

SMALL WATERSHED AND DRAINAGE LAWS
OF
NORTH CAROLINA

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INTRODUCTION

Senate Resolution 875, adopted by the 1969 North Carolina General Assembly, directed the Legislative Research Commission to study and report back to the 1971 Assembly on the need for revision and recodification of the drainage and small watershed laws. (See Appendix A)

In the past decade a number of local governmental units in North Carolina have been authorized by legislation to sponsor or participate in activities collectively labeled as "small watershed" or "watershed improvement" programs. The original impulse for these programs came from the soil conservation movement. Their activating purpose, initially, was to provide a vehicle for agricultural flood protection, water conservation (irrigation) and incidental drainage improvements. Philosophically, these programs were oriented toward encouraging farmers in upstream tributary areas to organize for mutual protection and benefit. The basic organizational vehicle for these purposes was conceived to be the watershed improvement district, a subdistrict of a soil conservation district. A federal aid program administered by the U. S. Soil Conservation Service and based on Public Law 566 of 1954 was a major stimulus for these watershed improvement activities.

The Statutory Basis of Small Watershed and Drainage Programs

The principal local sponsor of small watershed projects in North Carolina has usually been either a drainage district (under the Drainage District Laws), or a county or watershed improvement district (under the Small Watershed Act).

The Small Watershed Act was enacted in 1959. It comprises Articles II and III of General Statutes Chapter 139, together with portions of Article I (principally, some definitions). Article II of Chapter 139 is the vehicle for watershed improvement district programs; Article III, for county programs.

The drainage laws of North Carolina are contained in General Statutes Chapter 156. Three principal avenues for conducting drainage projects are

set forth in this Chapter: drainage by individual owners, by drainage corporations, and by drainage districts. Some of the earliest North Carolina drainage laws date back to the 18th century, and the basic drainage district law under which we now operate was originally enacted in 1909.

Since the conception of the original N. C. small watershed enabling law in 1959, the program has expanded and changed in many directions. Counties and drainage districts have displaced watershed improvement districts as the primary organizational forms. Program definition has been enlarged to encompass a number of related water resource activities-- including recreation, municipal and industrial water supply, fish and wild-life habitat preservation, and flood plains management. And, at least in suburban areas, the exclusively rural flavor of the original small watershed programs has been modified to include urban as well as rural problems. The upstream orientation of the early programs--typified in the phrase, "Hold the water on the land"--has been adapted to eastern North Carolina conditions, by accepting drainage improvements as a primary goal in wetland areas.

The evolution of this decade of change in the small watershed and drainage programs can be traced through a trail of statutory amendments enacted during the 1960's by the North Carolina General Assembly. These amendments, largely piecemeal in nature, are a mirror of the organizational and financial problems that have been encountered by sponsors of watershed and drainage projects across the State. (A year-by-year review of the amendments is set forth in Appendix B of this Report.)

To complete the picture, it need only be noted that the 1969 General Assembly added one additional vehicle for local and state participation in water resource developments that are similar to, and sometimes indistinguishable from, those that travel under the aegis of the small watershed and drainage laws. This 1969 statute (Session Laws 1969, Chapter 968) authorized the State Government and local governments to make the assurances of cooperation that are required for participation in river and harbor, flood control or other civil works projects. Its enactment was motivated primarily by a desire to enable areas of North Carolina to qualify for Corps of Engineers projects that require some measure of non-federal participation as a prerequisite.

Present Operations Under the Small Watershed Laws

In the early days of the administration of the program in North Carolina it was thought that the watershed improvement district would be the principal vehicle for small watershed projects in the State. Efforts were made to organize a number of such districts in the early 1960's. As experience was gained, however, two things became apparent: first, that the organization of a watershed improvement district was expensive, time consuming, awkward and uncertain; and, second, that there was a much simpler and more effective alternative available in the form of the county watershed program. The State Committee and SCS personnel made every effort to spread the word of this experience around the State and to encourage the organization of county programs in preference to watershed improvement districts.

The net result is that there are now only two active watershed improvement districts in the State, where once several times that number were being organized. The two functioning districts are Dutchman Creek WID in Davie, Iredell and Yadkin Counties, and Muddy Creek WID in McDowell and Burke Counties. Work is underway and partially completed in both districts.

Where the watershed improvement district device has faltered of its own weight, the county approach has caught on far beyond early expectations. The first county programs were initiated pursuant to local acts that incorporated by reference the general powers of Article 3 (G.S. Chapter 139) but set the maximum watershed tax rate in the local act and authorized the levy of the tax without the holding of the county-wide referendum required under Article 3. This approach has continued to be the most prevalent one. However, the State Committee has continually encouraged the general law - referendum approach--both because it provides an opportunity for obtaining widespread popular support for the program and because foregoing the referendum raises questions of constitutionality (necessary expense and Article II, Section 29). These efforts have begun to pay off, in that five counties have held (and won) referenda under the general law. Another 21 counties have followed the local act approach. (The details are set forth in Appendix C of this Report.)

Present Operations under the Drainage Laws

The records of the State Soil and Water Conservation Committee show that a total of 27 drainage districts were functioning or being organized as of mid-1970 in connection with P.L. 566 projects. Also in one case several canal companies are the local organization for a 566 project, and in another case a "levee district" was organized under a local act. These 566 projects lie within a total of 25 counties: Beaufort, Bertie, Bladen, Brunswick, Chowan, Columbus, Craven, Cumberland, Edgecombe, Gates, Greene, Hertford, Hyde, Johnston, Jones, Lenoir, Martin, Northampton, Pamlico, Pender, Perquimans, Pitt, Robeson, Tyrrell and Wayne.

In order to secure a more detailed inventory of drainage districts in North Carolina today, a survey was conducted for the Legislative Research Commission in the spring of 1970. This survey involved inquiries to clerks of superior court, who are responsible for keeping records of drainage district and drainage corporation proceedings. The inquiries were sent to the clerks in 43 counties including, and lying east of, the counties of Warren, Franklin, Johnston, Harnett, Hoke and Scotland. Answers were received from 37 counties. These answers indicated that in addition to the drainage districts reflected in the State Committee records in connection with 566 projects, there are at least another 32 drainage districts in the State. Counties represented in this group include those listed under the preceding paragraph, plus Harnett and Washington.

