United States
Department of
Agriculture

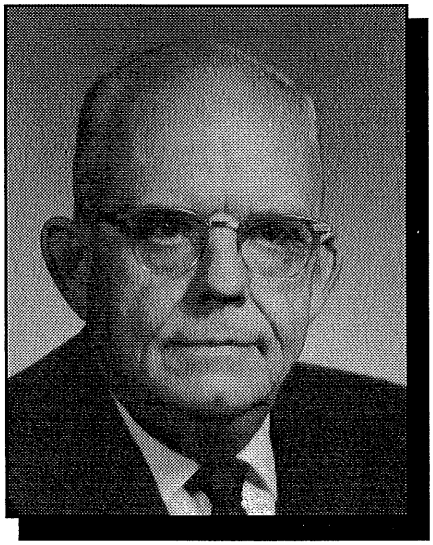
Soil
Conservation
Service

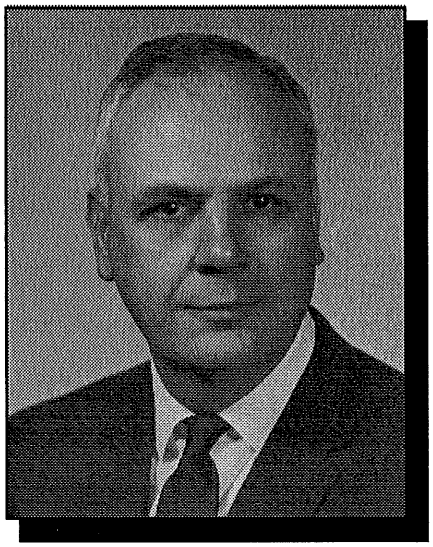
Interviews with Chiefs of the Soil Conservation Service: Williams, Grant, Davis, and Berg

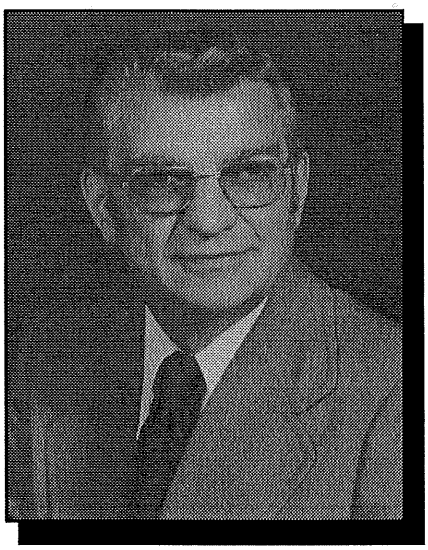
Edited by Steven E. Phillips and Douglas Helms

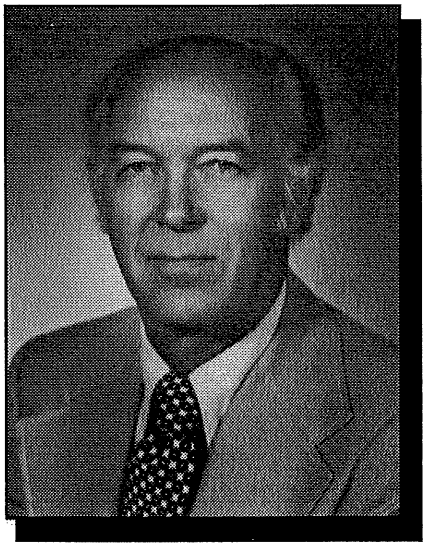
Economics and
Social Sciences
Division, NHQ

Historical Notes
Number 3









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Cover contains photos of the four SCS chiefs interviewed in this volume:

Top left: Donald Williams
Top right: Kenneth Grant
Bottom left: Mel Davis
Bottom right: Norm Berg

Cover designed by Jimmy Todd, SCS

Photos: courtesy of the SCS Office of Public Affairs

Interviews with Chiefs of the Soil Conservation Service: Williams, Grant, Davis, and Berg

Edited by Steven E. Phillips and Douglas Helms

Economics and Social Sciences Division
Soil Conservation Service
United States Department of Agriculture
Washington, D.C. 20013

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Introduction

Here, with varying degrees of candor, is the story of the Soil Conservation Service, told by four men who ran the agency from the Eisenhower to the Reagan administrations, a period of about thirty years. First came the late Donald A. Williams, who had the formidable task of managing the long-term development of the Service after the tenure of its crusading founder, Hugh Hammond Bennett. Next Kenneth E. Grant led the agency as environmental concerns grew and urban or suburban citizens demanded more assistance. Under Mel Davis, the Service attempted to cope with the expansion of land in production agriculture (largely a consequence of large grain sales to the Soviet Union) even as budgetary pressures increased. Finally, Norman A. Berg steered the agency during a time of renewed interest in environmental concerns. He was also the last "career chief," that is, he worked his way up the ranks of the Service to the top position. (Note: the title for the top position in the Service has switched between "chief" and "administrator.")

We edited these interviews with a light hand so as to give the reader a feel for the conversational style of each man. We endeavored to transmit not only what they said but also how they said it.

Several themes tie their tenures together. From its initial emphasis on soil conservation on agricultural land, the Service has steadily expanded into areas like flood prevention and rural economic development. Each chief sought to accomplish these new tasks while maintaining the agency's traditional role of service to farmers. Perhaps the most contentious issue was, and is, the perceived conflict between economic development and environmental protection. This is clear in disputes over the use of structural measures for flood control, channelization, and agricultural chemicals. Other common issues include the organization of the Service and relations with Congress and the White House.

Readers seeking to learn more about specific issues or programs discussed in these interviews are advised to turn to *Readings in the History of the Soil Conservation Service* (Historical Notes Number 1, 1992) by National Historian Douglas Helms.

We would like to thank Messrs. Williams, Grant, Davis, and Berg. Each graciously gave of their time, both for the interviews and to review the transcripts. Barbara Cook and Sheree Gross of the Economics and Social Sciences Division (ECN) cheerfully helped with the tedious task of transcribing the interview tapes. Nancy Mathews and Anne Henderson of Strategic Planning Division, as well as Jennifer Harr and Leigh Ann Mays of ECN made valuable suggestions for improving the readability of the text. Finally, we greatly appreciate the efforts of Claudette Hayes of the Service's Publication and Printing Branch, who has managed the printing of this and earlier volumes in the Historical Notes series.

Steven Phillips
Historian

Douglas Helms
National Historian

Donald A. Williams

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Part Three: June 14, 1981

Biographical Sketch

Donald A. Williams was born in Clark County, South Dakota, on July 14, 1905. After graduating from Clark County High School in 1923, he attended South Dakota State College of Agriculture & Mechanical Arts and received his degree in engineering in 1928. From 1927 through 1934, Mr. Williams worked as an engineer in Mitchell, Sioux Falls, and Senator, South Dakota; farmed at Clark, South Dakota; and did postgraduate work at his alma mater and at the University of South Dakota.

Following employment with the state highway department at Pierre, South Dakota, he entered duty with the Soil Conservation Service (SCS) on June 3, 1935 as superintendent of the Civilian Conservation Corps camp at Presho, South Dakota. He served as an engineer on SCS projects at Great Falls, Montana, Emmett, Idaho, and Dayton, Washington from November 1935 to June 1939. Mr. Williams then served as the area office engineer at Spokane, Washington, until moving to the Northwest Regional Office at Portland, Oregon as assistant regional director in September 1941. In March 1950 he became the flood control survey officer in the Office of the Secretary of Agriculture in Washington, DC. His appointment as assistant chief of the Service in charge of operations came in July 1951. Beginning in March 1953, Williams was administrator of the Agricultural Conservation Program Service until the Secretary of Agriculture appointed him administrator of the Soil Conservation Service on November 27, 1953. Williams remained as administrator until retiring from the government on January 11, 1969.

Mr. Williams has served as a consultant on soil and water conservation to the governments of India, Turkey, New Zealand, and Thailand. Additionally, he made four trips to India for the Ford Foundation in 1967-68, 1971, and 1973. Mr. Williams resided in New Delhi from April 1969 to April 1971 while serving as an advisor to India's Soil and Water Conservation Board for the Ford Foundation. This consulting work dealt with soil and water conservation--especially programming, organization, administration, and technical expertise. Professionally, Mr. Williams is best known for his contributions to conservation irrigation and integrating water management into the concept of soil and water conservation. Awards have included an honorary doctorate from South Dakota State College (1956), the Distinguished Service Award of the Department of Agriculture (1958), the Rockefeller Public Service Award for Public Administration from Princeton University (1967), the Hugh Hammond Bennett Award from the Soil Conservation Society of America (1967), and the Distinguished Engineer Award from South Dakota State University (1977). Mr. Williams

was selected as a fellow and life member of the Soil Conservation Society of America and of the American Society of Civil Engineers, and a fellow of the American Association for the Advancement of Science. The Soil Conservation Society of America established a fellowship in conservation in his name in 1969. Donald Williams passed away in November of 1982.

Part One: May 26, 1981

Interviewed by Douglas Helms, National Historian, Soil Conservation Service, in Alexandria, Virginia.

HELMS: Mr. Williams, could you tell us about farming practices during your early years in South Dakota that were beneficial or detrimental to soil conservation?

WILLIAMS: Yes, Doug, I'm going to refer back to the time of my boyhood, growing up on the farm of my dad and brothers in the glaciated section of eastern South Dakota. It was the only part of South Dakota I knew until I got through college. What I say will be largely confined to a geographic area with a certain kind of problem. The farming practices at that time were breaking the prairie sod and grazing for horses and cattle, because at that time all farming was by horses. Later they gradually put the soil into cultivation by horse-drawn machinery. This was pothole country. We did not drain potholes in spite of the fact that we would mire the horses and the machinery down in them every time we had a rain. My dad would never drain them. My father was an exception among farmers in our community in that he had had some agricultural education. He had attended Guelph Agriculture College in Ontario, Canada. He took all the agriculture they had in two winter terms back in the 1880s. He was considered an expert and he was an expert compared to the average farmer, both in the care of livestock and his knowledge about legumes and use of organic matter. But from a conservation standpoint he did not have the concept of contour cultivation and soil surface protection. I would say this: Instead of doing like many of his neighbors did, burning their stubble land and burning their straw stacks, he saved his stubble through the winter to catch snow and hold it on the ground. He took his animal waste and spread it on the land. He put the organic matter back in the soil. I would say that you had a mixture here of his type of approach. During the early 1900s, on his own farm, he cooperated with Dr. N. E. Hanson, the chief horticulturist of South Dakota State University, who had introduced alfalfa and clovers from Siberia and Russia and thereby helped to develop legumes and crops adaptable to our South Dakota area. My dad became the first foreman of the South Dakota State University farm, 1893-1899, because he did know something about agriculture and knew how to supervise boys in operating a farm. So there, limited to a certain type of geographic area, is my earliest recollection. I did not get out of the state of South Dakota until I was old enough to go to work. So when I started with the Service, I had it all to learn ahead of me as far as conservation was concerned. The pamphlets I got from South Carolina and so forth did not apply very much to the part of the country where I lived.

HELMS: What led you to a career in soil and water conservation and how were you recruited by the Soil Conservation Service? I guess that would include your education too.

