Better acquaint the authorities concerned and the public with the outdoor recreational opportunities, already realized or potential, in connection with Civil Works projects.

Bring about better understanding of the Corps of Engineers' statutory requirements with respect to the development of such opportunities.

Stimulate better cooperation between groups interested primarily in outdoor recreational development and those interested primarily in flood control, navigation, water supply and other basic project benefits.

And encourage the state and local authorities to take the most vigorous and effective action possible, beginning with the planning phase, to discharge their responsibilities for making optimum use of the opportunities presented.

NEEDED: A STATE WATERSHED PROGRAM

By Harold E. Wallace Florida Game and Fresh Water Fish Commission Tallahassee, Florida

What is a watershed program? The name itself imparts one meaning Simply this:

W ise
A mericans
T hink
E very
R iver
S hould
H ave
E valuated
D evelopment

And to carry it further:

P eople
R ealize
O ur
G od-given
R esources
A re
M ortal

I hesitate to use the word "mortal" as it has a number of meanings. But to me it means "that which is capable of being destroyed," or "that which can be given the kiss of death." And there have certainly been some fateful osculatory antics taking place with each setting of the sun.

Each passing day sees the spawning of a new plan to harness a river, develop a watershed, or exploit a natural resource. And occasionally an unwise or unpopular plan of action will find its way into the obituary column. But there always seems to be many more births than deaths. Actually there is nothing wrong with this; it is a sign of progress. But it is up to us, we who are being paid to protect, develop, maintain, and otherwise manage our natural resources, to watch the birth announcements, and make the acquaintance of the responsible family. Learn the plans that the proud parents have for their new offspring. And, as the child grows, watch his development. If the youngster shows promise, help him; if he turns into a menace to society, first attempt to lead him into the paths of righteousness; if that fails, strive to remove him from circulation.

I see a number of pallbearers here today who have done commendable jobs in burying those watershed projects which had no earthly niche. I likewise see scars of battle on these same people resulting from corpses which refused to lie down. Instead of headstones, these corpses-which-got-away have other

monuments in the form of ill-conceived drainage programs, silt-filled reservoirs, and polluted lakes, streams, and bays.

So where do we go from here? All is not evil. Let's avoid the negative approach, hang our grave shovels in the tool shed (but within reach), roll up our sleeves, and try to be good god-parents to these energetic embryos. Don't be passive, but be discerning. Cultivate that which is good, mulch that which is needed, and plow under that which is noxious. Use modern methods but be old-fashioned enough to believe in that old axiom: spare the rod and spoil the child. But use it with discretion. The child may grow up, you know, to be of frightening size—and retaliation is the spice of life. And the life you save may be your own.

This talk could be made short, sweet, and entirely innocuous, and could be tucked away and put to rest with the proper benediction. But there are pertinent matters to be discussed so let's get to it.

Today the matter of water conservation is being recognized to a greater and greater degree. More and more water laws are being thrown into legislative hoppers. And more and more people are becoming concerned with the problems of water wastage, and plain downright water stealing. Many of these acts are brazenly overt and are committed by private interests to the detriment of the public. And our various Game and Fish Commissions are right in the middle of this squabble and well they should be since their interests are directly involved.

But we are making progress. More and more interested groups are being organized. Some are concerned with various facets of the problem; others are concerned with the overall aspect. For example, just three weeks ago the Third National Watershed Congress was held in Lincoln, Nebraska. This versatile and universal group, sponsored by twenty or so national organizations, discussed such widespread subjects as flood prevention and water pollution, range clearing and reseeding as they affect water supplies and reservoirs, wetland va. open water drainage, and municipal and industrial water supplies in the watershed protection program.

Also just a few months ago the U. S. Department of Agriculture initiated a program for a National Inventory of Soil and Water Conservation Needs. A number of Departmental agencies concerned with land use, soil and water conservation, and the management of land resources was assigned to cooperate in this endeavor. The cooperation of state and local agencies, organizations, and groups concerned with soil, water, forest, range and wildlife conservation, utilization, and management has been solicited in the development and review of this Inventory. The Inventory is being developed for each county in the United States and the goal for initial completion is three years. This is highly commendable—and also urgently needed.

As has been pointed out by the Sport Fishing Institute, "the amended Public Law 566, 84th Congress, broadens the act now in force under the U. S. Soil Conservation Service, designed for watershed protection and flood prevention. Basic emphasis of watershed protection is on soil and water control."

There are other examples. However, let's discuss groups which are concerned with various facets of the program, rather than the overall viewpoint. In fact, let's discuss the group which is concerned directly with the fish and wildlife facet. It includes, among others, the U. S. Fish and Wildlife Service and the various State Game and Fish Departments. In other words, it includes us. What are we doing to safeguard our watershed resources? This could be an embarassing question!

First are we using what we've got in the form of legislative authority? On August 14, 1946, the President of the United States approved a law (60 Stat. 1080; 16 U. S. C. 661) wherein the Fish and Wildlife Service is authorized to provide assistance to, and cooperate with, Federal, State, and public or private agencies in planning for fish and wildlife. This is Public Law 732 and is commonly called the Coordination Act. It decrees that whenever the waters of any stream or body of water are authorized to be impounded, diverted, or otherwise controlled for any purpose whatever, by any agency of the United States or by any public or private agency under Federal permit, such agency

shall consult with the Fish and Wildlife Service and the State conservation department concerned, with a view to preventing losses to fish and wildlife resources; and also that the reports and recommendations of the Secretary and the head of the State wildlife agency concerned, based on investigations conducted by the Fish and Wildlife Service and the State wildlife agency for preventing such losses, shall be made an itegral part of any project report submitted to Congress by a Federal water-development agency.

