisations take on students over summer (usually between your penultimate and final years). Most organisations will pay a decent wage, and will have you working on set projects. This means that by the end of the placement you will have something to show for your time. A summer scholarship can also give you an idea of what working full-time within an environmental organisation is like.

Graduate programs differ slightly from volunteer and vacation work in that they are more long-term and you must have finished your degree. As the name

suggests, graduate programs are only for recent graduates and allow the organisation to get the 'cream of the crop' to develop within its ranks. The pay is not usually very high, but benefits such as extra training and placements throughout the organisation make up for this. The duration is usually 1-3 years with the ability to stay on with the organisation at the end. The graduate program intake is usually from March-November the year before starting, so apply well before you finish your degree. These positions are highly sought after with thousands of applicants for some vacancies.

There are many different places to find out what is on offer. It is possible to ask your local careers office or search the web. The Melbourne Environmental Jobs Network (MEJN) website ([www.environmentaljobs.com.au](http://www.environmentaljobs.com.au)) offers advice on looking for jobs with pages on volunteer work, vacation work and graduate programs and is a great place to start.

You should also visit the 'vacation' and 'volunteer' work resources on *gradlink*, found at [www.gradlink.edu.au](http://www.gradlink.edu.au) under 'How To Find A Job'. You can also search the considerable SEEK and Graduate Opportunities vacancies database by clicking on the 'SEARCH FOR WORK' section of *gradlink*.

Remember though that only a fraction of these positions will be advertised through these channels, so contact any organisations directly that you think you would like to work for.



# Further Information

## Joining Industry Groups / Non-Government Organisations (NGOs)

The benefits of joining these organisations are diverse. Many of these organisations produce a monthly newsletter, which allows you to keep up to date with the latest news. You will typically be invited to events run by the organisation which can provide great networking opportunities. You can also list memberships on your résumé to show that you have a long-term career interest in the area you are applying for:

- Check the Links Page on Melbourne Environmental Jobs Network (MEJN) for many NGOs and Industry groups – [www.environmentaljobs.com.au/links.php](http://www.environmentaljobs.com.au/links.php)
- Environment Institute of Australia. All encompassing, offers good benefits including a mentor program for young graduates – [www.eia.asn.au](http://www.eia.asn.au)
- The Australian Conservation Foundation, The Wilderness Society and Environment Victoria are three of the largest environmental NGOs – [www.acfonline.org.au](http://www.acfonline.org.au), [www.wilderness.org.au](http://www.wilderness.org.au), [www.envict.org.au](http://www.envict.org.au)
- Sustainable Energy Foundation is based in Melbourne and promotes all things to do with sustainability – [www.sef.org.au](http://www.sef.org.au)
- myfuture is the Federal Government's official career information service, providing a great deal of information about environmental and related careers – [www.myfuture.edu.au](http://www.myfuture.edu.au)

## Free Environmental Information Mailouts

To keep up to date with the latest information there are many organisations which will email information free of charge. It is good to be aware of the latest environmental issues – mentioning current events and news in job interviews will impress potential employers.

- Greenleap. Focuses on many local and national issues. Encourages debate. Can be found on the Internet at: [www.greenleap.com](http://www.greenleap.com)

- Environs. This Local Government organisation has a mailout called 'best 5 minutes', and has a website here: [www.environs.org.au](http://www.environs.org.au)
- Others include Eco-politics, Environmental News Service (ens) Australia. Eco-politics has a website at: [www.ecopolitics.org.au](http://www.ecopolitics.org.au) and the Environmental News Service can be found at: [www.ensaustralia.info](http://www.ensaustralia.info)

## Where to Find Jobs

To find information about environmental jobs, events and issues, try the following websites.

- Check the Jobs page on MEJN for loads of Environmental Jobs updated daily – [www.environmentaljobs.com.au](http://www.environmentaljobs.com.au)
- The Job Search facility on the *gradlink* site gives access to the combined job vacancies of SEEK and Graduate Opportunities – go to [www.gradlink.edu.au](http://www.gradlink.edu.au) and click on 'SEARCH FOR WORK'.
- NRMjobs – Natural Resource Management jobs is a free weekly, national mailout of jobs – [www.nrmjobs.com.au](http://www.nrmjobs.com.au)
- Australian Local Government Job Directory, Headhunt – Local Government jobs can be found at: [www.job-directory.com.au](http://www.job-directory.com.au), [www.headhunt.net.au](http://www.headhunt.net.au) or the official Australian Government 'graduate links' site: [www.jobsearch.gov.au/graduatelinks](http://www.jobsearch.gov.au/graduatelinks)
- Victorian State Government jobs (other state governments will provide a similar service) – [www.jobs.vic.gov.au](http://www.jobs.vic.gov.au). Other state government websites are listed here: [www.gov.au](http://www.gov.au)

It is also possible to put your name down at recruitment agencies. Some cater for environmental careers more than others.

## Environmental Events

Environmental events allow you to stay in touch with the latest issues and ideas. They are also a great way to network and expand your list of contacts. Remember 'it is not about what you know but who you know'.

- Check the Events Page on MEJN for loads of local and national events, updated daily – [www.environmentaljobs.com.au](http://www.environmentaljobs.com.au)
- The Federal Department of the Environment and Heritage (Environment Australia) has a comprehensive website detailing important environmental issues in Australia and the government's ongoing activities in the area – [www.erin.gov.au](http://www.erin.gov.au)



## Environmental Employers

It is worthwhile investigating potential employers and workplaces. If you find an employer that interests you, email them directly to ask if they have work available or if they can put your résumé on file. Taking this step shows employers that you have initiative and could land you a job.