WILLIAMS: When I got out of college--I graduated in civil engineering--I was employed by a private engineer to do consulting work in South Dakota, or to help him to do it--putting in curb and gutter, putting in sewage disposal plants in small towns and cities, water supply, this sort of thing. Then I worked for my brother who was an engineer also doing contract work for the South Dakota Highway Department. I worked on highway locations, bridge design and highway construction. It was in early 1935, while I was on a bridge design job in Pierre, South Dakota, that I got a call from a former classmate at Huron, South Dakota, which was then the South Dakota headquarters of the Soil Erosion Service. He wanted to know if I would be a camp superintendent in a CCC (Civilian Conservation Corps) Camp at Presho, South Dakota. I said, "What kind of an animal is that and what is a CCC Camp?" After getting an explanation on the phone I said, "I think I might be interested in looking into it further." They said, "We want you to go to work in about another week or two." At that time we could put all of our belongings--my wife and I, we had no family then--in the back end of our old Chevy and we could go any old place. We did not have to get a mover. The first we knew I had accepted the job of camp superintendent at Presho, South Dakota, and I found out for the first time what a CCC camp was when I arrived there on May 31, 1935. The previous year, the camp, a tent camp, had been under the jurisdiction of the U.S. Forest Service. It was one of the camps that was transferred from Forest Service jurisdiction to SCS administration. There was not a tree within hundreds of miles, or not until you got to the Black Hills. That is the reason the Forest Service did not want it. But, they had started a project that I was stuck with. They started to build two dams on school lands, the school sections of the Midwest. I could never find out and I never did find out as long as I was building the dams just why they were being built, except that they would catch some water. They were not for irrigation. They were not needed for stock water. They were too big. One dam that we were to build the year that I was there as camp superintendent, was over 100,000 cubic yards. We had one beat-up truck and some wheelbarrows and some shovels to do the job.

As far as learning about conservation was concerned, I was strictly in an engineering sort of a setting. I did not learn anything about range management or about cropland conservation until I moved from there in October of 1935 to Great Falls, Montana. This was one of the first demonstration projects established by the Service. It was in a wind erosion area north of Great Falls. So my

knowledge and my acquaintance with the broad aspects and purposes of soil and water conservation was very limited while I was a CCC camp superintendent.

HELMS: From your observation, where did the Civilian Conservation Corps succeed the most: unemployment relief, protection of resources, or the social good of the enrollees?

WILLIAMS: From my own observation, from the camps that I knew then and for the next few years, they were mostly for unemployment relief. I think, secondly, I would put the social good of the boys. I think they did some real good on that score, especially where the foreman and educational advisors had been carefully selected and where the camps were well operated by the U.S. Army. Protection of resources for the first camps that I was acquainted with was an almost insignificant matter. If these camps had been in the forest or in areas where there were active gullying problems and check dams to be built, the concept and approach would have been different. In other words, it depended on the location of these camps. At the five hundred that were under SCS--SES (Soil Conservation Service--Soil Erosion Service) at the time, there were either conservation problems on cultivated land or rangeland or forest land where certain practices could be applied and were applied. Before my career as a field engineer was over with, I was looking after that kind of work at a number of the CCC camps, particularly in the Pacific Northwest. We had WPA (Works Progress Administration) labor to look after and it was forced upon us. I was just suddenly told that I had two hundred men out of Great Falls, for example, that I had to supervise. During the drought period of the 1930s in eastern Montana I was told that we had to put fifteen hundred men to work with their teams and we had to get scrapers and so forth and put them to work building dams. It was a make-work proposition, but we did get it conservation oriented in so far as water opportunities were concerned.

My knowledge of conservation was, at that time, pretty much limited to engineering. It was not until later that some of these things became more evident. In the early days of the CCC camps and WPA labor we did some of the things we later were ashamed of. Temporary check dams built of wire and straw were put in gullies that would wash out when the first big rain came along. Well, we did not have any money and we could not get any from the cooperating farmers because they were just letting us on their land by the grace of God to put the boys to work. It was not their program; it was a government program. Sure they agreed to maintain it, but then whenever a dam washed out, they would call the government to come and fix it. I would say that the large amount of gully control work that was endeavored to be done with engineering types of structures was one of the

biggest flops of the early days. There were things done that were not right in terms of not paying enough attention to water conservation. It became evident to me when I began to really find out about conservation objectives and purposes that you could not do soil conservation work unless you also did water control or water conservation work in connection with it, unless you were just in a wind erosion area where the wind was the factor.

My interest in conservation largely developed on the water side of the soil and water conservation program. My goal was not to make engineering the dominant factor but to make it subordinate to the things that needed to be done to the soil itself. In other words, we had to get more tilth, more absorptive capacity, into the soil. We had to shorten the slopes so as to give the water a chance to infiltrate. We had to get the obstructions across the slope through contour operations to induce the water into the soil and to keep it from running off. That is how you reduce erosion at the same time you conserve water. Now, with farmers in some parts of the country--low rainfall areas--this matter of conserving an extra inch or two of water when it comes was highly important. That was true in the Great Plains country, whereas in the southeastern part of the United States water was an evil devil. It came too hard and too much and they wanted to get rid of it. Terracing and things like that were started in the early days in the Southeast region just as a matter of trying to get rid of the water. Later they found out in the Southeast they needed to conserve it too. But in the beginning that is the way it was. In the beginning days there was practically no attention paid to the irrigated land. People thought that if the farmers had irrigation, then the problems are all taken care of. But some of the most severe erosion was taking place on irrigated land because of running the water too long on too steep slopes and furrows or not using the right amount of water for the particular soil type or the particular crop. We developed what we called later conservation irrigation practices in which we would control the water with engineering devices or sometimes a diversion so they would not get too much water into a furrow or a basin for the particular crop that was to be grown. We would teach the farmers how often to irrigate different crops in order to get the best results from the efficient use of water. Then we would help them to save the water. They had to use it at the right time. They would get improved water use through how they handled the water on the field. At the same time they were taking care of some of the erosion problems on irrigated land.

Water use, water development and conservation really became my professional strong point. I am not ashamed to say that I was perhaps the pioneer in the development of conservation irrigation practices in the Pacific Northwest which have been spread around the world. This has

formed the basis of my international consulting work in India, Turkey, and New Zealand and various other places on how to manage water through drainage or through application of water to match the soil type, the crop type, and the quantity needed, at the time needed, to bring efficiency into the picture in a safe, productive way. Conservation irrigation practices became a major part of the technical program in the Soil Conservation Service over a period of time. That became the definition of "soil and water conservation" as far as irrigated land is concerned. In non-irrigated land, there are other devices for water conservation, but it was all tied back into this infiltration business. We had to know the soil. As an engineer, I had to know the soil intake capacity. I had to know what cover influence would do, in terms of straw or trash on the surface or growing crops, to infiltration. Coupling these things together we have made engineering a subordinate factor to the job that needed to be done to produce a crop in an efficient way and to save the soil. It was soil conservation supported by water conservation and development. That was the story we carried around the world to New Zealand, to India, to Turkey, to countless countries of almost every continent, which I did for over a period of thirteen years, off and on.

HELMS: When SES began, were operations too structure-oriented in terms of getting conservation?

WILLIAMS: Yes, that was the early emphasis during the CCC camp period. When we had all this labor to take care of from WPA during the relief labor days, we were forced into an engineering type program. "Build something that will use labor." I used to take WPA labor and clean the silt out from under a farmer's fences. That was not building anything because it would blow right back in again, but that was all we had for them to do. Then we would be laughed at for using WPA labor for that kind of stuff, you see. But what else was there to do with it? Here they were ready to go to work. We wanted to get rid of that labor. The labor part was running the program too much. We wanted to reduce that labor input and make that the farmer's job. If he was not interested enough to do the necessary work to install the practices that fitted his place, he was not going to use them anyway. We wanted to get rid of those camps. We were very happy when the WPA labor was over with, I can tell you that.

HELMS: You came to this realization fairly quickly after you started?

WILLIAMS: Very quickly, yes. After about the first week.

HELMS: I guess you have sort of answered the next question I had planned. You got to see the shift from

the demonstration area projects to the conservation district approach. How did you view that?

WILLIAMS: I want to say something about that, Doug. I was in on the very earliest days of that, of course, because the Standard Soil Conservation Districts Act came in 1937. I was in the Pacific Northwest living at Spokane, Washington. I was serving as an area engineer when the first soil conservation district came into the picture in the state of Washington and I was present at the hearing and in the organizational process. I worked closely with those farmers who became the district supervisors. Then I watched the district movement grow from 1937 until I retired in 1969, until it had covered practically every square mile of the United States with the exception of some urban areas and some of the public lands. I could not believe any more strongly than I do in the concept of conservation districts as against demonstration projects. The fundamental reason is that in a demonstration project, we actually went out there with labor, with materials, with seed, with trees, and did a job on a farm to show that it could be done. Whereas in a district, we went out there only with a soils map and with some technical guidance and advice on what to do with this kind of a problem and the farmer either bought it or he did not. Usually he would say, "I will try some of that on a part of the farm. If it works on a part of it, I will do it on the whole farm." Some of these farm conservation plans evolved way back there in the late 1930s. I would say the ones we had on the demonstration farms were not real conservation plans. They were government plans. But the soil conservation plans which were the farmers' plans, with technical guidance from SCS, tied in his problem, his capability, his resources along with his community interest, marketing opportunities, and so forth with what his capabilities were. He knew what power he had, horses or tractors. He knew what his financial resources were. He knew whether he could plant clover and alfalfa and use a part of the land for growing legume crops while the rest of it was growing grain crops. He had to make those decisions.

I did quite a lot of conservation planning as an adjunct to my engineering work. Usually we found that we could get a farmer to try out what we were suggesting on a part of his farm. If it did not work, why then we would not insist that he do it all. But if it worked and it proved advantageous, we would help him lay out the rest of it. I have some very great friends among the soil conservation district supervisors who I personally worked with in helping them come along. The organized effort of the soil conservation districts of the farmers working together, which is their project, not a government project, was sound. It is still working. I would say this out of my experience, in looking over the

entire field, somewhere between 10 or 15 percent of the total number of soil conservation districts, which is now some twenty-nine hundred or something, were outstanding in their leadership and their capability and their pulling people in. We had about the same number on the other end of the totem pole. They were kind of dead on their feet. It was partly the fault of the Service in generating leadership and it was partly the fault of the local people in electing people who did not want to work as a supervisor in the first place.

HELMS: Can you tie that to a region of the country as to which were more energetic or is there no pattern to it? Can you have one conservation district here with good leadership and then one next to it without it?

WILLIAMS: There is a real reason for it in my opinion--the background of education. In the early years that came almost exclusively from the Soil Conservation Service until such time when the Extension Service got more and more interested in the act and helpful. The background was selling conservation to the group before they organized the district. When they saw what was to be done, they wanted the capability or leadership to do it. In that kind of a setting, if a man or a woman agreed to be a district supervisor, he knew what he was taking on. But if he thought that he was just getting pushed into having to go to meetings once a month and sign a bunch of papers and maybe do some work trying to talk somebody into something, he would be a weak supervisor. A lot of the responsibility came back to the Service and how good an educational job it did. But it also hinged to a large extent on what we used to call finding the right "Elmer," finding the right local leader to work with. If you got the right local leader to work with in terms of getting him interested, he could get it out in the community.