Combining the survey results and the State Committee records, there appear to be at least 59 drainage districts in the State that are functioning or being organized, and are located in 27 eastern counties. There is also at least one functioning canal company, and one dike district created by special act. The survey responses indicated that, in addition, there are at least 63 functioning drainage corporations (of which about 50 are in Pitt County and 13 in Beaufort County).

A notion of the scope of all P.L. 566 activity in North Carolina can be gleaned from the two charts in Appendix D. As these charts show, North Carolina ranks 11th among the States in total 566 applications received, 7th in projects authorized for planning, tied for 6th in plans completed, and 15th in total estimated Federal costs for our 38 active watershed projects. N.C. projects with completed plans involve 1,489,844 acres of watershed area, with an estimated Federal cost of \$27,553,054--a little over one-half of the total estimated cost of these projects.

SUBJECTS OF THE LEGISLATIVE STUDY

The Legislative Research Commission was specifically directed by SR 875 to study and report on two topics:

- * The need for revisions in the small watershed and drainage laws.
- * The need for recodification of the small watershed and drainage laws.

Findings and recommendations on these topics are summarized in the remainder of this report.

In order to explore the subject in depth the Legislative Research Commission assigned the task of conducting hearings and making proposed findings and recommendations to a subcommittee, consisting of three members of the 1969 General Assembly. The Subcommittee was given staff assistance by the Institute of Government and by the Administrative Officer of the State Soil and Water Conservation Committee. One full day of public hearings was conducted by the Subcommittee. At this hearing fourteen persons testified on behalf of a variety of interests and organizations, including affected local, state and federal agencies, the N. C. Wildlife Federation, and a lawyer and an engineer experienced in drainage work. In addition, the Subcommittee held a series of meetings addressed to particular issues.

FINDINGS AND RECOMMENDATIONS ON
REVISION OF THE SMALL WATERSHED
AND DRAINAGE LAWS

At an early stage of its work the study subcommittee decided to review and resolve any suggestions for substantive changes in the watershed and drainage laws and programs before concerning itself with the proposed recodification. A number of such changes--involving organizational and financial issues, as well as legal questions--were suggested to the subcommittee. These proposed changes are reflected in the outline on page 7. For a variety of reasons, some of the proposals were not accepted at this time.

The subcommittee made five recommendations--four concerning proposed revisions in the watershed and drainage laws, and a fifth concerning recodification. These proposals were adopted as recommendations of the Legislative Research Commission.

OUTLINE OF PROPOSED CHANGES
IN WATERSHED AND DRAINAGE LAWS

<p style="text-align: center;"><u>Watershed Organization</u></p> <ol style="list-style-type: none">1. Phase-out Watershed Improvement Districts2. Authorize Soil-Water Cons. Dist. Supervisors to be designated to operate county programs.3. Authorize County Commissioners to conduct watershed program without referendum.	<p style="text-align: center;"><u>Watershed Financing</u></p> <ol style="list-style-type: none">1. <u>Local</u>: Authorize watershed tax on less than county-wide basis.2. <u>State</u>: (a) Authorize State to pay part of easement cost. (b) Authorize State to pay for wildlife enhancement features. (c) Analyze State funding.
<p style="text-align: center;"><u>Channelization</u></p> <ol style="list-style-type: none">1. By statute, limit channelization to last resort use.2. By statute, require Water-Air Resources Board to evaluate channelization questions, or provide some other impartial State review.3. Require more adequate statutory notice of channelization projects.	<p style="text-align: center;"><u>Drainage Law Revisions</u></p> <ol style="list-style-type: none">1. Revise drainage laws to simplify and clarify organization of districts (including 1969 proposals for tax map revisions, new definitions of "landowners," etc.)2. Require public hearings by County Commissioners on all drainage proposals.3. Revise timber removal procedures.
<p style="text-align: center;"><u>Natural Resources Districts</u></p> <p>Consider replacing or supplementing Soil-Water Cons. Dists. with natural resources districts of broader scope.</p>	<p style="text-align: center;"><u>Miscellaneous</u></p> <ol style="list-style-type: none">1. Ensure public access to projects for recreation.2. Require mosquito control projects to comply with same permit and coordination procedures as watersheds.

Recommendation No. 1

That a program be set in motion to gradually eliminate the use of watershed improvement districts (WID's) in North Carolina--foreclosing organization of new WID's and encouraging the phasing out of existing operations.

As already recounted, the watershed improvement district has proven itself a very unsatisfactory vehicle for small watershed programs in North Carolina (pp. 3-4 above). Other alternatives, primarily county programs and drainage districts, have shown themselves to be much more effective. The agencies and groups most concerned with the successful operation of small watershed programs in the State unanimously recommended that the WID machinery be phased out of existence as soon as feasible. (Those so recommending included the State Soil and Water Conservation Committee, the Association of Soil and Water Conservation Supervisors, the State Conservationist, and the Department of Water and Air Resources.)

There is agreement with these proposals. The two existing WID's should be permitted to function as such as long as their trustees wish, though they should be encouraged and assisted to convert to another form of organization. No further WID's should be organized under this law which has proved so awkward and burdensome in practice.

Recommendation No. 2

That the board of county commissioners be authorized by statute to designate a soil and water conservation district (SWCD) operating in its county to act for the county in carrying out a county watershed program--as an additional alternative to the existing options of administering the program itself or designating a Watershed Improvement Committee for this purpose.

The SWCD's have long played a vital role in the small watershed program in North Carolina. They provided the stimulus and leadership for enactment of the small watershed enabling legislation in 1959. However, they were understandably reluctant to commit all of the SWCD's in the State to the administration of a new program requiring substantial local responsibility for financing and operation, over and above their existing soil conservation duties. Thus, they recommended and supported an approach which minimized the formal responsibilities of SWCD supervisors for small watershed activities.

