STRATEGIC DIRECTION FOR ENVIRONMENTAL ENGINEERING

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The Army Corps of Engineers is entering an exciting new decade as we witness the greatest changes in the international order in years, perhaps our lifetimes. It is a time to reflect on our 200-year tradition of service and prepare ourselves for yet greater service in the nineties and beyond. This letter focuses on what I believe will be our greatest challenge, opportunity, and growth area. While the emphasis on various components of our national security and our Nation's well-being are changing, one element emerges in relative importance— not only in the United States, but throughout the world— our environment.

We in the Corps are justly proud of our role in developing and defending our Nation in the last two centuries and of our response and adaptation to a growing national concern for environmental values. In this era of ever increasing change, "response and adaptation" are not adequate for contemporary needs. The present lead times involved in changing the direction of our institution with the momentum of our legal, regulatory, cultural and budgetary bases for conducting our business are just too long. We must establish a new strategic direction that will guide current and future changes in all aspects of our program, civil and military. These changes will be fully consistent with Administration policy and in accordance with both the spirit and the letter of the authorizations provided by Congress.

The National Environmental Policy Act (NEPA) remains our broadest guide for action. Twenty years ago, the President and the Congress declared that it was the continuing policy of the Federal Government to use all SUBJECT: Strategic Direction for Environmental Engineering practicable means, "to create and maintain conditions

under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." (NEPA, Section 101) President Bush and Secretary of Defense Cheney have specifically declared their dedication to a sound environment. President Bush, for example, in a speech to the United Nations on 25 September 1989, identified the environment along with economic and security issues as the top global challenges of the 21st century. It is increasingly clear that our security relies on a healthy natural resource base. On 10 October 1989, Secretary Cheney stated his vision for how the Department of Defense would meet the environmental challenges it faces. He called on the DOD to be the "federal leader in agency environmental compliance and protection" and to be committed "to meet the worldwide environmental challenge." Therefore, to meet our Nation's and the world's needs, an environmental ethic must be an integral part of how we conduct our business. It is the Corps' obligation to protect and restore environmental quality while contributing to social and economic well-being.

In practical terms, embracing and promoting our environmental ethic and spirit will change the way we do our traditional business and work for other agencies. As our history demonstrates, we have a unique tradition and capability to solve engineering, environmental and developmental problems facing the Nation and the global community. The anticipation and prevention of environmental damage will continue to require that the ecological dimensions of a project, a policy, or a federal action be considered at the same time as the economic, social, and engineering considerations; however, the weight we give to environmental

consequences will increase. Proposed development or action will attempt first to avoid adverse impacts, then minimize or reduce them, and finally compensate for unavoidable effects over the life cycle of the project or action. Simply put, the environmental aspects of all we do must have equal standing among other aspects — not simply a "consideration," but part of the "go-no-go" test along with economics and engineering.

President Bush has stated that we will protect and preserve wetlands and adopt a no net loss of wetlands policy. We will wholeheartedly support the President's wetlands initiative (to the full extent of our authorizations) in our project planning, our operations and maintenance activities, our military programs, and our regulatory program. In doing this we will also strive to protect other precious natural resources, including valuable agricultural lands. While our current programs already provide essential protection for our water resources and wetlands, I am committed to strengthening them and using the regulatory program, within legal and policy bounds, to protect wetlands unnecessary destruction or degradation.

In our military program, the land, water, and natural resources made available to the Army are limited and must be carefully managed to serve the Army's short and long term needs. Embracing an environmental ethic and applying this ethic to our stewardship of our natural resources is vital and will be an important ingredient in supporting our Army. Environmental leadership and a commitment to go "beyond compliance" must be the standards upon which our service to the Army is measured.

Our work, military, civil, and support for others, depends on creative, environmentally sensitive engineering. We must look at our work in a broad social and environmental context, as well as in technical and economic terms. Decision makers (our higher authorities, project partners, and customers) need to be aware of the regional and life cycle consequences of each possible solution we recommend. We must plan wisely at the outset and

integrate environmental concepts with engineering creativity in all phases of our projects and activities. We will not only mitigate environmental impacts of development, but, when authorized to do so, we will our work expand that directly addresses environmental problems as a central purpose of the engineering effort. We will continue to consider both structural and non-structural solutions in solving problems and in protecting and restoring our environment. All of this will depend on our continuing to develop the requisite environmental engineering talent.

We have already realized the opportunities environmental engineering brings to the Corps. For example, we are investing nearly \$500 million annually in solving environmental problems in the area of hazardous and toxic waste. Restoration of contaminated sites is and will continue to be a significant environmental issue facing the DOD, EPA, DOE and other agencies. This challenge requires engineering capabilities that Army Engineers have demonstrated in EPA's Superfund and the Defense Environmental Restoration Programs. Environmental engineering and supporting research and development account for nearly three quarters of a billion dollars of our FY '91 budget – military, civil, and support for others.

Among all agencies whose primary reason for being is not environmental protection, you have been leaders in integrating and embracing environmental values – with your continued efforts we will build on that leadership. It is especially important to forge new partnerships with the total environmental community and other resource agencies as well as with those who pursue development. We can learn much from one another, and I challenge you to engage in continuing dialogues among these diverse interests.

Thanks to the visionary, pioneering efforts of our predecessors, we have a good story to tell about the environmental value we have designed and built into many of our projects; the aggressive research and development we have conducted to enhance the environmental aspects of our efforts; and the environmental protection achieved through our regulatory program. In more recent years, we have intensified our environmental focus in research and development, civil works, military, and support for others programs. Now, I believe our Nation asks more of us. Yes, we must continue the good work we have begun but we must also enhance the environmental aspects of our basic missions. We must be capable and willing to respond to new missions that feature solving environmental problems just as we have for navigation, flood control, military construction, etc.

I recognize that until we have included changes in the vast body of guidance that directs our actions, there may be a frustrating gap between our words and our deeds. For example, we will explore updating the principles and guidelines that are the basis for water resource project formulation. Bear with me in this transition.

Finally, I ask each member of the Corps to integrate environmental sensitivity into our day-to-day business. The cumulative consequences of our work must reflect a clear interest in protecting the quality of our environment and natural resources – we will be measured by what we do, not what we say. Our commitment must be to environmentally sustainable development in which we do not compromise the future while we meet current needs. Now is the time to use our engineering, scientific and management capacity to advance our Nation's environmental goals. We recognize that sustaining the environment is a necessary part of building and securing this Nation.