resources. I will not expand on this facet of South Carolina's program because I am certain that Dr. Timmerman, who follows me this morning on the program, will have much more to say about this.

As I review the program for this Conference, I recognize that many important subjects will be discussed. I am also pleased to see that part of the theme of the Conference concerns itself with the very change I have discussed with you. We must know our product better, know how to utilize it and at the same time educate the user as to its value and recognize the changing needs and attitudes of the user. I am certain that each individual attending this Conference will leave with new ideas, new enthusiasm and now dedication to the important job which lies ahead for all of us.

Thank you.

REMARKS OF NATHANIEL P. REED Assistant Secretary for Fish and Wildlife and Parks at the 25th Annual Conference of the Southeastern Association of Game and Fish Commissioners Charleston, South Carolina, October 18, 1971

I appreciate the opportunity to meet with the Southeastern Association at this conference marking a quarter of a century of effective environmental efforts. Little did that small group who met 25 years ago foresee that this Association would grow into the strong viable organization it is today—respected as the vanguard association of its kind. Congratulations on your silver anniversary!

You fish and game people are the front line troops in the conservation and environmental struggle. I can honestly say that in surveying the entire conservation picture, I don't know of any group that has fought for more causes, taken more abuse, or worked any harder than you have and you can well be proud of your record. The one thing you cannot do, however, is to rest on it. You must continue to carry the burden because, frankly, many of the agencies that should be doing the job are not.

More than any other part of the country, the States of the southeast are known for the high degree of cooperation that the fish and game agencies enjoy and benefit from—while leading the front line charge of the environmental movement.

I can think of no better example than you, the Southeast State Directors, who testified in Washington on stream channelization and who continue your efforts in your home States. I especially want to thank Earl Frye, Charles Kelly, Carl Noren, and others for their tell-it-like-it-is testimony.

While out at the International meeting in Utah, I was asked whether I felt like a Fed. My reply there was, No, I am past the stage of States rights or Federal jurisdictions—I am for standing tall, proud of our joint accomplishments, and looking forward to the mutual efforts with you, my concerned friends and allies, to developing a sane, rational environmental ethic. I don't come here as a paternalistic bureaucrat—I come as a friend, an adviser, a willing colleague who wants to work with you in grappling with our challenges of the day.

Environmentally, I consider myself an activist. I learned long ago to speak up early, and loud.

Too many times in the past, critical battles that otherwise could have been won have been lost through lack of aggressive and forthright action. This was particularly true in my home State of Florida. For years there were too few of us raising our voices to protest the short-sighted, ill-conceived exploitation of a State blessed with incredibly beautiful natural resources. And now, with most of those resources under relentless pressures of growth and development, there is a real question whether or not the State can turn itself around and meet the challenge of providing a quality natural environment for generations to come.

My home State is but a microcosm of what is taking place throughout the southeast. We all must recognize the trends and raise our collective voices now while there is still time to get a grip on these ever-growing resource problems.

When Jim Webb asked me to speak here today, I first indicated a desire to present an overview of destructive forces impacting on fish and wildlife habitat. However, after further reflection, I felt you would be much more interested in getting updated on the changes underway within the Bureau of Sport Fisheries and Wildlife and a review of where I think we must go from here.

As a prelude to that discussion, I want to make one thing clear beyond doubt. I came to Washington to do a job—to revitalize the Bureau of Sport Fisheries and Wildlife, and I fully intend to succeed in that job.

You are all by now aware of the tremendous changes in Bureau management I have made these past months. In the few short weeks following the International in Utah, this group has jelled and become a *team* of dedicated, determined administrators. They've weathered their first real baptism of fire—budgetary planning for fiscal year 1973. Though slow to start, they quickly rose to an impossible task of whipping a reformed budget into shape within four short weeks—a process normally consuming 6 to 8 months. This achievement parallels in many respects "Phase I" of the President's efforts to restructure the economy. "Phase I" for us was essentially a holding action to buy time while we redirected our energies and our priorities. The Bureau is now entering the tougher half—"Phase II"—an exhaustive probe into the very essence of our mission. Spencer and his staff, working closely with me, are now undertaking a massive, across-the-board review of the Bureau's objectives and priorities. Nothing is escaping scrutiny. Never before in the history of the Bureau has there been this kind of soul-searching reexamination.

