



US Army Corps  
of Engineers  
Waterways Experiment

# RECNOTES

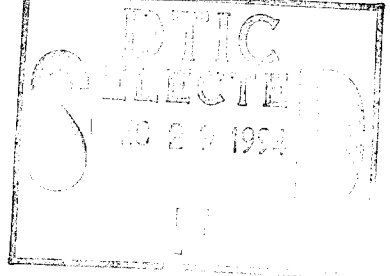
NATURAL  
RESOURCES  
RESEARCH  
PROGRAM

Vol R-94-3

December 1994

## Words Are Important

by  
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*U.S. Army Engineer Waterways Experiment Station*



**E**ach professional discipline has its own peculiar jargon or language that is commonly used by those who are employed in that particular field. The language of science, specifically the language of research, is uncommon and is known as a system language in which each word must mean one thing to all parties in a verbal or written conversation. There are, however, instances where colleagues use terms and words that are assumed to be understood by all participants, but really are not.

This is especially true where interdisciplinary teams composed of representatives of several professions collaborate on complex studies. This essay attempts to examine and define some popular terms currently in use in the field of natural resource management.

Many years ago, while working toward my wildlife science degree at Ohio State University, I visited the fish market trying to find a cheap substitute for my normal peanut butter and cracker diet. What I found was a fish labeled

“gray bass.” I knew the fish as freshwater drum or sheepshead. I appreciated, and appreciate even more now, that the work of Swedish botanist Carolus Linnaeus, in developing a system of classification which assigns unique scientific names, has potential for broad application. Otherwise, the same plant or animal may be known by several local or regional names.

Without some systematic approach to classification and an agreed upon nomenclature, it is often difficult to communicate effectively. Clearly, *Aplodinotus grunniens* became gray or white bass, drum, sheepshead, buffalofish, white or gray perch, grunter, bubbler, and other names, depending on the location in which the fish was found and the name assigned to it in that area (Trautman 1957).

The decade of the nineties has seen new words introduced in the Corps lexicon. Words such as “stewardship,” “environment,” “natural resources,” “watershed planning,” “landscape



Elk at Wynooche Lake, Washington

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has been approved  
and its sale; its  
approval.

planning or management," "basin planning," and "ecosystem management" are commonly heard in conversations and meetings of Corps personnel. While these words appear to be relatively new to many in these circles, they have been in use for many years in professional conversation and literature. It is not clear that these terms have universal meaning to members of the Corps family. It is then a far greater leap to expect that we are communicating clearly and consistently with our customers outside the agency.

We tend to use words that place the most favorable connotations on our products and activities and what we have to offer the public, while communicating as correctly as possible the actual situation. Two examples illustrate this point. For many years American foresters engaged in a method of timber harvest known as clearcutting. Clearcutting removes all timber from the harvest area and leaves no trees for wildlife habitat, soil protection, or other biological, physical, or chemical functions. An additional major adverse impact of clearcutting is the unsightly landscape that remains after the timber sale. When clearcutting came under severe public attack in the 1960s and 1970s, policies and public relations strategies were modified. Areas harvested in this manner are now replanted with seedlings so that the process of regrowth could begin immediately. The clearcut areas are now known as "regeneration areas."

A mainstay of the U.S. Army Corps of Engineers' water resources program has been and continues to be construction and maintenance of navigable shipping channels in inland and coastal waterway systems. This requires

dredging and disposal of material removed from the channels. Before the emergence of environmental awareness and accelerated public interest in the Corps' actions related to dredging, the excavated substance was referred to simply as dredged spoil. More recently, "dredged material" has become the accepted term. Dredged material is more accurate and avoids negative thoughts that members of the public might have about "spoil" generated from Corps activities, particularly when the material is used for development of wetlands, beach nourishment, or other beneficial uses.

These examples illustrate situations in which the best possible words were chosen to portray the positive aspects of management actions to a public that has challenged or criticized those actions. The facts have not really changed, and the new terminology does not deceive anyone. However, public presentation of the activity is done so in a much more positive atmosphere. Thus, it is common today to hear dealers advertise "previously owned" automobiles rather than "used" cars. Likewise, the recent flurry of activity associated with casino development in the lower Mississippi River Valley is commonly referred to by politicians and supporters as "gaming" rather than "gambling" activities.

