

ADDRESS BY CHARLES D. KELLEY

*To the 21st Annual Meeting of the Southeastern Association
of Game and Fish Commissioners on September 25, 1967*

Last year my good friend, and your past president, George Shields, presented an excellent summary of the accomplishments of your Southeastern Association of Game and Fish Commissioners. The things he said were good and pleasant to the ears. I find myself in a contrary position in that I deem it necessary to discuss several items which are not particularly pleasant, but which are of vital importance to all of us and should be brought up for discussion in this conference. Please realize that the following remarks will be critical in many respects, but it is my sincere hope that the criticism will prove to be constructive.

A major problem existing in my state at this time concerns watershed projects. The original concept was to design, through federal assistance, watershed projects in such a manner as to improve the renewable natural resources within the watersheds. From the very beginning, public monies have often been used to develop agricultural resources which directly benefit the individual landowner at the sacrifice of such public resources as fish and wildlife: the loss of which is felt by many people. From the trout streams in North Carolina to the shores of the gulf coast, channelization has played havoc with our valuable fish and wildlife habitat.

Fish and wildlife losses, as a result of channelization of one watershed stream when examined alone, may appear to be insignificant. But, with at least three federal agencies converting every feeder stream along that part of the Tennessee River in Alabama into man-made channels or ditches under the guise of flood control, we can begin to see the total impact. Not only will stream channelization destroy the fishery resource on the watershed stream itself, but channelization destroys the spawning habitat for such species as wall-eyed pike, sauger, white lake bass, and the several species of suckers. Without adequate stream spawning habitat, these species will ultimately disappear from or be greatly reduced in the TVA lakes.

Not only is channelization detrimental to the fishery resources, but it destroys feeding and occupational habitat for a number of game and furbearing animals and the wood duck. Another practice common in watershed projects is the removal of hardwood vegetation along the stream and the replacement of hardwood trees with a less desirable wildlife food producing tree, the pine.

Impoundments are seldom used on watersheds as a flood control measure in Alabama. Sufficient impoundment structures can hold back flood waters and make channelization unnecessary. Impoundments are more costly than man-made ditches, and for that reason, seldom considered in small watershed projects. If, however, fish and wildlife losses were given proper consideration as a factor in arriving at the cost benefit ratio of the watershed, I am sure that in many cases impoundments would replace channelization in order to arrive at a cost benefit ratio figure which would assure federal funds for the project.

Fish and wildlife organizations can no longer stand still and watch our natural stream areas turned into man-made ditches devoid of fish and wildlife. We must continue our efforts to gain greater appreciation of our fish and wildlife resources, or most surely we will suffer to an even greater extent in the future.

In the field of water pollution, there are millions of people who have been assured that at last our fishery resources are going to be protected from the detrimental effects of pollution by the all-enveloping umbrella of the Federal Water Pollution Control Administration. It was this agency that published a booklet which I am sure was designed to settle our fears about the growing menace of water pollution. This booklet entitled, "Guidelines for Establishing Water Quality Standards

for Interstate Waters," contains, among other things, the following statements and guidelines:

1. The standards are not a device to insure the lowest common denominator of water quality, but to enhance the quality and productivity of our water resources.
2. Water quality standards should be designed to enhance the quality of water. If it is impossible to provide for prompt improvement in water quality at the time initial standards are set, the standards should be designed to prevent any increases in pollution. *In no case will standards providing for less than existing water quality be acceptable.*
3. Standards of quality established should be such as to protect the public health or welfare, enhance the quality of water, and serve the purposes of the federal act. In establishing such standards, the state authority shall take into consideration their use, their value for public water supplies, propagation of fish and wildlife, recreational purposes, agricultural, industrial, and other legitimate uses.

