

AN ABSTRACT OF THE FINAL REPORT OF

Steven N. McLay for the degree of Master of Professional Science Masters of Environmental Sciences presented on 06 May 2013.

Internship with the Oregon Military Department, focusing on Natural Resource Policy

Internship conducted at: Oregon Military Department, 1776 Militia Way, Salem, OR 97309

Supervisor: Gerald Elliott, Environmental Program Manager

Dates of Internship: 01 October 2011 to 31 May 2012

Abstract approved:


Robert T. Lackey

The update of the Oregon Army National Guard Environmental Regulation and its associated compliance guides, or pamphlets, was a year-long effort that involved environmental program managers, legal staff, directorates responsible for logistics, operations, contracting personnel and was my internship project. The regulation was last updated in 2001. The question surrounding the Oregon Army National Guard Environmental Regulation (ORARNGR) and The Guide to Environmental Compliance (ORARNG 200-1) was whether these documents still serve the organization in the manner intended. Environmental regulations and policies change often and many times specific changes will affect the breadth of policy in an organization. The main task of my internship was to research germane information and to update the content. A plan was developed to ensure all components of the pamphlet were addressed, and related or linked instructions between program areas were consistent. Occasionally staff from state and federal environmental agencies were consulted to ensure the information obtained was current. Once updated, all affected principals of the organization were tasked with reviewing and providing comments or suggestions. A final copy was submitted to the chief of the Oregon Military Department for review and approval. The regulation and accompanying pamphlet were signed and are currently in publication.

Internship with the Oregon Military Department, focusing on Natural
Resource Policy

by
Steven N. McLay

A FINAL REPORT

submitted to
Oregon State University

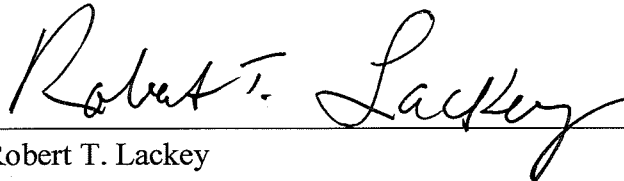
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degree of

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Professional Science Master's final report of Steven N. McLay presented on 06 May
2013.

APPROVED:

A handwritten signature in black ink that reads "Robert T. Lackey". The signature is written in a cursive style with a horizontal line extending from the end of the name.

Robert T. Lackey
Major Professor, representing Environmental Sciences

I understand that my final report will become part of the permanent collection of the Oregon State University Professional Science Master's Program. My signature below authorizes release of my final report to any reader upon request.

Steven N. McLay, Author

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Section 1: Project Report

Oregon Army National Guard Environmental Compliance Guidance: Update to Regulation and Pamphlet

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Keywords: regulatory update, environmental policy, ISO 14001 Standard, ORARNGR 200-1, ORARNG PAM 200-1

Introduction

For my internship, I used a specific process in revising the Oregon Army National Guard Regulation 200-1 and the accompanying pamphlet, ORARNG PAM 200-1. The project was one year in duration, with 500 hours devoted to completing the task. The documents were originally published in 2001 and had only seen modest revisions, though there have been numerous changes in national, state, Department of Defense (DoD), and organizational laws and policies. This project entailed researching over 40 regulations, consulting with organizational program managers on policy preferences and language, and updating and reformatting the draft document. Once drafted, the documents were reviewed through the directorates for concurrence, making final revisions, and finally, submission to The Adjutant General for approval.

The Oregon Military Department (OMD) headquarters is located in Salem, with two major subordinate unit headquarters in the Portland area. The primary mission of the OMD is to support the Governor in the event of emergencies or perform other civic duties. The secondary mission of the OMD is to support the President of the United States in times of war or when disaster strikes. OMD is structured like any other military organization with distinct units trained for specific missions, such as engineering, combat, logistics support and supply, and personnel services. In addition to assigned military personnel, there is an installations division (Adjutant Generals Installations [AGI]) at Salem headquarters comprised of civilians that report directly to the Commander of OMD, also known as The Adjutant General (TAG). This division operates outside the military hierarchy and comprises a staff of several hundred State of Oregon employees. My internship was conducted within the Environmental Branch of AGI.

OMD is a very large and complex organization. There are approximately 7500 uniformed and civilian employees working in 58 facilities throughout the state. These facilities consist of armories, training sites, maintenance shops, airfields, and

headquarters. The footprint of these facilities encompasses over 10,000 acres in every environment of the state, rural and urban. OMD operates thousands of pieces of equipment; automobiles, heavy trucks, helicopters, armored personnel carriers, and battle tanks. There is also support equipment such as generators, radios, food service, and testing systems. Activities include facility maintenance/construction, equipment maintenance weapons firing, heavy and light maneuver training, and vertical and horizontal engineering training. The bottom line is that this organization has a large environmental footprint and a complex set of activities.

Oregon Army National Guard Regulation (ORARNGR) 200-1 defines the responsibilities of the directorates. Supervisory, legal, delegation, approval or disapproval, and other authorities are described in the regulation which is modeled in a way that supports the Department of the Army's environmental compliance regulation, AR 200-1. The main guidance for the regulation is the Environmental Management System (eMS) and International Standards of Organizations (ISO) 14001 the document that provides the legal basis for actions taken in the accompanying pamphlet (PAM). ORARNG PAM 200-1 is the "how-to" guidance for environmental compliance, and is comprised of 17 chapters and 21 appendices that address environmental aspects in the eMS. PAM gives front line supervisors and workers instructions and checklists that enable them to remain in compliance with environmental laws.

Materials and Methods

This activity was assigned to me as a college intern after I had asked the Oregon Military Department about the potential to work on an environmental policy project. The environmental branch chief and I discussed the branches' need for an update to their environmental regulation and pamphlet. The project could be done in the necessary timeframe to meet both our requirements. I had the academic and experiential background to effectively manage the project. I approached my advisor and committee with the idea and gained their approval. The goal of the project was to have a final, signed copy of the new regulation to the print shop within 8 months.

I currently am a member of the Oregon National Guard which was helpful with many aspects associated with the project; knowing organizational structure, identifying key personnel, understanding regulations and policy associated with the regulation, using organizational terminology, and most importantly having unfettered access to Department of Defense information networks. Being credentialed for access and recognized as an existing mid-level manager in the organization was instrumental when working with others in the organization.

First I developed a set of tools to enable me to track my progress. I used Microsoft Word documents, Microsoft Excel spreadsheets and Microsoft SharePoint. The

spreadsheet was populated with the titles of chapters and alpha-numeric identifiers for appendices. The spreadsheet was set up to record which program manager was responsible for a section, had reviewed a section, the date, and revision notes. Another spreadsheet was used to log daily activities and accomplishments. I could refer back to this spreadsheet to track progress and to ensure I was meeting milestones established for the project. Microsoft SharePoint was used for documentation management. This tool would allow me to track who last modified a document and when it was reviewed, archive source documents thus allowing others access to current material, and set permissions when necessary. Microsoft Word documents were employed using the track changes function to track edits from reviewers.

Updated documents were accessed from the agency from which they originated. Due diligence was accomplished through going directly to federal and state repositories that listed the most current editions of required documents. Google-type searches were used only to access the source agency, and not the document required, since search engines have the potential to archive all versions of a single document. Milestones and project phases were developed. The first phase was reviewing applicable drivers for the sections of the regulation. The chapters are broken down into Program areas (Figure 1). The associated appendices support the chapters with additional information, such as information on how to complete checklists and forms. Federal and state, and organizational rules, laws, and regulations (Figure 1) apply to one or more of these sections. This phase ends with a comprehensive review and understanding of how these documents apply to the project. Phase two involved reviewing each chapter and appendix to ensure the instructions were accurate and supported the intent of the directive. Phase three was the program manager review phase. Program Managers are responsible for the content that relates to their field of expertise. Often the content and guidance in chapters overlap into several programs and a single chapter may need reviewed by multiple managers to ensure continuity and avoid conflicting instructions. It was my role to oversee the process of all responsible parties reviewing the document and ensuring that the message remained clear and accurate. A number of edits were necessary to align the instructions of the managers and with external directives. The milestone and end to this phase occurred when I rolled all chapters and appendices together and conducted a branch review with all program managers of the draft pamphlet. Concurrence with the suitability of the document for further review was attained and Phase four could now begin.