If there had been soil conservation districts when I was a boy and my dad was busy in farming, he would have been a local leader because he was a fellow who was on the school board. He was on the township board. He was on this and on that. He did more work for his community than he did for himself. That is why we never got rich. But, he liked to work with people. He liked to work with boys. That is why he went to South Dakota State University and helped them establish an agricultural education program at South Dakota State.

HELMS: If you do not have a strong conservation district board, then the Soil Conservation Service conservationist in that area pretty much has to take it on himself to find the cooperators, doesn't he?

WILLIAMS: Unless you have got a strong board, it becomes an SCS project just like the old demonstration projects. There is too much similarity to the old demonstration projects.

Then it depends upon the capability and the energy and the drive of the local conservationists.

The local soil conservation technician took on a responsibility that should have been the responsibility of the district supervisors of pushing the program and getting people interested in it and trying to do the whole thing. We soon found out that some of them were very adept at it and some were not. We knew that in every case, even with the best leadership of farmers, we had to have good conservationists out there to even keep up with the parade, to keep current, and to keep ahead of them. This necessitated that the Service set up in the very early days a training program for its field people. Not just training in how to seed or how to plant trees or how to irrigate or how to do the technical things which were also needed, but in how to work with people, how to give leadership, how to develop their interest in conservation. You know you go out and ask a man, "You are not interested in conservation, are you?" He will tell you, "No." But if you go at it the other way, he will say, "Yes." So we had to teach them how to get the answer to be "Yes." When we give further consideration to training, this was the reason why, in the early days, the Service recognized that we had to have a good strong training program within the Service to keep current and to work with other people.

HELMS: During World War II, did attempts to increase food supply cause setbacks in taking submarginal land out of production, specifically in the area where you happen to have been located at the time?

WILLIAMS: Yes. I remember very distinctly some of the things that transpired during World War II. The government encouraged--properly so, in the national interest--that all land that was suitable be put under cultivation. The farmers, many without proper knowledge or proper guidance, plowed up land that should never have been plowed because it was not suitable for crop production. It was too shallow, too sandy, or too droughty to go into cultivation. Millions of acres of it were out in the high plains country or breadbasket country of the United States, the wheat basket. There was an awful lot, some fourteen or fifteen million acres of land, that should have never been plowed out of grass that was plowed and put into wheat. Fortunately for the farmers they had a year or two of pretty good rain and they produced a crop. Then the drought hit and the wind started. We got into the hazards of wind erosion again in spite of the early wind erosion control programs that had been carried out.

HELMS: During your time as assistant regional director in the Pacific region, what conservation problems did the Service attack successfully? On the other hand, what

problems persisted either because of physical conditions or landowners' practices?

WILLIAMS: I could write a book on that one, but I will not. I will try to keep it as brief as possible. In the Pacific Northwest, the entire Pacific Coast area actually, we had had one of the most outstanding plant materials specialists that the Service ever had, a man by the name of Dr. A. L. Hafenrichter, an agronomist with tremendous experience in breeding plants for conservation objectives, and special grasses and legumes to fit different climatic and soil situations. I think that the greatest contribution to conservation and perhaps to agricultural production came about through the plant materials. Call it research if you want to. But it was applied research--developing these plants on Service areas and then getting the seed out to farmers to try. It gradually brought into the picture changes in the types of legumes and grasses that were being used throughout the western states. We did not get into such things as breeding wheat varieties or crop varieties. That was the job of the research service (Agricultural Research Service) or the state experiment stations. But we did get into the job of developing conservation plant materials. This was one of the strongest things that was done.

The second most important thing, because of the need in the West for irrigation for the generally low rainfall areas and non-irrigated sections, was water conservation. This was why, as an engineer, the challenge of uncontrolled water, either too much of it from flooding, from storms, or too much irrigation water, or lack of controls, or the improper use of the irrigation water became such a challenge to me. I found early in the game that it was possible--by knowing the kind of soil you had, the texture and depth of the soil, the rooting characteristics of the plants that you wanted to grow, and something about their water requirements by growth intervals--to find out how much water to apply to the land to irrigate a particular crop and how often to apply it to keep the moisture in the root zone. In order to do that, we had to have controlled outlets from the irrigation canals. We had to get the Bureau of Reclamation to put some controlled outlets in the canals so that the water could be moved out to the farm laterals. We then had to get controls on the farm laterals so that the water could actually be applied to the particular crop when it was needed. I would say that, as a broad category, conservation irrigation or conservation water management, some of which involved drainage to keep land from getting alkaline, was the second most important development.

The third most important development in the West involved the tremendous amount of rangelands, grasslands, both private and public. The Service, except in the early days, did not have much to do with public lands except

through its technical influence. On the private lands we had information from our plant materials work on what it took to grow grasses and legumes and the kind of grazing practices. We developed some very simple, practical approaches that farmers and ranchers could understand. In other words, the principle of "take half and leave half." You let the cattle graze half the climax grasses in the pasture and then move them. Do not let them graze it down to the ground. We looked at the way the grasses would come back and then perpetuate themselves as opposed to counting the number of cattle put on a piece of ground. This was probably the next most important thing.

The fourth most important aspect was on the dry land cropland where we converted from the moldboard and disk plows to the subsurface cultivation which would leave the crop residue on the surface to protect against wind erosion and against the impact of water drops and running water.

The next most important thing, I think, was the introduction into the areas that had long slopes of contour strip cropping to shorten the length of the slopes, without terraces or diversion ditches associated with them. In the Palouse country, which is still one of the major conservation problem areas of the United States, if not of the world, we had a situation in which the very, very deep loessial soils, windblown soils, were fertile even after the top was gone. Farmers did not worry so much if they lost some soil. But the slopes were so steep and the rainfall was usually adequate so that very seldom if ever was there a complete crop failure due to drought. Many of those lands were too steep to be cultivated, but practically all were plowed up and cultivated. Our big battle there was to try to get some of these steepest, most vulnerable lands taken out of cultivation and put into grass. The farmers of the Palouse did not grow livestock. They liked to go to California, Florida and Texas in the winter. They just grew wheat. They did not have any use for grass. They depended on wheat because there is no use producing something on land unless there is a use for it, whether it is trees, grass, or wheat. On the Palouse area with its extremely steep and rugged topography we tried everything we knew how to try. We developed special strip cropping types of practices. We got the machinery companies to develop special equipment for use in those steep slopes. We got a certain percentage of farmers to really take it seriously and try to do a job. In spite of the fact that they did not have livestock we got quite a lot of them to incorporate clover and other legumes into their cropping systems to get some organic matter and nitrogen matter back into the soil. This was a help, but, unfortunately, there was the profit motive, the economic payoff to do it the way they had been doing it, especially as the bigger equipment and the heavier crawler-type tractor equipment came into the picture as

well as self-leveling combines. They could harvest any steepness of slope. When those things came along it just about knocked the conservation ideas in a cocked hat. As an engineer, I laid out many, many miles of what we called diversion terraces. We built those diversion terraces on a slight gradient around some of the hills on the longer slopes. We built them so high that they could not crawl over them with the machinery, so they had to plow between them on the contour. We got quite a lot of farms done. Particularly in the Walla Walla, the Blue Mountain topography of the states of Washington and of Oregon, we got a lot of those diversion type terraces done. But the Palouse remains to this day one of the great unaccomplished conservation areas in the United States.

HELMS: About what time would you say these setbacks--the larger machinery--affected earlier accomplishments you had made? I understood you to say that you had made some progress with cover crops and then things sort of reverted.

WILLIAMS: During the late forties from about 1945 on. It corresponded fairly well with the soil conservation district movement. And then it came along in the early 1950s. Every time the price of wheat got up high enough they would plow up some of the stuff and get back into wheat again!

HELMS: But you were pretty successful in the rangelands, I take it?

WILLIAMS: I would say we were more successful with the sheep farmers in the range country than the cattle farmers, with the exception of the sandhill country in Nebraska, which is one of the greatest grazing areas of the whole world. In the sandhill country of Nebraska, the soils are too sandy to be cultivated. They blow. That is cattle grazing country. Almost every farmer has taken seriously and profitably the conservation recommendations on the management of that land, the management of the grasses, the kinds of grasses to use for different situations, different exposures and different soils so that our grazing management program in the sandhill Nebraska area has been highly successful. It is not limited to that. An awful lot of the other rangeland had good progress made on it too, but of a lower nature because of the poor soils. Usually it was rangeland because of thin soils, rough topography, too many rocks, or something; otherwise it would have been cultivated. The big problem there was to try to shift from putting so many cattle on a particular piece of land to managing the grass with a proper number of cattle to eat the right amount of grass. This was a shift. The Service was able to sell that concept, but not 100 percent, unfortunately. But it was real progress. It was progress that had exceeded the progress made by the Bureau of Land Management on the

public domain or the U.S. Forest Service on their area. They still used the idea of so many cattle permitted for a certain size area.

HELMS: During your water conservation work in the Pacific Northwest, did the cost of water for irrigation affect the adoption of your recommendations?

WILLIAMS: Not very much. Of course, in California, the cost of irrigation water is comparatively very high, particularly in southern California where they must import their water from Colorado and so forth. They are a lot more careful with it down there than they were up in Idaho where they just diverted it out of the stream and it practically cost them nothing. The cost of water was a factor in that they were inclined to use more than they needed because it was so cheap. Actually there are very few places in the United States or the world for that matter where the cost of water is really the controlling factor. The cost of water is a small part of the total cost of production, even in the highest water cost area. There could be some isolated exceptions to that such as in Israel where they use drip irrigation instead of sprinkler irrigation, or some areas of the country like the Columbia Basin Irrigation project. Incidentally, I had a lot to do with outlining the conservation practices that would be used on that project. Certain areas would not permit any kind of irrigation except the use of sprinklers.

HELMS: Was the development of plant materials for the Pacific Northwest region mostly plants for hillsides and arid areas? What were the main problems they were trying to attack?

WILLIAMS: First, we hoped to develop perennial type plants that would do well in given climatic and soil situations. We wanted them to have a productive value if they were on land that should be used. We also had the problem of land that was so steep that it should not be used even for grazing. We developed plants there that were unpalatable. Both of these things were done: legumes that would add nitrogen to the land and proper rotation of grassed areas. We used to call it a brome grass, a clover combination. It is not always brome grass but some kind of grass. It was developed for the rangeland areas or the land that was to stay in grazing lands that would take a certain amount of abuse and would stand up under rigorous climatic situations, under droughty situations and shallow soil situations, and would still provide enough ground cover to reduce the erosion.

HELMS: Do you have any recollections why the Bankhead-Jones Title III Land Purchase program faltered? This was taking some of the submarginal lands out of production.