Bertalanffy (1965) noted that because man, alone among the animals, possesses language in which abstract ideas can be represented by symbols, he very easily confuses the symbol with the "reality" for which it stands.

With the license to use words to reflect the most favorable position for an agency's policies and actions comes an obligation to know and understand what those words mean, in what context

they make sense, and what meanings and expectations they might connote to others.

Although the Corps has been in the business of managing natural resources for many years, the agency's emphasis has been directed toward engineering, development, and construction rather than sound natural resources management. In recent years water resources development has waned, and military downsizing has further restricted the Corps' development and construction mission. The agency is now in the process of redefining its mission, with environmental engineering being touted as the major service the Corps will provide for the American people.

Over the span of a 35-year career in the field of natural resources management, environmental considerations were, perhaps naively, thought to be part and parcel of natural resources. Conversation with many in the Corps and the Army, particularly those in the military, often reveals that environmental work involves hazardous and toxic waste cleanup, wastewater treatment, and provision of potable water supply. In other words, environmental engineering is viewed as a reactive activity that involves correction of past errors that have negatively impacted our resources. Conversely, natural resources management or stewardship is proactive, in that it involves development and implementation of strategies to maintain the quality and quantity of our resources, and thus avoids the need for future corrective action.

Many use the term "natural resources," but do we really know what it means? It is appropriate to define what natural resources are. E. W. Zimmermann provided a functional interpretation of natural resources in 1933. He argued

that neither the environment as such nor parts of the environment are resources until they are, or are considered to be, capable of satisfying human needs. That is, resources represent an entirely subjective concept that is relative and functional. According to Zimmermann, therefore, environmental attributes are not resources unless they are used or are perceived to be useful to humans. I would add that they are also resources when they are impacted, either positively or negatively, or are capable of being impacted by human actions.

To illustrate, Zimmermann explained that coal was not a resource without people whose wants and capabilities gave it utility. He stressed that natural resources are dynamic. They become available to man through a combination of increased knowledge and expanding technology as well as changing individual and societal objectives. In his words, "Resources are not, they become; they are not static but expand and contract in response to human wants and human actions" (Zimmermann 1951).

Natural resources, then, are defined by human perceptions and attitudes, wants, technological skills, legal, financial and institutional arrangements, as well as by political customs. What one culture considers a natural resource may not be considered in the same context by another culture. Zimmermann considered resources to be subjective, relative, and functional (Mitchell 1989).

Zimmermann's functional definition of natural resources is as valid today as it was 60 years ago. Using that definition as a base, natural resources can be broken into four basic components.

- The *physical component* includes the basic physical attributes of the environment.

These include geologic formations such as soil, mineral deposits, and landforms; water (in its various states and locations); and the various gases (notably the atmosphere).

- The *biological component* consists of the floral and faunal lifeforms that reside in the physical area in question.
- The *social component* comprises the human uses and values placed on the physical and biological components. This component includes all of the human interaction and uses of the physical and biological components that drive the definition of natural resources.
- The *functional component* consists of the processes, interactions, and functions that occur between and among the infinite pieces that comprise the physical, biological, and social components. This component is very important, but is often overlooked. Ecosystems are dynamic, and the functional component is the engine that drives them.

All four of these components can be considered as parts of a natural resource, or of an ecosystem, or as resources themselves. That is, coal is a physical natural resource. A forest, on the other hand, is an ecosystem or natural resource consisting of the four components identified above.

The four natural resource components also exist in two dimensions: time and space. The temporal aspects of natural resources can be described simply as renewable or nonrenewable. Renewable resources are capable of yielding output indefinitely without impairing their productivity. They include soil, vegetation, air, and water. Nonrenewable resources consist of finite masses of material, such as fossil fuels

and metals, which cannot be used without depletion. They are fixed in amount for all practical purposes (de Souza 1990).

Figure 1 depicts dimensions of natural resources in the context of planning, management, and research activities. Typical activities are shown on the horizontal axis of the model while representative resources are indicated on the vertical axis. The final dimension of the model describes the scale of resources and activity under consideration. Resources, activities, and scale shown in the model are intended as examples only and are not meant to be all-inclusive.

