

Environmental Management and Planning in the New Zealand Defence Force – An Overview

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“... seven small towns, three major airfields, a port/shipyard complex, 75,000 ha of iconic mountain and coastal landscape and numerous other smaller facilities throughout New Zealand. If you are looking for something different, we probably have it...”

So reads the introductory text to the advertisements we use when recruiting staff to the Environmental Services section of Property Group. What the ad doesn't say, but which will be assumed from the nature of the organisation, is that some of the activities carried out in those places are, to say the least, a little different from the norm. Yet when in casual conversation you mention that your job is environmental management in the New Zealand Defence Force (NZDF), the response is often puzzlement and along the lines of “What does the military need environmental management for?” This overview attempts to answer that question and provide an insight to some of the planning issues we deal with.

The Defence Estate comprises the properties from which the NZDF operates to support defence activities. Most of the estate was originally developed in the mid 20th Century during and after the Second World War and has been periodically upgraded or redeveloped since. It has a 2008 replacement value of about \$2.3 billion. The estate includes:

- A total area of 75,000ha including 62,000ha at the Army Training Group Waiouru and 8,100 ha at the Military Training Area, Tekapo
- Nine main camps and bases
- Three military airfields
- One Naval Base, and
- Over 5,000 buildings including 2,500 service houses.

Property Group

The Property Group responsibilities encompass a diverse range of activities extending from building maintenance through to major construction works and land stewardship. Property Group is an NZDF Headquarters organisation but has staff located at each of the nine main camps and bases.

Environmental Services (ES) is one of four business units within the Property Group and provides technical and policy support and guidance so that NZDF activities are environmentally sustainable and compliant with statutory and policy requirements. The Environmental Services team also undertake land management activities and the development and delivery of some specialist environmental project works such as wastewater treatment or water supply facilities.

The remainder of Property Group comprises the Business Services, Infrastructure Projects and Facilities Management business units.



Remains of fortification at Waiu Pa in the Waiouru Training area.

ES comprises eight professional staff with qualifications in a variety of relevant disciplines including environmental science, ecology and environmental engineering. Currently we do not have anyone with formal planning qualifications – but that's not for lack of trying! Staff are distributed between Wellington (4), Devonport Naval Base (2), Waiouru Training Area (1) and Burnham Camp (1).

Within ES workload is structured in portfolios around the principal issues we face. Each staff member holds one or more portfolios and is responsible for issue recognition and response as required. The sixteen current portfolios are:

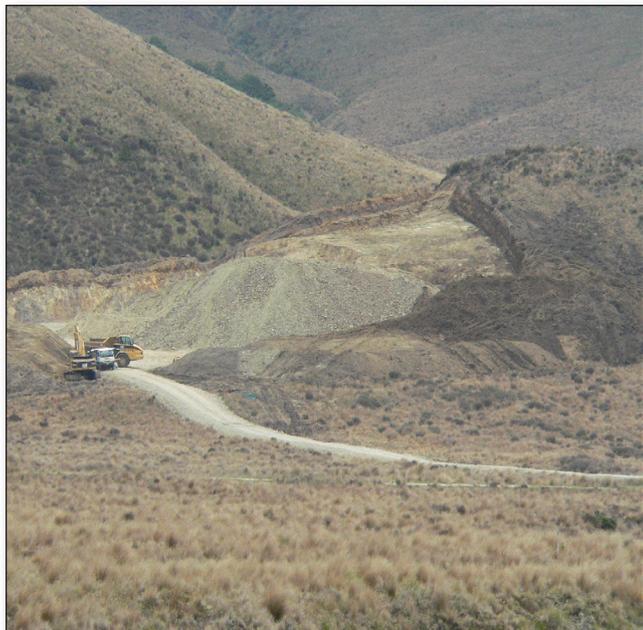
- Air Discharges
- Biodiversity/Sustainable Land Management
- Biosecurity
- Coastal
- Compliance
- Contaminated Sites
- Environmental Management System/Auditing
- Hazardous and Controlled Substances
- Heritage
- Promotion/Training/Advocacy
- Reverse Sensitivity
- Statutory Planning
- Stormwater
- Waste Management
- Waste Water
- Water Supply

A closer look at any of those portfolios would reveal issues of interest to students of environmental management and planning; the challenge here is to select just a few to illustrate the breadth and depth of the work we do. I have done that by just lightly touching on current issues in several portfolios and going into detail in just one. The issues mentioned are current, therefore details that would identify a particular location or local authority have been omitted.

Statutory background

The Resource Management Act (RMA) 1991 and the Biosecurity Act 1993 are the primary statutes driving the activities of ES but the following are also significant:

- Marine Pollution Regulations (MARPOL 73/78)
- Hazardous Substances and New Organisms Act 1996
- Building Act 2004
- Health and Safety in Employment Act 1992
- Ozone Protection Act 1996
- Local Government Act 2002



Quarry development to supply aggregate for development of the LAV Moving Target Range and roading in the north of Waiouru Training Area.