The booklet even goes so far as to state that "no one has the right to pollute" and it contains a statement made by President Johnson when he signed into law the Water Quality Act of 1965. For your edification I will repeat President Johnson's statement. "No one has a right to use America's rivers and America's waterways that belong to all the people as a sewer. The banks of a river may belong to one man, or one industry, but the waters which flow between these banks should belong to all the people." I know that when I first had an opportunity to review the Guidelines for Establishing Water Quality Standards, as set forth by the Federal Water Pollution Control Administration, I was convinced that this agency, with the backing of the President of the United States, would be the answer to most of our problems in the field of water pollution. However, the actions of the Federal Water Pollution Control Administration in recent months have proved that the protective umbrella offered by this agency is riddled with holes that continue to allow us to be drowned in a flood of pollution. Even President Johnson has demonstrated that he apparently does not intend to follow through on his promise to the people of this country. I realize that I have made some serious charges. However, I am talking about facts, and just to keep the record straight, let's look at some additional facts.

The Federal Water Pollution Control Administration is responsible for approving the water quality standards submitted by each state for its interstate waters. In determining the desirability of the standards, the Pollution Control Administration has available an abundant supply of reliable information regarding the water quality needed to protect, support, and maintain desirable fish populations. In the publication entitled, "Symposium on Water Quality Criteria to Protect Aquatic Life," published by the American Fisheries Society in 1967, there appears a wealth of information regarding some of the standards required to protect fish populations.

In regard to dissolved oxygen, it stated that for a healthy warm-water fish population, it would appear from review of the literature that dissolved oxygen levels should not be below five parts per million. In addition, the National Technical Advisory Committee to the Pollution Control Administration recommended that dissolved oxygen concentrations, essential for maintaining warmwater native populations of fish and other aquatic life, should be above five parts per million assuming normal seasonal and daily variations are above this concentration.

I wish to remind you that the National Technical Advisory Committee, referred to above, was established by the Secretary of the Interior for the primary purpose of recommending to the Federal Water Pollution Control Administration water quality criteria needed to protect fish and other aquatic life. Contrary to the recommendations resulting from a consensus of opinion by members of the American Fisheries Society, and contrary to the recommendations of the Advisory

Committee, the Pollution Control Administration chose to accept water quality standards which will allow the introduction of sewage and industrial waste to the extent that will cause the dissolved oxygen to be reduced to four parts per million in waters classified for fish and wildlife.

In the publication of the American Fisheries Society, it is stated that grave problems are posed by increasing amounts of heated effluents. It is asserted that frequent occurrences of 93° Fahrenheit maximum river temperatures would cause a reduction of the species number. It was further stated that, and I quote, "It is yet to be demonstrated that all life history stages of important game species such as largemouth and smallmouth bass can tolerate such temperature levels." It was concluded in the American Fisheries Society's publication that for optimum feeding and growth of any warmwater game species—water temperatures should not exceed 85° Fahrenheit even for brief periods of time.

In its interim report, the Advisory Committee on Water Quality Criteria recommended to the Secretary of Interior that in order to protect aquatic life in areas of moderate elevation in the southern portion of the country, peak water temperatures should not exceed 86 to 90° Fahrenheit depending on local stream characteristics and biota. Representative fishes in these waters were listed as largemouth bass, white crappie, white bass, catfish, drum, and buffalo. The Advisory Committee further stated that in moderate to large lowland streams and lakes in the southern portion of the country, peak temperatures should not exceed 90 to 96° Fahrenheit, and they should not remain in this critical area for more than six hours in any 24-hour period. To me, this implies that any water temperatures above 90° Fahrenheit, even for brief periods of time, are critical and should be avoided if our fisheries resources are to be protected.

In approving water quality standards for several states, the Pollution Control Administration chose to allow the addition of domestic and industrial wastes in sufficient quantities to cause the temperature of waters classified as fish and wildlife waters to be raised as high as 90° Fahrenheit and further allowed the increasing of water temperatures to 93° Fahrenheit for as much as eight hours during any 24-hour period. This action was in conflict of recommendations from the American Fisheries Society and the National Technical Advisory Committee.

pH values are certainly one of the more important environmental factors which affect the ability of a body of water to support a desirable population of fish. In his summary of the "Symposium on Water Quality Criteria to Protect Aquatic Life" published by the American Fisheries Society, Mr. Richard Stroud states that it is well established that for good game fish production, it is essential to control pH values between 6.5 and 8.5 most of the time. This was verified by the Advisory Committee when it published that, and I quote, "In most productive fresh natural waters in the pH lies in the range between 6.5 and 8.5." Of course, these statements by Mr. Richard Stroud and the Advisory Committee were based upon sound research conducted by many fisheries scientists.