It's exciting ... it's challenging ... and it's rewarding. Exciting to watch a charged-up team wade in and begin a stem-to-stern program review; challenging to hear them probing—asking "why" and "how" and "what does it accomplish"; rewarding to share their triumphant grins of pride and accomplishment after being told last week by the Office of Management and Budget that this year's budget briefing was the finest they could remember in the Bureau's history.

We're moving-and we're moving fast. Make no mistake about it.

If I sound like I'm blowing the Bureau's horn, it's because I am. I'm proud of this organization, proud of the teamwork, proud of its tremendous esprit de corps and proud of the new accomplishments it's chalking up.

We still have a difficult road ahead—a demanding road that will challenge us as never before. But I think we're now ready to take any and all hurdles as they come.

all hurdles as they come. A reordering of priorities by the Bureau holds the center ring here today. What will our research program consist of? How should we expand the endangered species program? What should the mission of our cooperative units more properly be? What can we accomplish as objectives on 30 million acres of refuge lands? How can we get ahead of the game in river basins studies? What should our Federal Aid program center about? Do fish hatcheries still have a role in our new program? Questions . . . hundreds and hundreds of questions. And slowly emerging are the answers, answers which will begin to affect us all as they are programmed and implemented in the months to come.

But what else is happening while this basic restructuring is underway?

Fish and Wildlife Coordination Act

My staff and I have completed our review of the proposed revision of the Act. It looks good. We are currently assessing the political climate for surfacing the bill—examining also alternative methods of accomplishing the same objectives without laying the existing Act on the table for open-heart surgery. Timing in politics, as you all well know, is the key to success. The last thing in the world we want to do is surface the Act and have it *weakened* instead of *strengthened* by our sister agencies. For that reason, I intend to move with careful deliberation in pressing for the amendments to the Act.

Estuaries

Our efforts to protect these nursery grounds from piecemeal destruction continue. The Bureau is redoubling its efforts in this critical program area. Our Southeast Regional Office, under the capable direction of Ed Carlson, has just adopted a tough new set of guidelines for reviewing Corps dredge-and-fill applications. These new guidelines have real teeth in them and will provide a reference point for all who seek to work in the navigable waters of the United States.

The Bureau is now in the process of refining these guidelines and will shortly issue them as uniform guidelines for all of the Bureau's Regions across the Nation. These guidelines state clearly and unequivocally that for projects that destroy valuable wetland areas, it must be clearly demonstrated by the applicant that no alternative site is available for the facility. They state that the traditional practices of using public waters as construction sites for businesses, residences, road beds, and as spoil-and-dump sites are no longer acceptable. We make it clear that only those structures for which an urgent public need can be shown will be recommended for approval by the Bureau. The applicant will have to demonstrate to our satisfaction that no adverse environmental effects will result from proposed structures which are not necessarily waterrelated or water-dependent, or of urgent public need in order to obtain recommendation for approval.

One of the more significant sections of the guidelines states that excavation of materials from submerged or intertidal wetlands for fill purposes will be recommended for denial. The guidelines establish specific criteria for consideration of boat docks, marinas, bulkhead lines, bridge construction, navigation channels, access canals and similar practices impacting on the natural environment.

We need the assistance of the Southeastern and the State game and fish agencies in making these guidelines effective. Your concurrence with our reports to the Corps, or even a stronger stand, will greatly help, and I urge each of you to review our guidelines and consider adopting them for your respective agencies as well.

And before leaving this subject, let me again reiterate that renewed emphasis must be placed on the *piecemeal* destruction of our estuarine environment-the real destroyers are the little projects-a bulkhead here or there today, another one tomorrow. Eventually, there will be no tomorrow. Chesapeake Bay is a prime example. In the first 8 months of this year, the Corps' Baltimore District received 60 requests for bulkhead permits below the line of mean high water. These were mostly for modest but permanent structures averaging only 200 feet in length. In the aggregate, however, they involved a total of 2.6 miles of bulkhead which would contain 4.6 acres of fill! Simple mathematics tells us that we cannot afford to continue this rate of attrition much longer. We must forcefully and factually draw the line and make our stand. It is essential that we back off from the morass of individual permits and take a long, hard look at the overview of what is happening in these areas. Perhaps a solution to the problem is to ask for environmental impact statements from the Corps in areas sustaining critical dredgeand-fill pressures. This, at least, would force recognition by everyone of the tremendous havoc being wrought.