Statutory documents including Regional Plans, Plant & Animal Pest Strategies and, to a much lesser extent (see discussion below concerning designations), District Plans provide detailed and site specific controls.

Land use activities on most Defence sites are authorised by a Designation placed in the District Plan. To ES designations appear to be a planning tool poorly understood by many practitioners in Councils and consultancies. I have very recently had a senior consultant advise that "... designations can be tricky things...". This is in the context of applying definitions contained in a District Plan to the processing of an Outline Plan under s176a RMA. I can only disagree. A designation is a simple thing and has the three simple effects, set out in s176

RMA:

- S9(3) RMA does not apply to activities properly complying with the designation.
- Nothing can be done in relation to the land that would hinder the public work authorised by the designation.
- The provisions of a District Plan do not apply to activities properly complying with the designation.

Similarly, many practitioners appear to misunderstand the function of an Outline Plan under s176a RMA. An Outline Plan is not an application for approval; it is a notification of intent to exercise an existing approval (the relevant designation). Its purpose is twofold:

- To give the District Council an opportunity to contest that the proposed work is within the scope of the designation.
- To give the District Council an opportunity to request changes to address actual or potential adverse effects.

We commonly encounter District Council planning staff handling Outline Plans as if they were consent applications and have even received requests for additional information under s92 RMA.

Many Defence designations are very general, simply authorising any land use that is for "Defence Purposes". That situation may change over time as District Plans are reviewed and designations renewed. Notwithstanding that District Plan provisions do not apply to activities properly complying with a "Defence Purposes" designation, NZDF is still bound by s16 and s17 RMA. That, in combination with internal policy, drives respect for and compliance with District Plan provisions where that is practicable. Overall, in terms of the statutory background, ES places a heavy emphasis on management of the environmental interactions (and compliance requirements) addressed through s12 – 17 RMA, and that is where portfolio structure is primarily focused.

Portfolios:

Air discharges

Air discharges generally relate to workshop and maintenance activities but each Base or Camp also uses coal or gas fired boilers to provide hot water for space heating. Some workshop activities produce fumes that require scrubbing or other special handling. A current issue involves a Council attempting to use conditions on a newly granted resource consent to vary conditions on an earlier unrelated consent. An approach we do not agree with!

Biodiversity and Sustainable Land Management

The Biodiversity and Sustainable Land Management portfolio covers a vast sweep of activity focused mainly but not exclusively on the two large training areas at Waiouru and Tekapo. Defence occupancy of those lands has effectively protected them from development and grazing for long periods. As a result significant biodiversity values, including endemic plant and animal species, exist at both sites. Potential threats to those values include not only the obvious ones arising from

military training (use of munitions, vehicles, excavation for fortifications) but less obvious threats such as wildfire and grazing by animal pests such as rabbits, hares, possums and (at Waiouru) feral horses.

Responsibility for management of the training areas is shared by the military organisations responsible for training and by ES. ES provides a Land Manager responsible for the ecological side of the equation (including pest management) and promotes sustainable management of the land through a Sustainable Land Management Strategy at each location.

Biosecurity

Biosecurity involves activities as diverse as control of weed trees such as *P. contorta* in training areas to management of contractors conducting mosquito surveillance at “ports of first entry” such as the Devonport Naval Base.

Coastal

Obviously, activities in the Coastal portfolio are focused around the Devonport Naval Base and include management of occupation of and discharges to the coastal marine area. A major activity is the ongoing investigation of the risks of and, if necessary, remediation options for the area of contaminated seabed immediately offshore at the Naval Base. The contamination arises from operation of the dry dock prior to 1990. The dry dock was owned and managed by the Auckland Harbour Board from 1888 until 1987 when ownership of the dry dock was transferred to NZDF.

Compliance

Compliance management is a current focus of development and improvement for ES after recent audits showed a large number of compliance failures (fortunately mostly of a minor nature!). ES intends to establish a computer based system which will be aware of all the requirements and responsibilities and will proactively use automated email to remind site managers and others of upcoming requirements.

Contaminated sites

Contaminated sites are an inevitable legacy of long term occupation of any site simply because in years gone by management and disposal practices for what we now regard as hazardous materials were less careful. As a result ES puts significant effort into identification and ongoing management of contaminated sites on the Defence Estate. Quite recently development of a single site revealed old munitions, archaeological remains and significantly contaminated soil. All are now being managed as business as usual within ES with the appropriate authorisations in place.

Environmental Management and Auditing System

Development of an Environmental Management and Auditing System is underway incrementally. An NZDF specific audit methodology has been developed and is producing valuable

results which will help drive improvements in management and reporting systems. A Risk Register and the compliance management system referred to above will be significant components of the EMS.

Heritage

The Defence Estate includes a significant number of heritage sites; from fortified pa and associated earthworks to one of the sites used for observation by the Royal Society’s 1874 Transit of Venus expedition to the Victorian era drydock at Devonport and many more conventional structures.