A decade of experience with the watershed programs has brought new perspectives. The county-operated watershed program, a lightly considered prospect in 1959, has become the norm in the Piedmont and the West and is not

uncommon in the East. Many SWCD supervisors or former supervisors have participated actively and productively in these county programs. It has often happened that SWCD supervisors--being the best qualified candidates to serve as members of a county watershed improvement commission (WIC)--have resigned their positions as supervisors so that they could accept appointment as WIC members.

In light of this experience the leaders of the soil conservation movement in North Carolina have joined in recommending that it be made legally permissible for a SWCD to be designated to operate a county watershed program. There is accord with this proposal which is purely permissive in nature, and would merely offer the county commissioners and the SWCD supervisors an additional alternative which they mutually agreed to be desirable.

Recommendation No. 3

That (in light of the revision of Article V of the State Constitution adopted by the people of North Carolina in November 1970) boards of county commissioners should be given the authority to conduct watershed programs on their own motion without a referendum.

Local, state and federal officials associated with small watershed programs urged legislation giving boards of county commissioners the authority to initiate county watershed programs without the special tax referendum now required by general law. (G.S. § 139-39.) This proposal was supported by all of the witnesses at public hearings who spoke to the issue, and it is concluded that this would provide a more convenient way to initiate a program than by referendum.

Under the State Constitution prior to the amendments adopted in November 1970, there was some question whether such a statute would be constitutional in any or all cases under the "necessary expense" clause of Article V, Section 2. The question was eliminated, however, by the approval of the revision of Article V at the polls this fall by the voters of the state. Under the revised Article V, the "necessary expense" limitation has been replaced by a provision empowering the General Assembly to authorize counties and other local governments to levy taxes for purposes authorized by general law without a referendum.

Accordingly, it is recommended that general statewide legislation be enacted permitting county commissioners to initiate and conduct tax-supported small watershed programs on their own motion and without the referendum now required by law. Such legislation would be responsive to the legitimate preferences of the supporters of watershed programs, and could eliminate

legal questions that might arise concerning county programs that have already been authorized by special act without referenda.

Recommendation No. 4

That the following provisions be adopted concerning watershed or drainage projects that involve channelization:

(a) By statute, the use of channelization techniques should be limited to cases where this is a last resort and no other alternatives are available.

(b) By statute, the Board of Water and Air Resources should be required to evaluate channelization proposals at an early stage (under SCS terminology, after the "preliminary project investigation"; under Corps of Engineers terminology, after the time of the "recommended report".)

(c) A statutory notice requirement should be adopted for publication of a map in a local newspaper in any affected county showing the location of any proposed project involving channelization, preliminary to a public hearing on the proposal.

Watershed and drainage projects located in the Eastern part of the State often have resorted to the "channelization" of streams as a method of agricultural flood protection or drainage improvement because--unlike the Piedmont and Western regions--reservoir sites are not usually available as an alternative to channelization in the East. Where this has occurred it has sometimes caused serious impairment of wildlife values as a consequence of the drainage of swamps that are the natural habitat of fish and game. Some of these swamps also are exceptionally well suited to the growth of valuable hardwoods. Thus the coming of channelization projects has been, at times, a mixed blessing. Conservation agencies and groups have expressed growing concern about the use of channelization techniques, a concern that was reflected in public hearings.

Some concrete responsive steps have been taken. Cooperation between wildlife agencies and watershed sponsors in North Carolina on these matters is good, and is continuing to improve. There is a formidable array of checkpoints already in existence for every watershed project in the United States that affords opportunities for such issues to be raised. (See Appendix G.) And, North Carolina in 1967 enacted legislation specifically requiring consideration of recommendations from fish and wildlife agencies concerning replacement of habitat in mitigation of damages. (G.S. 139-46 (a).)

Despite these laudable efforts to meet the problem, it is believed that more can be done. Proposed additional steps amount to a codification of some of the best of current practices, and were formulated in consultation with representatives of the sponsoring agencies for small watershed and drainage programs.

FINDINGS AND RECOMMENDATIONS ON RECODIFICATION

Recommendation No. 5.

That the small watershed and drainage laws be recodified with such clarifying and perfecting changes as may be appropriate. In conjunction with the proposed recodification, it is recommended that amendments be considered and adopted to simplify the organization of drainage districts and reduce organizational costs.

The North Carolina General Assembly has struggled manfully to keep up with the past decade of change in small watershed program concepts. It is not surprising that the present statutes concerning small watershed programs-- never having been generally reviewed and overhauled--are somewhat confusing and disorganized. The soil and water conservation organizations of North Carolina have for some time recognized the need for a recodification effort that would bring some pattern into the present laws concerning small watersheds.

It is clear that a recodification of the small watershed enabling laws of North Carolina is in order, and that to the extent feasible this effort should include the drainage district laws and the 1969 State-Local Cooperation Act as well.

There was general agreement among the witnesses at hearings, and the responsible public officials who advised the Legislative Research Commission that every effort should be made to simplify and reduce the expense of drainage district organization. Some substantial proposals to this end have already been offered, including a bill that was introduced in the 1969 General Assembly, which contained provisions concerning the use of tax maps, definitions of "landowners" and "benefits," and other related changes.

Amendments to simplify and improve drainage district procedures in connection with the proposed recodification bill are recommended.

APPENDIX A

SENATE RESOLUTION 875
1969 GENERAL ASSEMBLY

NORTH CAROLINA
GENERAL ASSEMBLY

1969 SESSION

Senate Resolution 875

(Public)

Sponsors: Senator Burney:

Referred to: Conservation and Development.

1

June 23

2 A SENATE RESOLUTION DIRECTING THE LEGISLATIVE RESEARCH COMMISSION
3 TO STUDY CERTAIN WATER AND AIR RESOURCES LAWS, AND TO REPORT
4 ITS FINDINGS AND RECOMMENDATIONS TO THE 1971 GENERAL ASSEMBLY.

