DOD P^2 WATERSHED ADVISORY BOARD: PROJECT OVERVIEW

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Abstract. The DOD P^2 Watershed Advisory Board (WAB) was established in September 2002 to promote environmental compliance and pollution prevention on military installations throughout the southeast. With assistance from the University of Georgia, the diverse membership of the WAB have recently completed a survey of critical water resources issues that identified stormwater as the highest concern facing environmental managers at military bases. The WAB is now implementing a suite of technical transfer activities (e.g., training workshops, comprehensive web site and base-specific technical assistance) designed to build trust, foster understanding, and leverage resources to enhance and protect the military's (and the region's) most vital natural resource.

INTRODUCTION

New surface water regulatory programs that are currently impacting military installations throughout the United States and will continue to do so for the next several years include: (1) Safe Drinking Water Act (SDWA) Source Water Assessment requirements; (2) Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) Stormwater Sediment and Erosion Control requirements; and (3) CWA Total Maximum Daily Loads (TMDLs) requirements. All of these programs focus on assessing and reducing pollutant loads into impaired waterbodies. Failure to do so may result in new treatment requirements and/or permit restrictions on the installation's wastewater treatment plant permits – both of which could have significant impacts on military planning (budgets) and operations (readiness and security).

There are approximately sixty-six major Department of Defense (DoD) installations (Army, Navy, Air Force, Marines Corps) and over 900 Reserve and National Guard facilities located in the Southeast. A map of military installations in the southeast is shown in Figure 1. This represents over 20% of the nation's total. Some military installations in this region of the country are aware of the magnitude of some of these environmental issues and have planned accordingly. Other military installations have not planned for these upcoming regulations and would benefit from lessons learned by other organizations within and outside of their branches of the military.

To meet this need, a Watershed Advisory Board (WAB) was recently established that includes representatives from all service branches of DoD, as well as other federal and state agencies. The overall goal of the WAB is to promote pollution prevention (P^2) and environmental compliance at military installations throughout the southeast. This goal may be achieved during the first year through the following tasks:

1. Assess current water resource challenges facing the military installations in the southeast.

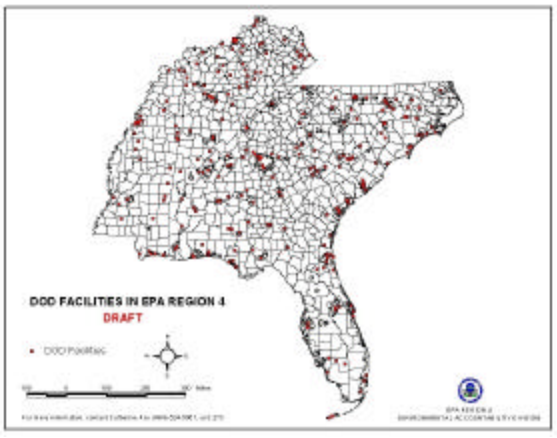

Figure 1. Military Installations in the Southeast.

2. Identify cost-effective pollution prevention (P2) solutions capable of resolving critical water resource issues identified on military installations in the southeast.
3. Provide technical assistance with the transfer of pollution prevention tools and techniques addressing critical water needs identified.

This paper provides a brief overview of the project, the structure of the WAB, and milestones achieved in the first six months of the project.

BACKGROUND

In 2002, approximately $2 million was allocated to the University of South Carolina (USC) by the DoD Pollution Prevention Partnership to promote sharing of P^2 experiences and expertise across military installations, branches of service, and state borders in Region 4. Funding for this project was provided by the USC to the University of Georgia (UGA) to address critical water resource needs on military installations in the southeast. EPA Region 4 provided additional support to the project to ensure its success.

Participation in the Watershed Advisory Board is open to the US Army, US Air Force, US Navy, US Marine Corps, Major Commands, Service Field Offices, State National Guards, US EPA, US Army Corps of Engineers (COE), state agencies and universities within the southeast. Membership currently includes over fifty representatives from each of these organizations. WAB Members meet quarterly for the purpose of reviewing current project activities and providing input on the development and implementation of future project tasks.

A seven member Steering Committee serves as the decision-making body of the WAB. It is composed of one member from each military branch and representatives from USC, Southern Regional Environmental Office (SREO), EPA and the COE. The Steering Committee is responsible for guiding all actions associated with the WAB to promote the effectiveness of the project aimed at resolving water resource issues on military installations in the southeast. This Committee meets about six times per year while the WAB is brought together less often and usually in conjunction with other training and networking opportunities.