The scale or dimensions of natural resources can vary from a rather small geographical area such as an individual site or water resources project to a larger area or region that encompasses river basins, mountain ranges, or even entire continents. The scope of interest in natural resources depends on the physical or quantitative extent of the resource and area of interest for study or management. Acid rain problems now are hemispheric in nature since approximately 3 to 5 percent of the acid rain fallout from the midwestern United States is estimated to find its way across the Atlantic Ocean to Europe.

Both renewable and nonrenewable resources are exhaustible. It is possible to expand resource productivity by technological progress or by substitution of other resources. However, it is also possible to deplete resources through misuse and isolated actions of individuals who appear unwilling to use a minimum share of a resource. This phenomenon is commonly referred to as the "tragedy of the commons" (Hardin 1968).

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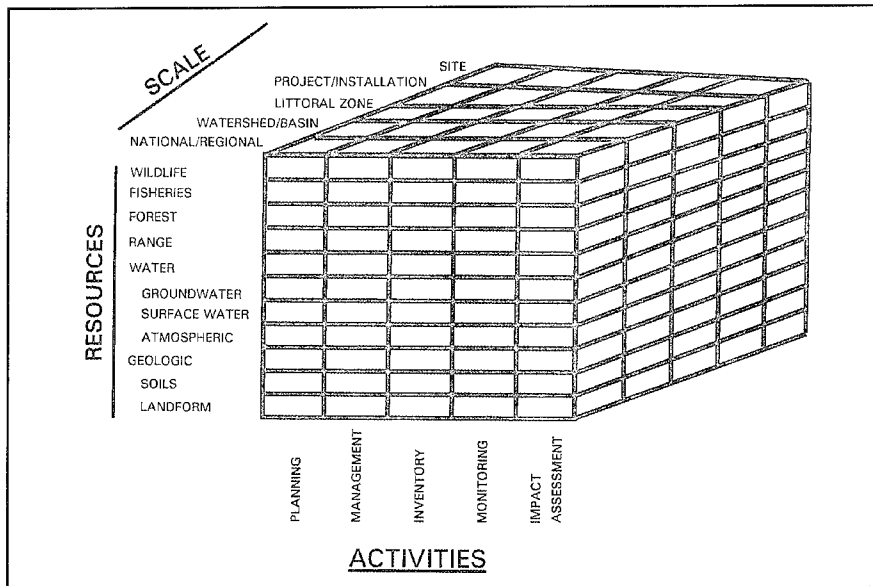


Figure 1. Dimensions of natural resources

Cumulative human actions are resulting in alteration of natural systems at a greater rate than at any time in the history of the earth. The rate of those actions and resultant modifications to natural resources is increasing rapidly. Decreased diversity of biological systems at an alarming accelerated pace is the net result. Species are being lost faster than they can be identified. Natural habitat is being converted to cultivation, living space, and infrastructure necessary to satisfy the increasing human population. A trend from biodiversity of species to a potential monoculture of humans is not too hard to imagine.

When we make statements about our goals in natural resource management, we need to be very careful in thinking through the correctness and appropriateness of those goals. Then we must be very careful in choosing and using the proper words and phrases to describe where we want to go as an organization and how we want to get there, so that those with whom we wish to communicate understand our message. In other words, form

follows function. How a geographical area is intended to be used will guide the management prescription.

We are now entering the era of landscape or basin study and management. Ecosystem planning is another term often used. What is meant by these words?

Odum (1959) defined an ecosystem as the biotic community and the nonliving environment functioning together. He stated that "the ecosystem is the basic functional unit in ecology since it includes both organisms (biotic communities) and abiotic environment, each influencing the properties of the other and both necessary for maintenance of life as we have it on Earth. A lake is an example of an ecosystem."

According to James and Martin (1981), a landscape is a combination of interrelated environmental components (local climate, landforms, soils, plants, and animals) occupying a discrete territory. Tuttle (1975) says a landform is an individual feature of terrain such as a hill or a single stream valley. A combination of features or landforms is a landscape accord-

ing to Tuttle. Thus, "...an area of hills of varying shapes and sizes with streams flowing among them comprises a landscape."