Phase four entailed sending copies of the complete document to directorate managers. Directorates are broken into activities such as maintenance, supply, personnel, legal, operations, procurement, fleet, construction, and all were included that would be affected by these instructions. They were given a deadline to complete their review and provide input. Content was considered to ensure the intended message was clear and met the

intent of directives. Structure and language was assessed to ensure the intended message was clear and met the intent of directives. This process was important because the directorates enforce the policy stated in the pamphlet within their particular activities.

The last phase involved my final edits and submission to The Adjutant General (TAG) of the Oregon National Guard. As leader of the organization, TAG must sign all regulations and policy directives. ORARNGR 200-1 and ORARNG PAM 200-1 were signed and are currently being published.

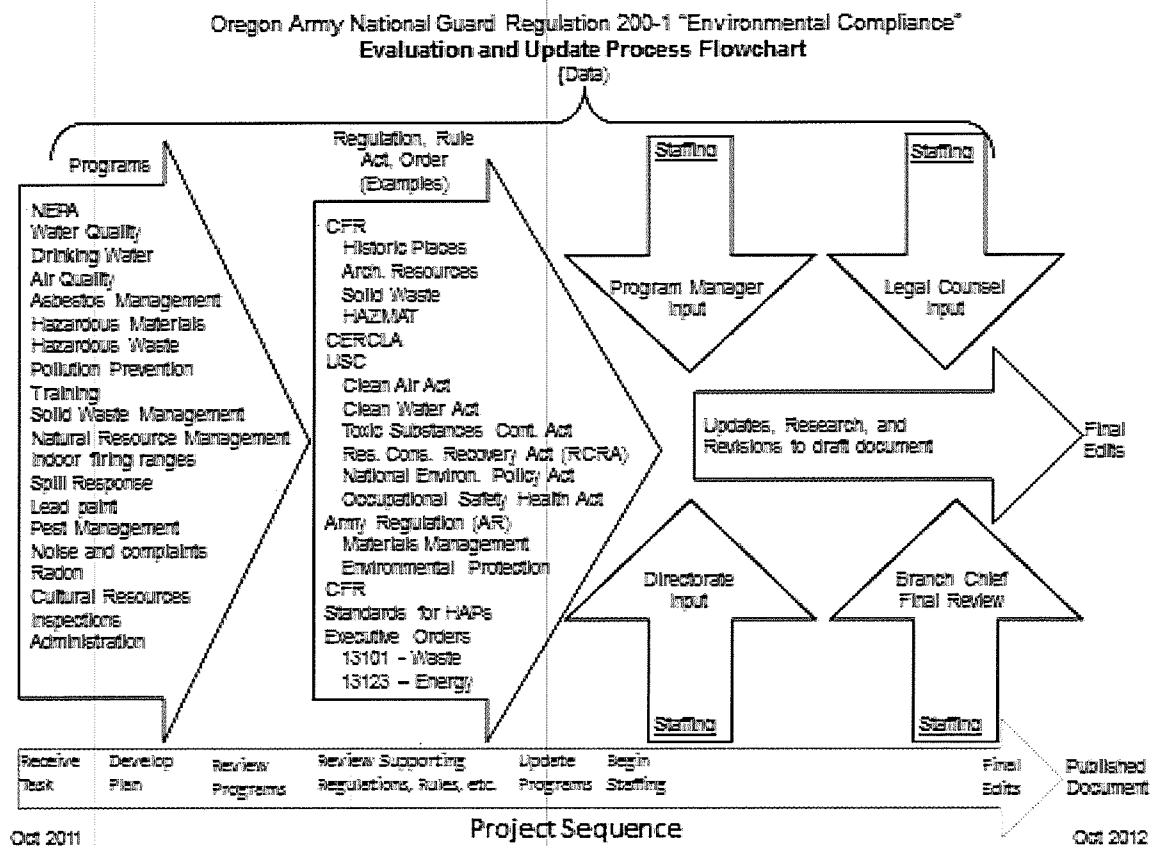


Figure 1. Sequence of inputs culminating in the published regulation

Results

The effort of revising this document was concluded on 01 October 2012. A final copy was delivered to The Adjutant General and received his concurrence and signature 04 October 2012. The regulation and pamphlet now have the same consequence as a statute. Outdated or inapplicable sections were purged while a decade's worth of changes to statutes, regulations, rules, and policy were incorporated. The regulation will be published and posted on the OMD online library. Users now have a current regulation to reference when addressing environmental considerations in the workplace. As a result of this effort, the potential risk of violations and incidents of noncompliance will decrease.

There is now a database available for all environmental staff to access. This will make revisions easier for program managers as regulations change. Documentation management was deficient prior to this effort; but the system I established throughout this project has given the environmental branch the tools to efficiently update chapters and appendices.

Discussion

As I became more familiar with the project, the more I was relieved that the Army chose to follow the International Standards for Organizations (ISO) 14001 guidance on environmental management. I learned this was a deliberate effort on the Army's part to build a foundation for their environmental management system (eMS). Using an internationally recognized system enabled the Army to interface more effectively with suppliers, contractors, private industry, nation states, and other entities as they conduct activities around the world. They could speak the same language and engage eMS fully into all that they do. ISO 14001 is recognized globally. It provides a measure of compliance that adds certainty to actions carried out by the Army and those they interact with. Federal law mandates that federal agencies enact and enforce environmentally sound policy. ISO eMS is well suited to meet these requirements.

Other organizations may not subscribe to the idea that this extensive of a management system is warranted, considering their level of involvement, or footprint, in society. The commitment to ISO guidance forces a substantial change in an organization, from the top to the bottom, and many organizations are not willing to invest resources into exceeding current standards. This endeavor can be expensive and appear to lower the productivity of employees and suck away resources that contribute to the bottom line. There is also a misunderstanding among the uninitiated of what the environmental management system requires of an organization. It is actually a flexible process when implemented correctly, and can result in steady progress toward attaining efficiencies in addition to ensuring compliance.

The task of reviewing a regulation and accompanying policy as comprehensive as ORARNGR 200-1 would have been arduous for a single person. The expertise needed to accomplish this achievement required the assistance of many experts in the organization. It took nearly a year for this process with all involved. One concern of mine was that the longer the project lasts the less certain one could be that the resulting information is current; due to frequent changes in environmental policy. A small change in one part of a directive can have a ripple effect into many environmental programs within an organization. This often resulted in a circular reviewing cycle where finally I had to establish a cut-off point and deem the content acceptable. As a result of this effort, the

potential risk of violations will decrease and the confidence of workers and supervisors relating to compliance will increase.

Because this task involved many people, it was cumbersome and time- consuming, largely because this effort was not their primary duty. They had other priorities and reviewing my documents would occur when they scheduled some time from their busy schedules. The environmental staff spends at least half of their time out of the office, and it is not much different for the directorate managers. For instance, I had to wait weeks while one manager finished with an Environmental Impact Statement, another manager was in the field capturing and tagging owls, and another was training shop managers on hazardous materials management. All the managers involved supported this project, although it was not a priority. Many of their efforts are synchronized with other activities, such as construction, funding streams, or concurrent with other federal and state agencies. Synchronizing reviews between managers required attention to detail and exceptional communication. Often times the changes made by one subject matter expert on a document had to be confirmed by another to ensure instructions did not conflict between program areas. As I was editing and proofing these revisions, it was necessary to ensure the message of the instructions flowed to the reader in a coherent manner.

The next important step is to develop a process to ensure the system I established is sustainable. Program Managers or an appointed individual need to take the responsibility of posting updates as they occur. Proposed changes should be discussed at branch meetings and approved by all involved. This process would ensure relevant content is included where necessary and conflicts in policy guidance reduced.

Acknowledgements

The program managers of the Oregon Military Department (OMD) Environmental Branch assisted whenever asked and provided expert assistance in completing this project—William Vagt, Jeff Mach, Jennifer Lossin, Kris Mitchell, Jim Arnold, Russell Gibson, and Robin Webb. Credit for the final review goes to the Environmental Branch Chief, Gerald Elliott, who is ultimately responsible for the accuracy and clarity of the product. The OMD legal staff provided a careful review of legal references and provided guidance on language when necessary.

Section 2: Training and Experience

Scope of Internship: Approved internship proposal

There are myriad environmentally related tasks I will be involved in, but my primary focus will be on the environmental policy documents. The value of being involved in tasks in addition to policy is that the other divisions of Adjutant General Installation (AGI) operate within the established policy: therefore I can observe how these policies are put into practice, evaluate how those policies are implemented, and be able to suggest possible future strategies for improvement in policy implementation.

