MULTIPLE USE MANAGEMENT OF FLORIDA'S WATER RESOURCES—AN EXAMPLE OF COOPERATION BETWEEN SEVERAL STATE AND FEDERAL AGENCIES

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Ladies and Gentlemen:

It is a pleasure to have this opportunity of acquainting you with the inter-agency cooperation in the development and management of Florida's natural resources. I can remember the time when my reaction to my assigned subject would have been one of near resentment. For I am one of the many who have made various attempts toward inter-agency cooperation with sometimes very unsatisfactory results.

Thus many of you may well say that the idea of cooperation among local, state, and federal groups is very nice, but quite idealistic and something which has a marked resemblance to an attempt to raise dogs, cats, and canaries in the same cage. However, I realize now that the trouble with the aforementioned attempts was a lack of individual and agency effort. We all did not work hard enough to accomplish our agreed purposes.

Why should public agencies undertake to cooperate with each other in the first place? If such efforts are so seemingly painful, are the benefits worth the trouble?

An answer to both of these questions is indicated in this question: can we really accomplish the job at hand without cooperating?

Multipurpose use of our resources calls for multipurpose management. Multipurpose management calls for multipurpose planning. Multipurpose planning crys for every group concerned to make its fullest contribution to the solving of the resource problem being attacked. For an agency to fail to make its best contributions is to fall short of its responsibility to the program, to other agencies involved, and to the public it serves.

Just as important, there is this: without the forces of all levels of government coordinated in efforts to reach the goal of a particular conservation program, there is duplication of effort which results in the wasting of public funds, funds which might be used to carry out increased activities in the same program.

Cooperation is more than agreements and pleasant relations. It entails a sincere respect for and a desire to help in work that does not always seem related but which is pointed toward a common goal. Usually the common goals are evident. The trick is how to reach these goals in the most expeditious and effective manner. Many differences that seem to block progress can be resolved through a solid cooperative program.

Since our other natural endowments are dependent on water for their survival, it is quite appropriate here that we consider cooperation in water resource management. Our mutual concern for this primary source of life and our welfare brings us together at the outset, whether we are engineers, farmers, sportsmen, businessmen, biologists, wildlife specialists, or what have you.

In discussing the Central and Southern Florida Project, I am describing a multipurpose endeavor concerned with the problems of floods, droughts, salt water intrusion, navigation, and wildlife preservation, each somewhat in conflict with the other.

Doubtless you will be more interested in what I have to say about fish and game than anything else. Because of this and because of the excellent example the development and preservation of our wildlife offers in illustrating the high degree of cooperative work contributing to the Central and Southern Florida Project, I will not disappoint you.

However, I would like briefly to explain the overall project. Ever since the middle and lower peninsula was settled, there have been water problems. Through the years they have varied, but now we seem to have all of them. Through the years, also, there have been attempts to solve these problems, not always with due appreciation that they were related and must be fought with such awareness.

The 1947 flood was the project's immediate stimulus. The efforts of many local and state groups led to the establishment of the project, and these groups are still working toward its completion. The very mention of the project purposes indicates the wide range of groups, agencies, and individuals keenly concerned with its development.

The nature and scope the project required both State and Federal participation. The Corps of Engineers handles the Federal obligations. Its responsibilities include the development of the detailed plans subject to local and state approval, the letting of contracts, and the supervising of construction.

To take care of the state's obligations, the 1949 legislature created the Central and Southern Florida Flood Control District, a public corporation which represents local interests and the state at large. It has taxing powers—an ad valorem tax not to exceed one mill—but it cannot issue bonds. In representing the people of Florida and especially the people most directly affected by the project, the District must approve each item of work before it is begun.

The FCD also acquires all rights-of-way and water storage areas, handles relocation work, and maintains and operates completed works. This last function is especially an important one, for project works can possibly give a false sense of security. Maintenance and operation of the project is the payoff.

The project covers all or part of seventeen counties and includes four main areas: the Lower East Coast, the Lake Okeechobee-Everglades area, the Kissimmee River Valley, and the Upper St. Johns River Basin. These areas' water supplies are all related in one way or another. Lake Okeechobee is the heart of the lower peninsula's water system and is the main reservoir for water storage in the project plan.

Briefly, the plan calls for protective levees between the Everglades and the Lower East Coast, these in conjunction with three large impoundment areas in the Everglades; the encirclement of the Everglades Agricultural Area, which is south and east of Lake Okeechobee; the complete encirclement by dikes of Lake Okeechobee, including controls and navigable outlets; the improvement of the Kissimmee River for flood runoff, including control of the river by structures and the control of the large lakes in the Kissimmee Valley for water conservation; and the improvement of the upper St. Johns River-Marsh for conservation purposes and flood runoff.

The project is now about 10% complete. Over 200 miles of levees stretching from near Lake Okeechobee to below Miami are already giving the Lower East Coast protection from the erratic waters of the Everglades. A large part of these levees are also serving as the eastern wall of the three large conservation pools now under development as wildlife habitats. The levee encirclement of the Everglades farming lands is making progress also, and planning for the Kissimmee and St. Johns watersheds is well under way.