Federal Department of Natural Resources

As you know, there is at present a substantial fractioning of conservation effort in the Federal Government that has resulted in problems of coordination and waste of limited manpower resources. I firmly believe that gathering these fragmented efforts under a new Federal Department of Natural Resources will drastically improve the consideration given the environment in the planning of Federal projects. With Army, Agriculture, Commerce, and Interior working within a department having a wide concern and responsibility for the environment, we can infuse our concern for maintaining a quality environment into the planning and construction of those projects. We need your strong support of this measure to make it a reality.

Sport Hunting Backlash

All of you are aware of the various suits filed with the courts to restrict or prohibit the killing of wild animals. The future of recreational sport hunting is being attacked by people who are violently opposed to this practice. While we appreciate the concerns of these segments of our society, we do feel that where wildlife populations can be maintained in abundance through scientific wildlife management and habitat protection, there is no reason why properly regulated recreational hunting should not be allowed. The decision to hunt or not to hunt should be a matter of personal choice and, under our form of government, these personal values should not be imposed upon others either way.

The social precedent of the Tule Elk hunt in California and the American Bison hunt in Arizona makes it evident that a massive reaction against hunting in general can be generated by those who, through publicity and legal assaults, have focused and will focus public attention on these and similar hunts. The highly subjective concept of "sportsmanship" is certainly hurt as a result and, in the long run, so is the future of all recreational hunting.

"We're kidding ourselves if we fail to recognize the growing antihunting sentiment. We must jointly face this issue and determine a course of action that will better educate the American public to the role of the consumptive use of our wildlife resources." I welcome your thoughts on how to best tackle this growing problem.

Non-Game Wildlife

Again, as at the International, I return to the subject of non-game wildlife because I feel so strongly that we must all increase our efforts in this critical program area. The results of the 1970 national survey indicate that the time spent by the public in bird watching, on nature walks, and in wildlife photography far exceeds the time spent in hunting and fishing. In fact, the survey shows twice as much time spent bird watching last year as there was hunting.

We cannot pass off lightly the growing interests of the nature enthusiasts. Their wishes *must* be considered in fish and game programs, just as the interests of the fisherman and hunter have been. To a large extent, these interests are not mutually exclusive. The same habitat supporting game animals also provides for the raptors, song birds, and shore birds attracting these outdoor enthusiasts.

"Those of us within the profession who must allocate meager funds to provide well-rounded programs for all our citizens recognize that the hunters and fishermen are still carrying the bulk of the financial burden alone." This *must* be changed, and it is incumbent upon both the Department and the State agencies to seek a new approach to this vexing problem.

We in Interior have initiated two efforts in this regard. First, as you may recall, amendments were made last year regarding Federal Aid in the Fish and Wildlife Restoration Acts. The most significant change was the option, for those States interested in it, for development of a long-range, Statewide fish and wildlife plan. When accepted by the Secretary of the Interior, the plan would provide the basis for funding on a program level rather than on an individual project basis, as is now the case. Non-consumptive wildlife programs can be cranked into the plan and funded through this medium.

Secondly, the Bureau has completed the drafting of a non-game wildlife bill designed to provide up to \$10 million in Federal Aid funds for the preservation and enhancement of non-game wildlife and their environments. This legislation would do for the nature enthusiasts the same thing the Pittman-Robertson and Dingell-Johnson Acts have done for the hunters. We are presently circulating the bill for interagency review. I am confident that with your strong support this measure can clear the Congress and provide the funds needed to operate this program.

You at the State level have several additional options available to you. State legislative bodies should be approached to fund your operations out of the general revenue fund instead of earmarked license fees. I find many of the legislators across the Nation becoming more acutely aware of your revenue problems and recognizing the need for a shift in emphasis.

Another course of action is that similar to the approach proposed by Missouri. Carl Noren and his people have proposed a bold new step to help support their revitalized program—a program that would include non-game species, natural areas, special ecological communities, and refuges for rare or endangered species. Missouri proposes to fund this program with a tax on soft drinks. If they are successful in obtaining sufficient citizen support for their initial petition, the proposal will be up for a referendum vote on the 1972 ballot. This is unquestionably the type of program that each of you should be initiating in your respective States. I wish Carl Noren success in this effort and offer my full assistance if we can be of any help with it.