My main focus will encompass legislative and regulatory analysis, various environmental acts (NEPA, CWA, CAA, and ESA for example) that are incorporated into Oregon Military Department (OMD) policy, compliance activities and education, and reviewing and updating policy to reflect changes in federal and state guidance. I will have access to many state and federal agencies as I execute my internship since facilities and training sites are located on lands belonging to both. OMD operates with funding from both state and federal agencies, and operates under the regulatory guidance of both.

Training during internship

US Army Environmental Officer Course (40 hours)

The Environmental Officer Certification Course is in accordance with the requirements identified in AR 200-1 (Environmental Compliance Regulation) and explores basic environmental management and protection principles and practices necessary to mitigate military training impacts on the environment. Students learn and use basic environmental conservation skills, apply basic principles to protect and mitigate training impacts on Army lands, learn and develop an understanding of the wide variety/number of environmental laws and regulations that The US Army must adhere to, and learn the basic principles of energy conservation.

Natural Resources Compliance Course (32 hours)

This course instructs DOD (all services) and Coast Guard to identify, understand, and meet responsibilities under natural resource laws, regulations, policies, Executive Orders, DOD Instructions, and other guidance. The course addresses stewardship, preservation, and processes; fish, game, and wildlife management laws, protection of wetlands, waterways, and other protected ecological areas, forest and land use management laws, Sikes Act and Integrated Natural Resource Plan (INRMP), and inter-departmental cooperation.

National Environmental Workshop (40 hours)

This workshop brings together environmental professionals from all 54 states and territories. Program areas covered included: NEPA, cultural resources, water quality,

spills and spill prevention, restoration and compliance, hazardous waste, natural resources, renewable energy, pest management and invasive species, endangered species, legal, and environmental management (ISO 14001).

Breakout sessions include briefings by program managers in specific environmental areas. Other sessions include hands-on exercises dealing with data management and reporting software. Panel discussions conclude each day's classes, providing a forum for students to gain additional clarity on material covered earlier in the day. Additionally, professionals from USDA, USFWS, and other agencies present details or updates on natural resource issues their agencies are focusing on.

Experience

GIS and GPS

I worked directly with the GIS analyst from the AGI Branch Environmental Office to develop maps of timber sales, agricultural leases, and thinning operations. Went to the field numerous times to plot positions and mark off areas. I was trained on the Trimble GEO XT, creating polygons, tracks, and plotting points. Another tool employed by the GIS section was a GPS enabled, ruggedized camera. I would take pictures in a specific position before a given project with the goal of coming back to the same spot to take another from the same location and perspective after a project was completed. This would give us a historical record of our activities and also help us track repopulation trends of vegetation.



Figure 2. GPS and GIS

Integrated Natural Resource Management Plan (INRMP)

Every OMD training site has an INRMP. This plan is a comprehensive approach to managing natural resources on OMD sites. All actions taken by those who use the land must meet requirements of the plan. This document also guides planners in their decisions on how they are going to use the land, now and into the future. It is a guiding vision for the organization.

I have often had to refer to the INRMP when proposing or working on a project. It is necessary to ensure an action follows the guidance set forth in the plan. Whether it be cutting in access roads, out-leasing portions of land, developing a plan for a timber thinning operation, or dredging a lake, there are considerations involved throughout the environmental spectrum to be reviewed. The INRMP addresses most issues and a thorough review is necessary to ensure these activities comply with the plan.

Lesson learned: An INRMP should not be seen as a constraint to uses or modifications to the land it addresses. Often it can be used to justify an action when the action supports a goal or the spirit of the plan.

The figure below is a visual depiction of activities supporting the INRMP. This is not a static picture and it evolves as the year progresses. Areas are in various phases of restoration, development or sustainment.

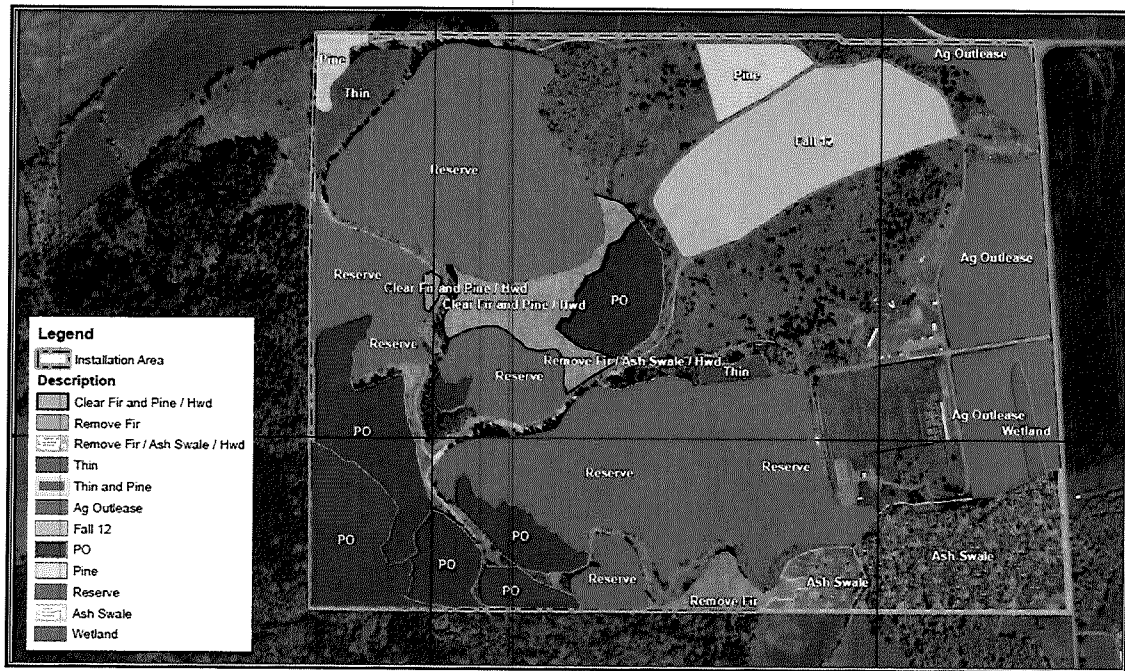


Figure 3. Integrated Natural Resource Management Plan Map

Endangered Species Act and species of concern

I have been involved in monitoring and promoting of endangered species at OMD sites. The Najaf Training Center (NTC), commonly known as Camp Adair, is located 5 miles North of Corvallis, OR. This 600-acre facility supports Nelsons checkermallow (*Sidalcea nelsoniana*) and Kincaids lupine (*Lupinus oreganus*), which are listed species. Meadow Checkermallow (*Sidalcea campestris*) is monitored as a candidate species on this site. Camp Rilea, located near Seaside Oregon, is the habitat for the endangered Silverspot (*Speyeria zerene hippolyta*) butterfly.

At NTC the Kincaids lupine (*Lupinus oreganus*) is located in a grassy, exposed hillside. Promotion of the species is accomplished through protecting it from invasive species, excluding plots from vehicle traffic, burning through the site at regular intervals, and hand-spreading seeds when available. NTC Nelsons checkermallow (*Sidalcea nelsoniana*) is located in a 30-acre Ash wetland in four separate locations. Camp Rilea Silverspot (*Speyeria zerene hippolyta*) habitat is maintained by ensuring the flowering plants it breeds on are present, preventing harassment during critical times, and

maintaining open spaces with appropriate flora present. Protecting these species must be balanced with the intended use of the training sites. Timing is important at both sites where much of the time the area can be used for foot traffic, weapons training, and other military activities.

Lesson learned: As a natural resource manager, I would advise users of these lands on when to avoid certain areas and if they do use the land what activities are authorized. Land does not have to be excluded from other uses if properly managed.

Camp Rilea encompasses habitat for the federally listed Oregon Silverspot butterfly. The larval food plant, the early blue violet (*Viola adunca*), populates grassy areas of the site and management efforts have continued for decades to ensure this food source remains viable. I spent a number of hours with Dr. Paul Hammond, (Research Associate, Dept. of Entomology, OSU; the man who rediscovered Fenders blue [*Icaricia Icaroides*] butterfly) conducting surveys of the native habitat for the Silverspot butterfly. We discussed the species of grasses, exposure, human usage, and other aspects of the habitat. He has been a consultant for OMD on the Silverspot and its habitat at Camp Rilea for nearly 15 years. His recommendations on management techniques have been implemented by OMD and have shown to be successful.

Lesson learned: I have come to realize that Natural Resource managers often enlist the expertise of others to provide detailed assessments related to specific management needs. Throughout my internship, I was introduced to a number of specialists called in to assist in NR management planning and the execution of those plans.