5 Be it resolved by the Senate:

6 Section 1. The Legislative Research Commission is
7 hereby directed to study the need for legislation concerning (a)
8 revision and recodification of the drainage and small watershed
9 laws; (b) local and regional water supplies (including sources of
10 water and organization and administration of water systems); (c)
11 the legal framework for delivery of stored water; and (d) such
12 other legislation concerning water and air resources as the
13 Commission deems appropriate.

14 Sec. 2. The Legislative Research Commission shall
15 report its findings and any recommendations resulting from this
16 study to the 1971 General Assembly.

17 Sec. 3. This Resolution shall become effective upon its
18 adoption.

APPENDIX B

A BRIEF HISTORY OF THE WATERSHED
AND DRAINAGE LEGISLATION

The Small Watershed Act and its Amendments*

The Small Watershed Act was enacted in 1959. It comprises Articles II and III of General Statutes Chapter 139, together with portions of Article I (principally, some of the definitions). The initiative for its enactment came from the soil conservation movement. During the middle and late 1950's soil conservation leaders throughout the nation sought to secure adoption of similar statutes in every state to implement legislation that was enacted in 1954 by Congress providing for a Federal aid program for small watershed projects--Public Law 566. A bill to accomplish this purpose was first introduced in North Carolina in 1957 but died in committee. Between the 1957 and 1959 sessions, strenuous efforts were made by sponsors of the measure to resolve the contentious issues that had prevented passage of the bill in 1957. These issues were finally resolved, mainly by means of a study subcommittee of the old Board of Water Commissioners, which labored diligently for many months to find satisfactory answers. (The principal protagonists were electric power companies and other large water users, on the one hand, and soil conservation leaders on the other hand. The points of difference included: financing methods for small watershed programs; overall review of watershed work plans by an independent public entity--eventually vested in the Board of Water Resources; and the large water users' concern that watershed projects might foster expansion of irrigation that would deprive them of needed water--eventually resolved by a requirement written into the statute for maintenance of stream flows that essentially codified the rule of riparian rights.)

The bill as introduced in 1959 contemplated that small watershed projects would be carried out by sub-divisions of soil conservation districts, authorized to levy benefit assessments and to be known as watershed improvement districts. The parent soil conservation districts would be responsible for setting up a watershed improvement district and would serve as co-sponsors of projects, but would have no operating responsibilities or financing powers. (The bill as drafted gave the soil conservation districts in Article I of GS chapter 139 all of the substantive powers to carry out small watershed projects. In Article II it simply incorporated by reference

* A more detailed review of the amendments to the watershed and drainage laws can be found in the legislative issues of Popular Government following each legislative session. See articles on "Water Resources" in the following issues of Popular Government: June 1959, Sept.-Oct. 1961, Sept. - Oct. 1963, Sept. 1965, and Oct. 1967. And see article on natural resources and environmental legislation in a fall, 1970, issue.

these same powers for watershed improvement districts, adding thereto financing authority by benefit assessments and administrative provisions. In later years eminent domain powers were also to be added to Article II, but not to Article I.)

During the consideration of the small watershed bill by the 1959 General Assembly, questions were raised by some legislators about the wisdom of setting up a vehicle for a new local governmental program that would require creation of new special districts. In order to meet these objections, Article III was added to the bill, permitting another organizational alternative, under which watershed programs could be conducted by county governments with property tax financing. With this addition, the bill was enacted.

1961 Amendments. - The year 1961 brought some minor clarifying amendments to the Small Watershed Act. Growing out of experience in Transylvania and Henderson Counties, the authority to hold watershed tax elections under Article III at a rate lower than 25¢ per one hundred dollar valuation was clarified. Growing out of the Henderson experience, some boundary description problems were also resolved. Also, authority was granted for multi-county soil conservation districts to delegate their watershed functions to the appropriate county committee. And, the first appropriation for a State-financed planning party for small watershed programs was made in this year.

1963 Amendments. - As a result of experience of watershed improvement district sponsors in and around Iredell County, various changes were made in 1963 in the financing provisions concerning watershed improvement districts. This year also, there was added to the state budget a fifty thousand dollar revolving fund to aid in local watershed organization, and an appropriation for the first time of \$9,000 for a research study on Ahoskie Creek watershed.

1965 Amendments. - Prior to 1965 land located within municipal limits could not be included within either soil conservation districts or watershed improvement districts. This restriction was eliminated by the 1965 amendments.

1967 Amendments. - A number of substantial amendments were adopted in 1967. These included provisions permitting cities and counties to borrow money for storage capacity in watershed projects for present or future needs (derived particularly from Mt. Airy experience); permitting counties to issue general obligation bonds for watershed improvement projects (derived particularly from Wake County experience); permitting county sponsors to make expenditures for watershed purposes outside of their counties in appropriate

cases (derived primarily from Cabarrus County experience); authorizing and clarifying the authority to include recreational purposes in watershed projects (derived primarily from Rutherford County experience); permitting inclusion of fish and wildlife features in watershed projects (proposed by the Wildlife Resources Commission); and simplifying the collection of watershed improvement district assessments (derived from experience in Iredell and neighboring counties).

1969 Amendments. - Several clarifying amendments were enacted in 1969. One of these, arising out of interest in Pender County and neighboring counties, involved clarification of the authority of watershed sponsors to maintain "works and projects" (e.g., periodic channel clearance and grassing) as well as "structures". Another, initiated by Rutherford County, clarified the authority of watershed sponsors to vary the form of the ballot in watershed tax elections from the statutory form. The third change clarified the authority to coordinate county watershed programs with related activities such as beach erosion projects - growing out of experience in Pender County.

The Drainage Legislation and its Amendments

The drainage laws of North Carolina are contained in General Statutes Chapter 156. Three principal avenues for conducting drainage projects are set forth in the Chapter: drainage by individual owners, by drainage corporations, and by drainage districts. In each instance, directly or by implication, some form of condemnation authority is available.

Some of the earliest drainage laws in the State date back to the 18th century. The basic drainage law under which the state now operates was originally enacted in 1909 and has passed the test of constitutional challenge (unlike the watershed laws, which have not yet been litigated.)