Stream Channelization

We've not heard the last of the stream channelization issue. The Reuss hearings forcefully brought the problems of this devastating practice to the attention of the public and the Congress. However, it is apparent that the development agencies still have the upper hand as evidenced by the floor vote *against* the Reuss Amendment.

I think it safe to say that no section of the country has been more severely affected by stream channelization than the southeast. We recognize the special efforts made by your organization to bring this devastating practice under control. North Carolina, Georgia, Louisiana, and Alabama have made especially commendable efforts. Our good friend, Len Foote of the Wildlife Management Institute, and other conservation organizations such as the Sport Fishing Institute, have also been in the forefront.

One of our real failures thus far, however, is that we haven't really succeeded in enlisting the solid support of our strongest ally—the public. People power translates to voter power, which in turn translates to responsive public officials. We've got to carry our message to the public in terms easy to understand. The July 1970 issue of the Georgia Game and Fish Magazine, devoted entirely to channelization, is the kind of counter-offensive we must mount. I urge you to devote further efforts to this kind of grassroots approach—to earmark a larger portion of your I & E budget to preparing TV film shorts on channelization and the consequent losses to fish and wildlife. Select each month a single environmental problem and center your educational effort around that item. Do follow-up reports to the public 6 months later to fan their interest and continue the campaign. Take the initiative and carry the fight to the development agencies through our strongest medium aroused, informed citizens!

Before leaving this subject, let me point out that the most effective ammunition in the channelization battle is our growing arsenal of facts. We cannot rely on outdated information. We must continue to build a substantial factual base using the most modern techniques and methods. This may require a reordering of priorities on your part. A major shift in our efforts from enforcement of violations against fish and game to detection of violations against the environment is long overdue. These violations can only be documented by increasing the size and effectiveness of our monitoring capability—by augmenting biological and River Basins staffs. Stronger State efforts reinforcing those by the Bureau of Sport Fisheries and Wildlife and the Environmental Protection Agency should yield a high payoff in terms of habitat protected and more stable and diverse fish and wildlife populations.

I recognize that State game and fish agencies have been monitoring the environment long before the "new ecology" became fashionable. Under the Federal Aid program alone, some \$1.6 million in both State and Federal matching monies will be spent on environmental monitoring in 35 States this year. These figures demonstrate our efforts in this area, but we *must* drastically accelerate them.

Youth-Our Leaders of Tomorrow

In looking around this room filled with life-scientists and professionals, I'm pleased to see so many young faces. For it is the youth who will shortly be taking over the reins and directing the environmental renaissance that must come if we as a civilization are to survive on this planet.

This summer, I traveled the length and breadth of this country, visiting many of our parks, refuges, field stations and college campuses. I found a new dimension to my responsibilities as I met and talked to the bands of young people roaming our land. Their quest is for rebirth, with a purpose. Never before has mankind produced a generation exactly like the one that today is waiting in the wings. They are not just a new generation . . they are a new breed.

They have an incredibly naive and wide-eyed way of asking the most profound questions. And they have an uncomfortably sophisticated and beady-eyed way of weighing your answers.

These components of the new generation are not the spiritual heirs of their parents. They do not recognize the many languages and colors they come in. They join few of the fights of their fathers, but *ours* is a battle they understand and applaud.

They are greedy, these youngsters who watch us, not for money or luxuries, but for life; and they are jealous of their allotment of it. They see an environment in disrepair . . . a value system in disarray, and they are judging us, their elders, as stewards of the earth they will inherit.

They possess, as no other generation has possessed, an innate reverence for life, for that environmental ethic that Aldo Leopold described so well in A Sand County Almanac. Our responsibility, yours and mine, is to relate to these youngsters . . . to bring them closer into our fold, for it is on their shoulders that our future rests.

In Conclusion

We as environmental professionals are challenged as never before ... we're at a point in history where we must choose our priorities with care. We must close ranks and pursue our common goals for the future of man. I hope that these few minutes together this morning underline my determination, my warm friendship for you, and my high hopes for the future.