Crow (1989) says that "unlike ecology, where many concepts were developed by studying more or less undisturbed conditions with the intent of minimizing the influence of human activities, there is an explicit recognition that humans, with all their related impacts on the biotic and abiotic world, are integral parts of any meaningful concepts developed in landscape ecology. Spatial and temporal variations in attributes measured by ecologists (e.g., species, populations, ecosystems) have always presented problems when seeking to sample homogeneous conditions. In contrast, recognizing the importance of variation in time and space on the integrity and continuity of ecosystem processes is a cornerstone of landscape ecology. Because landscape ecology is an eclectic science (i.e., is composed of elements drawn from many sources), it is more than merely a branch of ecology."

Finally, Decker and others (1991) maintain that "landscape ecology should be viewed as an intersection between the biological and social sciences, including ecology, geography, forestry, wildlife biology, landscape design, sociology, and economics. Words such as synoptic, holistic, integrative, and interdisciplinary are often used to describe landscape ecology."

Thus, a landscape approach to stewardship or study of an area means a holistic or all-inclusive view of the issues, identification and consideration of the various component parts of a system, and provision of results that have considered all known aspects and facts that surround and are a part of the problem or study

area. This approach includes analyses of the interactions among various components of the study area as well as the attributes themselves. In short, we are talking about truly interdisciplinary studies—something touted within the Corps for many years, but never satisfactorily accomplished. Further, the 541 reservoirs operated by the Corps (U.S. Army Corps of Engineers 1992) that were justified, authorized, and constructed on mostly individual merits will now be viewed as functional systems under a landscape approach.

What are relative scales when one thinks of studies or actions on pieces of the earth in terms which have been discussed? Decker and others (1991) state that a stand or a site is generally about 1 to 500 acres in size while a watershed might be 5,000 to 20,000 acres. They place a landscape at about 1 million to 2 million acres and a region at about 10 million acres.

Others may have different definitions or estimated scales to fit the terminology. The point is, however, that watershed or basin studies encompass greater geographical areas than we have often associated with individual projects. Further, landscape planning activities are truly large scale, both geographically and intellectually. They are holistic and all-inclusive.

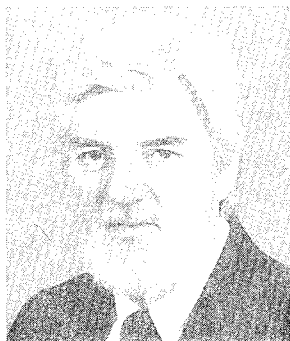
Again, form follows function. The scale of the study depends on the objective of the study. How large is an ecosystem? If we can identify the objectives and the parameters of the study, we can answer that question.

The great misconception about communication is the illusion that it has been accomplished. The important thing we must all remember is that we need to be clear in the use of words so that we communicate our ideas, goals, and objectives correctly. If we start with misunderstanding, we can expect only additional difficulty in achieving the goal until all partners understand a common language.

The purpose here has been to examine meanings behind some of the words that appear in our lexicon and to generate some understanding of their application. Definition of terms is an important starting point in any undertaking, whether it be research, application of technology to complex problems, or negotiation of issues. Perhaps this simple essay will help in that regard.

## References

- Bertalanffy, Ludwig von. 1965. "On the Definition of the Symbol," *Psychology and the Symbol: An Interdisciplinary Symposium*, J. R. Royce, ed., Random House, New York.
- Crow, T. R. 1989. "Landscape Ecology: An Eclectic Science for the Times," *Proceedings of the Seventh Central Hardwood Conference*, U.S. Forest Service, St. Paul, MN.
- de Souza, Anthony R. 1990. *A Geography of World Economy*, Macmillan, New York.
- Decker, Daniel J., Krasney, Marianne E., Goff, Gary R., Smith, Charles R., and Gross, David W. 1991. *Challenges in the Conservation of Biological Resources: A Practitioner's Guide*, Westview Press, Boulder, CO.
- Hardin, Garrett. 1968. "The Tragedy of the Commons," *Science*, Vol 162, pp 1243-1248.
- James, Preston E., and Martin, Geoffrey J. 1981. *All Possible Worlds: A History of Geographical Ideas*, 2nd ed., John Wiley and Sons, New York.
- Mitchell, Bruce. 1989. *Geography and Resource Analysis*, 2nd ed., John Wiley and Sons, New York.
- Odum, Eugene P. 1959. *Fundamentals of Ecology*, W. B. Saunders Company, Philadelphia, PA.
- Trautman, Milton, B. 1957. *The Fishes of Ohio*, Ohio State University Press, Columbus, OH.
- Tuttle, Sherwood D. 1975. *Landforms and Landscapes*, William C. Brown Company, Dubuque, IA.
- U.S. Army Corps of Engineers. 1992. "Authorized and Operating Purposes of Corps of Engineers Reservoirs," Washington, DC.
- Zimmermann, E. W. 1933 (rev. 1951). *World Resources and Industries*, Harper and Brothers, New York.



