

In conclusion it appears that we are headed in the right direction though at times it seems painfully slow. And in summary we would like to recommend that

(1) continued effort be made to initiate new state programs to study and evaluate water development projects and to utilize the opportunities now existing under the Fish and Wildlife Coordination Act,

(2) continued effort be made to take advantage of the opportunities now existing under the Watershed Protection and Flood Prevention Act, as amended, and

(3) adequate representation be had at the various water resource meetings in order to indicate our interest, assume our responsibility, and inject our thoughts into such appropriate and allied programs.

FISH AND WILDLIFE AND THE SMALL WATERSHED PROGRAM*

The Watershed Protection and Flood Prevention Act (Public Law 566, as amended), which is administered by the Soil Conservation Service, was passed in 1954 and is now popularly known as the small watershed program.

The attached table, "Status of P. L. 566 Watershed Applications as of October 1, 1959 in 12 Southeastern States and U. S. Totals," shows the magnitude of this relatively young program. The popularity of the program is amply demonstrated by the fact that 1,204 applications, totalling 86,454,800 acres, have been received in Washington by the Administrator, Soil Conservation Service, and 209 projects, comprising 12,412,500 acres of land and water, are already authorized for operation. Of the authorized projects, 77 are in the 12 Southeastern States and comprise a total of 3,765,400 acres of land. The 521 floodwater-retarding structures, which will impound 12,847 acres of water, and the 1,157.4 miles of channel improvement, which have been or will be installed in these watersheds, demonstrate the importance of the program to fish and wildlife resources.

The enactment of two recent amendments to Public Law 566 is of significance to fish and wildlife interests. In 1956, the Act was amended by Public Law 1018. The provisions of this amendment of interest have permitted the inclusion in watershed projects of nonagricultural water-management measures, including fish and wildlife development. It did not, however, provide Federal financial assistance for such measures. In 1958 it was further amended by Public Law 85-865. This amendment authorizes Federal technical and financial assistance for the installation of measures for fish and wildlife developments when such measures are an undertaking for the conservation, development, utilization, and disposal of water, and are a part of a watershed project developed under authority of Public Law 566, as amended.

Eligible measures for fish and wildlife development are:

1. *Storage capacity in reservoirs for fish and wildlife development.* This capacity may be in addition to capacity provided for other purposes such as floodwater retardation, irrigation storage, or municipal water supply. A reservoir may be constructed solely for fish and wildlife development, however, if it is an integral part of a watershed project developed for multiple purposes. The fish and wildlife storage capacity in any reservoir may be for the purpose of enhancing the fish and wildlife resources in the reservoir or for releasing water to maintain stable flow and suitable temperature conditions downstream that are conducive to fish and wildlife development.
2. *Modification of reservoir structures for fish and wildlife development.* Features for fish and wildlife development may be incorporated in structures to be constructed as a part of a project or may be provided for as

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modifications of existing structures. Such improvements may include modifications of structures to provide seasonal regulation of water level such as "duck windows"; construction or modification of structures to maintain stable water levels conducive to improved fish and wildlife development in natural or artificial lakes; construction of fish ladders; modification of site clearing; and installation of fish shelters.

3. *Stream channel improvement for fish and wildlife development.* This includes streambank stabilization by sloping, riprapping, vegetative plantings, jetties, etc.; tree and shrub plantings adjacent to the bank to provide shade for the water surface; channel clearing and deepening including gravel removal; constructing sills and other facilities to create pools suitable for fish development; fencing streambank areas; and other similar and related practices approved by Federal or State fish and wildlife agencies for the improvement of fish and wildlife habitat and environment in and along streams.
4. *Marsh and pit development to provide breeding and nesting areas for migratory waterfowl and aquatic mammals including appurtenant facilities required such as fencing.* Developments which are considered ineligible for Federal financial assistance include recreational measures for the enjoyment of fish and wildlife resources such as access roads, parking areas, boat facilities, etc.

Benefits from the developments must demonstrate public significance, and improvements must be open to the public in accordance with applicable State laws and regulations. No financial assistance can be made to developments of a purely private nature.

Local organizations or the State must bear at least 50 percent of the cost allocated to fish and wildlife development (incremental costs) and the benefits are considered to exceed the costs when these groups are willing to pay 50 percent of the costs. P-R or D-J funds may be used to reimburse States for costs if the project is considered worthwhile.