Until recently heritage structures on the Defence Estate were managed in a somewhat ad hoc fashion. In 2008 NZDF funded development of Heritage Management Plans for all listed sites and the protection and ongoing maintenance of Heritage sites is now on a much more proactive and informed basis.

Promotion / training / advocacy

ES has taken on a promotion, training and advocacy role to support NZDF environmental policy which calls for environmental factors to be considered in decision making processes in the organisation.

Reverse Sensitivity.

Reverse sensitivity is a term familiar to planners and involves ES in statutory planning and other activities to avoid constraints on NZDF training activities arising from sensitivity of new land uses locating in proximity to NZDF facilities. Almost universally the issue is noise from training activities impacting new rural/residential lifestyle subdivision and development.

Statutory Planning

There is a constant stream of changes to the many statutory plans and policies affecting NZDF lands and the Statutory Planning portfolio holder manages the organisations response to those. Currently there are four major District Plan changes, two Regional Plan Changes and two Regional Policy Statement changes underway. As above, one of the ongoing issues that arise in relations with the statutory planning community in District Councils is the tension generated by resentment or misunderstanding of the purpose and function of the Defence Purposes designations that authorise Defence activities at most sites.

Waste management

Waste management is a current focus within ES with a major project reviewing current practice having been completed in June 2009. Recognition and implementation of opportunities for improvements in practice without adding significantly to costs is now underway.

Wastewater

Wastewater treatment and disposal at five NZDF sites is carried out under the terms of discharge permits obtained and managed by ES. Where the need for new permits had driven a need for treatment system upgrades then ES has taken the lead in

those projects. Currently under action is a system upgrade and new discharge permit for disposal of wastewater from the military and civilian communities at Waiouru.

Case Study:

Reverse Sensitivity – Military Noise

Reverse sensitivity is well established in case law and there are many differing definitions or explanations of the concept. The NZDF view of reverse sensitivity is primarily derived from consideration of noise effects on adjacent land – primarily noise from shooting and explosives use and noise from fixed and rotary wing aircraft operations.

NZDF primarily encounters two situations in which reverse sensitivity arises:

1. Incremental development of noise sensitive activities (generally residential) within the terms of long established development controls.
2. Changes (or proposed changes) to development controls which will provide for establishment or increased density of noise sensitive activities.

The first of these is more difficult to manage and therefore is the more likely to lead eventually to constraints on training activities. This situation arises where long established controls provide inadequate protection to the existing, established training facility and where changing land use patterns see permitted, sensitive activities gradually establishing closer to the noise source.

That existing controls do not provide adequate protection to the established training facility might be because when those controls were established NZDF did not recognise the risk and did not use the statutory processes available to protect its interests. Alternatively it may be that NZDF engaged in the statutory process but was unable to persuade the territorial authority that noise based reverse sensitivity justified protective development controls.

The probability that the territorial authority will ignore or play down the potential for reverse sensitivity effects is increased where the territorial authority is not supportive of the continued presence of the Defence facility and the Defence designation.

Irrespective of how it comes about this situation tends to result in conflict as new arrivals in the rural/residential environment find their expectations of a quiet environment are not met. The reality of the rural environment is that it is not quiet. It is a working, productive environment and a variety of significant noise sources exist. Expectations of quiet are often unrealistic and unreasonable.

When changes to existing development controls are proposed, through the Schedule 1 process of the RMA, the situation is simpler. In this case the proposed change is effectively a proposal to change the nature and sensitivity of the receiving environment for noise. ES believes it is the responsibility of the proponents of change to address and cater for reverse sensitiv-

ity issues relating to established users.

In both the situations referred to above one of the key questions relates to the expectations of the affected residents. Urban dwellers relocating into a rural environment often expect a quiet environment and are disappointed when they find that agriculture, horticulture and other production systems and rural land uses are at times quite noisy. Military noise is often particularly unexpected and, by its nature, often perceived as more intrusive than similar noise levels from more conventional sources. As reverse sensitivity issues arise more often NZDF may need to adopt strategies, such as higher profile signage at training facilities, to ensure that the nearby presence of the facility is brought to the attention of intending property purchasers.

The RMA, and s16 in particular, requires that noise emitted from activities on land will not exceed a reasonable level. To date the practice at District and Court level has been to assess “reasonable” in terms of what has been assessed as the legitimate expectations of the affected party. ES believes that interpretation can be challenged. Is it “reasonable” to build a house, or to subdivide land, close to a long established military training area (or any other obviously noisy activity) and expect to enjoy a quiet environment?

That question is likely to be raised in Court within the next 12-18 months and the answer will determine strategies followed by NZDF in management of reverse sensitivity at numerous sites throughout the country.



Green gecko at the Ardmore Training Area – (uncommon but not rare or threatened) discovered during ecological survey at the site of an upcoming rifle range redevelopment project.

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