- Use the Melbourne Sustainable Business Directory to find Melbourne-based businesses which promote sustainability – [www.melbourne.vic.gov.au/sustainablebusiness](http://www.melbourne.vic.gov.au/sustainablebusiness)
- VICNET has links to many organisations in the environmental industry – [www.vicnet.net.au](http://www.vicnet.net.au)
- Co-operative Research Centres (CRCs) are research-based organisations with many different environmental facets, and are worth looking up. Check out the Cooperative Research Centres Association – [www.crca.asn.au](http://www.crca.asn.au) and the Australian Government's CRC program directory – [www.crc.gov.au](http://www.crc.gov.au).
- Local Government is a key employer of environmental graduates and it pays to consider employment opportunities with local councils. Many councils offer short-term employment (e.g. summer scholarships) but do not advertise these opportunities, so you need to contact them directly. Environs Australia – [www.environs.org.au](http://www.environs.org.au), the International Council for Local Environmental Initiatives – [www.iclei.org](http://www.iclei.org) and the Municipal Association of Victoria – [www.mav.asn.au](http://www.mav.asn.au) are three good resources for Local Government information
- State Government Departments or Authorities in your State, in areas such as: agriculture, conservation, environmental protection, forestry, land management, sustainable energy, water supply and catchment management can be useful sources of employment information – find your state government's website at [www.gov.au](http://www.gov.au).
- Graduate Opportunities contains profiles of many major employers in Australia, searchable by industry and other keywords – [www.graduateopportunities.com](http://www.graduateopportunities.com)
- Bureau of Meteorology (located in each state) – [www.bom.gov.au](http://www.bom.gov.au)

- C.S.I.R.O. (located in each state) – [www.csiro.gov.au](http://www.csiro.gov.au)
- Department of Agriculture, Fisheries, and Forestry (Canberra) – [www.affa.gov.au](http://www.affa.gov.au)
- Department of Education, Science and Training (Canberra) – [www.dest.gov.au](http://www.dest.gov.au)
- Australian Greenhouse office (Canberra) – [www.greenhouse.gov.au](http://www.greenhouse.gov.au)
- Environment Australia (Canberra) – [www.ea.gov.au](http://www.ea.gov.au)

## Volunteering

Many companies have volunteer positions but few advertise them, so approaching the company directly could be worthwhile.

- Check the Volunteer Page on MEJN for more information – [www.environmentaljobs.com.au](http://www.environmentaljobs.com.au)
- Volunteer Green is a useful database of volunteer work run through the Australian Conservation Foundation (ACF) – [www.volunteergreen.org](http://www.volunteergreen.org)
- Go Volunteer – [www.govolunteer.com.au](http://www.govolunteer.com.au) and OurCommunity – [www.ourcommunity.com.au](http://www.ourcommunity.com.au) are also good volunteer resources
- SEEK Volunteer can be found at: [www.volunteer.com.au](http://www.volunteer.com.au)
- FIDO, the Friends In Deed Organisation lists volunteer positions at not-for-profit and non-profit organisations – [www.fido.com.au](http://www.fido.com.au)
- Similarly, Pro Bono Australia's Volunteer Match site at [www.volunteermatch.com.au](http://www.volunteermatch.com.au) helps skilled volunteers find positions at not-for-profit organisations.
- Australian Volunteers International helps graduates find volunteer placements overseas, and has a website at: [www.osb.org.au](http://www.osb.org.au)

## Graduate Programs

Graduate positions are advertised between 3 and 9 months before the start of the program.

- Check the Graduate Programs page on MEJN for more information – [www.environmentaljobs.com.au/gradprograms.php](http://www.environmentaljobs.com.au/gradprograms.php)
- The 'SEARCH FOR WORK' section on *gradlink* at [www.gradlink.edu.au](http://www.gradlink.edu.au) allows you to search for graduate programs in the SEEK and Graduate Opportunities databases simultaneously.

# Acknowledgments

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## Employers

Earth Systems – [www.earthsystems.com.au](http://www.earthsystems.com.au)

City of Melbourne – [www.melbourne.vic.gov.au](http://www.melbourne.vic.gov.au)

Melbourne Environmental Jobs Network –  
[www.environmentaljobs.com.au](http://www.environmentaljobs.com.au)

Victorian National Parks Association –  
[www.vpna.org.au](http://www.vpna.org.au)

RMIT – Ian Thomas – [www.rmit.edu.au/tce/ssp](http://www.rmit.edu.au/tce/ssp)

## Graduates

Cameron Miller – Parks Victoria

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Chris Smyth – Victorian National Parks Association

Mike Cramer – Earth Systems

John Waters – Earth Systems

Martina Gassner – Earth Systems

Sophie Pape – Earth Systems

Vicki Barmby – EPA, Victoria

Pictures courtesy of Earth Systems  
and Duncan Leadbitter

## Additional Reading

*gradlink*, the publishing arm of The Graduate Careers Council of Australia (GCCA), produces a range of publications including the Graduate Destination Survey, Graduate Starting Salaries, Course Experience Questionnaire, and Your Career and You. The publications can be sourced from your university careers service and the GCCA, or can in many cases be downloaded for free from the *gradlink* website: [www.gradlink.edu.au](http://www.gradlink.edu.au).

This booklet is one of a series intended for use by careers services in higher education in Australia. The booklets will also be of use to secondary school students and others considering further study. A full list of titles is available from [www.gradlink.edu.au](http://www.gradlink.edu.au), or on request from the *gradlink* helpdesk on 03 9349 4300.

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