WILLIAMS: There were several reasons. In the first place, there were some philosophical differences as to whether the government ought to be owning the land or whether the farmers ought to own it. When the Bankhead-Jones program first bought up the marginal land, they bought quite a little land that was not too marginal. They got some real good land purchased in some places that was suitable for cultivation. Then the drought let up and the farmers were anxious to have some more land. I am thinking now of one area in southeast Idaho around Malad. There was some good soil bought up there. The farmers wanted to grow wheat and the government wanted to grow grass. This was one reason there was a conflict of views between farmers and the government. Of course, the political pressure kind of developed around that. In addition to that the price of wheat after the war and the need for production reached the stage where all land that was reasonably suited for cultivation plus some that was not got transferred back into private ownership. The Service was happy to transfer the rest of the projects to the U.S. Forest Service to manage along with the public domain. The U.S. Forest Service manages the remainder of the Bankhead-Jones Act lands along with the rest of their land management programs.

HELMS: The Soil Conservation Service did not have very much enthusiasm for managing these public lands?

WILLIAMS: It was against the basic philosophy of the Soil Conservation Service for the government to buy land and manage it. We were not in the land management business. We were in the technical assistance--the conservation business. We wanted to see productive use of the land. We wanted to see it in the hands of the farmers if it was suitable. If it was not suitable for private ownership, we wanted to see it in the hands of some agency that knew how to run public lands and the Service was not an expert at that. The influence that I had on it was to get rid of it.

HELMS: Did you have something to do with seeing that?

WILLIAMS: Oh yes, I had something to do with that.

HELMS: Well, we will get to that point later. Why were you selected to come to Washington? Whom in Washington did you impress to be selected to come here to work?

WILLIAMS: The last few years I spent at Portland, Oregon, which was then the regional office for the Pacific Coast, I was assistant regional director. I also had an assignment from the Secretary of Agriculture to represent him on the Columbia Basin Interagency Committee for the entire Columbia Basin. This committee met monthly or more often to pass judgment upon projects of various natures all the way from power development, the Bonneville Power

Administration, to flood control by the Corps of Engineers, work by the Bureau of Reclamation and so forth. Agriculture, to the dismay of some of these other agencies, was pulled into that picture. I had, as a representative of the Secretary on that interagency committee, the same power of my vote as the chief of the engineers had. This kind of irked a few people, because sometimes I would vote the other way. That was one way we were able to get the Bureau of Reclamation to pay some attention to what to do with water after it is in the canal. We used to just ride the dickens out of the Bureau of Reclamation for getting water out there and then forgetting about it in their canals. "Let it go," they said. "Leave it up to the farmers to sink or swim." Many of them sank. We got the Bureau of Reclamation on the projects, which were under their administration and had not been turned over to farmers, to give some further attention to water use on the soil, plants, and the water application. They learned that from the Soil Conservation Service.

Now, why did I come to Washington? When Charlie (Charles F.) Brannan was Secretary of Agriculture, I was his representative on that committee for several months. He wanted to spend a few days in the Pacific Northwest to find out more about what was going on out here in the Columbia Basin Project and find out more about the Northwest. I was selected because of my association with the committee to chauffeur him around for a few days. We did a lot of chauffeuring and a lot of talking and a lot of visiting about concepts. One of the areas that we visited was the Columbia Basin irrigation project, that million acres of land that was irrigated out of the Grand Coulee Dam. It so happened that Hugh Bennett was out there about the same time. He joined me one day as we were out there in the Columbia Basin Project. I was explaining to Brannan and Bennett, "Now in this soil area we have got various sandy windblown soils here. We have to irrigate them with sprinkler irrigation. We have to keep ground cover on them. Over in this area we have got good deep loamy soils that can be used here for any kind of crop with good water control." We got back to the office and Bennett went to the regional director, whose name was Heinie Christ, and asked him who that soils man was who was out with them. He said, "Hell, he's no soils man. He's an engineer!" Bennett, said, "Well, I'll be damned." That developed later to be a very significant matter. Charlie Brannan went back to Washington from that trip. Inside of three or four months, he decided he had a vacancy on his staff. He called me up on the phone and wanted to know if I would come back and join his staff.

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HELMS: Mr. Williams, when we finished last time you were explaining why you were selected to come to Washington. I think we had gotten to a point where Charles Brannan, the Secretary of Agriculture, had called you.

WILLIAMS: Yes, Doug, Secretary Brannan called me sometime after that field trip and wanted to know if I would take a staff position of limited duration in his office in charge of flood control surveys and flood prevention responsibilities at USDA. I respectfully declined his offer because I liked it so much in the Pacific Northwest and liked what I was doing. But he did not want to accept that so he asked me to make a trip to Washington. He wanted to talk to me. I did so and I thought up all the reasons I could why I should not accept it. When I went to his office and sat down, he leaned back in his chair and listened while I talked about half an hour. Then he asked me how my health was and I said, "Pretty good." And he said, "When can you report?" He had already cleared it with Dr. Bennett to release me from the Service. So I was appointed. That appointment was for one year. I went from that appointment back to the Service one year later when A. E. (Amwell) Jones, then chief of operations, resigned because of poor health. Dr. Bennett asked Charlie Brannan to release me to become assistant chief of the Service. That was one year before Chief Bennett retired.

HELMS: What were your duties as the flood control survey officer?

WILLIAMS: This was in the beginning of the activities under the so-called eleven river basin or watershed projects. The first eleven projects were activated by the Service as a result of Congressional action. The surveys had been made many years earlier. They included several basins in the country, some in California, some in Mississippi, and one big one in Iowa. These projects were to be the foundation for updating the surveys. The Soil Conservation Service in cooperation with the Forest Service and the Bureau of Agricultural Economics had prepared updated reports. It was my function, working with those agencies, to review those reports and presumably to get them ready to transmit to the Congress. This extended over quite a period of time. It brought up many controversial matters in view of the fact that the concepts of the earliest surveys were not the concepts that later evolved in terms of getting more attention to retardation of water flow through small reservoirs. It dealt almost exclusively with land treatment which included land treatment practices and reforestation and so on. It was our opinion that the surveys should be expanded to include a broader program. It was my function

to review for the Secretary those reports and to give the blessing to them for their transmittal to Congress.

HELMS: Were you fairly well pleased with the final product of the reports?

WILLIAMS: No. The final products were too bulky, too detailed, and too complicated for ready reading. I suppose very few people ever found out what was inside them, rather than the summary pages. By that time, certain key members of the Congress were sufficiently well acquainted with the objectives of the projects initiated out in the field that there really was not any problem of having them authorized in any event. That process did take place in Congress.

HELMS: Do you recall who in particular in Congress was most interested?

WILLIAMS: That was still while Congressman Clifford Hope was Chairman of the Agriculture Committee on the House side. He was a Republican and always a leader. Bob Poage from Texas was a leader on the other side, and also some of the Oklahoma delegation. They could see more positive results coming from it in the early days. Then there were some lay leaders from Nebraska, the governor's office and so on, who were very helpful at that time in pushing the concepts. And I should mention Congressman Ben (Benton F.) Jensen of Iowa who was a strong supporter.

HELMS: You went back to the Soil Conservation Service. Not long thereafter you were appointed head of the Agricultural Conservation Program?

WILLIAMS: When the change of administrations from the Truman Administration to the Eisenhower Administration took place in 1953, following the 1952 election, Ezra Taft Benson was appointed as Secretary of Agriculture. He proposed in October of 1953 a significant organizational change, a number of them, in the Department of Agriculture. Many of these affected the research activities, but among the ones that affected the Soil Conservation Service was the elimination of the regional offices of the Service. This was very strongly opposed by Dr. Bennett and by lay leaders, soil conservation district supervisors and others around the country. They were afraid that the breakdown of the regional offices would deteriorate the technical competence of the Service. In any event, the announcement was made in early November that the reorganization would go forward. Among other things, the Agricultural Conservation Program split away from the old Production and Marketing Administration and was set up as a separate agency. I was asked to be the acting administrator on a loan basis from the Soil Conservation Service to head up that activity until some full-time regular appointment was made. That loan lasted for nine months. I went back to the Soil Conservation

Service at the time that Dr. (Robert M.) Salter, who had succeeded Dr. Bennett as chief, resigned. This was when the reorganization was announced. Salter resigned and I was asked to take over the Soil Conservation Service the next day.

HELMS: On that same question, who asked you to head up the Agricultural Conservation Program (ACP)?

WILLIAMS: Secretary Benson. I do not remember whether it was he personally or Assistant Secretary James Earl Coke. It was one of the two of them.

HELMS: Was that an attempt to increase cooperation between the SCS and the ACP and link those closer?

WILLIAMS: I do not know that that was a primary motive. It might have been an incidental motive. I think they were more inclined to try to see if there could be a stronger, more valid cost sharing activity with the money going toward more enduring conservation practices than had been the historical case. The historical case had been that so much money had gone for temporary practices like fertilization, lime and so forth. It was the desire of the Benson administration to see the money go into more permanent, enduring things that would last over a period of time.

HELMS: When were you selected as administrator of SCS? Who was responsible for that? Benson?

WILLIAMS: I went back as administrator of SCS. That was when the reorganization took place really. The transfer to ACP or the loan to ACP took place in the early months of 1953. Nine months later, in November of 1953, was when the reorganization took place. It was on a Sunday afternoon when Benson called me at home and asked me if I would take over the Soil Conservation Service the next day. I told him only on one condition. That was if he was through reorganizing it and would let me operate it. I was not going to take it with the idea of having it disintegrate further.

HELMS: Did you encounter any difficulties in administering a Service that had been so identified with one man? There were some Federal agencies that one man built up and the people were very loyal to him.

WILLIAMS: No. There were no particular difficulties. There were a few of the old, old timers who had more or less grown up with Bennett who philosophically, I think, resented seeing anybody take his place. But Bennett was never known to be a good administrator. He was a technical man, a professional man and noted worldwide for his capabilities in that regard. I had established something of a reputation of being able to say "yes" or "no" and have some good reasons

for it. I think I was accepted rather universally as the administrator. The name was changed from chief to administrator at that time. I would say there were minimum difficulties of that sort of acceptance. The problems that we had had to do with organizational changes from the regional organization to a state operation. This included the selection of state conservationists to direct the work in each state, the selection of staff members for technical leadership, and the setting up of technical service centers for interstate support. We had our problems, but there was not a refusal to accept me.

HELMS: Do you think that reorganization in the long run helped or hurt the Service?

WILLIAMS: I think the reorganization turned out to be a strengthening of the Service rather than a weakening of it, partly because of the resolve of the employees that SCS was not going to be weakened. And partly because if we were going to a state-by-state basis, our state conservationists could be in daily contact with state-level organizations--state governments--and with the responsibilities that state governments should have and with the state extension service and so on. I think as a result of that our working relations improved. The program of the soil conservation districts benefited.

HELMS: There were other people involved other than Benson in wanting to see that happen, weren't there?

WILLIAMS: Benson left the actual carrying out of it to Assistant Secretary Earl Coke who had been the director of the Extension Service in the state of California before he came to Washington.

HELMS: Did losing the research work in the reorganization hurt the Soil Conservation Service?