So, here, by direct legislative act both the Fish and Wildlife Service and the various state fish and game agencies had an opportunity to take progressive action. And what happened? The Fish and Wildlife Service utilized the opportunity by creating the Office of River Basin Studies. This branch was directed to perform the necessary field work and submit recommendations in report form to the construction agencies. The Office of River Basin Studies has done a good job, restrained only by their limitations. Branch offices were established in the various regional offices of the Fish and Wildlife Service and a number of field stations were also established.

And what have the various states done? The states, with few exceptions, have done nothing—absolutely nothing! Yet it is the state which should carry the ball. It is the state which stands to benefit the most. And already ten years have gone down the drain since this legislative authority was granted.

Let's examine the present situation, ask a few questions, and supply a few answers. Is the Office of River Basin Studies able to carry the entire burden alone? Or should the state help? If the state had its own program would duplication of effort result? Are there certain activities which can be performed by one agency which can complement the work of the other? Let's see.

First, the Office of River Basin Studies is neither designed nor equipped to do basic biological research. It has neither the personnel, time nor equipment to delve into many pertinent biological problems. This is not a fault but a fact. It primarily collects, compiles, and presents all available information on the subject. Lately, however, progress is being made with more funds. For example, the Vero Beach, Florida office of River Basin Studies is now conducting extensive field surveys and I'm sure this desirable condition is taking place in other sections of the country. But there can never be too much of it. The Service must rely on the state to furnish much of the basic data and other background material. This would be fine and dandy, but unfortunately the state often is unable to supply the needed data. So a weak report is submitted. And weak reports are not the nicest things to have around.

Secondly, the Office of River Basin Studies often does not have an intimate knowledge of the state's long-range game and fish program and thus is handicapped in analyzing needs and determining priorities. This does not imply lack of coordination with the state. It is only a basic fact that a local agency usually knows more about local conditions whereas a national agency knows more about national conditions. This is not a fault but a fact.

Thirdly, the Office of River Basin Studies can and has neglected certain watershed areas by its own or by the construction agency's direction whereas the state can work where it so desires. This ties in with determination of priority and means only that there can be and has been honest differences of opinion as to where priority should be placed. And priority must be placed, due to the ever-present lack of time and manpower. This is not a fault but a fact. The state should thus have its own investigative program to guarantee proper coverage of its own particular interests.

Fourthly, the Office of River Basin Studies must submit a basic report founded on benefits and damages and the enchancement or mitigation of these factors. The state, aided and abetted by national, state, and local public, private and civic interests, is not bound by purely biological reasons but can use sociological and other fundamental approaches. The state, being a political subdivision, has a voice, backed by a vote, in Congress. This is not a fault but a fact.

Fifthly, the Office of River Basin Studies could conceivably be forced to close down or curtail its program due to lack of funds (as almost happened a few years ago). With its own program in operation the state would not have

to be quite so urgently concerned with the possibility of losing the services of that agency. This is not a fault but a fact.

As has been emphasized through repetition, the features just mentioned are not faults but facts. I have pointed to the Office of River Basin Studies, not as a matter of criticism, but because that agency is presently shouldering the major portion of the burden, and to highlight reasons the state should not continue to lean on that agency for sole execution of this vital program. An Office of River Basin Studies program can be strengthened materially by a strong state program and the converse is also true. And we need all the strength we can muster.

In the final analysis the state should have the manpower, know-how, and equipment; it should have the intimate knowledge of its own long range program and needs; it should have the freedom to investigate any and all areas to promote a watershed program; and it should use these and other contributing features to promote recommendations desired by the sportsmen or needed by the natural resources of that state.

Let me emphasize this. I don't say the states already have these features; I say they should have. And that reflects the title of this paper—"Needed: A State Watershed Program."

There is plenty of work to go around for as many agencies as want to become involved with watershed problems. Coordination, however, is needed to prevent duplication of effort. Generally speaking, River Basin personnel have a better working knowledge concerning determination and assignment of dollar value to benefits and damages, whereas states have, or should have, more intimate knowledge of the fish and wildlife resource itself.

Obviously, I haven't mentioned the other side of the picture and pointed out the weaknesses of the various game and fish departments. This could be time consuming, to say the least. However, it should be done, and I look forward to that presentation. Only after the strong and weak points of both agencies have been presented and efforts made to mesh these to the best advantage will there be something to point at with satisfaction. I hope it is soon.

OPPORTUNITIES FOR FISH AND WILDLIFE DEVELOPMENT AND MANAGEMENT PROGRAMS—WATERSHED PROJECTS UNDER PUBLIC LAW 566

By THEODORE B. FORD

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The Bayou Dupont Watershed will be Louisiana's first project under Public Law 566. This program, as similar programs in other states, will be carried out under the authority of the Watershed and Flood Prevention Act (Public Law 566, 83rd Congress, 68 Stat. 666). Objectives and purposes of this act are commendable, and this program should provide a useful tool in assisting with the development and use of each acre of agricultural land according to its best capability. The "Small Watersheds Act" not only provides for impounding headwaters, but it also provides for draining areas commonly referred to as wetlands. Hence, this latitude of operations should be of primary interest to us in fish and game management.

Agricultural practices have changed remarkably in the past few years to the cleaner, more intensive types of cultivation. This has resulted in our increased needs for upland and wetland areas. If the present trend in agricultural practices continues as expected, then the value of upland and wetland areas will increase even more by providing us the major types of habitat for game and fisheries development and management programs. These areas will afford us the opportunities for meeting the needs of the fishing and hunting public for recreational opportunities. License sales and the various state and