Figure 4. Nelsons checkermallow
(*Sidalcea nelsoniana*)

Nelsons checkermallow grows in areas within an Ash grove on NTC that receives direct sun for a few hours each day. We have counted as many as 15 plants flowering late in the summer. The ash grove is a wetland that will dry up in late June and usually become saturated by October, depending on the rainfall. The area is used for training, either by foot traffic or by ATV type vehicles. I work closely with the Range Officer to ensure training activities do not negatively impact the Nelsons. Additionally, we contracted a restoration company to thin the Ash grove to enhance the habitat for the Nelsons and open up more of the grove to training. The Nelsons had been growing on the edges of existing trails where the sun would penetrate the heavy forest cover. The thinning will allow more light to the forest floor, which in turn will potentially encourage spread of the Nelsons. The main management strategy is to not allow traffic near the Nelsons until it drops its seed. We timed the thinning operation in this way, not allowing work to proceed until the plant had completed its reproductive cycle.

The population of Kincaids Lupine on NTC inhabits a 35-acre oak savanna hillside with an east-facing slope. There are seven distinct groupings of Lupine on this hill and the population is increasing. We have staked out the perimeter of each group and mapped their locations. We also have an Memorandum Of Understanding (MOU) with US Fish and Wildlife (USFW) to work together to create a corridor linking OSU Dunn forest to E.E. Wilson Wildlife Reserve, where our oak savanna with Kincaids Lupine form a bridge for listed species such as Fenders blue butterfly. Management practices include periodic burning of the hillside.



Figure 5. Kincaids Lupine
(*Lupinus oreganus*)

I was tasked to coordinate the burn plan for 2012 as part of the management plan for Kincaids lupine. This involved researching local and state code for prescribed burns, consulting with the Oregon Department of Fish and Wildlife (ODFW), assisting in writing the burn plan, having the site prepared, scheduling fire crews from ODFW, OMD, and Adair Rural Fire Dept., and monitoring weather for approved burn conditions. Everything was in place to begin the burn, but problems with weather and fire crew availability forced postponements until burning was not feasible this season.

Lesson learned: I continue to monitor the sites that Kincaids Lupine inhabits. It is interesting to note that it is not very difficult to maintain a population in its native habitat if managed properly.

Wetlands

During many of my natural resource management activities, it was necessary to address wetlands that exist on OMD lands. Activities such as thinning, training, ground-disturbing activities, and spraying had to be well planned and timed to avoid damage to these wetlands. Soil and species composition is monitored to sustain wetlands.



Figure 6. Wetland Monitoring

Wetlands do not have to be completely avoided and left to their own devices. Activities can occur on or around wetlands, for instance, when they are dry, as long as the integrity of the wetland is not compromised. Wetland mitigation is a common and accepted practice, often used by OMD.

Lesson learned: Wetlands can occur almost anywhere, and they can occur from earlier human activity. When there is a question, a person must do due diligence to ensure a parcel of ground is classified correctly.

Habitat conservation plans

I wrote the General Conservation Plan for Najaf Training Site relating to an agricultural lease that was to be administered through the Army Corp of Engineers (USACE). This plan included guidance on maintaining the flora existing on the leased area, including criteria such as nutrient uptake tools, harvest intervals, soil integrity, and plant vigor. The plan addressed criteria to control disease, insects, weeds, and invasive species infestations. Some of the other goals addressed in the plan were reducing fire risk, improvement of wildlife habitat, protecting and promoting threatened and endangered species, and managing for desired species composition.

NEPA, CWA, CAA, and related guidance input to OMD policy

I have filled out two Record of Environmental Consideration (REC) and checklists for Army actions that need National Environmental Policy Act (NEPA) documentation filed. One was for a prescribed burn and the other an agricultural lease. These documents then go to OMDs NEPA manager where he proofs it for accuracy and signs off on it. The REC provides a comprehensive review of matters relating to NEPA when planning a project. The REC covers all environmental, historical, and human aspects that may be impacted by the activity and using it ensures nothing is missed.

Lesson learned: At first glance, NEPA appears to be overwhelming and left me thinking that meeting requirements would be arduous and time-consuming, although checklists have been developed by different agencies that streamline the effort and provide focus on necessary aspects.

Air Quality (Air Emission Inventory)

I was assigned as the project manager (PM) for a contract involving an air emissions inventory of facilities operated by the OMD. As PM, I was responsible for hiring the contractor, overseeing the administrative functions of the contract, assisting in assigning and scheduling site visits, determining which emission sources would be inventoried and by what standards, and ensuring the quality of the work being performed.

This contract involved 16 facilities with emission sources such as boilers, parts cleaners, paint booths, backup generators, aircraft operations, vehicle maintenance facilities, indoor pistol ranges, and various other activities. It was necessary for me to research the CAA and Oregon rules to become familiar with relevant laws regarding air quality.

Lesson learned: I learned much about ODEQ and EPA guidance in air quality issues, Oregon's procurement information network website which is used to manage contracts, and Oregon's contracting process.

Forestry

I have participated in several forestry activities. OMD has issued a number of timber contracts through the USACE. One involved a thinning operation to restore the terrain to an Oak grove landscape, and another other was a thinning in a wetland to remove poison oak, blackberries, and an excess of ash and fir trees.

I started with OMD job at the tail-end of the fir thinning. I assisted the NR manager with inspections of the job and issuing guidance to the logger. Some issues I addressed were slash piles locations, chipping operations, cleanup of downed timber, trees to girdle or leave standing, skid trail rehabilitation, and scheduling. The vision of what we wanted the forest to look like after logging required close supervision of operations.

I assisted the USACE forester in setting up the timber sale for 2013. The thin would take out all fir trees, poison oak, holly, snags, and remove larger downed trees. First we went out and marked off the sale area. We took into account archeological sites that had to be protected and flagged them, and I was instructed to also flag native Pacific Yew (*Taxus brevifolia*) trees for preservation. The NTC has a small population of these uncommon trees and our NR managers believe it is important to save these trees from harvest.



**Figure 7. Pacific Yew
(*Taxus brevifolia*)**

After marking off the boundaries, we cruised 10 percent of the acreage and estimated the board footage. Total board footage would be calculated from this estimate, factoring in some waste for insect damage. My contribution was to measure the diameter of the trees, pace off distances to the next plot, spot insect damage, and take notes.

Lesson learned: The USACE forester was very instructive and described in detail what he was doing and why. When choosing where to cut and what to leave standing, a good forester will look to avoid destabilizing the ground, decreasing the chance of blow-down due to the cut, and leave material that will decay quickly to maintain the nutrient load.

Restoration—Dredge and Stream project

The area of NTC (Camp Adair) was taken over by the Army during WWII and its main use was as a firing range. Due to much of the area being in the impact zone of the ranges, much of the land was not utilized or managed in any way. Historically the land was periodically burned or thinned by settlers. When the settlers' use ceased, invasive, noxious, or undesirable species were allowed to proliferate. There are Himalayan blackberry, English ivy, poison oak, English holly, Meadow knapweed, Tansy ragwort, and Scotch broom on site. Various species of fir have out-competed many other species and compromised the diversity sought in the INRMP.



Figure 8. Overgrown Wetland

I am involved in using a variety of management techniques to eradicate these plants and restore the area to a more usable and biologically diverse state. Mowing is used for large areas, handheld brush cutters are used in tight spots, pruners are used to cut poison ivy from trees, herbicides are applied by boom or backpack sprayer and sometimes daubed by hand, biological controls (such as seed head borers) are released, and seeding of native competitive species has been completed.



Figure 9. Oak savanna restoration



Figure 10. Western red cedar planting

Vegetation Survey

I spent a week assisting an Oregon Department of Agriculture, Department of Botany and Plant Pathology field crew in conducting a vegetation survey on Camp Rilea, Oregon. This group has an office on the OSU campus in Cordley Hall and focuses on conservation of native plants. OMD contracted the ODA group to survey the 1800-acre property and map species populations. This is done periodically to monitor population changes and if necessary, make adjustments to management practices.

Historically, Camp Rilea was developed to support WWII troop training and augment coastal defenses. The coastal dunes and inland to about a ½ mile were planted with nonnative species to stabilize the area.

Training ranges were developed and buildings were erected throughout the site.

Many of these earlier-planted are currently outcompeting natives, for instance,

European beach grass vs. American beach grass or dying (coastal pine introduced from

higher elevations) trees which has site managers concerned about the stability and future of the landscape. Invasive species, such as Scotch broom and Spurge laurel, are a problem and periodic surveys will indicate success or failure of management practices.

