

WATER USE LEGISLATION IN RELATION TO WILDLIFE RESOURCES

By WM. M. APPLE

Board of Directors, National Wildlife Federation
Little Rock, Arkansas

I am more than pleased to have the privilege of appearing before such a distinguished body as the Southeastern Game and Fish Commissioners meeting here in Little Rock today.

The subject of Water Use Legislation has been assigned to me and it is only natural that since my work has been confined principally to the State of Arkansas, that my observations must follow along the lines as developed locally. Certainly our problems in Arkansas are not too different from the states represented here today, all of which are in the Southeastern section of the United States.

Arkansas' problems are very similar to yours in that its continued progress depends on balancing the productive use of its land and water and the needs, numbers and ability of the people in an age of growing industrialization, modernized agriculture, and the proper use of water for recreational purposes.

First, in order to better inform you, I would like to apprise you of what has occurred here in the hope that our experiences may be of benefit elsewhere.

Arkansas, in its Pilot Bill, introduced in the 1955 Session of our Legislature, attempted to set out a method whereby the men, on what was termed, the Arkansas Water Control Commission, would be chosen.

The bill stated, "The Governor shall choose members of the Commission from a list of persons recommended by a Nominating Committee hereby created, consisting of the Dean of the College of Agriculture and Home Economics of the University of Arkansas, as chairman. The State Conservationist of the United States Soil Conservation Service, the State Director of the Farmers Home Administration, the Chairman of the Agricultural Stabilization Committee, the President of the Arkansas Farm Bureau Federation, the President of the Arkansas Farmers' Union, the Master of the National Grange, the President of the Arkansas Association of Soil Conservation District Supervisors, the President of the Arkansas Economic Council State Chamber of Commerce, the President of the Arkansas Municipal League, the Chairman of the Arkansas Game and Fish Commission, and the President of the Arkansas Wildlife Federation."

Following out the same system used in the selection of the Commissioners for our Game and Fish Department, the State would have seven members, each with a term expiring on February 1st of each year. Theoretically, this places the appointments on the calendar where no single governor can appoint all of the members.

Personally, I am of the opinion that this can be improved on materially and will be in the construction of the new Commission. It would seem from what I have read above that the Farmers' Group is predominantly strong in being in the position of denominating the nominating committee. Arkansas is peculiar in having a number of farm organizations and, on matters such as this, there is deep jealousy between each.

Recognizing that the situation may be reaching a critical state and that we must intensify and broaden our efforts toward a more orderly program of water development, conservation, and wise use of it, our Legislature created an eleven man Commission to study the problem.

The 1955 bill, as introduced, was lacking in many points, there was considerable opposition, and, as a result, our Legislature tabled it with the authority for our Governor to appoint a special Water Study Commission. I am happy to advise you that it was my privilege to be among the Governor's appointees and later on the Executive Committee of three, starting this very important work.

It was only natural that our first meetings should be disorganized but from each came many constructive suggestions, the result of which caused the Committee to broaden its activities. We took in some thirty-six representative groups, state-wide, in an advisory capacity. The several groups included farm organizations, representatives of municipalities, and our Industrial Development Commission, the Forestry Departments, our Game and Fish Department, and all Government farm agencies represented in Arkansas. The group included officials of the University of Arkansas and numbers of the University faculty. Farmers, bankers, lawyers and civil engineers took part. All were invited to participate. The United States Engineers, while they were unable to officially take part, have made available to us, all necessary data for our use. These and other groups joined with us in this all important water study.

Our first agreement was that the Committee would concern itself specifically with the study of water problems in the state and the four major water use fields; agriculture, industry, municipal and recreation. The field was divided and each of the appointed groups assigned in the field where they were best informed. Each was then required to make a written report of findings or recommendations to the Guiding Committee. We were charged with digesting and processing the information. The information filed by this group, including data, on our surface water problems, our flood problems, our storage problems, our pollution problem, our stream load carrying capacities, our agricultural needs and problems, our municipal requirements, and predicted increased supply needs, for our ever growing industrialization. *The demanding and growing field of recreation was recognized as one of the most important problems and must receive equal rights.*

We are still in the process of accumulating information, preparing brochures for distribution, and drafting the actual bill to be presented to our Legislature. In general, we are informing the public of the progress but we have much to do before our 1957 Legislature convenes in January.

Recognizing that no piece of legislation can pass without the public being fully informed, the state has been divided and numerous meetings will be held by members of our committee and sub-committees. Arkansas's problem is not unlike the balance of the Southeastern states where it can be said "we have too much water when we do not want it and too little water when we do want it." Actually, Arkansas has an abundant water supply if we are to refer to it in terms of average annual rainfall, stream flow, and underground water resources. But our rainfall and stream flows are erratic and our supply is usually at its lowest ebb during the growing season when most needed. Arkansas has an annual rainfall of approximately fifty inches, the majority of which falls during the first six months of the year. Coming in the early part of the year when evaporation and percolation are low. Most of our surface water is lost in the early spring months' run-off. This simply adds up to water when we do not need it and a shortage when we do. This lesson was brought home forcefully to us during the drought years of 1953 and 1954. Our industries were handicapped for lack of water. A number of our towns had insufficient supplies. Farmers lost hundreds of thousands of dollars and fish and other wildlife suffered.

