What is Environmental Management, Policy and Planning?

Environmental management, policy and planning describes the practice of overseeing the environmental performance of an organisation, industry or land-use whose operations affect the environment. Organisations design and implement environmental management systems (EMS) to manage, mitigate, and minimise negative local and global environmental effects resulting from their operations. Environmental managers provide skills in operational and environmental analysis, communication, mitigation, and restoration systems.

With training in holistic and integrated environmental management graduates go on to careers that assess, evaluate and monitor the ways in which natural and human environments interact and are impacted. Importantly, graduates may develop innovative and creative ways to address a range of complex environmental challenges facing New Zealand and the world today. Developing a knowledge of environmental policy and planning also enables graduates to move into careers that can affect positive change at local, regional or national levels. Good planning requires an in-depth and integrated knowledge of regulatory frameworks, and of social and environmental systems.

Environmental management, policy and planning programmes at Lincoln University are interdisciplinary, and give graduates the ability to see how environmental issues are viewed from a number of perspectives and disciplines. This ‘big picture’ view brings together both theory and practice and places graduates in a strong position to take on environmental challenges. Programmes are structured so that students attain core knowledge, skills and values but are also able to develop areas of personal interest across the natural and social sciences.
Environmental management, policy and planning in New Zealand and the world

Global resources are under pressure from growing populations and changes in the way we live. Many organisations are now seeking, and in some cases are mandated, to understand, manage, and plan for the environmental impacts of their operations. The obligation that organisations have to meet statutory and policy requirements and their desire to meet increasing public expectations of environmental responsibility have resulted in the need for professionals who have the expertise to make strategic decisions with sustainability in mind. Increasingly it is seen as vital that policy and planning is undertaken using a holistic and integrated approach in order to tackle the complicated and often urgent issues facing New Zealand and the world, including climate change, sea-level rise, loss of biodiversity, and resource depletion.

New Zealand’s natural environment is a key resource for our two biggest export earners: agriculture (dairy) and tourism. Awareness of environmental impacts is required if land is to continue to be used for production, and as a drawcard for tourists to New Zealand who often come expecting a “100% pure” experience. Our urban environments are also faced with a unique set of issues as more people choose cities as places to live, work and play. These pressures demand people in professional roles who are innovative thinkers able to see and change the ‘big picture’.

Skills and knowledge developed by studying environmental management, policy and planning

Lincoln University graduates gain an in-depth understanding of the complex ways in which environmental and social systems interact, and to be able to critically assess how these issues affect environmental planning. The flexible structure and inter-disciplinary approach furnishes students with theoretical knowledge and practical skills that can be applied in a number of fields, industries and professions, from water resource management to urban planning.

Employers seek well-rounded, engaged graduates with a strong work ethic. As in any sector, employers value those with a professional attitude. This includes good communication (including the ability to communicate to groups, as well as effective interpersonal and written communication), self-motivation, initiative, time management, and flexibility. The importance of these basic skills cannot be underestimated, even in voluntary or internship roles, as future job opportunities often arise from a good reputation and a varied network of contacts.

Skills and knowledge valued in environmental management, policy and planning roles

- Awareness of tikanga Māori
- In-depth knowledge of environmental and social systems
- Innovative and solutions-focused mindset
- Problem-solving and diplomacy skills
- The ability to analyse and communicate technical data to diverse stakeholders
- Critical thinking and analytical skills
- The ability to plan and think strategically
- Relationship management skills
- Understanding of or ability to learn the research funding environment
- The ability to form and justify an argument
- Business acumen
- Establish and maintain relationships with external organisations
- Judgement, initiative and leadership
- Information technology (IT) skills
- Understanding of and ability to use systems thinking
- Collaboration and negotiation skills
- Community engagement skills
- Effective written and verbal communication skills
- Flexibility and the ability to manage change
- In-depth understanding of environmental policy and planning (across local, regional and central government levels)
- Project planning and management
- Working knowledge of both statutory and non-statutory tools and options
- Broad knowledge of local, national and global environmental issues
Where can environmental management graduates find work?