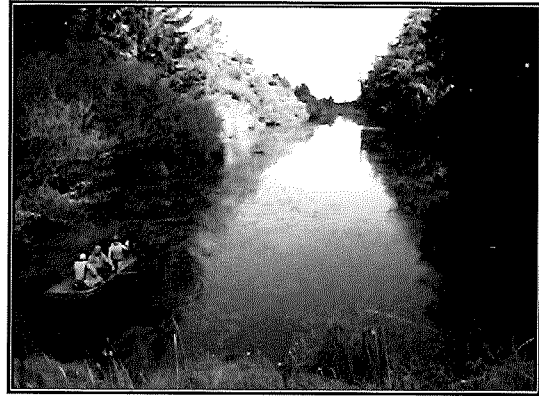


Figure 9. Neacoxie creek survey

The survey consisted of walking all vegetative zones on site and referencing what we saw to what was indicated on earlier maps. If there was a noticeable change in species population or new populations, we would plot the new boundaries and take notes on what we found. Vegetative health was noted, along with age and density of primary species.

Transition zones were closely surveyed to document how the terrain may evolve in the future. Detailed notes were taken on introduced species and how their presence was affecting the native species. We borrowed chest waders from the US Forest Service Field Office in Warrenton and boats from OMD and conducted surveys of the water bodies. Interestingly, we found 2 species of water lily in all the water bodies, 1 invasive and 1 native.



Figure 10. European beach grass, Clatsop County

Lesson learned: Invasive species found their niche in almost every vegetative zone we surveyed. I witnessed the destruction of native habitat invasive species can cause. Careful management of some invasive plants have proved to effectively keep them at bay, but eradication is close to impossible. Additionally, neighboring property will contribute to repopulating invasive plants in a short period of time, which confounds control efforts. The coastal zones are complex and dynamic. Human alteration of the landforms and introduction of nonnative plants to stabilize these areas has changed most of the coastal environment. I have witnessed firsthand the effect these activities can have on native plant species and the insects and animals that these plants support.

Cultural Resources

There was a homestead on the NTC when the US Army “condemned” the property and took possession of it. The previous owner grazed livestock, managed the surrounding forest to some degree, built a number of buildings, and planted an orchard. The Army razed all the buildings and removed most of the fences. Interestingly, the orchard was preserved and OMD has worked with the State Historic Preservation Officer (SHPO) to classify the site as historically significant.

The orchard’s apple, pear, and plum trees are extremely old and it has been determined that the apple trees are from stock brought over on the Oregon Trail. ODA and the Oregon Apple Association have provided expertise on species identification and proper care for the trees. Oregon Public Broadcasting’s “Oregon Field Guide” staff visited the site and filmed a segment for future airing regarding historic orchards—this orchard is one of only a few of its type in the state.



Figure 11. Oregon Field Guide crew

Lesson learned: I have developed a firm understanding of cultural resource management related to NEPA requirements due to the duties I perform as a NR manager. Most of our lands have cultural or archeological sites and I have had to consult often with the OMD cultural resource manager when planning projects or doing field work.

Coordination with other Governmental Agencies

During my tenure I have had to become familiar with other governmental agency regulations and policy. For example, when developing the agricultural lease I had to



Figure 12. USACE and USFS staff checking for pathogens

research County and State Land use guidelines. The Army Corps, who owns the real property on NTC, has procedures that must be followed by licensees, but in turn allows great flexibility in management. NTC has many types of landforms; wetland, fir forest, oak savanna, ash grove, grassland, and a mixture of these. Consultation has taken place with the US Forest Service, US Fish and Wildlife, Oregon Department of Agriculture, and select Non-governmental agencies on management strategies.

Section 3: Business Report

Description of the Business

The Environmental Branch for the Oregon Military Department provides support to the organization in matters relating to Natural and Cultural resources, remediation of damaged land, pollution prevention, recycling and reduction, hazardous materials and waste, GIS, environmental training, permits and monitoring related to activities. The main focus of the branch is to ensure organizational regulatory compliance with federal, state, and local. Through oversight and action, the branch ensures good stewardship of resources and prevents fines and penalties from regulators.

The Environmental Branch accomplishes these tasks by assigning qualified individuals to head various divisions (programs) within the branch. The program managers operate independently of the others but will consult with each other when concerns overlap, or a project affects more than one entity. Each manager is responsible for all aspects of their programs, to include financial, technical, compliance, and reporting. They report to the Branch chief on their progress and occasionally when matters are beyond their scope of authority.

The policy guidelines set forth to the employees of OMD from the environmental branch are contained within ORARNG 200-1 and ORARNG PAM 200-1. The working copy of the regulation is known as the Environmental Compliance Notebook (ECN), and contains the instructions necessary for facilities and activities to maintain environmental compliance. The ECN was last updated in 2001. The branch chief had been attempting for 3 years to update the ECN but continually ran into difficulties getting it done.

When I approached Mr. Elliott (Environmental Program Manager) with an offer to provide my services as an intern, he was quite receptive. After some discussion about his and my needs, we came to the conclusion that a complete rewrite of the ECN would fulfill both our needs. I have been recently promoted to the rank of Lieutenant Colonel and assigned to the very branch that I was going to do my internship with. This fortuitous course of events was a win-win situation.

I would be receiving modest compensation for the time I spent on the ECN, and the dollars paid to me would come from someone else's budget. Mr. Elliott was essentially getting the ECN rewritten by someone who understands environmental issues, the military, and would accomplish the task for a small percentage of what a contractor would charge. My intimate knowledge of military operations, culture, and jargon was essential in rewriting the ECN because the document was written for a military organization.

Marketing

There are a few things the branch does that could be construed as marketing. Ensuring individuals are aware of environmental issues is key in maintaining compliance. There is a directive organization-wide to have environmental posters prominently displayed in every facility. These posters are intended to remind the individual that environmental concerns are foremost in the leaderships focus. These posters relay core values held by the organization, along with ways to gain more information on key initiatives.

Another way they market environmental awareness is that facilities have distinctive recycling and reuse bins located where they cannot be ignored. People are essentially compelled to use these since many people would not want to be seen breaking with organization policy concerning disposal. The branch, having been authorized by leadership to local these bins in prominent locations sends a message to employees and visitors that environmental stewardship is important.

Finances

The Environmental branch is fully federally funded. This is different than most OMD sections where there are state and federal monies funding an activity. At the beginning of each annual cycle they submit "project" (permits, monitoring, mitigation, etc.) requests to National Guard Bureau (NGB) in Washington D.C. These requests are forwarded through the Active Army (AC) and to the Department of Defense (DoD). At each level the requests for funds are reviewed and validated. Once these "projects" are approved the money is sent to the Oregon United States Property and Fiscal Office (USPFO) and held in an account. As contracts or other obligations are executed, the state of Oregon, through a Master Cooperative Agreement (MCA), pays the debts and bills USPFO. This arrangement is quite cumbersome but it allows for exceptional oversight and awareness of activities occurring within jurisdictions and ensures accountability for federal funds.

The office is fully authorized to enter into agreements and obligate funds for various expenditures. The only limitation is that with agreements over \$750,000.00 the contracting specialists must conduct a legal review. This is unique in this organization since there is an in-house contracting section. This arrangement allows them great flexibility and shortens the time to get things accomplished. There is a reconciliation process that occurs quarterly between AGI-ENV, Oregon, and USPFO. This is necessary for all parties to understand the current financial status.

Management/Human Resources

I reported to the Environmental Program Manager (Mr. Gerry Elliott) throughout the project. During slack times during the rewrite of the regulations, I was allowed to essentially freelance throughout the environmental branch, which provided me ample opportunity to learn what all the other managers do. Gerry asked me what I wanted to concentrate in and I told him natural resources specifically. He suggested I ask the two natural resource managers if there were any projects or any work that I could help with. Bill Vagt had a number of things he was involved in and he essentially became my mentor.

The Environmental Branch, as stated earlier, is made up of program managers with specific skill sets and they advise the organization, or carry out specific tasks as necessary, such as remediation operations, compliance reporting, training, or assessments. The Branch is within, organizationally, the Adjutants General Installations (AGI) division of OMD. AGI manages all the property held by the OMD. Its construction branch builds or renovates its buildings. The real property and planning branch handles acquisitions and disposal of property. Training lands management is handled through the operations but is an integral part of installations management.