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# Regional Recreation Demand Model— progress report

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The finishing touches are being made to the Regional Recreation Demand Model (RRDM). The accompanying technical report and user-friendly software will be distributed upon completion of technical review. To acquaint potential users with the RRDM, this article presents a sample of the model's output and describes how it can be used by decisionmakers at Corps projects and districts.

As reported in earlier *Rec-Notes* articles (Henderson 1990, 1992; Henderson and Allen 1994), the RRDM is a regional travel cost model that estimates recreation use and user benefits. This type model is described in detail in Volume I of the "National Economic Development Procedures Manual" (Vincent, Moser, and Hansen 1986). The model can be used to estimate baseline recreation visits and economic benefits and to assess the impact of operational changes on recreation use and benefits for a single project or for all projects in a Corps district.

RRDM output given in terms of number of visits, and benefits are expressed as consumer surplus. Consumer surplus is the economic benefit measure of recreation required by the U.S. Water Resources Council guidelines (1983) for national economic development, so model output is ready for immediate use in evaluating proposed changes.

## RRDM output products

The RRDM's primary use is to estimate changes in visits and benefits due to operational, demographic, and other changes that affect demand for recreation. A secondary product of the work is an estimation of per-trip benefits for campers and day users. The accompanying table is a sample of the model's output, showing 1985 consumer benefits per-visit estimates for projects in the Little Rock and Sacramento Districts. Dollar values have been inflated to 1994 dollars using the Consumer Price Index.

The values mean that, using Beaver Lake (Little Rock District) as an example, each camper was willing to pay an additional \$8.38 to visit the project (that camper's consumer benefit), while each day user would have paid an extra \$2.36. A quick look tells us that consumer bene-

fits for campers were higher than they were for day users; benefits for campers at the Little Rock and Sacramento projects were three and two times higher, respectively, than day user benefits. These differences reflect the fact that campers stay overnight and come from farther distances than do day users.

Of major importance for these estimates is their role as baseline (or "without change") benefit estimates for use in evaluating changes in conditions such as water level or number of facilities. To evaluate addition of parking spaces, campsites, or other new facility, or the effect of changes in demographics (for example, aging population) using the RRDM software, one would estimate the baseline visits and economic benefits and then make changes to the campsites or other facilities, fees, or demographics. The analysis and output from the analysis are

1994 Per-Trip Benefits			
		Camping	Day Use
Little Rock	Beaver	8.38	2.36
	Blue Mountain	18.65	8.43
	Bull Shoals	10.42	2.88
	Dardanelle	10.97	3.90
	Millwood	12.91	4.15
	Nimrod	14.57	6.19
	Norfolk	10.24	2.61
	Table Rock	10.53	3.03
Sacramento	Black Butte	7.43	3.62
	Eastman	9.22	5.39
	Hensley	6.68	3.42
	Isabella	13.93	8.91
	Kaweah	4.69	2.67
	Mendocino	8.29	2.17
	New Hogan	10.49	5.44
	Pine Flat	5.41	3.22
	Success	7.34	4.37

retrieved from the user-friendly screens of the IBM-compatible PC software.