Public Law 566 requires a responsible local sponsoring organization as a condition of Federal aid, and -- of all of the drainage approaches -- the drainage district is the most promising vehicle for this purpose. Amendments to the drainage district laws in recent years have been addressed mainly to making these laws better adapted to projects involving P.L. 566 assistance.

1959 amendments spelled out authority for drainage districts to install water retardant structures, to use SCS planning services and to

make maintenance provisions of the law applicable to water retardant structures.

1961 amendments established procedures for annexation of territory to existing districts, and for renovation and extension of existing districts. They also removed a \$1 per acre limit on maintenance assessments, authorized water control measures, and authorized municipal participation in district projects.

1963 amendments dealt mainly with financing procedures and personnel matters.

1965 amendments authorized recreational uses of district impoundments and recreational land acquisition; authorized joint use of district impoundments by municipalities; and directed that fish and wildlife habitat effects be considered in drainage projects.

No significant general law changes were made in 1967 or 1969. A bill introduced late in the 1969 session, however, would have made substantial changes aimed at simplifying district organization procedures and reducing expenses for items such as title searches. (This bill was prepared by Frank Wooten, former legislator and long involved in legal work with drainage districts.) These proposals were responsive to widespread complaints concerning the high cost of organizing drainage districts. This bill, which did not pass, should be helpful in shaping revisions in the drainage district law.

APPENDIX C

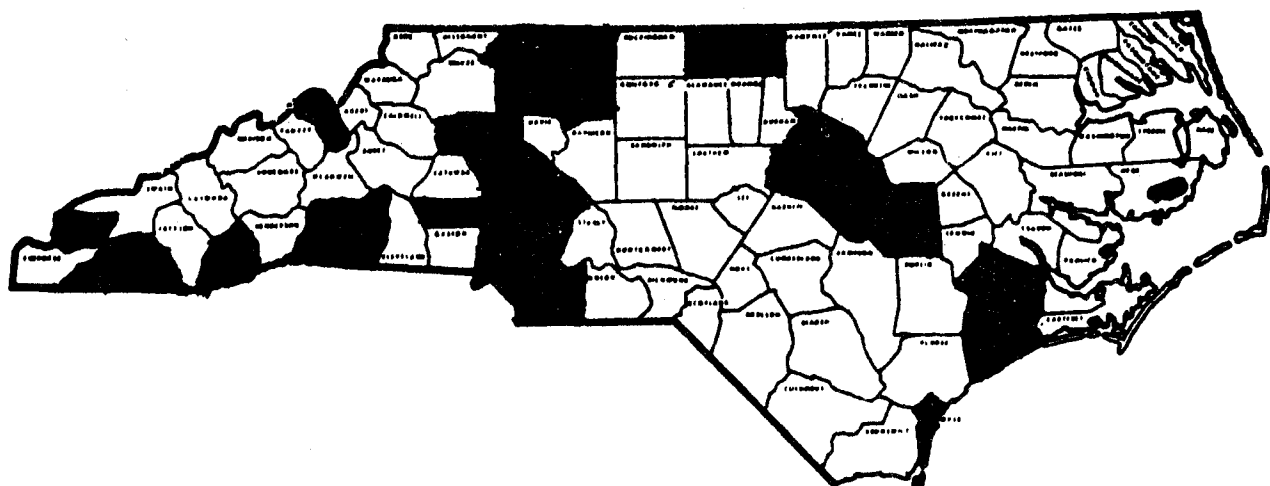
COUNTY WATERSHED PROGRAMS

COUNTY WATERSHED PROGRAMS

This list shows the counties in North Carolina that have authority to administer watershed programs under the provisions of Article III of G. S. 139.

<u>County</u>	<u>Amount of Levy*</u>	<u>Authority</u>
1. Alexander	5¢	Ch. 500, S. L. of 1967
2. Cabarrus	2¢	Ch. 615, S. L. of 1965
3. Caswell	7¢	Ch. 553, S. L. of 1969
4. Clay	2¢	Ch. 1047, S. L. of 1961
5. Forsyth	2¢	Ch. 761, S. L. of 1963
6. Graham	10¢	Ch. 503, S. L. of 1967
7. Iredell	2¢	Ch. 623, S. L. of 1967
8. Johnston	1¢	Ch. 955, S. L. of 1969
9. Jones	25¢	Referendum
10. Lincoln	3¢	Ch. 934, S. L. of 1969
11. Macon	10¢	Referendum
12. Mecklenburg	2¢	Ch. 1191, S. L. of 1969
13. Mitchell	5¢	Ch. 1033, S. L. of 1963
14. New Hanover	5¢	Ch. 958, S. L. of 1969
15. Onslow	5¢	Ch. 725, S. L. of 1967
16. Person	1¢	Ch. 111, S. L. of 1967
17. Polk	7¢	Ch. 996, S. L. of 1963
18. Rowan	2¢	Ch. 568, S. L. of 1967
19. Rutherford	5¢	Referendum
20. Stokes	2¢	Ch. 156, S. L. of 1963
21. Surry	2¢	Ch. 442, S. L. of 1963
22. Transylvania	3½¢	Referendum
23. Union	2¢	Ch. 19, S. L. of 1965 Ch. 390, S. L. of 1967
24. Wake	1¢	Referendum
25. Wayne	3¢	Ch. 821, S. L. of 1969
26. Yadkin	2¢	Ch. 443, S. L. of 1961

* Per \$100 property valuation



APPENDIX D

STATUS AND COST OF PL 566 PROGRAMS

PLANNING AND INSTALLATION PROGRESS

P. L. 566 WATERSHED PROJECTS IN NORTH CAROLINA

The following tables present a picture of how North Carolina ranks with other states in watershed planning and installation progress of P.L. 566 projects. The data in these tables are shown as of June 30, 1969.