Almost all of the proposed projects that AGI or Training Lands plans to complete need an environmental review. Oddly enough, there is no formal process for this to occur. Often the proponent will initiate consultation with the Environmental Branch, but other times we will learn that some action is being planned, and we will have to intervene. The plan will be reviewed by various PMs and the appropriate actions will follow. Many larger plans are reviewed by the Facilities and Environmental Management Board (FEMB) and this is often where the Environmental Branch can learn of projects and begin their review process. This part of the process is very much in line with the Environmental Management System, as directed by ISO 14001.

I have the opportunity to interact with all staff in the Branch, AGI, and OMD as a whole. Almost from the first day I began work, I have been working or having discussions with members of the organization for various reasons. My project required me to meet often with the other environmental managers. When working on other projects, such as the agricultural lease, timber sale, wetlands restoration, or lake dredge project, it was necessary for me to meet with the master planning, operations, training, real estate, and budget personnel to either give or receive information about the project. I was given the lead on a number of projects and it was up to me to ensure all aspects of a given activity were covered. Due to my status as higher ranking officer in OMD, I was able to gain access to many decision makers that generally only PMs have access to. I was able to leverage this fact to my advantage and often go straight to the top for decisions or to pitch a proposal. This situation is similar to a graduate student being able

to schedule a meeting with university executive staff to propose a project relating to management of university property.

The organization runs very efficiently. The main improvement I would suggest is developing a process where everyone has to review a project proposal and concur with the concept, or provide input related to their subject matter expertise. Often a project will be in its later stages before a subject matter expert catches a problem. The effect is that the project often is stalled while the problem is resolved. Projects are synchronized and when they get off schedule, resources are needlessly wasted.

Section 4: Referenced Documents During Internship

Federal Statutes

U.S. House of Representatives, Office of the Law Revision Counsel. (1970). *Air pollution prevention and control* (42 USC 7401-7462)

U.S. House of Representatives, Office of the Law Revision Counsel. (1972). *Water pollution prevention and control* (33 USC 1251-1376)

U.S. House of Representatives, Office of the Law Revision Counsel. (1980). *Comprehensive Environmental Response, Compensation, and Liability Act* (42 USC 9601)

U.S. House of Representatives, Office of the Law Revision Counsel. (1966). *National Environmental Policy* (42 USC 4321)

U.S. House of Representatives, Office of the Law Revision Counsel. (1972). *National Historic Preservation Act* (16 USC 470)

U.S. House of Representatives, Office of the Law Revision Counsel. (1970). *Occupational Safety and Health Act* (29 USC 15)

U.S. House of Representatives, Office of the Law Revision Counsel. (1976). *Resource Conservation and Recovery Act* (42 USC 6901)

U.S. House of Representatives, Office of the Law Revision Counsel. (1974). *Safe Drinking Water Act* (42 USC 300)

U.S. House of Representatives, Office of the Law Revision Counsel. (1966). *National Environmental Policy* (42 USC 4321)

U.S. House of Representatives, Office of the Law Revision Counsel. (1966). *Conservation* (16 USC)

U.S. House of Representatives, Office of the Law Revision Counsel. (1976). *Toxic Substances Control Act* (15 USC 2605, 2607, and 2611)

Code of Federal Regulations (CFR)

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Office of the Federal Register, Government Printing Office. (1966). *National Register of Historic Places* (Title 32, Part 60)

Office of the Federal Register, Government Printing Office. (1979). *Archeological Resources Protection Act* (Title 32, Part 229)

Office of the Federal Register, Government Printing Office. (1984). *National emission Standard for Hazardous Air Pollutants* (Title 40, Part 61, Subpart M)

Office of the Federal Register, Government Printing Office. (1980). *Designations, Reportable Quantities, Notifications, and Planning* (Title 40, Part 300, 302, 355)

Office of the Federal Register, Government Printing Office. (1979). *Hazardous Materials Regulations* (Title 49, Subchapter C, Parts 171-178)

Executive Orders (EO)

Office of the President of the United States of America, Office of the Federal Register. (1977). *Protection of Wetlands* (EO 11990)

Office of the President of the United States of America, Office of the Federal Register. (1978). *Federal Compliance with Pollution Control Standards* (EO 12088)

Office of the President of the United States of America, Office of the Federal Register. (1981). *Responses to environmental Damage* (EO 12316)

Office of the President of the United States of America, Office of the Federal Register. (1978). *Procurement Requirements and Policies for Federal Agencies for ozone-Depleting Substances* (EO 12843)

Office of the President of the United States of America, Office of the Federal Register. (1978). *Federal Compliance with Pollution Control Standards* (EO 12088)

Office of the President of the United States of America, Office of the Federal Register. (1993). *Federal Compliance with Right to Know Laws and Pollution Prevention* (EO 12856)

Office of the President of the United States of America, Office of the Federal Register. (1994). *Energy Efficiency and Water Conservation at Federal Facilities* (EO 12902)

Office of the President of the United States of America, Office of the Federal Register. (1995). *Federal Acquisition and Community Right to Know* (EO 12969)

Office of the President of the United States of America, Office of the Federal Register. (1998). *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition* (EO 13101)

Office of the President of the United States of America, Office of the Federal Register. (2000). *Greening the Government Through Leadership in Environmental Management* (EO 13148)

Oregon Revised Statutes (ORS)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Preservation of Property of Historic Significance* (ORS Chapter 358, Sections 635-660)

Oregon State Legislature, Office of Legislation Counsel. (2012). *Indoor Air Quality Standards* (ORS Chapter 433, Section 521)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Water and Sewage Systems* (ORS Chapter 448)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Hazardous Substances; Radiation Sources* (ORS Chapter 453)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Water and Sewage Systems* (ORS Chapter 448)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Reuse and Recycling* (ORS Chapter 459A)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Hazardous Materials and Hazardous Waste I and II* (ORS Chapter 465, 466)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Noise Control* (ORS Chapter 467)

Oregon State Legislature, Office of Legislation Counsel. (2012). *Environmental Quality Generally* (ORS Chapter 468)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Air Pollution Control* (ORS Chapter 468A)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Water Quality* (ORS Chapter 468B)

Oregon State Legislature, Office of Legislation Counsel. (2011). *Safety and Health Conditions in Places of Employment* (ORS Chapter 654)

Oregon Administrative Rules (OAR)

Oregon Administrative Rules, Department of Administrative Services. (1984). *Recycling* (OAR Chapter 125, Division 85)

Oregon Administrative Rules, Oregon Health Authority (1981). *Public Water Systems* (OAR Chapter 333, Division 061 and 340)

Oregon Administrative Rules, Department of Environmental Quality. (1981). *Water Quality Issues* (OAR Chapter 340, Division 40-45)

Oregon Administrative Rules, Department of Environmental Quality. (1993). *Recycling and Waste Reduction* (OAR Chapter 340, Division 90)

Oregon Administrative Rules, Department of Environmental Quality. (2002). *Hazardous Waste Management* (OAR Chapter 340, Division 100-110)

Oregon Administrative Rules, Department of Consumer and Business Services. (1991). *Construction* (OAR Chapter 437, Division 3)

Army Regulations (AR)

Department of the Army, (2007). *Environmental protection and enhancement* (AR 200-1) Army Publishing Directorate

Department of the Army, (1995). *Natural resources - land, forest and wildlife management* (AR 200-3) Army Publishing Directorate.

Department of the Army, (1996). *Cultural Resources* (AR 200-4) Army Publishing Directorate.

Department of the Army, (2007). *Solid and Hazardous Waste Management* (AR 427-47) Army Publishing Directorate.

Department of the Army, (2007). *Army Material Maintenance Policy and Retail Maintenance Operations* (AR 750-1) Army Publishing Directorate.

Department of the Army, (2007). *Environmental Compliance* (DA PAM 200-1) Army Publishing Directorate

Appendix: Internship Log

DATE	Hours	TASK	Notes
3-Oct-11	8	Review ECN	Received guidance; gather materials, became familiar with Website, SharePoint, office surroundings. Introduced myself to AGI staff that I was unfamiliar with.
10-Oct-11	8	Prepare documents	Began initial review of Regulation and took notes for discussion, Downloaded regulations onto website, built tracking logs and documentation.
17-Oct-11	8	Review ECN	Reviewed 200-1 and APPX A&B, PAM 200-1 TOC and Summary of changes, Cp 1-4 (Took notes on possible changes, fixed grammar, validated references).
24-Oct-11	8	Review ECN	Reviewed ECN - Cp 5-20 (Took notes on possible changes, fixed grammar, validated references).
31-Oct-11	8	Review ECN	Reviewed ECN - Appendix A-Z (Took notes on possible changes, fixed grammar, validated references), Spent time with Gerald discussing the next steps in the review process. We will call a meeting among AGI-ENV staff and lay out the process we are to take.
5-Nov-11	8	Review organization	Gained an understanding of what each program manager does and provides to the environmental branch. Explored the website where they have posted products from their past and current work.
6-Nov-11	8	Develop tracking document	Developed tracker for Internal performance assessment summary (IPAS). This will help in gaining a clear picture of how to prioritize inspections and what assistance is necessary.
7-Nov-11	8	Record of Environmental Consideration (REC) overview	Assessed the record of environmental consideration (REC) that was developed for an IRT project. Studied the various sections and how they tie into environmental policy. Worked with Kris Mitchell on filling out or reviewing these. Spoke with Jeff Mach on IRT projects and gained insights on particulars of terrain restoration projects.