During these years especially, many people began to wonder what the situation would be in the future years in light of current water use trends. If our cities kept on growing and our industrial, agricultural and recreational developments continued at anything like our present rate, what will be the situation in twenty-five to fifty years from now?

And it was during those drought years, too, that people began seriously to question the adequacy of our water laws in respect to more modern needs. If our water problems are mainly problems of seasonal excesses, seasonal shortages, and *quality*, rather than total supply, then the answers to our problems can, in large measure, be found in development, wise use, conservation, and protection of our water resources to level out peaks and valleys of supply and protect and improve water quality. With these conditions, people began asking, "do our present water laws facilitate development, wise use, conservation, and protection for investments in putting water to beneficial use in our economy and our way of life?"

There were all the problems of the Committee and we were especially cognizant of the fact that Arkansas had made many mistakes in its water handling, some dating back 40 and 50 years. We are now reaping the benefits of those mistakes and errors. *It was recognized that we, like many states, had overdrained.* We had overdrained the supply of many of our natural recesses that were keeping our land moist during the arid season. We had dug many drainage ditches that were causing a fast run-off of our surface water, depriving it of the benefit of percolation and resulting replenishment of our underground supply. We had built huge dams at the heads of our streams and straightened the channels. This, of course, caused a faster run-off by retarding the upper flow and speeding that of the lower drainage system. All seemed to be necessary in our modern form of development and especially as applied to agriculture. It is an historical fact that many of our natural resources must, of necessity, suffer in the orderly development of our civilization and as we grow in population. Why we have done many of these things and how we have done them is always a debatable question, depending on which interest one represents. The farmer has a desire for a higher income through the cultivation of additional acres. Industry wants unlimited water supplies without restrictions or control of pollution. Municipalities want an abundant water supply, plus recreation, and in too many cases, unrestricted use of the water for sewerage disposal purposes.

The groups more specifically interested in fish and wildlife want our lakes and streams undisturbed and, as much as possible, left in their natural state and our waters retarded from fast run-off. This is the most pressing problem of this assembled group.

While dwelling on this subject, I cannot be too complimentary of you gentlemen of the Game Departments. I regard you as being true conservationists. Many of you advanced new and far-reaching theories and ideas that have been years ahead of the thinking of other groups. From my own observation and experience, I find these other groups now falling in line with many of the recommendations that you made years ago, especially where it relates to the conservation and wise use of water.

Possibly I am digressing some from the original intent of this talk, supposedly to be built around our water use legislation. If and when a law is drafted for presentation to our Legislature, it will be basically a water policy that is nothing more than a set of rules and regulations governing the use and disposition of the water. This use is of two general types, consumptive and non-consumptive. Under this first type, the water is used in such a manner that it does not remain or is not returned to the source of supply. Water used for irrigation, watering of stock, human consumption and certain industrial processes, such as steam generating, are examples of consumptive use. Examples of a non-consumptive kind/sort includes such uses as navigation, recreation, wildlife conservation, and certain industrial processes and water used for hydro-electric power.

Rules concerning the use of water involve such problems as determining who may use the available water and in what quantities, how the water may be used and in the kinds and amounts of waste that may be emptied into the water supply, surface and sub-surface.

It is the consensus that water, if used by industries and municipalities, may be in almost unlimited quantities, but must be returned to the streams or its origin in a quality free of pollution.

At present, Arkansas finds itself in somewhat of a dilemma as actually there are no laws on our books that permit the use of water for any purpose. This same statement may be true of other states represented by this group here. Arkansas is now operating under the Riparian Doctrine and the Prior Appropriation Doctrine. The Riparian Doctrine first appeared in the Napoleonic Code in France and was developed further in England. It was introduced in America by the early colonists and was later adopted by the 13 Eastern states of the United States. Numerous additions have been made to it and many deviations have been made from it, but the doctrine remains basically the same. Under this doctrine, the owner of the land which is either bounded or crossed

by a water course has certain exclusive rights and privileges in connection with the stream which are known as Riparian Rights. Every Riparian owner is entitled to have the water in the stream flow by or over his land in its natural course, quality and quantity subject to reasonable use of the water by other Riparian owners. The use of water for household and domestic purposes and for the watering of domestic animals is considered a "natural" use, and for such uses a Riparian owner may use all of the water he needs even though it may exhaust the supply. For purposes of irrigation and other artificial uses, the Riparian owner must consider the rights and needs of other Riparian owners and may use only so much of the water as would not affect their supply. It is unlawful under the Riparian Doctrine to change the flow of the stream or dam it in a manner that would materially reduce the flow below the dam or cause the land above the dam to flood. It is also unlawful to pollute the water to an extent that would lower the quality of the water for the downstream users.