This table shows the number of applications received from the top twenty states and the acres covered in these applications. It also shows the number of applications authorized for planning and the plans completed. Acreages are also shown. It should be noted that North Carolina ranks No. 11 in the number of applications received; No. 7 in the number authorized for planning; and tied for sixth in plans completed. Also shown is how North Carolina ranks in the per cent of total applications received in the Nation; total authorized for planning; and plans completed. North Carolina ranks No. 9 in dollars contributed by states for watershed planning.

WATERSHED PLANNING PROGRESS (6/30/69)

<u>States</u>	<u>Application Received</u>		<u>Planning Authorized</u>		<u>Plans Completed</u>	
	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>
Texas	158	17,200,500	89	9,546,700	69	6,856,700
Georgia	148	9,995,200	69	4,500,400	58	3,670,100
Arkansas	124	9,958,200	64	5,250,000	46	2,689,400
Oklahoma	111	11,653,200	65	6,569,300	55	5,515,200
Indiana	94	7,467,800	49	4,159,300	29	1,727,200
Nebraska	91	7,179,900	47	2,680,700	36	2,225,700
Kansas	88	9,461,300	60	6,321,600	36	3,176,500
Mississippi	85	6,135,400	61	4,600,300	46	3,480,800
Tennessee	83	4,108,100	46	2,296,600	29	1,164,200
Iowa	83	1,599,200	48	865,900	38	650,800
North Carolina	79	4,926,200	52	2,830,600	38	1,628,700
New Mexico	78	7,357,800	37	3,179,200	23	1,209,600
Illinois	76	5,049,800	34	1,815,000	15	724,400
California	74	5,551,700	43	2,894,200	20	886,300
Louisiana	72	7,695,000	44	5,203,800	29	3,123,200
Florida	71	5,088,400	30	2,276,400	19	1,222,900
Virginia	69	2,848,600	29	1,596,500	23	1,303,600
Missouri	64	4,499,300	25	1,579,800	16	686,500
Ohio	63	6,208,900	19	1,436,900	15	975,500
Kentucky	59	3,752,600	41	2,841,600	28	2,024,900
Total -						
United States	2795	212,792,200	1511	109,882,200	1014	63,041,600
N.C. Per cent						
of Total	2.83		3.42		3.75	

This table shows the top twenty states in the total estimated Federal construction cost. It also shows the percentage of total project costs to be borne by the Federal government, the amount of cumulative Federal obligations as of June 30, 1969, and the per cent of Federal cost that has been obligated. The table also shows the total number of watersheds in a state for which Federal funds have been obligated. Some watersheds in the table may be credited to two states. For example, Cane Creek is credited to both North and South Carolina. The acreage and funds are credited to the state in which they fall. Also shown is the North Carolina percentage of the national total for watershed acreage; total estimated Federal costs; and total cumulative Federal obligation. North Carolina ranks No. 15 in the total estimated Federal costs for the thirty-eight watersheds in North Carolina.

INSTALLATION PROGRESS IN P.L. 566 WATERSHED PROJECTS (6/30/69)

<u>States</u>	Total No. <u>W/Ss</u>	Total Watershed Area (Ac)	Total Estimated Federal Cost	% Fed. Cost to <u>Total</u>	Total Cumu- lative Fed. Obligation	% Fed. Cost <u>Obligated</u>
Oklahoma	54	5,332,752	104,699,002	58.7	47,506,550	45.4
Texas	63	5,980,015	94,381,010	53.5	43,384,148	46.0
Mississippi	43	3,023,955	66,236,116	61.1	18,054,692	27.3
Kansas	35	2,994,304	65,230,279	74.2	28,967,735	44.4
Georgia	53	3,134,254	62,691,123	61.2	23,906,972	38.1
California	17	852,213	62,171,425	61.2	28,260,195	45.5
Arkansas	41	2,242,344	50,616,021	61.9	24,374,862	48.1
Indiana	27	1,582,502	40,241,052	53.6	15,775,779	39.2
Alabama	27	1,678,918	35,472,133	62.8	12,030,426	33.9
Tennessee	30	1,087,260	35,340,845	74.7	15,792,435	44.7
Pennsylvania	22	1,111,137	32,667,881	50.9	12,165,245	37.2
Kentucky	28	1,986,380	32,322,311	50.3	17,171,011	53.1
Nebraska	35	2,157,466	31,411,580	53.4	12,612,978	40.2
Louisiana	26	2,325,612	30,734,084	43.5	11,656,535	37.9
North Carolina	38	1,489,844	27,553,054	54.9	10,954,154	39.8
Iowa	37	643,346	24,454,370	70.8	10,137,931	41.3
Ohio	13	826,772	22,962,938	70.9	7,797,730	34.0
Arizona	9	1,009,223	20,550,159	60.5	8,004,723	39.0
South Carolina	27	891,633	18,970,820	53.9	6,297,285	33.2
Virginia	24	1,272,566	18,913,044	54.4	8,187,859	43.3
Total - United States		56,975,292	1,165,704,090	57.9	511,191,784	43.8
N.C. Per cent of Total		2.61	2.36		2.14	