The purpose of the Everglades conservation areas well illustrates how the project serves its multipurpose function. I will speak more of these areas shortly, so it would be well to bear in mind these purposes:

(1) They receive flood waters from adjacent areas.

(2) They store these waters for use during drought.

(3) They recharge ground water tables, thereby holding back salt water intrusion into our coastal underground water supplies.

(4) They preserve fish and wildlife.

These areas cover 1,344 square miles of land considered impractical for farming because of the shallow depth of their muck and peat soils.

Even a brief glance at the project indicates its immensity and comprehensive nature. The necessity of cooperative effort from every group, agency, and individual connected with it is evident. There is not time here to recognize

all the contributors to the project. Neither is there ample time to give the background of how such cooperation began. Briefly, it became apparent in the 1930's that the solution of the lower peninsula's water problems could not be accomplished in a piecemeal manner. Before the establishment of the project there were several organizations of considerable size engaged in water-control work in the area now the Flood Control District. One of these, the Everglades Drainage District, had learned through the years that mere drainage was not the solution to all our water problems.

As an example of the appreciation of this fact, the Everglades Drainage District created an advisory committee to study the area and work contemplated for it and to make recommendations toward an improved program. Most of these groups are working with the Central and Southern Florida Flood Control District today in advisory capacities, as suppliers of basic data, or in other ways. I might mention that the National Audubon Society, the National Park Service, the U. S. Fish and Wildlife Service, and the Florida Game and Fresh Water Fish Commissions were included in this group of fourteen.

Thus a few years later when the 1947 flood shocked the people of the state into aggressive action, the stage was already set for cooperative work. The Everglades Drainage District had shown the way, although the Central and Southern Florida Flood Control Project's creation was to eliminate this and several other projects of varying natures.

This same group, representing the agencies I have just named, made recommendations over eleven years ago concerning wildlife preservation areas which pointed to the development of the present Everglades impoundment areas. In fact it was foreseeing what is now Conservation Area No. 1, the Loxahatchee National Wildlife Refuge.

That the plan for water conservation in the Everglades had been growing through the years is quite evident from such documents as prepared by the aforementioned committee which was functioning before the project. Hence when the multipurpose plan was prepared by the Corps of Engineers, previous studies made major contributions to the project plan. When the plan was authorized by Congress and the lands acquired by the Flood Control District for the large storage areas in the Everglades, it was a natural step that these lands were turned over to the Fish and Wildlife Service and the Game and Fish Commission for wildlife management.

I hope I have indicated how cooperative work had a part in shaping the plan of this particular phase of the project. Actually the conservation areas were discussed in several publications in the years prior to the 1947 flood and the development of the plan for presentation before Congress.

Now, to follow the development of some aspects of the area selected as an example, and to show concretely how even the seemingly minor details of a program involve many people and groups, I would like to discuss the recreational development in the Everglades conservation areas. There is no doubt that recreation is properly a major purpose in any program dealing with natural resources.

To help the public receive the most benefit from these conservation pools, the Flood Control District's job did not end in acquiring the lands needed and then waiting for structures to be completed so they could be taken over for operation and maintenance. Particularly with the Florida Game and Fresh Water Fish Commission, which was particularly limited financially, we could combine our efforts.

The Commission decided on developing its two conservation areas into wildlife management areas—wetlands intensively developed as wildlife habitats but open to the public for boating, fishing, and in season for hunting. Through Pittman-Robertson and Dingel-Johnson funds a team of wildlife biologists were assigned to the areas to study them and determine methods for their development.

Much progress has already been made in this work, and little time has been lost. While wildlife biologists are making studies for habitat improvement and to enable recommendations of water levels which would be beneficial to wildlife, the task of actually opening the areas to the public has begun. You who

have seen the Everglades know that most of the area is covered with a thick growth of sawgrass almost impenetrable by man. If accessibility was to be limited to expensive air-boats and marsh buggies, few people would be able to enjoy the recreation offered by this great expanse of marsh, shallow lakes, and scattered hammocks. A rotary marsh digger brought in from Louisiana seems to be solving this problem of providing accessibility. It was put into operation last July and more and more innovations in its use are springing up as it cuts boat-trails through the marsh.

Many of these boat-trails lead off from canals maintained by the FCD, and cooperative water hyacinth control measures are being developed which will keep this plaguing plant from taking over these waterways. The FCD and the Game and Fish Commissioin have been working cooperatively in water hyacinth control for several years now. In some areas the FCD may furnish the chemicals needed and Commission crews may handle the spraying. In other areas the FCD controls these water pest in main channels, and the Commission takes care of them in smaller contributor channels. Sometimes our crews work side by side in erradicating this nemesis to stream runoff, navigation, and fishing.