WILLIAMS: I think the answer has to be no to that. The fact of that matter is that when soil conservation research work was within the Service, it did not get the financial and administrative support that it needed as compared with the operation work. Therefore, it was not serving the needs of operations as much as it could. When it was transferred to the Agricultural Research Service, it was done with the understanding they would give attention to the needs of research as the Soil Conservation Service presented it to them. It would be a joint review and joint participation. It is my opinion that we got better results from the Agricultural Research Service, who by the way used many former SCS employees in carrying out the research, than we had when it was a part of our own organization. Somebody told me about reorganization that took place in the Forest Service. He said when they made a separate organization of their

research work that "we found out we could work with them." This was sort of what happened in this case!

HELMS: I believe in your time there the land utilization projects were transferred to the Forest Service. Were you responsible for that?

WILLIAMS: I was not responsible for it, but I had a lot to do with helping it being brought about. The decision was made beyond my level and I can not tell you specifically who made it, except of course the Secretary of Agriculture approved of it. It was theoretically sound and I think finally turned out to be sound. The land utilization projects were on land that the government had acquired and owned and, by putting them under a land management agency, the land could be managed in conjunction with other government lands. There is a difference in how the government lands have to be administered as against working with people on private lands. Aside from some program orientation, we had some of the usual problems of getting some of the land shifted over, and personnel difficulties, such as not wanting to leave the Service on the part of some people. Some of those problems were inherent in the process, I guess. I was never really sorry to see the land utilization projects transferred to the Forest Service as a general thing. There might have been land in some of the projects that should not have been in the public ownership in the first place but that is another question.

HELMS: Could you tell us about the conception and enactment of the Small Watershed Program?

WILLIAMS: Based upon the experience that we already had with the eleven authorized projects, which had gone into operation after World War II, it became evident that soil and water conservation could not be carried out just on individual farms. It had to be community action. It had to be on a water management as well as soil management basis. To manage water you have to do it on the basis of hydrologic units. In other words, the area from which the water flows needs to be considered, program-wise, for the kind of actions that need to be taken on the whole watershed. But it was realized that these eleven projects were far too large an area. They were not sufficiently homogeneous in terms of people to produce the right kind of results. It was proposed by certain members of the Congress, particularly on the appropriations committee by Jamie Whitten of Mississippi and H. Carl Anderson of Minnesota, that some small watersheds be established. They added an amount of money--I believe it was $5 million to start it with--for up to fifty small projects not to exceed two hundred and fifty thousand acres in size. It came about through the general basic authority that the Soil Conservation Service had through its original Public Law 46. It could be handled through the appropriation process without being challenged on the floor. The demonstration projects had partially

been set up and theoretically they were to be carried out to prove one way or another whether permanent legislation was needed for a Small Watershed Program for flood prevention and water conservation.

However, before the projects were all selected it became evident to some of the members of Congress and some of our own people in consultation with them that legislation was needed. Mr. Carl Brown, particularly, who passed away many years ago, was a strong leader in the concept of the watershed program. He had been in charge of our sediment control research activities at one time and then our sediment control operational work. He was strongly of the opinion that we needed to approach many of these problems on a small watershed basis rather than on an individual farm basis, which was absolutely right. With some discussions with the members of Congress, as I recall it, Clifford Hope, then the Chairman of the House Agriculture Committee, with the aid of Carl Anderson, Ben Jensen of Iowa, and various other people proposed permanent legislation. They did not want to wait for these demonstration projects set up under the appropriations act to come to a head. A piece of legislation was drafted within the Service at the request of the Congress, which was based upon flood prevention and land treatment and supported by small structures for flood prevention purposes. The original draft did not include such things as water for irrigation, drainage work, municipal supply, or fish and wildlife. Those were subsequently added. This legislation was also introduced in the Senate at about the same time. I do not recall the names of the Senators who took the lead on it but I know there was strong interest in it. The legislation was essentially uncontroversial and was passed by the Congress and signed by the President.

There was opposition to it. The opposition to it came from the Corps of Engineers who were fearful that this would be injurious or interfere with the basic flood control responsibility under the Rivers and Harbors Act which the Corps of Engineers administered. As a result of that opposition, it looked like for a while that the public law which became Public Law 566 might bog down and not pass because of the Corps of Engineers or their lobbyists or people who were interested in their work. So Cliff Hope as the primary legislator of interest went to President Eisenhower and asked him to interject his influence upon the Corps of Engineers. President Eisenhower, to the best of my knowledge, called the chief of the Corps of Engineers and told him to lay off. He wanted this legislation. It was his program and he did not want them to get in the way. Immediately the opposition died down and the law was passed. From then on it was a question of establishing a working relationship with the Corps of Engineers which ultimately worked out quite well.

HELMS: To what extent are you responsible for having SCS work more with suburban and urban clients?

WILLIAMS: I really cannot tell you. I really do not know. It was sort of a combination of recognition by several people. Now, I will say that I did have something to do with it. Way back in the early 1950s--and you can find my original article in *Coronet* magazine--I wrote an article about the disappearance of good agricultural land to nonagricultural uses and the danger of some of our best land getting out of agriculture. This predated by almost thirty, at least twenty-five years, the current concern about the disappearance of our best agricultural land. It is still the same problem. At that time I estimated that there were about a million acres a year of our good agricultural land going into highways and other nonagricultural uses that did not necessarily need to take place. That article had nationwide distribution and had something to do with stirring up interest of other people. There were some broad-minded people in the urban communities here and there around the country, as well as their agriculture leaders such as soil conservation districts, who recognized the interrelationship between some of the urban problems and some of the rural problems. Therefore, in such places as the suburban areas of Chicago we had a growing interest in keeping the land in agriculture, but also recognizing that it had some other uses too, particularly esthetic and recreational uses. From that it grew into a strong feeling that the growing suburbia which was gobbling up so much land around the cities needed to do a better job of planning, or a job of planning where none was being done. There were many people including an architect in the Chicago area, John Quay, who had a very strong interest in this matter, who took the lead in working with the Service and helping bring about the concept. There grew over a period of two or three more years a feeling on the part of many soil conservation district leaders and many urban leaders that something more needed to be done on this regard. We had right here in the Washington, D.C. area, in Fairfax County, for example, some leaders. One was a radio announcer and a chairman of the soil and water conservation district, Stuart Finley, who took strong leadership in wanting to see some planning done in suburbia. Land that was good for various uses would be planned for those uses. This thing evolved gradually over a period of time and I would hate to say that there was any one person that had any overwhelming influence on it.

HELMS: Did gradually working with suburban areas draw a little more support from Congress other than your traditional agricultural allies?

WILLIAMS: That is part of the story. We were able to get the soil conservation districts, the national association, to invite into their annual

meetings and other meetings representatives of urban areas, representatives of recreational interests such as fish and wildlife, and park interests to express their point of view and talk about the value of land use planning for things in addition to agriculture. Then there were some national conferences held on the subject here in Washington which were instigated by the Service and supported by several agencies of the Department of Agriculture and some in the Department of the Interior. It just evolved over a period of time.

HELMS: What prompted you to initiate the national inventory of conservation needs? Has that program accomplished what you wanted it to?

WILLIAMS: It did in that it was the first step. It seemed to me after I had written this article that appeared in *Coronet* and after doing a lot of thinking about this disappearance of land to nonagricultural uses that we really did not know what was going on in terms of volume. My guess of a million acres was just right out of the blue. I had nothing to go on except some very rough calculations. It appeared to me that we could, by going to our field people and in consultation with local interests--not just soil conservation districts but county officials, state officials and others--get a pretty fair idea of what was going on. From that evolved the idea of a sampling process, a statistically sound sampling process, which would actually select on a scientific basis certain areas of land around the country. You could go out there and find out what in fact the land was being used for. This was done and became the general process. We worked with Iowa State University and some of the other universities on this statistical operation. We did get an inventory. It involved a certain amount of facts, a certain amount of conjecture, and a certain amount of estimating, community by community. I think the national summary was indicative of the direction. I think the regional summaries were also indicative. I think at the state level they were more meaningful, but it had the most meaning and the most accuracy at the county level where local people knew more about what was going on. When you start putting the whole thing together on a state and regional and national basis, obviously it became pretty generalized. But it did this: It helped to create a lot of interest. "If this is anywhere near what is going on, well, we had better know a little more about it. We had better be hurrying up the completion of our soil surveys. We had better find out for sure what is going on."

As it happened, my original guess of a million acres of annual disappearance was only exceeded by a quarter of a million acres. I do not remember the exact figure. It seems to me that it was about a million and a quarter acres of disappearance. At the same time, we found out that there was a lot of awful good land in forest use and

rangeland use that could be used for cropland in case of necessity. There were various categories of use and this was estimated on the basis of land use capabilities. As a starting point, I think it was very much worthwhile.

HELMS: Did you try to assess during that whether you were gaining ground or losing ground in getting conservation practices on the land or did you already have a good idea of what was happening in that area?

WILLIAMS: In terms of alerting some people, urban and rural, to the need for land use planning and to the need for conservation not only on a community basis, but on a farm-by-farm basis, I think it was a stimulus. Now I would hate to say how much it brought about but I am sure it did not do any harm. It did some good. How much, I would not want to say. I think it more than paid for itself.

HELMS: Since it has been continued, it has been recognized as being beneficial?

WILLIAMS: Yes. That is right.

HELMS: What were the climatic factors and who were the people involved in getting the Great Plains Conservation Program initiated?

WILLIAMS: (Laughter) I am afraid that you will think I am getting back to saying that I did everything. It so happens that the Great Plains Conservation Program was another program that also came into being during the period of my administration. Of course, my administration extended over a period of sixteen years so there were quite a few things happening. This was an outgrowth of the Dust Bowl days back there in the "dirty thirties." I grew up in that part of the world and I knew it firsthand. A lot of the things had been done. The shelterbelt planting had been carried out largely through Forest Service and the emergency activities. There had been some wind erosion demonstration works set up after the big blow. That was the big blow which triggered the creation of the Soil Conservation Service in 1935. Then World War II came along and the big demand for food and fiber. So the word went out. But the word did not need to go out to plow the land because the price of wheat went up. The farmer went out and found some land to plow up and put into wheat. There was an awful lot of very poor land that was plowed up during World War II and subsequently when the price was still favorable that should have never gone into cultivation. Millions of acres of it. This became very evident when we had some drought years that came along again in a kind of cycle situation after World War II. We had not accomplished the job at all. It was going too slow. It was a community-wide, county-wide, part of a state, part of ten states involved, all the way from Canada to Mexico. There was a lot of discussion on what should be done. I know the state conservationists from those ten

states were heavily involved. I know that they discussed it locally in the states with the governors to try to come up with some ideas for a program.