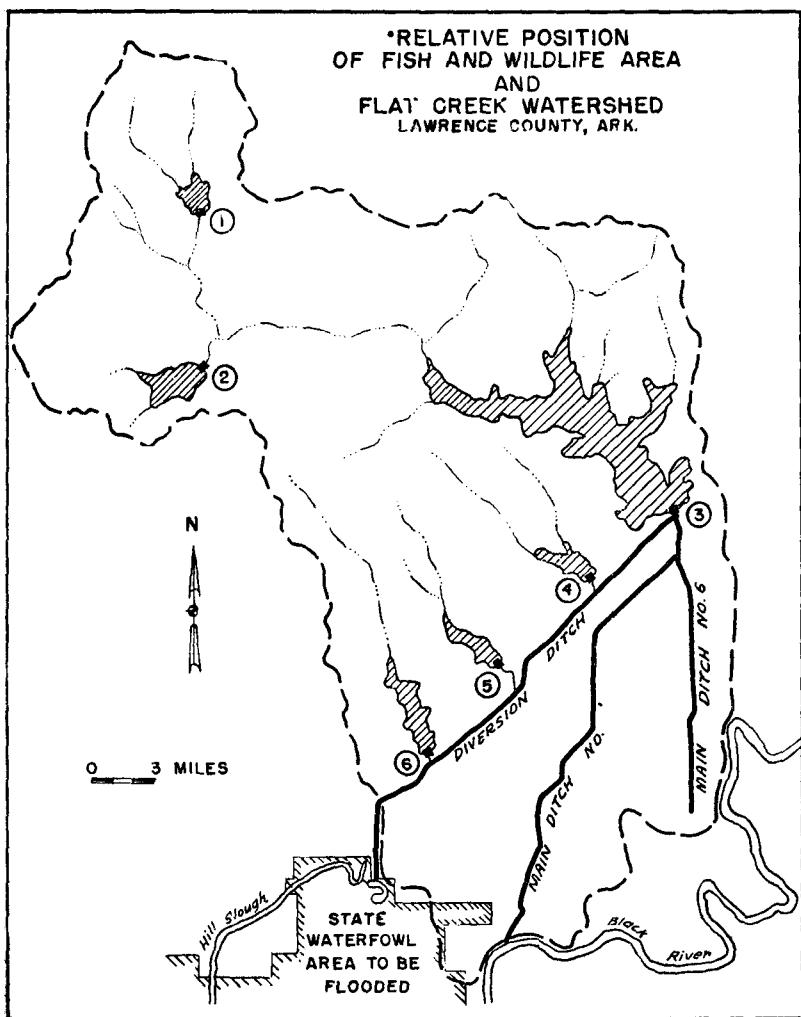
All lands, easements, and rights-of-way must be provided by the local people or the States. P-L 566 funds cannot be allocated for this purpose.

Full advantage has not been taken of the opportunities afforded the States for fish and wildlife developments associated with the small watersheds. To date, according to information available to the Branch of River Basin Studies, Bureau of Sport Fisheries and Wildlife, there are only four watershed projects in which fish and wildlife developments have been included in the work plan.

Probably the most outstanding example of full utilization of fish and wildlife developmental possibilities employing Public Law 85-865 is Flat Creek Watershed, Arkansas. In this case, the Arkansas Game and Fish Commission has become a co-sponsor to the work plan. The development for fish and wildlife will consist of 4.6 miles of diversion and a multiple-purpose structure which will serve dual purposes. Additional water will be stored in Site 3 for fish and wildlife development both in the reservoir of this site and in a wildlife area adjacent to the southwest part of the watershed. This wildlife area, consisting of about 9,000 acres, was purchased and is being administered by the Arkansas Game and Fish Commission. When fresh water is needed in this area, it may be released from the reservoir in Site 3 into the upper end of the diversion. From this point it will be carried through the diversion by gravity flow and discharged into the area to be flooded.

The attached map shows the details of this development. This is truly multiple-purpose planning including fish and wildlife conservation.