As an example case, consider that one proposes to provide parking spaces at Black Butte Lake (Sacramento District) and needs a cost-benefit analysis. Knowing the number of spaces and using the RRDM software package on an IBM-compatible personal computer (PC), the first step is to calculate the baseline economic benefits. This is done by uploading the baseline data in the "Main Menu" screen. Next, from the "Changes" menu, one selects "Make Changes to Zone Demographics and Fees," moves the cursor to "Number of Parking Spaces," types in the number of spaces desired plus the number already existing, and then selects "Compute Visitation/Benefits with Management Changes."

The RRDM automatically estimates recreation visits and economic benefits for the "with" and "without" management action conditions (that is, with and without the change). The output shows the change in visits and economic benefits by subtracting visits and benefits with and without conditions. The output also calculates per-trip benefits with and without management actions and shows changes in the per-trip values.

## **Use by Corps districts/projects not included in RRDM development**

The RRDM can also be used by Corps districts and projects that were not included in the RRDM modeling process, provided that certain conditions are met. Basically, these conditions (which are detailed in the technical report to accompany the software) are that the regional recreation demand conditions and natural resource, demographic, substitute, and facility variables be similar to the districts used in the model.

For those districts not included in model development, the technical report will outline procedures for applying the RRDM and for collecting the required data and entering these into the RRDM software. Guidance will also be provided on overcoming situations in which data (such as recreation use surveys or Natural Resource Management System data) are either incomplete or nonexistent.

This article has presented a sample of the per-trip benefit output of the RRDM and offered ideas on how the model can be used. If you would like a copy of the report and software when available, or have questions about putting the RRDM to work for your district or project, contact

Jim Henderson (CEWES-EN-R), (601) 634-3305; facsimile (601) 634-3726.

## **References**

- Henderson, J. E. 1990. "Regional Recreation Demand Models," *RecNotes*, Vol R-90-2, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Henderson, J. E. 1992. "Regional Recreation Demand Models," *RecNotes*, Vol R-92-2, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Henderson, J. E., and Allen, D. S. 1994. "The Regional Recreation Demand Model—A Tool for Decisionmaking," *RecNotes*, Vol R-94-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- U.S. Water Resources Council. 1983. "Procedures for Evaluation of National Economic Development Benefits and Cost in Water Resources Planning and Proposed Revisions to the Standards for Planning and Related Water Resources," *Federal Register*, Vol 44, No. 102, pp 30194-30258.
- Vincent, M. K., Moser, D. A., and Hansen, W. J. 1986. "National Economic Development Procedures Manual— Recreation; Vol I: Recreation Use and Benefit Estimation Techniques," IWR Report 86-R-4, U.S. Army Engineer Institute for Water Resources, Fort Belvoir, VA.

# Natural resources management employee of the year

The Corps of Engineers has selected Michael D. McClendon of the St. Louis District as natural resources management employee of the year. He is park manager at Wapappello Lake, a 45,000-acre project in Wapappello, Missouri, that averages over 2 million visitors annually.

McClendon earned this recognition for his leadership in upgrading and enhancing outdoor recreation facilities and program and promoting high-quality public service and recreation opportunities.

Since becoming park manager in 1976, McClendon has undertaken a "make-over" of the project. Activities have included

undertaking a comprehensive natural resources program and implementing habitat development plans to benefit wildlife and protect unique natural areas.

His "Environmental Visions" plan defines the commitment to stewardship of public lands and waters and emphasizes partnerships with public and private sectors to restore habitat and wetlands and to improve the quality of life for visitors and residents.

Toward these goals, McClendon managed the removal of all Corps-owned underground storage tanks and worked with concessionaires to eliminate theirs; directed the installation of

automated chlorination systems to reduce the potential for water contamination; and was instrumental in getting the Old Greenville site placed on the National Register of Historic Places.

McClendon has assembled a management team of highly skilled professionals and emphasizes on-the-job safety. He fosters cooperation with other Federal agencies, state agencies, and two Missouri universities in an outreach program that encourages minority students to take advantage of career opportunities in natural resources management.

Source: USACE News Release, David Hewitt.