STATUS OF PLANNING, APPLICATION, AND EXPENDITURES
OF THE P. L. 566 PROGRAM IN NORTH CAROLINA

NAME	1/ F	DAMS		CHANNEL, MI.		ESTIMATED COST		SPENT TO DATE		COMMENTS
		Proposed	Const.	Proposed	Const.	Federal	Local	Federal	Local	
<u>Completed Projects</u>										
1. Ahoskie Creek	F	0	0	65.7	65.7	\$ 521,369	\$ 631,251	\$ 642,156	\$ 504,499	Comp. Nov. 1966
2. Burnt Mill Creek	F	0	0	8.4	8.4	28,372	66,758	44,344	64,263	Comp. Fall, 1962
3. Cutawhiskie Creek	F	0	0	53.9	53.9	318,620	226,353	386,074	374,887	Comp. June, 1966
4. Folley Ditch	F	0	0	7.4	7.4	26,049	23,573	27,242	22,865	Comp. 1962
5. Grindle Creek	F	0	0	28.5	28.5	329,206	679,489	483,320	704,506	Comp. 1966
6. Horse Swamp-Flat Swamp	F	0	0	26.1	26.1	73,787	98,294	76,696	62,734	Comp. 1964
7. Pollock Swamp	F	0	0	21.5	21.5	156,845	246,955	174,419	192,115	Comp. 1966
Pilot - Third Creek	F	14	11					1,010,000	884,804	
8. Johnson's Milltail	S	0	0	21	21	129,869	195,155	125,978	231,667	Comp. Apr. 1967
9. Moccasin Creek	S	0	0	22.4	22.4	127,736	212,525	150,076	192,115	Comp. June 1966
10. Broad Creek	S	0	0	45.6	45.6	407,159	1,240,728	312,117	1,117,000	Comp. 1969
11. Caw Caw Swamp	S	0	0	16.5	16.5	414,470	411,392	186,913	375,000	Comp. 1969
12. Conetoe Creek	S	0	0	95	95	802,194	1,488,862	666,871	840,000	Comp. 1969
Total for 12 Completed Projects + Pilot		14	11	412	412	3,335,676	5,521,335	4,286,206	5,566,455	
<u>Projects in Operation</u>										
1. Bear Creek	F	7	7	19.5	19.5	897,035	373,560	947,073	326,000	Should Comp. 1969
2. Chicod Creek	F	0	0	60	0	492,324	691,080	76,418	230,000	Work Plan Appr. 1966
3. Crabtree Creek	F	13	0	10	0	4,023,930	1,359,190	63,506	270,000	Authorized Oper. 1965
4. Deep Creek (Yadkin)	F	17	14	38.7	20	1,485,388	1,158,465	1,241,659	570,000	
5. Dutchman Creek	F	9	0	73	0	1,613,878	684,381	77,943	151,500	One Dam Under Const.
6. Gum Neck	F	0	0	21(dike) 17	21(dike) 17	748,915	219,344	993,491	214,000	Const. Complete
7. Hobbsville-Sunbury	F	0	0	60.2	0	702,578	626,455	29,758	45,000	Final Design Stage
8. Little Yadkin	F	3	0	31	0	682,112	503,472	52,249	22,000	One Dam Under Const.
9. Muddy Creek	F	9	7	23.4	15	712,378	664,170	718,339	275,000	
10. Stewarts Creek- Lovills Creek	F	4	0	22.5	0	1,856,878	899,300	75,976	115,000	Authorized for Oper., 1965

1/ F - Federal Financed for Planning
S - State Financed for Planning

NAME	1/ F S S S S S S F F	DAMS		CHANNEL, MI.		ESTIMATED COST		SPENT TO DATE		COMMENTS
		Proposed	Const.	Proposed	Const.	Federal	Local	Federal	Local	
<u>Projects in Operation</u> (Continued)										
11. Town Fork Creek	F	13	4	27.8	4	\$2,646,710	\$1,224,057	\$1,359,117	\$ 208,000	3 Dams Under Const. Designed
12. Back Swamp	S	0	0	40	0	491,673	609,425	54,372	180,000	
13. Dunn Swamp, Cedar Branch Trib.	S	0	0	68	0	821,113	989,437	611,247	452,000	1st Cont. App. 1968
14. Flea Hill	S	0	0	43.9	0	519,551	977,134	62,233	225,000	Appr. for Oper. 1966
15. Jacob Swamp	S	0	0	18.1 3.25 (dike)	0	348,517	404,358	28,125	115,000	Combined w/Back Swamp; Work Plan Approved
16. Little Contentnea	S	0	0	207	0	2,340,348	2,095,999	233,446	350,000	Work Plan App. 1966
17. Lyon Swamp-White Oak Swamp	S	0	0	37.4	37.4	682,785	462,142	600,755	260,000	Const. Complete
18. Meadow Branch	S	0	0	17.6	0	123,890	218,547	34,512	45,000	Work Plan Appr. 1966
19. Mosley Creek- Tracey Swamp	S	0	0	37	0	405,792	459,128	50,425	220,000	Const. Started
20. Lowland	F	0	0	1 Pumping Plant 7.9(dike)	0	409,635	114,588	22,441	22,540	
21. Swift Creek	F			235.6		3,172,967	2,251,573			
Total for 21 Pro- jects in Operation		75	32	1,138.95	133.90	25,178,370	16,965,805	7,332,583	4,296,040	
<u>Inactive Projects</u>										
1. Abbotts Creek	F	14	0	49.7	0	812,140	1,072,582	122,209	127,300	
2. Deep Creek (Washington)	F	0	0	14.5	0	164,068	167,562	12,035	83,900	
3. Mud Creek	F	17	0	27.8	0	791,001	1,047,763	82,165	314,400	
4. Juniper Swamp	S	0	0	7.7	0	114,070	192,870	47,766	40,000	
5. Swan Quarter	S	0	0	19.1	0	1,807,929	427,697	49	0	Inactive-Legal Problem
Total for 5 Inactive Projects		31	0	118.8	0	3,689,208	2,908,474	264,224	565,600	
Totals for 38 Projects Authorized for Oper.		120	43	1,669.75	545.9	32,203,254	25,395,614	11,883,013	10,428,095	
Total Project (Fed. and Local)						\$57,598,868		\$21,145,427		

NAME	1/	DAMS		CHANNEL, MI.		ESTIMATED COST		SPENT TO DATE		COMMENTS
		Proposed	Const.	Proposed	Const.	Federal	Local	Federal	Local	
<u>Authorized for Planning</u>										
1. Cane Creek (Union)	F									
2. Coddle-Coldwater- Dutch Buffalo Creeks	F									
3. Fourth Creek	F									
4. French Broad River	F									
5. Second Creek	F									
6. Stony Creek	F									
7. Turner Creek	F									
8. Cane Creek (Mitchell)	S									Preliminary Investi- gation Completed
9. Mayo Creek	S	5		10.7		\$1,018,584	\$542,475			Work Plan Developed
10. Tallulah Creek	S									Work Plan Developed
11. Second Broad River	F									
12. Stoney Creek (Wayne)	F									
13. Upper Bay River	F			181.6 3.7 (dike)		945,840	888,190			In Wash. for Approval
14. Country Line Creek	S									
15. Fisher River	F									
16. Friar Swamp	S									
<u>Priority for Planning</u>										
<u>Recommended</u>										
1. Forbush-Logan Creeks	F									
2. Little Tennessee	S									
3. North Pacolet River	F									
4. South Deep Creek	F									
5. Trent River	S									
6. White Oak River	S									
7. Bear Swamp (Chowan)	S									Preliminary Invest. Completed
8. Bear Swamp (Robeson)	S									Preliminary Invest. Completed
9. Bryant Swamp	S									Preliminary Invest. Completed
10. Shallotte-Wet Ash River-Bear Branch	S									Preliminary Invest. Completed