The Kentucky Fish and Wildlife Resources Commission has become a co-sponsor in the planning of Mud River Watershed. An 826-acre lake will be constructed in this watershed, with cost sharing by the State and Public Law 566 funds. Also in Kentucky, a floodwater-retarding reservoir will be increased in size in North Fork Little River Watershed, with the State as co-sponsor to the work plan.



The Tennessee Game and Fish Commission will increase the size and storage capacity of a floodwater-retarding reservoir in Johnson Creek Watershed, thereby making more water available to the public.

In Louisiana, the citizens of the town of Plain Dealing felt the need for added recreational development. Through increased city taxes, funds were raised to increase the storage capacity of one of the reservoirs proposed for West Fork Cypress Bayou Watershed. In so doing, they increased size of a 20-acre reservoir on private lands, designed for flood control alone, to a 95-acre reservoir with public access. The Louisiana Wild Life and Fisheries Commission will provide management assistance in order that maximum fishing benefits can be realized.

These and other States are following the small watershed program very closely in order that advantage can be taken of other opportunities which may be available to improve the fish and wildlife resources.

Aside from the water-management measures for fish and wildlife development made possible by the relatively new Public Law 85-865, there are other reasons why the States should keep in close touch with the small watershed program.

This program offers an outstanding opportunity for upland-game management on a watershed basis. For instance, rather intensive farm game habitat improvement work can be carried out as land-treatment measures for watershed protection. In such cases the landowner is eligible for cost-sharing for the planting of food and cover plants, thereby adding greatly to the incentive for planting wildlife food and cover plants. Several of the Southeastern States are taking advantage of this opportunity.

Of almost equal importance to the opportunities for enhancement of fish and wildlife resources is the need to be ever on the lookout for possible damages to important fish and wildlife habitat caused by flood prevention or water-management improvement. Public Law 566 includes authority whereby such damages can be mitigated, and the cost of mitigation is treated as a part of the project cost for flood prevention or drainage or any other purpose to which they relate.

Under authority of Section 12 of Public Law 566, the Bureau of Sport Fisheries and Wildlife may make surveys and investigations and prepare reports with recommendations concerning the conservation and development of wildlife resources. Such reports not only recommend enhancement measures compatible with the watershed work plan but also point out losses which will result from proposed structural developments. If these losses can be mitigated, appropriate measures are recommended.

In order to realize maximum benefits for fish and wildlife resources, it is absolutely necessary for the State game and fish departments to take an active interest in the program and assist the Soil Conservation Service in watershed planning.

STATUS OF P. L. 566 WATERSHED APPLICATIONS AS OF OCTOBER 1, 1959
IN 12 SOUTHEASTERN STATES AND U. S. TOTALS

States	Applications Received, Washington		Authorized for Planning Assistance		Watershed Projects Authorized for Operations			Channel Improvement†	
	No.	Acres (1,000)	No.	Acres (1,000)	No.	Acres (1,000)	No.	Permanent Water* Miles	Miles
Ala.	23	1,649.1	11	579.3	6	151.5	16	310	38.0
Ark.	49	3,884.5	12	965.1	5	103.3	16	1,075	110.2
Fla.	25	1,900.4	11	823.2	6	309.0	0	0	74.1
Ga.	68	2,749.3	16	649.2	12	579.7	52	1,323	177.9
Ky.	138	6,862.1	20	1,760.8	9	929.8	155	2,992	223.1
La.	24	1,758.1	10	718.6	6	324.3	46	1,968	30.3
Md.	10	234.8	10	234.8	4	73.7	14	216	37.5
Miss.	27	1,320.1	11	453.1	6	249.4	65	1,978	132.0
N. C.	37	2,101.4	17	804.0	11	459.8	57	506‡	226.7
S. C.	16	828.1	10	383.2	3	101.8	8	152‡	11.5
Tenn.	32	1,575.3	14	714.3	6	290.2	69	1,586‡	77.0
Va.	21	1,017.1	11	755.6	3	192.9	23	741	27.1
TOTALS	470	25,880.3	153	8,841.2	77	3,765.4	521	12,847	1,157.4
U. S. TOTALS	1,204	86,454.8	498	35,177.4	209	12,412.5

* Includes surface acres in sediment pool, fish and wildlife pool, or municipal water.

† Channel improvement includes new ditching, enlarging, snagging, clearing, etc.

‡ Incomplete data.