## Calendar of natural resource-related events

- |                          |  |
|--------------------------|--|
| February 15-17, 1995     | <b>Southeastern Recreation Research Conference: Education and Communication, Tools in Recreation Management</b> , Comfort Hotel, Chattanooga, TN,<br>POC: John Burde and Ken Chilman, (618) 453-3341                         |
| March 29, 1995           | <b>FY 96 Natural Resources Research Program Review</b> , USAEWES, Vicksburg, MS,<br>POC: Russell Tillman, (601) 634-4201   |
| March 30 - April 1, 1995 | <b>Fourth Annual Southeastern Lakes Management Conference</b> , North American Lake Management Society, Radisson Plaza Hotel, Charlotte, NC,<br>POC: Gary Springston, (615) 751-7336   |
| April 17-21, 1995        | <b>Eighth Conference on Research and Resource Management in Parks and on Public Lands</b> , Marriott, Portland, OR, POC: George Wright Society, (906) 487-9722   |
| May 14-17, 1995          | <b>Fourth International Outdoor Recreation and Tourism Trends Symposium and 1995 National Recreation Resource Planning Conference</b> , St. Paul, MN,<br>POC: Kelly Fisher, (800) 367-5363, or Internet: kfisher@mes.umn.edu |



*Collinsville Beach, Okatibbee Lake*

## **Okatibbee Lake, Mobile District, named project of the year**

The 11-member natural resources management staff of Okatibbee Lake, near Meridian, Mississippi, was recently awarded the Chief of Engineers' Award of Project of the Year. Recognition was given for excellence in managing renovation of recreation facilities, developing fish and wildlife habitat, creating volunteer cleanup, and organizing special events for public education and enjoyment.

Okatibbee Lake occupies 4,100 acres and is surrounded by 6,860 acres of Federal lands. Flood control is one project purpose. In addition, the lake serves as a primary source of

municipal water for Meridian; represents a major recreation site offering boating, fishing, picnicking, and camping; and offers water quality control features. It was completed in 1969 and attracts 1.3 million visitors each year.

A hallmark of Okatibbee Lake is the partnerships and cooperative arrangements that have been established with other Federal agencies and with state and local agencies. Through these agreements, wildlife management and mitigation lands have been established, visitor and water safety programs have taken place, national boating races have

become an annual event, and special light shows such as "Christmas on the Lake" have been held.

The staff of Okatibbee Lake have made a concerted effort over the last decade to rehabilitate and upgrade campgrounds and to continue fish and wildlife management programs. Volunteers have been instrumental in the success of these environmental efforts and in organizing recreation activities.

Source: USACE News Release, David Hewitt.

# NRRP

## NATURAL RESOURCES RESEARCH PROGRAM

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## NATURAL RESOURCES RESEARCH PROGRAM

This bulletin is published in accordance with AR 25-30. It has been prepared and distributed as one of the information dissemination functions of the Environmental Laboratory of the Waterways Experiment Station. It is primarily intended to be a forum whereby information pertaining to and resulting from the Corps of Engineers' nationwide Natural Resources Research Program can be rapidly and widely disseminated to Headquarters, and Division, District, and project offices as well as to other Federal agencies concerned with outdoor recreation. Local reproduction is authorized to satisfy additional requirements. Contributions of notes, news, reviews, or any other types of information are solicited from all sources and will be considered for publication so long as they are relevant to the theme of the Natural Resources Research Program, i.e., to improve the effectiveness and efficiency of the Corps in managing the natural resources while providing recreation opportunities at its water resources development projects. This bulletin will be issued on an irregular basis as dictated by the quantity and importance of information to be disseminated. The contents of this bulletin are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products. Communications are welcomed and should be addressed to the Environmental Laboratory, ATTN: J. L. Decell, U.S. Army Engineer Waterways Experiment Station (CEWES-EP-L), 3909 Halls Ferry Road, Vicksburg, MS 39180-6199, or call AC (601) 634-3494.

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# HQUSACE Natural Resources Management Perspective

## “Making It Work”

Over the past few months, I've had the opportunity to meet with several groups of Natural Resources Management (NRM) people in an open forum atmosphere. The predominant issues in these sessions revolved around two Corps-wide activities:

- The changes brought about by the Standardized Organizational Structure decisions stemming from the National Operations and Maintenance Program Plan of Improvement.
- The impacts of the Administration's workforce reduction activities on our ability to accomplish Corps missions.