In spite of this knowledge, which was certainly available to it, the Federal Water Pollution Control Administration approved standards which would allow the introduction of sewage and industrial wastes or other wastes, into waters classified for fish and wildlife, to such an extent as to cause the pH value to be depressed to 6.0 which is somewhat lower than the range recommended by men and organizations who should know that most desirable environmental requirements for good fish populations.

I am convinced that the Federal Water Pollution Control Administration has approved water quality criteria far below that which is deemed necessary for the maintenance of desirable populations of fish. In addition, it has approved water quality criteria which not only fail to enhance many major bodies of water, but also locks in present conditions of pollution or even worse, builds in room for additional pollution in the future. The Federal Water Pollution Control Administration has freely used the word "enhancement" to describe the purposes of setting

water quality standards and criteria. In other words, they assured us that approval of standards which failed to enhance water quality would not be forthcoming. Its actions have made this assurance ridiculous.

Ask yourself if enhancement of water quality is accomplished when approved standards allow the introduction of sewage and industrial wastes which lower dissolved oxygen values to four parts per million in waters where dissolved oxygen content of less than five to six parts per million has never been found.

Ask yourself if enhancement of water quality is accomplished when **the** introduction of sewage and industrial wastes is approved to an extent that it will raise the temperature of the waters above that which has ever been demonstrated to exist, and even to a point that is harmful to many fish.

Ask yourself if enhancement of water quality is accomplished when the introduction of sewage and industrial wastes is allowed to an extent that it will carry the pH values into ranges considered by experts to be harmful to fish populations.

Personally, if I know the meaning of the word enhancement, I do not believe that standards such as those approved by the Federal Water Pollution Control Administration will result in enhancement. Therefore, I believe it has failed to live up to its own guidelines and further that it has approved water quality criteria which tend to lock-in present conditions of pollution. This is in violation of the Federal Water Quality Act of 1965. Even worse, the approved standards make possible the additional pollution of our waters in the future. Are there to be no high quality bodies of water in this part of the country in the future?

The application of the classification commonly known as Fish and Wildlife to a body of water strongly implies that all of the environmental factors within that body of water will be maintained in such a manner as to make the water completely suitable and desirable for the maximum production of desirable fish. However, this is not the case when the criteria within that classification allow dissolved oxygen, temperature, and pH to vary beyond the limits known to be necessary for good fish production. In other words, the application of the Fish and Wildlife classification to a body of water serves to lull the public into a false sense of security which such application fails to protect our fisheries resources. This appears to be the intent of the Federal Water Pollution Control Administration; that is, to talk and write in one direction while acting in another.

However, in accordance with the guidelines of the Federal Water Pollution Control Administration, the abatement of pollution in our waters, and the maintenance of clean waters which we already have on hand, is both desirable and necessary. I fail to see that these objectives have been fulfilled by the actions of the Federal Water Pollution Control Administration. I do not intend to place all of the blame on this organization, however, for I know that any federal organization is subject to the whims, desires, and wishes of its bosses. Therefore, it follows that the failure of the Federal Water Pollution Administration to fully protect our waters is also the failure and responsibility of the present administration.

I am very apprehensive over the future of our Federal Aid activities in the Southeast. The P-R and D-J Programs have been the backbone of both Game and Fish Research and Development in all of our Southeastern States. Without these programs the Southeast could not have made the progress in Game and Fisheries Management that it has up to now.

These programs are now undergoing rapid changes through the issuance of new regulations by the Secretary of Interior. I fear that these changes will promote legislation to amend the Federal Aid Acts. Amendments to the Federal Aid Acts could open the door for other amendments which would make the Acts inoperative. There are present rumors of possible large disallowances in various Southeastern States that have been caused by the sudden change in auditing procedures. For

example, the new auditing procedure requires that the various states go back for two years on each federal aid employees' activity reports and make daily breakdowns of work performed. These are the same activity reports that were designed by the Federal Aid Regional Office and were reviewed and approved by the regional auditors for many years.