It is true that I personally took the leadership, again working with Congressman Cliff Hope because he was from Garden City, Kansas, right from the blow area. Some of the other congressmen were from Nebraska. We thought maybe we needed something to focus on this problem area. Even though we had the basic authority under Public Law 46 to do the things that could be done, we did not have the financial resources to focus there and not take something away from the rest of the country. By having special legislation, Congress could appropriate money to that program that would not belong to the rest of the country. It would go to that particular area. With the help of the General Counsel's office in Agriculture and with the sympathy and support of the Secretary of Agriculture, we concocted in 1956 what became known as the Great Plains Conservation Program. Then there was a question of who should administer it. There was not much question in *our* minds who should administer it. We felt it was basically a soil and water conservation program with multiple practices and it ought to be based on sound technology and that the cost sharing features, instead of being like ACP for temporary measures, should be tied to permanent practices. No Great Plains funds should be used for annual practices except on a strictly emergency basis. After the basic legislation was passed by the Congress the program began to take shape with my leadership as administrator and with the staff support of many people, but especially Mr. Cy (Cyril) Luker, who was our first Great Plains Conservation Program leader in the Washington office. He was from New Mexico. It had strong support of the congressmen and senators from those ten states, who were familiar with the problem. It did not have strong support from congressmen from other parts of the country such as Congressman (Jamie) Whitten, who at that time was on the Appropriations Subcommittee and is still on the Appropriations Committee. Since this area did not affect Mississippi, he never took very much personal interest in it. In fact, he kind of felt, I think, that we could do what needed to be done under the general law. But H. Carl Anderson, who was from Minnesota--next door to the area--was interested. He was the minority leader.

We were never able to get the full amount of the appropriations authorized by the Great Plains Act. I believe that was $25 million per year. We did get up to a $10 million level of appropriations. The program details as to just how it would be handled were worked out by staff people in SCS working with the Forest Service and others and with our superior in the Secretary's office, Ervin Peterson. He was very sympathetic to the concept

of the Great Plains Program and to the concept that we had in it of cost sharing for enduring or perma-nent type practices rather than temporary practices. He and I traveled through the Great Plains area with some of the congressional representatives of the area to see for ourselves and for him to learn about the problem. We talked with farmers. We talked with district supervisors. We held meetings. We did a lot of different things. He came back 1,000 percent in support of the Great Plains Conservation Program as did Senator Roman Hruska, who up to that time was just an Omaha lawyer who was not much interested in agriculture of any kind, and especially conservation. He came back saying that this is one thing that he could support. He was a very conservative Republican senator, but here was one thing that he could support.

The Great Plains Conservation Program got underway about the same time that we were getting underway with the Small Watershed Program. There had been a lot of things taking place in the middle 1950s. From about 1954 on up through 1960 a lot of activities supplemental to our basic authority to work with districts were added. In all special programs--the Watershed Program, the Great Plains Conservation Program, and the Resource Conservation and Development Program--we tried to make these supplemental and special purpose to add to the basic authority of the Service. I think by and large that this was reasonably well done, although admittedly we did not bat 100 percent on it by any means. There was some feeling on the part of some soil conservation districts who did not happen to be in the Great Plains area or did not happen to be in an approved watershed that some of the money that should have been coming to their districts was going to somebody else. That was awful hard to prove one way or the other. To the best of our ability, we had a sound basis for the allocation of the funds. The work progressed soundly.

I am satisfied that nearly all the long-term contracts awarded between the government and the farmers, with soil conservation district approval of the conservation program for the farm, were binding contracts. From a financial standpoint the farmer was obligated to carry out a program over a period of time. There was a penalty involved if he were to plow up the land again as was done after World War II. He would have to pay back the money that was given to him for carrying out a conservation practice as well as some other penalties. The Great Plains Conservation Program, after it was observed by farmers living in the area where it was pertinent, became popular. It became especially popular to those farmers who had land that needed to go back into grass or where more shelterbelts were needed. We in the meantime had inherited the shelterbelt program from the Forest Service and we changed the nature of it. Instead of going into wide multi-row shelterbelt planting, we went into

single and double row planting of trees. We did this partly as part of the Great Plains Conservation Program because it was pertinent to that area. Then several million acres of the some fourteen, fifteen million acres of land that should not have been plowed up and needed to go back into grass was reseeded to grass. A sound range management program was designed for those farmers. I think the Great Plains Conservation Program was highly successful.

HELMS: Do you think that we need that sort of program for other areas of the country?

WILLIAMS: I think we have a need for many special areas in the country. I would like to see some kind of program designed specifically for the Palouse country, one of the major erosion control problem areas of the United States. It was proposed several times by the Service and by soil conservation district supervisors living out in that area. Since it primarily affected only Washington, Idaho, and Oregon--mostly Washington and Idaho--it did not get enough support in Congress to push it through. The feeling was that you can take care of that with the regular program. I honestly believe if there had been authority to design a special program for the Palouse area and put the added resources and responsibilities in there that it would have made a difference. Now whether it would have solved the problems or not only time will tell. But the basic facts are that the physical problems of erosion in the Palouse that existed thirty years ago are still there.

HELMS: Would it be wise to have a big general fund applicable for the whole country where you could do contracts with farmers for enduring or permanent measures?

WILLIAMS: If you had that you would in effect have an ACP with a different type of administration. It would have to be an ACP based upon a technical foundation and based upon conservation needs rather than dividing up the money--so much for a congressional district or so much for a county or state. Theoretically having a big pot of money and being able to spot that out on a special basis has some merit. I am afraid the practical problems of political pressure would defeat it. I would be afraid of it.

HELMS: So you think that legislation designating certain areas is probably a wiser way to go?

WILLIAMS: I think if the Congress designates the area and appropriates the money to carry out a program for the area that you have got the soundest basis.

HELMS: SCS people seem to have esprit de corps in carrying out their mission. Has this improved or declined through the years?

WILLIAMS: Yes, Doug, it is true. The Soil Conservation Service employees from day one were highly dedicated to the work that they were to do. They were because they could understand the problem and its significance. They were because they were dealing with solid facts of soils, the water, and the plants. They could see results of their work. It is not like some jobs of being able to talk about it but not seeing anything happen. You could be part of the action of bringing change. It made them interested and developed an esprit de corps personally and then as a unit of organization. I think that it has been a very important part of the Service.

I think there is some degree of slacking off of esprit de corps in the last few years, partly because of overloading of work activities at the local level with decreased support. When you put too much of a workload on a person so that he is unable to do the kind of a job he would like to do and is capable of doing, I think you have to hurt his pride and hurt the esprit de corps. I would say that the basic elements of esprit de corps are still present. There is nothing about the current situation as I understand it that would not be revived again in esprit de corps with resources--wherever they came from. They would not all have to be federal; they could be private or public nonfederal such as county or state. But with resources to do the job, I think you would see again a rebuilding of the esprit de corps that was so strong for so many years. I do believe that during the period of the fifties and sixties when we had the new programs coming into being, new opportunities, and sixteen thousand employees, esprit de corps reached its peak. I was always proud of it. When you get up to around sixteen thousand employees in an organization and you can just about say that every one of them is out there doing a job within their capabilities and opportunities, then you can feel pretty proud of your organization. I always felt that way.

HELMS: SCS seems to place a great deal of emphasis on training, including their own courses and at educational institutions. What is the origin of this emphasis?

WILLIAMS: Doug, I do not know that any one person was the originator of it. We had several staff people in the Soil Conservation Service. Dr. (William R.) Van Dersal, who was one of my assistant administrators, was in charge of our personnel work. And our personnel director, Verna Mohagen, and some of our field people. We recognized that we had to have new employees and most were college graduates that we got from universities. We got them as agronomists or engineers or range managers or foresters or what have you. They were not conservationists. They had to have a rounding out of "how agronomy relates to engineering," and "soil management," and so forth. There was not any other place to do it except in the Service and

this was decided fairly early in the game. I do not know precisely when the first training centers were established, such as the one at Coshocton, Ohio, which was one of the strong ones. Another one was in Athens, Georgia. Another one was in Nebraska. I do not know exactly the date that those were established. They became very necessary. The first step would be to take the new recruits there for general orientation on what the Soil Conservation Service is all about. "What is its basic authority? What is its function? What is its job? Where do the different pieces fall? Do they fit together? What is soil and water conservation? Is it agronomy? Is it soil management? Is it this?" "Yes, it is all these things but it is all of them put together."

At the same time that we were having these orientation classes, we recognized the need for two additional types of training. One was on-the-job training right out in the field where the man was assigned to a field location, where his supervisor or some person assigned to do it would go with him out in the field and hold him by the hand, so to speak, and take him through the process of how to interpret land and the soils, and how to judge land capability. How to recognize when one kind of grass was needed against another kind of grass or when you needed a grass-legume mixture or how to recognize when range grasses need better management. How to recognize when terracing was needed and how to build terraces. How to lay them out and build them. All of these required on-the-job training.

They also took a second type of group training, advanced training in a professional field. At these same training centers where we gave the orientation training, we set up specialized training in the vegetative field for agronomists, as well as range management and forestry. We trained people to adapt their technology to soil and water conservation farming. Also on engineering techniques. I happened to have graduated as a civil engineer. I grew up on a farm so it was a rather easy transition. I understood agriculture from the beginning. But an awful lot of engineers did not have that kind of background. Therefore, they had it to learn. They had to learn that they were not out there just to do engineering, but they were out there to do a kind of engineering which would support a conservation program and would support or make possible a vegetative program, a land treatment program that would put water into the soil instead of leading it off. There was a need for specialized training of a group nature as well as the general orientation. Who started it? I do not know. I know that I gave it all the support I could muster because I recognized that with all the people that we had if they were not trained to do their jobs they could not do them. I did support it very heavily and heartily.

Part Three: June 14, 1981
Alexandria, Virginia

HELMS: Mr. Williams, who conceived of the idea of the multi-county Resource Conservation and Development (RC&D) projects?

WILLIAMS: I can say unequivocally that it was the concept of Secretary Orville Freeman. He had been the governor of Minnesota. I had known him fairly well as governor having worked with him on a number of issues within the state. We had talked about some of the conservation problems in Minnesota that go across county lines and take in a number of jurisdictions. After he became the Secretary of Agriculture, he asked me to stay on as the administrator of the Service. Not long after that he asked me to come over and discuss some program matters with him. He was 100 percent in support of the soil conservation district concept of conservation work. But he felt that the problems did not stop at the county or district lines and that many of them needed to be dealt with on a broader basis. They were not necessarily water conservation or watershed oriented although that might be a factor. He asked me if it was not true that in a number of resource areas the land use--whether it was in forestry or grass or cropland or perhaps recreational uses--had an economic impact and could have more of an economic impact if people would work together on a multi-county and other jurisdictional basis. I had long been convinced that that was true but our appropriations and our directions up to that time had been focused very largely on the soil conservation districts entity approach. Our funds had been appropriated for that purpose. When I agreed that some of these problems could be handled on a multi-county, multi-jurisdictional basis, he said, "Would you be willing to tackle some kind of a demonstration or trial program?" I said, "I guess we would have to do it with the present resources we have because there are not any other financial resources to do it with." He said, "If we could start out two or three of them and get some experience out of it, maybe we can find a way to convince Congress to give us some extra money." I agreed that we would be willing to try on that basis. Then he turned to me and said, "What shall we call this thing?" I said, "Well, we have been talking about resources and conservation and development from a standpoint of labor opportunities and economic opportunities. Really what you are talking about here is the economic side of the results of conservation." He said, "Okay, let us call them RC&D projects." That was how they were named. He and I together did it and that was a start.