## Standardized Organizational Structure (SOS)

As I write this, the final decisions have been made and are being transmitted to the Major Subordinate Commands (MSC) for execution. The primary changes will be the bringing of all MSC and District Operations and Maintenance functions into compliance with the SOS. For the NRM function, the primary effect is the elimination of specific NRM offices at both MSC and District levels. A Technical Support unit will contain a mix of NRM and all other program staffs. At the project level, one position (the Operations Project Manager) will direct all activities (Navigation, Hydropower, Flood Control, NRM, etc.).

There was spirited debate on the merits of this move within the NRM community. I know my phone stayed busy! The major concern was the perceived loss of the NRM “stovepipe” and the positions (or grades) that went with it. These concerns were incorporated into the decision process, which concluded that the SOS would result in a more efficient organization in light of the trends for fewer and fewer people. At the project, one person will be in charge and be empowered to accomplish all project mission goals in an integrated fashion. From a corporate viewpoint, we will have a more effective organization.

So...the decisions have been made, and our job is to make them work. There is *nothing* in the SOS which directs reductions in force or reductions in grades specifically at the NRM community. I have no doubt that the NRM community will thrive in this new environment. You've seen guidance emanating from the Assistant Secretary of the Army (Civil Works) directing many jobs commonly not open to NRM people to be advertised in a manner that permits NRM people to qualify. It is our responsibility, as professionals, to identify our career goals, prepare ourselves through experience and training, and seek out jobs at whatever level we personally aspire to reach. The opportunities are there. The ball is in our court!

You want specifics? Well, the NRM Career Development Committee met the last week of October. As part of their efforts, they polished off the NRM Career Guide, which goes into considerable detail on career ladders for all elements of the NRM community. The Guide will be distributed to all MSCs, Districts, and Projects over the next 2 or 3 months. As we considered the impact of the SOS on that document, we agreed that some segments of the career ladder had been significantly changed. We identified two possible courses of action: 1) redo the NRM Career Guide to reflect the new world created by the SOS or 2) create a multi-program career guide that would recognize the integrated nature of the Operations function.

On 3 November, I delivered—to my boss, John Elmore, Chief, Operations, Construction & Readiness Division—a recommendation by the committee that we create the latter, a multi-program career guide. He enthusiastically supported the concept and initiated steps to create an Operations career ladder and identify training and experience requirements that will allow *all* Operations people to qualify and compete for the jobs throughout the Corps Operations organization. Mr. Elmore's initial target is for the effort to produce a finished product by the end of 1995. The NRM Career Guide will no doubt serve as a prototype for this effort. You can be proud of your representatives on this committee!

## Workforce Reductions

On this topic, I can't say much except to observe that these reductions in workforce have been allocated to all Federal agencies on an equitable basis. My friends in all the other Federal land management agencies are experiencing the same scale of reductions. *And*, our friends in the private sector have been making headlines with their massive layoffs for several years. So, I see these reductions as reflecting the general theme of "large organization management." Impacts on the Corps are certainly no greater than those on our peer land management agencies. Within the Corps, it's up to us to do the best job possible to identify and justify the Natural Resources Management workforce requirements as the Full Time Equivalencies are allocated.

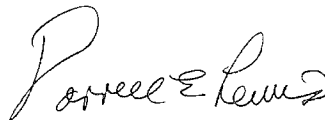
## Summary

We continue to be buffeted by change. The rate of change makes Tofler's book *Futureshock* seem prophetic. To survive in an environment of change, we have to be aware of the major trends, understand the philosophic basis for trends, and maintain personal flexibility. Most important of all, when change impacts you, embrace it and *make it work!*

## Late-Breaking Good News!

This news just came in. Thought you'd be interested—

As some of you know, a number of our Park Manager positions have been under an Office of Personnel Management-directed consistency review. This review involved using the new General Schedule Evaluation Guide (you might have heard it called the "Guide for White Collar Supervisors") to evaluate and determine the proper classification of these positions. There was some concern that the review would result in down-grades, especially with the GS-13 positions. However, I'm pleased to announce that the consistency review has concluded very positively. On 1 November 1994, our Human Resources office sent a letter to the OPM upholding the grades for every position reviewed. I expect OPM to concur with this determination. It's encouraging to see our Park Manager positions rate out so successfully under the new evaluation guide.



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