14-Nov-11	8	Populate tracking documents and review field manual	(1) Developed tracker for Internal Performance Assessment Summary (IPAS). I will be using this data to guide a program that is intended to focus on problem facilities. The areas included in the IPAS closely match the ECN. The plan is to personally put into practice the enforcement of policy. (2) Built a spreadsheet to track the breakout of documents once broken out to SMEs. (3) Reviewed FM 3-100.4 - Environmental Considerations in Military Operations.
21-Nov-11	5	Meetings and project and research	1) Planning meeting with Mr. Elliott. Discussed the next phase of project. Reviewed potential for smaller projects to fill the time between reviews of ECN. AGI-ENV will be having an external evaluation in the spring and we discussed how some internal pre-inspections would be helpful in getting selected units ready. Selected regulatory compliance weaknesses exist and will be targeted. I am to develop a scheme for providing assistance to the biggest offenders. 2) Spent the rest of the time researching indicators and drafting up a spreadsheet addressing guidance from the meeting.
22-Nov-11	5	LEED Building tour	Attended a tour of an Oregon Military Department LEED Gold building in Clackamas Oregon. The tour highlighted some of the cutting edge building technology in sustainability. Much of the technology is being incorporated into all new military department buildings. The area surrounding the building is designed to exceed environmental standards and encourage natural processes.
28-Nov-11	8	Meetings / Breakouts	Met with the various department heads, (i.e. natural resources, pest management, Water quality, Spill planning) in order to determine responsibilities for sections of the regulation. I had to e-mail some of them since they were out of the office. Worked on a synchronization document to visually depict the sequence and timing of the project.

3-Dec-11	8	Individual task development	Discussed with my counterpart on how to integrate drill weekend tasks and duties with the full time weekday staff. We broke up and scoured through the duties and responsibilities of the environmental branch to answer these questions. We built a spreadsheet of proposed activities and will present to Mr. Elliott for his consideration.
4-Dec-11	5	Compliance planning	Reviewed Internal Performance Assessment System with MSG Carrar. We developed a prioritized list of facilities that added focus in assistance is necessary. There are eight facilities that have many reoccurring faults. The plan is to travel to these facilities and assist them in records updates and other program issues.
5-Dec-11	4	ECN review notifications	Sent notifications and instructions to selected members on updating their sections of the regulation. Updated tracking log contingent on replies received from staff.
12-Dec-11	8	Meeting with program managers and response	Met with the pollution prevention program coordinator and the training and inspection program coordinator. In the meeting with training coordinator, we covered specifics of the environmental program and on ways to achieve higher levels of compliance with the units. Starting at the supervisory level, from her opinion, is a much wiser use of my time.
22-Dec-11	8	Document review	Reviewed Chapters 12, 4, 3: Spill Planning and Emergency Response, Safe Drinking Water Mgmt, and Water Quality Management; that CW5 Swartwout and Mr. Elliott had provided comments on. I made sure these comments were incorporated into the newest version of the ECN. Sent spill planning to Jennifer for comment.
23-Dec-11	5	Document review	Reviewed Appendices O, E, and K: Spill Planning and Emergency Response, Safe Drinking Water Mgmt, and Emergency Information; that CW5 Swartwout and Mr. Elliott had provided comments on. I made sure these comments were incorporated into the newest version of the ECN. Sent documents back to CW5 Swartwout for final review.

27-Dec-11	8	Policy discussion and document revision	Discussed some of the policy and legal aspects of Pest management at the national level; how decisions are made, how the review board is structured, and some of the shortcomings with management and organization. Made corrections to Cp 15 (Pesticide Mgmt) that Bill had updated. Annotated corrections needing made to Appendix A (References) by cross referencing the appendix with the documents.
27-Dec-12	8	Research and document revision	Sorted through the Acronym list, referencing the chapters and appendices to ferret out inconsistencies. Some Acronyms have become obsolete or changed over the last decade. Mr. Elliott stated that it is not so important that ALL acronyms are listed, only the most vague ones, considering the audience.
28-Dec-12	8	Remediation discussion and doc. Review	Cp 1 and Plans review. Discussed Remediation with Jim Arnold. Remediation is a big deal with military organizations. Munitions and hazardous waste are part of doing business, and historical use of training areas leaves a lot of these materials behind.
3-Jan-12	8	Site Tour at large maintenance facility	Toured Camp Withycombe where the deputy facility manager showed me the ways that Camp Withycombe maintains a high standard of environmental compliance. Their paint shop, machine shop, maintenance shop, and scrap yard for instance use state-of-the-art processes to minimize their consumption and footprint.
7-Jan-12	8	Research and document review	Read through CAA and NEPA documentation. I also became familiar with AGO forms to ensure chapter and appendix references match up correctly in guidance. Some may need additional attention as some information appears outdated. I will follow up with this.
8-Jan-12	8	Environmental training research and registration	Scheduled training for Professional Development. It is striking to find opportunities for environmental training abound. Many times this training is free where a person only needs to fund travel

			and housing. Reviewed final report guidelines for internship so as to help guide me in my focus as I continue through this project.
16-Jan-12	6	ECN review notifications and document management	Sent notifications to group that the first phase of the project has passed the suspense date. Those who have not reviewed and provided comments need to do so in the next two weeks. I have notified Mr. Elliott. I have review a number (13) of the Chapters and accepted markups that fit the model. I left other markups for others to review. I have ensured formatting is consistent and made necessary changes.
18-Jan-12	3	Document revision and Q&A communication	Replied to inquiries about reviews and questions on who would need to look at others documents. Worked on another 9 documents, including referencing applicable state and federal regulations.
25-Jan-12	3	Document review and revision. Document management	As I review the documents, I am accepting the obvious markups that involve grammar, updates of regulations or references, and placement of instructions/comments in appropriate sections. I am leaving the markups for others to review that may involve their input. It looks like we are on track to open up the ECN for review across all sections in early February. This would involve asking those who believe there is overlap to review chapters and appendices they are not normally responsible for.
26-Jan-12	8	Same as above	Same as above, continuing with changes.
29-Jan-12	8	Changes to appendices and waiting for replies	Finished with most the changes made to the Appendices by the program managers. There are a few that still need a first pass through because the training manager has been out of town much of month conducting training. I plan to move ahead and she can catch up, since her particular content does not overlap as much as others.

5-Feb-12	8	Policy review and research to ensure accuracy	Read through CWA, National Guard Bureau Env. Policies, and searched a number of state policies that relate to the ORARNG Env. Policies. Some AGO forms need to be updated and these have been identified. I will work with program managers to ensure they are current.
9-Feb-12	5	Document formatting and style check	Updated tracking documents to bring current the status of the project. Went through all the documentation to ensure formatting was consistent and markups were taken care of.
11-Feb-12	8	Website content management, document revision	Comparing the Sustainability Management Website to the environmental program illuminates some shortcomings in its design and content. I tasked MSG Carrar to examine the website and provide recommendations on how to improve it. There is also a state website containing the same content that needs updating. Revised the Natural Resources Mgmt chapter.
12-Feb-12	8	Upload documents into electronic library and organize	Uploaded corrected copies to SharePoint. Worked on corrections to the table of contents, glossary, and acronyms. Table of contents was a time consuming endeavor because of the amount of information contained within. Continued to work on formatting.
16-Feb-12	8	Website and web content management efforts	Viewed the various websites where the ECN resides. Made inquiries into how to get documents uploaded and asked to gain permissions to manage sites where Env. Documents reside. Non-supported software would necessitate the harvesting of templates and content.
23-Feb-12	8	Document review and follow up with managers	Reviewed returned documents. Send reminder to program managers on timelines and suspense's agreed to in earlier meetings. Reviewed Camp Adair Natural Resources Management Plan at the request of Bill. There are a number of projects he is involved in and he thought it would be informative for me to be aware of these.