In the Everglades, cutting boat-trails and maintaining channels for public use is not enough, however. The man with a boat must have a place to get that boat into the water, or if he doesn't have a boat and a motor, he should be able to rent one nearby. He must have a place to park his car safely. Picnic areas should be available, and there should be facilities for refreshments. The Everglades is a wild place, and if the sportsman is to have these things, it cannot be left to chance that somebody will provide them. Since the FCD controls nearly all the land in the conservation areas where such facilities could be placed, naturally it is up to it to do something about this situation. Without these facilities the areas are still a long way from serving the public.

Hence the FCD and the Game and Fish Commission have designated representatives who have been jointly studying the development of access points in these conservation pools called the Everglades Wildlife Management Area. Over a dozen sites have been chosen to date, and work on three has already begun. The counties have also shown interest in developing recreational sites here, so they are being invited in on a cooperative basis. The three sites I have mentioned are being developed by the FCD and the Commission with the help of a county commission.

Many problems have to be solved in this work, but I will give you a simplified picture of a purely mythical access point and how it might be developed under the cooperative planning now in progress. A site is chosen by representatives of the FCD and the Game and Fish Commission; it is approved for development by the FCD governing board and by Commission officials. With aid from FCD engineering office, plans are drawn up for any necessary earth-moving. A boat ramp and boat basin are built and parking areas cleared off and, if necessary, fences removed. The FCD may take care of the fence-moving, and the developing of the parking area may be handled by the county or the state road department. The county may take charge of the concession facilities and construct a building and open bids for concession operation under FCD and Commission policies. The state road department may build improved parking areas and include picnic tables such as seen at wayside parks. Commission management personnel dig boat trails from the site to a major grid system of trails and potholes. And finally, with studies progressing in the area, recommendations are made by Commission biologists for water levels which would help the propagation of fish and game. The FCD, which controls these levels, follows these recommendations consistant with the reservoir's water conservation purposes.

Now the access point is open to the public with everything needed for full outdoor enjoyment, and the public agencies have done it by combining efforts. The sportsman does not have to pay a special fee for entrance to the area, and he can be from Florida or Montana—it makes no difference. All he has to do is get himself there through maps provided perhaps by the State Development Commission or the nearest Chamber of Commerce, and follow the regulations set forth on a sign placed at the location to explain its use to the public.

The cooperative work of many agencies and groups have enabled the sportsman to enjoy these areas. He may not know it, but groups ranging from the U. S. Geological Survey, which supplied a considerable amount of basic data for the conservation areas, to a University of Florida researcher, who developed hyacinth control techniques, has enabled him to outboard to a pothole and fill his boat-well with bass.

Perhaps this sample of only one phase of an activity helps you understand the cooperation needed to get the most out of our water resources in Central and South Florida. Bear in mind that these same conservation areas are still serving their other major purposes. The Everglades muck farmer has channels near his land where he can pump off excess water; the reservoirs receive this water and hold it for times the the farmer may need it; the water is growing fish and giving waterfowl feeding and resting areas; it is recharging ground water tables and helping cities on the east coast fight salt water intrusion into their water supplies; and it is even helping to prevent extreme high and low temperatures over South Florida which are detrimental to the tourist industry and winter crops.

The Central and Southern Florida Flood Control Project, only about 10% complete, has a long road to traverse before it can fully serve its function of alleviating the major water problems of over a fourth of the state of Florida. The Kissimmee Valley and the Upper St. Johns Basin have yet to see their first construction. But the opportunities offered in these watersheds to conserve and utilize our water resources to the best advantage are a challenge to all those concerned with the project.

By its comprehensive nature, the project requires many different groups to handle the inevitable complications that arise. It would be very difficult to gather together under one agency all the qualified personnel the project needs at one time or another. Cooperation in almost every conceivable form, and from all levels of government and many private groups, has helped mold the foundation we have today.

Certainly the high degree of cooperation we have received from the citizens of the District and the state should not be omitted here. It would probably interest you especially that there are many sportsmen represented in our County Flood Control and Water Conservation Committee which study and spell out the needs of local areas so the project can be made responsive to their needs. In speaking of sportsmen, I might add that there has been increasing cooperation in recent months between the FCD and the Florida Wildlife Federation. Our meeting yesterday afternoon with representatives of the FCD, the Corps of Engineers, the Fish and Wildlife Service, the Game and Fish Commission, and several Federal and state groups—in the presence of our governor/is certainly indicative of a high degree of cooperation existing between outdoorsmen of Florida and the project developers.

In closing I would sound this warning to all agencies and public groups engaged in the conservation of our natural resources. Constant awareness of the public's needs and desires is a must. To become removed from the public is to invite a program dissatisfying the public.

None of the resource programs of the state of Florida could flourish without the sympathetic cooperation of the people and organized groups who are most intimately affected. The progress of recent years has been made possible in a large degree by this cooperation of both citizens and their representative groups and public agencies. It is heartening to know that most people today are realizing that their natural resources must be managed wisely in a multipurpose manner that demands cooperation on all levels if those resources are to sustain us in the years ahead.

Thank you—