A Planning Team comprised of representatives from the UGA, EPA and SREO is responsible for all WAB project management and coordination activities, as well as providing technical and administrative support to the WAB and its Steering Committee. Funding for the one-year pilot project was made available from the DoD Regional P2 Partnership in September 2002.

CRITICAL WATER RESOURCE ISSUES

A survey was conducted in the fall of 2002 to identify the most critical water resource issues on military installations in the southeast. Respondents were asked to rank each of the 14 categories as high (3 points), medium (2 points) or low (1 point) depending upon the needs at their installation.

Sixty-six completed surveys from all service branches of the military (as well as seven surveys from representatives outside DoD) were completed and evaluated. The eight-week survey identified NPDES Stormwater Phase II and NPDES Erosion and Sediment Control as the top issues of concern at military installations in the southeast. Water supply, structural best management practices, public education and outreach, and water conservation/reuse were viewed as important but less critical issues. All other listed issues were ranked as more moderate concerns at the time of the survey. A summary of the results is shown in Figure 2.

The results of this effort suggest some variability among military branches that may be indicative of geographic trends, size of installation, and awareness of environmental issues, among other factors. Also of

Figure 2. Relative Ranking of Critical Water Resource Issues by the Military

CATEGORY	SCORE	RANK
NPDES Stormwater Phase II	154	HIGH
NPDES Erosion and Sediment Control	154	
Water Supply	133	MEDIUM
Structural Best Management Practices	132	
Public Education and Outreach	131	
Water Conservation/Reuse	130	
Total Maximum Daily Loads	124	LOW
Wastewater Treatment	124	
Watershed Assessments	122	
Land Use Planning/Encroachment	120	
Source Water Assessments	117	
Intergovernmental Coordination	114	
Vegetative Best Management Practices	110	
Stream Restoration	88	

note was the dissimilarity of opinions expressed by the military verses nonmilitary on what issues were most critical at military bases. In this survey, the nonmilitary respondents identified Water Conservation and Land Use Planning as the top two priorities, whereas the military respondents saw these issues as less important compared to others, (e.g., stormwater). These results may be biased due to the small number of non-military responses collected.

P^2 TOOLS AND TECHNIQUES

The next phase of the project focused on identification of effective tools and techniques to promote compliance and pollution prevention among the critical issues identified in the WAB Water Resource Needs Assessment. Four categories of P^2 Tools were presented to the WAB for consideration in January 2003. These include: (I) Compilation of Key Resources (e.g., Policies and Guidance); (II) Information Exchange/Communication (e.g., web site); (III) Education/Training (e.g., NPDES Phase II Stormwater Workshop); and (IV) Technical and Regulatory Assistance (e.g., Low-Impact Development Pilot Project). The WAB provided both verbal and written comments on what and how activities should be implemented to meet overall project goals. Their recommendations are currently being evaluated with final decision-making carried out by the WAB Steering Committee in March 2003.

TECH TRANSFER

The WAB hosted a successful Spill Prevention and Stormwater Management Training Workshop in Atlanta, Georgia on January 28 and 29, 2003. The workshop was designed to assist military bases in understanding and responding to new Federal and State Spill Prevention Countermeasures Control (SPCC) and National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Requirements. Presenters included leading experts from the US Environmental Protection Agency (EPA) and the Department of Defense. Approximately ninety representatives from Army, Air Force, Marines, and Navy installations as well as federal and state regulators from all eight states in the southeast participated in the workshop and received CDs containing extensive resource material (including a model Stormwater Management Plan to assist bases in meeting the March 10, 2003 deadline).

Future tech transfer activities sponsored by the WAB will likely include: (1) Development of a comprehensive web site; (2) DOD/EPA Training Workshop on Erosion and Sediment Control; and (3) Hands-on technical assistance to individual military installations on how they can achieve compliance with new NPDES Stormwater Phase II requirements and control/reduce nonpoint source pollutant runoff in their watershed.

DISCUSSION/RECOMMENDATIONS

The WAB Project is currently funded for one year only. As discussed previously, the overall goal of this project is to promote pollution prevention and environmental compliance at southeastern military installations. If success is measured by: (A) Increased understanding of regulatory requirements and applicable best management practices; (B) Enhanced relationship building among and across military services as well as state and federal regulators; (C) Leveraging limited resources among all military branches, EPA and state governments, then the project goal has already been met. To date, Tasks 1 and 2, and much of Task 3 (with respect to the highest priority issues) have been completed by the WAB. However, the need to provide additional support on these issues and other identified critical water resources needs remain. Discussions are underway to determine the future of the WAB. Consensus is that the group should continue its successful efforts in 2004 and beyond. The mechanism for doing so, however, has yet to be identified.

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