Environmental management, policy and planning careers are wide-ranging and diverse. In a world of rapid change and rapid growth, professional roles with an environmental focus are more in demand than ever. Lincoln University graduates with a sound environmental background are sought across a range of sectors, such as: agriculture, horticulture, aquaculture, air/water/soil quality, high-tech industries, local/regional/national government, conservation, ecology, restoration, irrigation, education, research, consultancy, community development, and land/water/waste management in both urban and rural environments.

Places of employment for environmental management graduates include

- Private consultancies (e.g., BECA, Lowe Environmental Impact, WSP, AECOM, Coastwide Resource Consultancy (CWRC))
- Local government (e.g., City Councils such as Porirua or Christchurch City Council)
- Regional government (e.g., Whanganui District Council, Environment Canterbury (ECan))
- Government bodies/departments (e.g., Department of Conservation (DoC), Ministry for the Environment, Ministry for Primary Industries (MPI))
- Crown research institutes (e.g., NIWA, Landcare Research, Plant and Food Research)
- Environmentally related organisations (e.g., Renewable energy: Enphase, Forestry: PF Olsen, Scientific consultancy: Cawthron Institute, Conservation and restoration: Ecoworks New Zealand)
- Non-government organisations (e.g., World Wildlife Fund (WWF), Greenpeace International, National Wetland Trust, Irrigation New Zealand Inc., Fish and Game New Zealand)
- Waste management (e.g., EnviroNZ, EnviroWaste Services, WasteMINZ)
- Education sector (e.g., Lincoln University, schools)
- Community trusts (e.g., Waihora Ellesmere Trust, EcoMatters, Banks Peninsula Conservation Trust)
- Primary sector companies or cooperatives (e.g., Fonterra, Wither Hills Vineyard, Tegel Foods)
- Defence forces (e.g., NZ Air Force, Army, Navy)

Environmental management, policy and planning job titles

- Academic Lecturer
- Agricultural Consultant
- Analyst/Environmental Reporting/Policy
- Biodiversity Officer/Advisor/Ranger
- Climate Change Consultant/Coordinator/Modeller
- Corporate Responsibility Advisor/Manager
- Community Engagement Advisor
- Compliance Officer
- Consents Monitoring Officer
- Conservation Officer
- Conservation Restoration Consultant/Project Manager
- Consultant (planning, water quality, enforcement)
- Contaminated Land Advisor/Specialist/Consultant
- Corporate Social Responsibility Officer
- Ecologist (Aquatic, Freshwater, Terrestrial)
- Environmental Advisor
- Environmental Educator
- Environmental Health Officer
- Environmental Health Practitioner
- Environmental Impact Assessor
- Environmental Monitoring Officer
- Environmental Technical Officer
- Environment/Sustainability Campaigner
- Farm Environment Consultant
- Fisheries Officer
- International Aid and Development Officer
- Land Assessment Advisor
- Land Management Officer
- Media Officer
- Natural Resources and Environment Coordinator
- Park Ranger
- Planner (policy, resource management, resource consent)
- Project Leader
- Quality Assurance Manager
- Renewable Energy Consultant/Developer/Researcher
- Researcher
- Sustainability Educator
- Sustainable Business Analyst
- Sustainable Farm/Dairy Advisor
- Technical Officer - Land and Water Quality
- Waste Management Advisor/Specialist
Pay rate indications: full time equivalent (FTE) $NZ per annum¹

Most starting salaries for graduates of bachelor degrees fall between 50,000 - 70,000. Entry level jobs are stepping stones to roles with increased responsibilities and remuneration. Your employability is enhanced by all of your life experiences, be they employment related, or the transferable skills and competencies gained from community involvement, volunteer work, or previous work or study - all of which can grow competency, expand networks, and demonstrate enthusiasm to future employers.