Unfortunately, Arkansas is operating under the Riparian Doctrine as adopted from the English Common Law, and as such our Arkansas laws have never been codified. Consequently there is no administration of our water use and any aggrieved person must now take his case to court and have the facts determined by a jury.

The present trend now is toward the broad theory of water use directed toward development and beneficial use.

Since we in this assembly are concerning ourselves principally with fish and wildlife, its conservation and future development for recreational purposes, the problem of how to maintain and increase the water supply is our principal concern.

Of no lesser degree of importance is the need to keep our lakes and streams in an unpolluted condition where fish may propagate and survive. We fortunately are aided and abetted by a natural trend of events. The need for water is becoming so pressing that the question of pollution is not paramount, not because it does not actually exist but because of the demands that will be made. Our natural and orderly development of increased population and a larger number of industries, together with the demands of municipalities and water for recreational purposes will automatically necessitate the full control of pollution. As we progress down each stream, we find the pollution problem becoming more important, so much so that when we reach the lower reaches of that stream, we find the water in such a condition as to not be usable by any industrial plants or municipalities, and, in many cases, unfit for agricultural uses. It, therefore, follows that the demand for pure water in the lower basin will be loud and long. Such demands can result only in cleaning up the streams so that everyone may have his equal share of pure water and the full use thereof. Fortunately, these facts are being recognized. Arkansas, like many Southern states, at present is lagging far behind in industrial development and finds itself in the position of being able to control and keep pure its waters, without working a hardship on the users as is too often the case in more congested states, provided adequate legislation and enforcement go hand in hand with industrialization.

Municipalities under a recently passed national pollution control bill, will find themselves benefitted by reason of grants through which new disposal facilities may be constructed. National laws, together with state laws, if properly enforced, will bring about a bettered condition where water may be free of pollution.

We approach the all important subject where this group is most vitally interested and that is, how are we participating in the construction of these many bills being offered to our legislatures and what can we do about it. With the future demands for water being certain, we, as a body, have a very important part to play in the construction of any new bill presented and the policing of its condition; the guarding of our water so that fish and wildlife for recreational purposes will be properly protected now and for posterity.

The first thing, of course, is that we see that the quantity and quality of the water in a stream be so controlled that fish and wildlife and humans will not

find it wanting. It is all important that in the construction of any bill that we have statutory recognition of fish culture, wildlife and recreation, as a beneficial use of water and that as such it should assume equal importance with other water uses.

While designating the all important recreational use, qualification of that should be in the framework of the drafting so that there will be no misunderstanding that it includes protection to fish, wildlife, and the privilege of boating on the surface. While some states have failed to specifically set out this all-important item, many have, because of public demands, found it practical to include such as a "read-in" of its construction. Other states have not been so generous.

So that no misunderstanding or misapplication might ever occur, it is proper for us to spell out the meaning of recreation. Recreation should include other aspects, dependent on local conditions, but under all circumstances, it should specifically set out that the use of such water is for recreation, wildlife including fish culture, and such shall be considered as beneficial uses. Boating has become so popular and the demand for boating waters so great that specific mention in defining recreation should include boating. Boating and fishing seem to be synonymous as 85% of the boat owners are fishermen and the majority of the boats and motors purchased are for fishing purposes.

While I have covered many of the subjects relating to the problems of the drafting, passage, and application of a water use bill, you, of course, recognize that it was impossible within the limited time to cover the subject adequately. It is such a broad subject and assuming such great importance that many of us believe that in order to protect our waters for present and future use that its conservation is the most important problem facing us today.

The passage of a water use bill whereby future users will have some reasonable guarantee of supply seems to be of paramount importance. It is a question we here in Arkansas are trying to solve in a manner sufficiently satisfactory that our first water rights bill may be passed, knowing that it will be constructively amended in future years to better fit the growing problems.

Gentlemen, it has been a distinct pleasure and privilege for me to bring before you this all-important question.

SMALL WATERSHEDS

By VERNE E. DAVISON

Southeastern Biologist, Soil Conservation Service
Auburn, Alabama

Watershed Protection and Flood Prevention is the title of Public Law 566. It established a national policy in recognition "that erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and that it is the sense of Congress that the Federal Government should cooperate with states and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other public agencies for the purpose of preventing such damages and of furthering the conservation, development, utilization, and disposal of water and thereby of preserving and protecting the Nation's land and water resources." The Congress authorized the Secretary of Agriculture to carry out the provisions of Public Law 566. He in turn assigned responsibility of the administration of this act to the Administrator of the Soil Conservation Service.

The Soil Conservation Service administers three types of watershed projects for the Department of Agriculture. They are: (1) the flood prevention projects in the 11 watersheds authorized by the Flood Control Act of 1944; (2) the 60 Pilot Watershed projects under authority of Public Law 46; and (3) the Watershed Protection and Flood Prevention projects authorized by Public Law 566 in 1954 and amended by Public Law 1018 (1956).

We have helped to install works of improvement under the Flood Control Act since 1946 in three Southeastern states. the Little Tallahatchie and Yazoo