Then he told me to go ahead and try to find one that I thought would be manageable in size and that would have some problems. That was how the one in southern Indiana was selected as a trial, the first one. It was

in an area where there were problems of land use from a cropland standpoint. They needed conservation on the land. There were problems of private forestry, of farm forests, and commercial forests. Trees were just standing there with no use and there seemed to be many opportunities in the recreation area. Our state conservationist, Mr. Ed Swain, was able to get the soil conservation district directors of three counties together. After discussions with them and discussions with county officials, they agreed to start a pilot project. So that area was selected. Secretary Freeman made a special trip out there to launch the project. That became one of the best projects we ever had because the entire community, the three-county area, was behind it and they did have plenty of problems to work on. The second one was selected in a quite comparable way. It was in the area north of Pittsburgh, in northwestern Pennsylvania. That was a different set of problems and a different combination of political jurisdictions. But the soil conservation districts, and I think there were three of them there, were quite active in leadership. That was a very, very key point.

HELMS: So after you saw the results of some of this he tried to get the legislation enacted?

WILLIAMS: We had the authority to do what we needed to do under the old basic Public Law 46, but the problem was that the Congress and the administration had interpreted this on an individual soil conservation basis. In order to meet some of the problems, we needed to get authority to do some special work in recreational land use areas. In terms of some amendments, the old Bankhead-Jones Act permitted us to do some work on public lands.

HELMS: What are your thoughts now about the RC&D projects? In retrospect would you have done anything different?

WILLIAMS: I think the concept was absolutely sound. I think the beginnings of it were good. But like so many things it sounded to a lot of people like the salvation of all their problems and they wanted to jump into it too quickly--before they were ready. That was true of some of our own personnel as well as some of the soil conservation districts and non-soil conservation district leaders like city mayors, councils, and college officials who saw an opportunity, or thought they did, to get a hold of some federal money to do some things. They came up with some grandiose ideas and they brought enough pressure to bear to get areas designated that were really not ready for it. They were really too big to be handled in a homogeneous fashion. The Soil Conservation Service was not equipped to handle them. I think that the program began to bog down or became static, so to speak, when it got away from the smaller homogeneous areas where local leadership could get together rather frequently and discuss the

problems and make decisions. When they got too big they could not get together to deal with their problems. We had trouble with the soil conservation district folks for diverting the Soil Conservation Service technicians from their regular conservation activity into a semi-managerial type of approach of public relations and dealing with political jurisdictions. If the groundwork had not been properly laid, we found that the local people would not take the lead and expected the Soil Conservation Service to do it all. Therefore, it pulled a lot of people away from some of their regular duties. From that standpoint I do not think it was good.

HELMS: You mentioned that it pulled the conservationist away from his regular duties. On the other hand, were there some who concentrated too much on their traditional role and were not fully aware of the other things they were supposed to do?

WILLIAMS: We had both. The Soil Conservation Service personnel had been trained as technicians to deal with erosion control problems and agronomy and engineering and range management. They had not been trained in this field of multi-county planning and resource planning--especially on the economic side. Some of them were ill-equipped to take the kind of leadership that local jurisdictions thought we ought to take. We did not want to get too deeply into that side. We were trying to force the local people to take that part of the leadership. We found that in order to make any progress we had to do some of that. Our people were not too well trained. Therefore, we had to set up some special training programs in order to educate some of our people on how to deal with multi-county jurisdictions.

HELMS: For a long time, the various government programs have emphasized the creation of employment opportunities in rural areas. Does the need to preserve prime farmland mean we should close out that activity?

WILLIAMS: I think not. The fact of the matter is that it intensifies the need for it, but on a basis of land selectivity. Our country has got to grow and it has got to have space to grow. The truth is that we have got land and resources enough to do both if they are properly planned. We can still preserve our prime farmland if it is properly designated and properly protected by legislation, regulations, and zoning.

We have plenty of land in this country for the foreseeable future provided that it is properly selected and put to the uses for which it is best suited. But it is going to have to be done on a more systematic basis than we have been doing up to this time. More of our problems with urban sprawl and other types of uses that are using up some of the prime farmland should be halted because too much of our good land is going into nonagricultural uses

on a regular or permanent basis. That does not need to happen. But unless local leadership is supported by state governments under a national policy of encouragement--and I do not mean just from the Soil Conservation Service, I mean from the Federal government as a whole--it will go on happening. Therefore this whole business of land use suitability, land capability as we call it, has an economic relationship to it--the land best suited to recreation, some best suited for forests, some for range, some for cultivation, some are best suited climatically and in soil types for cereal crops and some for other types of crops. These things need to be sorted out and broad guidelines set forth and the educational process carried out so that people will understand what their economic opportunities are. I do not think this thing will have to be forced upon people so much as it can come about through proper guidance and education. But not enough attention is being given to that side of the picture. We are looking down through a too narrow gun barrel at the present time.

HELMS: Much of your career was spent developing and conserving water resources mostly for agriculture uses. Have we reached the end of the need for reservoirs and irrigation channels and other structures of that sort?

WILLIAMS: No. We shall never reach the end of that. There will always be a need for conserving water that goes beyond the individual farm. It must deal with community projects. Needs keep changing. The intensification of the need for water for various uses is increasing. This means that some of the opportunities for reservoir storage that in the past have not been economically feasible will become economically feasible. We have lots of places that can be used for reservoirs. Most of the reservoirs can have multi-purpose uses--not just for irrigation water or for flood control but also for recreational purposes. As far as irrigation canals are concerned, there are going to have to be some large projects because in many cases the water is not near the land that needs the water. There are going to have to be transmission lines, pipelines, or canals, or something to take water where it is needed. That will be intensified. I think we are going to have to give more attention to cutting down on the waste of water. Instead of having open ditch transmission where there is a lot of loss through percolation, a lot of our canals are going to have to be lined and or use pipelines so as to save the water. Especially in the western states we are going to have more and more competition for water as those synfuel (synthetic fuel) projects come into the picture more. They are going to compete directly with agriculture. It is going to mean not only the wise selection and use of water but it is going to mean saving, recycling, and reusing it all the time. The need for such facilities is not going to decrease,

it is going to increase in terms of the specific needs--perhaps not so much in quantity as in quality and selectivity.

HELMS: What have been the most difficult erosion problem areas? This answer can include your whole career.

WILLIAMS: Speaking first about the continental United States, I would say the high plains country with its peculiarities of climatic cycles and tendency for wind erosion is still a critical problem area from a standpoint of erosion control. It happens to be because of wind and the shortage of water. Then there is the notable example of the Palouse area of Washington and Idaho, some in Oregon. We have some critical problem areas in the southeastern states that have not been adequately solved. I am speaking here mostly about domestic problems in spite of the fact that there has been a lot of progress made and that the technology is quite well known as to what to do about these problems. The problem has been to coordinate the economic incentive of farmers with doing the conservation job. Even though they may have to sacrifice a few dollars in growing the wheat and put some of this land into grass and trees, it ought to happen. In other words, get to proper land use. When you have proper land use, you can use proper conservation practices.

Now I would like to speak a moment about some of the international situations. As you know, while I was administrator, I became an international consultant to a good many governments around the world in setting up conservation programs and organizations patterned somewhat after the concept that we had developed here in the United States. It happens that India was one of the problem countries that I spent more time in than others. But I spent time in other Asian countries as well as some in South America, Central America, and so on. With some two-thirds of the world population facing malnutrition, or even approaching starvation, a lot of the problems due to the lack of food tie back to poor land and the lack of conservation practices in both soil and water conservation. We have the wide gamut of different kinds of conservation problems around the world. These must be dealt with on a scientific basis as we have learned to do here in the United States, through their particular form of government whatever that may be. A lot of countries are doing a pretty good job of this already. But many of them know essentially nothing and, of course, the United States for several years has through the auspices of the State Department and AID (Agency for International Development) sent teams to other countries such as Turkey, Greece, some of the northern African countries, and many more to give them guidance on what a basic conservation program ought to be as well as the fundamentals of land use,

the fundamentals of tying conservation practices into land use, the fundamentals of how to do the job, and the use of vegetation and engineering. An awful lot of this has had to come from the United States. In recent years the Canadian government and the governments of Australia and New Zealand have been helpful. Holland has been helpful. Those countries have competence and the technicians that are available to do that kind of work, too.

The conservation problems that we have here in the United States are not limited to our country by any means. We have been working on it pretty hard but we have got a long, long way down the road to go before we get them resolved. Sometimes it seems to me that we get ahead three steps and slip back two while we are doing it. But every time we have a drought cycle, I have the feeling that we are just a little better off than we were before. Hopefully, the time will come when we will be able to conserve the water when we get it. We will be able to keep our land tied down so that it does not blow away when we have the drought cycle in the wind erosion areas. And we will get our land use protected by either the use of vegetation or the use of protective measures on land, with or without engineering structures, so that it can be properly taken care of. I think the United States has a lot to offer to the rest of the world in helping to promote peace through better nutrition and through better food production. It can be done. I have seen it done. I know it will work. I participated in it in many of the countries of the world. I know it is possible to do, not exactly on our pattern, but the fundamental principles are the same as far as what you do and how you do it. The good Lord made the soils all over the world not just in the United States, and the climatic factors that influence erosion control and land use work around the world as well as they do here.

HELMS: What do you consider to be your major accomplishments during your career with the Soil Conservation Service?

WILLIAMS: Well, Doug, it would be pretty hard for me to give a complete rundown on this. It would be too hard. But you say major accomplishments. I will try to digest it in this fashion. I think probably helping to create and get accepted the conservation concept which interrelated the various factors into a program for different types of land use which had not been sufficiently carried forward under Dr. Bennett's leadership before he passed away. I expect that the conservation concept of technology plus working with people under soil conservation district management was probably the greatest function I performed. In other words, the wise and efficient use of land and water. This was a constant emphasis.

Now as a personal matter, I think that organization and supervision which involved training and all the other

aspects of what goes into organization and supervision where my strongest attributes as an administrator. I used to be told by friends that Dr. Bennett developed a concept or a philosophy of conservation. He was not an especially strong administrator. I came along in a time when they needed some people to say yes or no to things. We reorganized our efforts and our activities in a more effective way to deal with the problems of that time. We were able to get a type of organization with a good spirit, a good esprit de corps. We were able to get a lot of things done. With supervision of people who were responsible to me and the state conservationists in charge of the work in each state, I was able to get them pulled together not only on a regional problem area basis but on a country-wide basis of common problems within the Service, by annual meetings, by more frequent meetings if we needed to, by correspondence and by various other methods.

To leave no doubt as to what the objectives of the Service would be, I outlined each year what our objectives for the following year would be. These were checked out in advance by the assistant secretary in charge of conservation, such as Mr. Ervin Peterson. I asked him and his successor, Mr. John Baker, to help with that project. Baker was assistant secretary under Orville Freeman. Peterson was assistant secretary under Ezra Benson. They came to the meetings of our state conservationists which were held once a year and helped to get across the concept of working together--not only as a group but working with other agencies. I think that organization and supervision perhaps were my greatest contributions even though I would personally feel that the emphasis given to the concept of the interrelationship of soil and water management with more attention to the use of water and the management of water as a controlling and helpful device was, from a professional and technical standpoint, my greatest contribution.

HELMS: What did you wish to achieve while in the Soil Conservation Service that you did not get to see?