¹ Rates sourced from SEEK, MBIE, Careers NZ, Universities NZ, PayScale, PQOS survey data

<table>
<thead>
<tr>
<th>Job title</th>
<th>Indicative rate</th>
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<tbody>
<tr>
<td>Fisheries Officer</td>
<td>60,000 - 100,000</td>
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<tr>
<td>Compliance Officer</td>
<td>60,000 - 90,000</td>
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<tr>
<td>Planner</td>
<td>65,000 - 140,000+</td>
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<tr>
<td>Environmental Manager</td>
<td>80,000 - 120,000+</td>
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<tr>
<td>Environmental Consultant</td>
<td>50,000 - 110,000</td>
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<tr>
<td>Academic Lecturer</td>
<td>75,000 - 200,000+</td>
</tr>
<tr>
<td>Environmental Health Officer</td>
<td>50,000 - 85,000</td>
</tr>
<tr>
<td>Sustainability Officer</td>
<td>55,000 - 140,000+</td>
</tr>
<tr>
<td>Land Management Officer</td>
<td>50,000 - 150,000+</td>
</tr>
<tr>
<td>Environmental Agricultural Consultant</td>
<td>60,000 - 100,000+</td>
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<tr>
<td>Ranger</td>
<td>50,000 - 90,000</td>
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<tr>
<td>Consents Monitoring Officer</td>
<td>60,000 - 80,000</td>
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<tr>
<td>Risk Advisor/ Protection Officer</td>
<td>70,000 - 110,000+</td>
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Environmental management tasks

Professionals working in the environmental sectors are expected to wear many hats in their day-to-day work. The following list indicates tasks one might encounter as an Environmental Planner, and as an Environmental Manager.

a) Environmental Planner

- Analyse maps, aerial photos, data, and field investigation reports for planning usage
- Liaise with planning teams, iwi, industrial representatives, developers, public and private stakeholders, and members of the public
- Conduct site investigations
- Deliver presentations to stakeholders (community, iwi, regulatory, and government)
- Prepare and advise on resource consent applications
- Make recommendations regarding proposed developments/ projects
- Engage with specialists to identify strategies to minimise environmental impacts
- Prepare environmental impact assessments/ reports in partnership with engineers, ecologists, or other specialists
- Make recommendations that comply with regulatory frameworks at all levels
- Collate content from specialist reports into cohesive environmental assessment (and tailor to various stakeholders)

b) Environmental Manager

- Identify and establish feasibility of organisational goals
- Develop and maintain relationships with stakeholders and partners
- Formulate arguments in support of organisational goals, which can sometimes be conflicting
- Develop policies and procedures
- Develop and design innovative programmes and services
- Monitor regulatory compliance
- Deliver and receive education and training
- Provide technical advice, training and assistance
- Monitor and improve environmental awareness, systems and action
- Conduct site visits to monitor and assess environmental impacts
- Develop and/or maintain inspection and monitoring checklists, and reports
- Report to stakeholders via email, meetings, conferences, symposiums, and press releases
- Serve as spokesperson on environmental matters for your organisation

Job tasks are role-specific, so the above is an indication only. For more information on roles, registered Lincoln University students can search LU Career Centre (online) for job titles similar to those they are interested in. Job descriptions, including tasks and skills required, are often available.
Industry bodies

Membership of an industry specific body enhances the professional status of graduates. By joining a professional body, members can research career options, access training and events, and network and collaborate with industry colleagues at all levels.

In some roles, registration with, or membership of, a professional body is compulsory.

Examples of environmental management, policy and planning bodies include:

- New Zealand Association of Resource Management (NZARM)
  www.nzarm.org.nz
- Environmental Institute of Australia and New Zealand (EIANZ)
  www.eianz.org
- New Zealand Planning Institute
  www.planning.org.nz
- Lincoln University Planning Association
  www.facebook.com/LincolnUniversityPlanningAssociation/about
- New Zealand Geographical Society
  www.nzgs.co.nz
- New Zealand Association for Impact Assessment
  www.nzaia.org.nz
- Resource Management Law Association
  www.rmla.org.nz
- Lincoln Environmental Organisation
  www.lusa.org.nz/environmental
- IPIECA (Global Oil and Gas Industry Association for Environmental and Social Issues)
  www.ipieca.org
- The Secretariat of the Pacific Regional Environment Programme (SPREP)
  www.sprep.org

Find out more:
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