THE WATERSHED BOX SCORE

	<u>United States</u>	<u>North Carolina</u>	<u>Per Cent of United States</u>
Applications	2,850	88	3.1
Authorized for Planning	1,531	53	3.5
Approved for Operations	964	38	3.9
Under Construction	432	9	2.1
Complete	240	12	5.0

PARTIAL RANKING OF STATES IN NUMBER OF WATERSHEDSAPPROVED FOR OPERATIONS

1.	Texas	64
2.	Georgia	53
3.	Oklahoma	54
4.	Arkansas	45
5.	Mississippi	43
6.	North Carolina	38
7.	Iowa	38
8.	Nebraska	35
9.	Kansas	35

STATE FUNDS FOR WATERSHED PLANNING PARTY

<u>Fiscal Year</u>	<u>Appropriated</u>	<u>Refunded</u>	<u>Spent</u>
61-62	\$ 90,113.00	\$ 11,797.36	\$ 78,315.64
62-63	86,790.00	4,743.82	82,046.18
63-64	87,100.00	3,031.34	84,069.66
64-65	87,800.00	7,854.13	79,945.87
65-66	99,184.00	2,587.40	96,596.60
66-67	99,781.00	13,449.34	86,331.66
67-68	99,781.00	21,048.30	78,732.70
68-69	<u>99,781.00</u>	<u>1,584.33</u>	<u>98,196.67</u>
TOTAL	\$750,330.00	\$ 66,096.02	\$684,234.98

APPENDIX E

POINTS OF REVIEW FOR WATERSHED PROGRAMS

POINTS OF REVIEW FOR WATERSHED PROGRAMSForm of Organization

INITIA- TION	(1) Landowner petition, followed by two sets of public hearings on Board of Viewers' report, and judgment of (clerk of) court. (2) Further hearing on final report of Viewers, followed by determination by (clerk of) court whether benefits exceed cost.	Landowner petition followed by public hearings before SWCD supervisors.	Either county-wide vote of approval, or special act of General Assembly.
LOCAL REVIEW	(1) Drainage Comm'rs elected for 3-year overlapping terms (or appointed in some cases). (2) Amount of annual assessment (of Drainage Comm'rs) must be approved by Clerk of Court.	(1) WID trustees elected (6-year overlapping terms). (2) WID trustees must publish annual audit.	If Watershed Improvement Comm'rs are created to manage county program, they must submit annual budget to County Comm'rs and supply annual audit.
STATE REVIEW	<p>(1) The following reviews apply to all P.L. 566 projects:</p> <ul style="list-style-type: none"> (a) SS & WCC reviews and approves or disapproves all applications for P.L. 566 assistance. (b) Prior to approving watershed planning, SS & WCC must consider recommendations of fish and wildlife agency for habitat replacement. (c) SS & WCC must approve exercise of condemnation power for watershed projects. (d) By federal law (P.L. 566) the Governor must review and comment on all P.L. 566 projects (delegated to BWAR). (e) BWAR hearing and review of watershed work plans as impartial 3rd party (under State law, and exercising delegated responsibility of Governor under federal law). Specifically, no watershed work plan may be approved unless BWAR finds plans provide for safe construction, satisfactory flood plains management, maintenance of stream flows, and compliance with other laws. (f) BWAR may hold hearings on and review compliance with watershed plan of operation for projects. (g) Borrowing for anticipated water supplies in connection with watershed projects requires Local Government Commission approval. 		

POINTS OF REVIEW FOR WATERSHED PROGRAMS, cont.

	Drainage Districts	Watershed Imp. Dist.	County Programs
STATE REVIEW (cont.)	<p>(2) Under the Federal Water Resources Development Projects enacted by the General Assembly in 1969, the following review points are prescribed:</p> <p>(a) BWAR must approve every exercise of condemnation power in connection with water resource development projects not covered by SS & WCC approval (i.e., primarily Corps of Engineers projects).</p> <p>(b) Governor and Advisory Budget Commission must approve actions of BWAR giving state assurances of required nonfederal cooperation in connection with federal projects.</p>		
FEDERAL REVIEW	<p>(1) Under the P.L. 566 Congressional Committee approval is required for large P.L. 566 projects (costing over \$250,000, or including any structure larger than 2,500 acre feet capacity), after review by Secretaries of Interior and Army.</p> <p>(2) Under Fish and Wildlife Coordination Act, consultation with U.S. Fish and Wildlife Service and with its state counterpart is required, as to fish and wildlife damage mitigation and enhancement, prior to initiation of any impoundment or channelization project by any Federal agency. Wildlife agency reports must be made part of the project records. Project modifications to accommodate wildlife interests are authorized.</p> <p>(3) (Related to item 2, above) under Executive Order 10584, by President Eisenhower, the Secretary of Agriculture must notify the Secretaries of Army and Interior before initiating any survey or field investigation involving water resource development work, and must give full consideration to any fish and game conservation recommendations by Interior in connection with the project.</p> <p>(4) Under the National Environmental Policy Act of 1969, every Federal agency recommendation or report on proposed legislation or action that would affect environmental quality must include a detailed statement (transmitted to the Council on Environmental Quality) concerning environmental consequences and alternative courses of action, prepared after consultation with the affected environmental agencies.</p>		