The Federal Aid Manual presently in use does not contain or explain the numerous changes in federal aid policies. In fact, I understand that these policy changes are being made so fast and furious at the present time that it is impossible for the Washington Office to get out an up-to-date Federal Aid Manual showing the states what is expected. At the present time we do not even know whether some of our southern cooperative studies will qualify at some later date for federal aid participation.

I am deeply concerned with the increasing amount of time that State Personnel spend completing forms and questionnaires required by the federal agencies. Not only are these requirements taking considerable time to be completed but they are submitted to us with a deadline, allowing only a few days to return them. The Bureau, during the past year, has placed a great emphasis on long-range planning. I believe that if long-range planning were also practiced by the Bureau that many of these forms would not be necessary, or in any event, would be submitted giving a reasonable length of time for their completion. This would eliminate the constant interference with the planned activities that the states attempt to carry out.

Only a few days ago we received from the Regional Office a letter requesting the submission of another planning-programming and budgeting request for each of our activities which is commonly called PPB. This is a multi-year program and was submitted last year for the period of 1966-1973. I realize a long-range program needs to be updated periodically, but I am unable to see why an annual revision is necessary. I am sure that the state P-R and D-J Coordinators, who are in attendance here today, will agree with me that the number of forms and questionnaires that are requested by the Bureau is getting well beyond reason.

Even though I have been critical of changes in federal aid policies, I do want to express my feelings on another joint effort between the Southeastern States and the Bureau of Sport Fisheries and Wildlife. I wish to commend the Bureau for its cooperation with the Southeastern States on the newly activated dove research program. This million dollar project is designed to test the effect of dove hunting regulations. This study could well be a useful tool in wildlife management by testing the validity of regulations on other wildlife species on national, regional, and statewide levels.

Since the dove research project is being carried out within the Eastern Management Unit, which comprises twenty-seven states, it is highly imperative that a program of this magnitude have the full support of the states, the various sections of the Bureau, and other cooperating agencies. In order to insure success, each cooperating agency must fulfill its portion of the duties allocated to it and they must be completed on schedule. This, I trust, will be done in the future.

For a number of years, considerable concern has been expressed in regard to the welfare of most of the lesser known migratory game birds, which in the Southeastern States includes the woodcock, snipe, and various species of rails. Very little is known about the national population of these birds. For years hunting regulations have been formulated, not by biological facts, but by an educated guess.

Through the combined efforts of a few individuals, Congress appropriated \$250,000 to begin studies of migratory game birds, excluding waterfowl, during the year 1968. Although this is not a great amount of money to be utilized for studies of these birds, it is a beginning and appropriations will probably be increased in future years. Some of this money will be used in the Southeast for studies on mourning doves, woodcock, snipe and rails.

From the preceding comments, it would appear that little progress other than on dove is being made on cooperative projects between the

states and the Department of the Interior. Certainly this is not true, for many states, including Alabama, have enjoyed excellent working relationships on many worthwhile programs, particularly within the Bureau of Sport Fisheries and Wildlife. The Branch of River Basin Studies has provided invaluable assistance to my own State of Alabama and we look forward to the continuation of this harmonious relationship. With the exception of the above comments relative to the Federal Aid programs, we have had a most pleasing experience. We have repeatedly requested assistance and received able support on group and individual programs in Alabama.

Although we have not felt that adequate attention has been given to the beaver problem by the Wildlife Services Branch, we work most closely with those personnel assigned to the area involving Alabama. The spirit of cooperation could not be better, and only money and manpower can lead toward dissolving the problems which we now experience.

The anadromous fish program is working real well, and we look forward to continued progress in this cooperative endeavor.

To come here today and criticize certain aspects of the Bureau's program is not easy, but I hope that Director Gottschalk and other employees within the Bureau will accept my comments as constructive thoughts expressed by at least one state that recognizes the value of the Bureau's assistance and is merely trying to improve the situation whereby this assistance will be even more valuable in the future.

I have enjoyed a very productive relationship with Director Gottschalk, and, therefore, maintain my opinion that he is an excellent choice for the job he now holds. His forthright actions and frank statements have certainly made it easy to reach decisions among Bureau personnel.