3-Mar-12	8	Project review with weekend staff	MSG Carrar and I discussed projects that AGI-ENV currently has on the books. We discussed a strategy to incorporate drill status soldiers into the full time staff's activities. We brainstormed how to build a program that would allow turnover of personnel without a loss in workflow. We broke up and scanned the various programs, took notes, and reviewed regulations, then we came back together and debriefed each other on what we found.
4-Mar-12	8	Document management and resource inquiry	We began populating an electronic folder of resources we would use as a continuity resource and a single source for references. Gathering this information involved searching various websites, internal databases, and SharePoint archives, a time consuming process.
13-Mar-12	4	Document review and communication	Reviewed Pest management documents that were submitted to me earlier. Sorted through e-mails about changes and answered questions.
21-Mar-12	5	Regulation review	Researched information within a number of documents that had comments about whether references were still current, and that the information had not changed. For instance if a cited regulation had not been updated and a changed detail had not rendered something in the ECN as inaccurate.
26-Mar-12	8	Instructed to change formatting on ECN	Received direction from Mr. Elliot to update the headers and footers on all the documents. Essentially this must be done to every document individually. This task and scanning for obviously needed corrections took all day.
27-Mar-12	8	Meetings (Water quality, net-zero, natural resources)	Finished up on updating headers and footers. Had a 1 1/2 hour meeting with the program manager (Major Gibson) for water related issues and also discussed Oregon's "Net-Zero" program relating to water and energy. Met with the Natural Resources manager (Bill Vagt) to review rehabilitation activities at Camp Adair and ECN updates.

28-Mar-12	8	Develop comment matrix and discussed business aspects with manager	Developed a comment matrix in MS Excel to boil down changes that had not been yet resolved. This involved searching through the chapters and appendices and recording a summary of the comments on a spreadsheet. This spreadsheet was later distributed to the group. Met with the Budget Manager (M.J. Jacobsen) for 2 hours for the branch and gained insight on how funding is managed, and how agreements are handled.
29-Mar-12	8	Staffed comment matrix with limited response	Circulated the comment matrix through the office, gaining feedback from the various managers. Some said they would review the outstanding comments and provide me with feedback in a week or two. A couple of them just gave me verbal guidance and told me to make the changes myself and submit it back to them. Received comments and incorporated them.
30-Mar-12	8	Research and revisions	Worked on a few of the documents. I had to do some background reading on the NEPA and Natural Resource documents before getting started.
2-Apr-12	4	Edited NEPA and Pest management documents, meeting with Bill	Worked from home editing the NEPA document. Read through the Integrated Pest management (ORARNG 210-5) regulation and supporting documents. I had discussed with Bill the issue of what should be included in the ECN. We agreed that referencing most of it would work the best. The regulation will reside on an external website for easy access.
4-Apr-12	8	Meeting with Gerald Elliott and site visit of building deconstruction	Had a scheduled meeting with Mr. Elliott about progress. There are about 20 issues yet to resolve and these should be completed by the end of the month. Had a discussion on what to do next. Visited a site of deconstruction of the Dallas Armory. Visited escrow office and realtor.
9-Apr-12	8	More research on NEPA documents. Document revision	Went to the office and got feedback on the NEPA document. Finished it and submitted for final approval. Additionally, completed and submitted Noise Management (Cp 16) and Cultural Resources (Cp 18). Got started

			on Appendix C but I need additional information that I requested from Kris.
16-Apr-12	8	Compliance discussions, IRT projects, document revision	Sent RFI to training lands manager (TLM) about DCSOPS piece of LTA/IRT process. Jeff discussed with me how his consulting agency worked with USCG Env. Office on Kodiak Island. Spoke with Kris on Innovative Readiness Training (IRT) projects, and need to talk to MAJ Gibson too; what us the status of these program? Finalized Appx K, Cp. 2, and Appx T.
17-Apr-12	8	Appendix C modifications, schedule attendance for conference	Phone call with TLM netted information what I needed to do to Appx. C. We will reference ORARNG 350-29 in the document and strip out AGO 744 and instructions. Modified Appx C., Spent much of the day coordinating conference attendance. Met with MJ about conf. details. Funding is done difference for AGI / Fed Techs / M-day employees.
21-Apr-12	8	Attended Environmental Performance Assessment out brief	EPAS out brief by audit team. There were limited findings for Oregon. The team mentioned that Oregon is one of the best states they have visited and find it a pleasure to come here. These assessments occur every three years and Oregon has done very well every time. There were a number of category III deficiencies which are minimal, and only a few categories I which need immediate attention.
23-Apr-12	4	EPAS findings will affect ECN language, review findings	Reviewed EPAS findings and supporting documents. Worked to gain an understanding of how the findings and responses by AGI-ENV would affect the ECN. It appears that there will be some changes to the ECN due to an effort to write in/out wording that either does not meet the intent of regulations, or sets unachievable standards.

27-Apr-12	8	Transferred REC instructions to NEPA documents	Finalized Workshop travel and attendance plans. Added a DCSOPS permit flowchart to the ECN appendix C and sent to the NEPA manager for approval. Pulled information from the Record of Environmental Compliance (REC) checklist to include in NEPA compliance documentation.
30 Apr-04 May 12	40	National environmental Workshop (NEW)	National Environmental Workshop - This workshop brought together environmental professionals from all 54 states and territories. Program areas covered included: NEPA, cultural resources, water quality, spills and spill prevention, restoration and compliance, hazardous waste, natural resources, renewable energy, pest management and invasive species, endangered species, legal, and environmental management (ISO 14001).
5-May-12	8	Briefings and workshop content review	De-briefed select environmental staff on NEW. Began reviewing classes I was unable to attend. Had a meeting discussing how to apply lessons learned from NEW into Environmental program
6-May-12	8	workshop content review	Continued to take classes I was unable to attend (14). There were 58 sessions during the NEW and a person had to pick and choose a few. Drafted a whitepaper on lessons learned and distributed to branch members.
9-May-13	8	Higher level notification	Began notifying directorate level reviewers of pending document review. These were informal conversations as a drop-in courtesy. I was concerned that many were not aware of their responsibilities as laid out in the ORARNGR 200-1. With the high turnover of people to positions in the military, many do not know the scope of their responsibilities. Some wished to review the document prior to staffing.
16-May-12	8	Coordination with outside organizations	Worked to develop closer relations with Penn. National Guard. Exchanged documents and started coordination on having VTCs and conference calls. Downloaded all the NEW slide packets (58) one at a time, and now transfer them to

			SharePoint. Read though some of the documents Penn. ILE sent me.
23-May-12	8	INRMP review	Went through the balance of the training materials that I missed at the NEW. Reviewed the new instructions for the Integrated Natural Resource Management Plan (INRMP) from NGB. Coordination with other agencies and stakeholders is emphasized throughout the document.
30-May-12	8	Reviewed IPAS tools and reviewed/ uploaded documents	1: Requested permissions to WEBCASS and got into the program. This is the software that manages Environmental assessments, both internal and external. There is also training modules, tools for assessing training site impacts, and links to federal and state environmental information. Spent the morning exploring this tool that the entire National Guard uses. 2: Uploaded a number of Appendices to the SharePoint that had been reviewed and accepted by PMs.
4-Jun-12	8	Site visit to Camp Adair	Went to Camp Adair with Bill Vagt to observe what activities were occurring there. I was amazed that the amount of work being done on the natural resources side. Forestry, listed species management, restoration of cultural resources, archeological site protection, invasive species control, etc.
6-Jun-12	8	Camp Adair training and ECN review	My interest was piqued about Camp Adair and I asked for more information on activities at this site. Bill and Jeff gave me packets to review of the various projects current and past. This gave me great insight on the breadth and depth of skill necessary to carry out these projects. Got back Annexes relating to HAZ waste and HAZMAT. I had to reformat these to fit the template.
			Took a week off after finals

18-Jun-12	8	Filled out employment paperwork, met with HR	Mr. Elliot offered me a full time job since I was done with school. Of course I promptly accepted and agreed to begin the first of July. I could continue to work on the ECN from home and come to the office occasionally when necessary. Going through the hiring process for a state position was a new experience and informative. I will start 01 July.
20-Jun-12	4	VPN from home, document management	Responded to questions about the ECN review, routed documents between managers, and modified formatting. It seems that often the formatting is messed up during a revision and I have to fix these problems whenever I get a document back.