WILLIAMS: Well, Doug, briefly stated, I was disappointed that there was not greater acceptance on the part of more people--soil conservation districts, farmers within districts, conservation leaders, and state governments--of the conservation concept and the technology. This is not saying that there was not an awful lot of progress made. There was a lot of progress made in those sixteen years that I was administrator. I think there were not very many people around the country who did not know what Soil Conservation Service was for and what it was trying to do. We had respect on a nonpartisan or a bipartisan standpoint. But my hopes for greater progress in conservation in such areas as the Palouse and the High Plains--it seemed like we get up to a

certain point and then something would happen. The war would break out. The price of wheat would go up and the farmers would go out and plow up the land again. You had to back up and start over again in a way. But we never went clear back to where we were before. We had a better starting point so that we were able to get ahead. I do not know how others would judge that question that you asked me, but that is the way I look at it.

Kenneth E. Grant

Contents

Biographical Sketch

Kenneth E. Grant was born in New Hampshire in March of 1920. After receiving a B.S. in agronomy from the University of New Hampshire and serving for four years with the United States Army Air Corps, he joined SCS in 1946.

He advanced rapidly from soil scientist to deputy state conservationist by 1956. From 1959 to 1964 Grant was state conservationist for New Hampshire. In 1964, after obtaining a Masters in Public Administration from Harvard University, he moved to the state conservationist position in Indiana. It was there in the Lincoln Hills area that he helped initiate the first Resource Conservation and Development project in the nation. In 1967 he was selected to become associate administrator. Following the retirement of Donald Williams, Grant served as administrator from January of 1969 to May of 1975. During his tenure, SCS faced a tremendous challenge as the amount of land under cultivation grew rapidly due to increased grain exports.

Grant served as USDA representative for a variety of important projects, including the Connecticut River Basin survey and the Ohio and Wabash River Basin studies. In the late 1960s, he represented USDA in a major project with the Office of Science and Technology that led to the *Report to the President on Control of Agriculture-Related Pollution.* He also carried out two assignments as advisor on erosion control in Pakistan and one assignment on soil and water management in India.

In 1971, the University of New Hampshire awarded him the honorary degree of Doctor of Science. He has received the Distinguished Service Award from USDA, which recognized his contributions in many areas including his response to growing public concern over the environment. Grant is a fellow of the Soil Conservation Society of America.

Grant served as a volunteer to the International Executive Service Corps (IESC). He went to Greece as an advisor to the Ministry of Agriculture on soil and water conservation. He also assisted in recent activities of the IESC.

July 29, 1988

HELMS: This is July 29, 1988, and we're in Durham, New Hampshire. To start off, Mr. Grant, could you tell me where you were born and something about your early education?

GRANT: Doug, I was born not too far from here in Rollinsford, New Hampshire, which is on the Maine-New Hampshire border, in 1920. I moved around quite a lot during my early years but basically lived in the New England area, primarily in the state of New Hampshire. I went to high school in Dover, New Hampshire, and graduated in 1941 from the University of New Hampshire. In education beyond that, I became a graduate student in the Agronomy Department, but World War II came along and interrupted that for four years.

HELMS: Do you recall anything from your college years about the soil conservation movement? Were there things you observed in the countryside?

GRANT: I have observed in this state in particular a very, very pronounced transformation of the landscape. New Hampshire way back in the 1850s was a highly agricultural state. And practically every county in the state, of which there are ten, was cleared except in the very northern part of the state. The peak of agriculture was around 1850. From that point on people went west, and agriculture went through a decline. Many counties that were at one time 75 percent cleared are now back to 80 to 85 percent woods. So I've seen some of this transition from the 1920s on. For example, I'd walked four miles from my home to Dover, where I went to high school and I was among dairy farms all the way. Today you could walk that same area and there's about two operating farms. There's been a great change in the agricultural picture. I worked on farms all through my early days. Today of course little of that exists. I'm aware of and can remember the discussions on radio and in newspapers of the Dust Bowl in the 1930s. That was a long way off but nevertheless we were aware of what was going on.

This state has never suffered from a real severe problem of erosion that you had in much of the country because the agriculture was not that intensive and the type of land use was such that most of the land was kept in pasture. People don't realize how much agriculture there was in the state at one time. I've read some of the old histories, where they had cattle drives, and sheep from the central part of this state moved all the way down to the Brighton stock markets near Boston. The background of many of the people that I knew when I went to college was agricultural. Today that has changed.

HELMS: Was there anything in your college curriculum about soil conservation? Had it made an impact?

GRANT: Oh yes. I studied primarily agronomy and agricultural economics. The problems associated with soil erosion were in the text and obviously I was aware of that, not on a firsthand basis but simply from classroom discussion. I was fortunate too in that some of the staff had had some experience in Washington in USDA. I also worked in the soils lab and spent one summer on the mobile soil survey. At that time I had decided to work in the soils field.

HELMS: You were in the military. Then how did you end up coming to work for the Soil Conservation Service?

GRANT: When I came back from the service, I went back to the University as a graduate assistant for a short time. The Soil Conservation Service was really just getting started in the state of New Hampshire. The district law had been passed and Al Collins was the one employee here in the state that represented the Service. I got to know him and so I applied for a job. In fact, I had been on the rolls before I went into the military as a soil scientist. And so I accepted a soil scientist position in Keene, New Hampshire, in March of 1946.

I only stayed a soil scientist for a relatively short period of time because I found out that my real interest was more in terms of working with farmers on their land than it was in mapping. And so after about six or eight months, I switched over to soil conservationist and became the work unit conservationist in Keene. I stayed there for, I suppose, about two years, when Al Collins asked me if I would move up to Grafton County, which was a much larger county and larger workload. And I did. I stayed there for another year or so. At that time, there were three district conservationists in New Hampshire who had three or four counties under them, and I became a district conservationist for the three northern counties in the state.

HELMS: In those capacities, were you working mainly with the farmers? What were the main programs to be pushed and the objectives to be accomplished?

GRANT: Most of the land, particularly in Cheshire County and Grafton County, and in the northern part of the state that was being actively farmed was in dairy farms. Now, there were some potato farms. At that time, Coos County, the northernmost county, actually was called Little Aroostook. Aroostook County was a very large potato area in Maine. On some of those farms we had a fairly intensive erosion control program in which we were involved in diversions and terraces and so on. But that type of agriculture didn't really persist very long and so basically we were working with dairy farms. There

were exceptions. There has always been in some of the counties considerable acreage in apples. There was also a fair number of truck farms. But in terms of total acreage, it was basically the problems associated with those of the dairy farms, which was grassland management and water control. Practically every farm had a woodlot that we were involved with.

I'd say one of the most serious erosion control problems, and one of the ones we had great difficulty in really coping with, was streambank erosion. The Connecticut River Valley is a very productive agricultural area. I've studied some of the old maps and histories of these towns along the Connecticut River. They had large contiguous fields of several hundred acres, which, at the time I was working with the Service in the late 1940s, were pretty badly cut up by gullies. Except for fencing and trying to get some vegetation established, the individual farmer didn't have the resources to control gullies the size that you had on the Connecticut River. Basically what we were trying to do was to exclude cattle from those areas and get some sort of vegetation back on them. Very little actual structural work was done because the gullies were just too large. We did some streambank work in other sections of the state with some degree of success. But these were minor parts of the program in terms of actual time input. Basically we were developing complete farm plans based on the farmers' needs, and promoting sound land use.

HELMS: You didn't have lots of money to spend on that sort of thing either, is that correct?

GRANT: The staff consisted of soil scientists, a district engineer, a soil conservationist, and an aide. Except for what money was available to the farmer through ACP (Agricultural Conservation Program), which was not really into the structural program at that phase, there wasn't any money available. A farmer would have had primarily an out-of-pocket expense.

HELMS: You mentioned the farm woodlot. In the Soil Conservation Service it's been debated through the years as to who is in charge.

GRANT: Absolutely.

HELMS: What was the situation in New England at the time?

GRANT: Well, in New Hampshire it was pretty complex as a matter of fact. The Extension Service had the extension foresters and there was the state forester with a staff. Of course a large area of the state was administered by the U.S. Forest Service. So you had a lot of people with some activity in woodland areas. We were unique in that we were providing a soil survey which could be used in planning. We always tried to encourage the farmer to recognize his woodland as an integral part of his farm and to use it in such a way that he could not only protect the land but make an income from it. Although we

had people trained in forestry and some of our district conservationists were foresters, the relationship had to be, of necessity, one of working together with the Extension Service and the state forester. In situations where a farmer needed fairly detailed forestry management plans, it was basically done by someone else, usually the Extension forester.

HELMS: Speaking of other controversial matters, how did the district organization go here? You hadn't started yet when the Standard Act was sent out and then you were in the war, but I guess you know of the background on that.

GRANT: Well, the Soil Conservation District Act was introduced into the state legislature first in 1943 and it failed. I think it failed largely because people thought that it was going to mandate land use control, in particular in the forested areas. It was opposed by many of the large timber owners and forestry groups. I think it was simply a matter that there hadn't been enough personal discussion for them to understand what the act was. Then when it did finally pass in 1945, it passed creating the state of New Hampshire as one soil conservation district, and the state committee by its action had to actually set up sub-districts in each of the counties. Then they had to hold referendums in order to establish the districts and elect the board of supervisors. But the board of supervisors was still approved by the state soil conservation committee. It was a fairly cumbersome way of operating at the start. Districts were then fairly well accepted, once there was a better understanding of what the real mission of the Service and the role of the district supervisors were going to be. Later the law was changed and each county became a district.

We had to develop working relationships. I was involved in this because I was the first work unit conservationist in the state. We had to go through a period with the Extension Service of dovetailing together the kinds of recommendations that we were going to make in completing conservation plans. We had to work with the Extension Service foresters and others in terms of what role we were going to play in the forestry picture. So there were obviously times where we had some conflicts and disagreements that had to be worked out. I think I had some advantage in doing that in that I was a native in the state. I knew a lot of the people. I graduated from the university. I knew the Agronomy Department, which was where many of the recommendations were made on which varieties and crops and so on were best suited for the land, and on fertilization and management programs. So, I would say that within a fairly short time we had a pretty good working relationship with the state and the local agencies. We didn't go through the real problems that some of the states experienced.

HELMS: That's interesting. You're saying that the initial opposition to the district law was not so much by established farm organizations or agriculture agencies but by the timber interests.

GRANT: Well, you have to remember that by that time the state was probably 80 percent forested, so they controlled a lot of land and anything that looked like it was going to be government-controlled in any way, shape, or manner was suspect. Remember the Standard District Act did have land use controls as one of the options and it raised a flag. Before people really understood the Act there was a lot of opposition. However, they were some of the strongest supporters of soil and water conservation after we started. And the Farm Bureau, which was a very strong organization during that period of time, eventually became a very strong supporter of the whole soil conservation program.

HELMS: I asked you about forestry in particular, because I guess the Extension Service here would have been much more involved in forestry than in other parts of the country. Also, what was the level of cooperation with the Extension Service?

GRANT: The Extension Service was very much involved in woodlands. They had a county forester in every county and it was an area where we had to spend a lot of time working out how each agency would proceed. I believe we eventually developed a very good understanding and working relationship.

The Extension Service was also obviously very much involved in working with farmers in terms of fertilization programs, management techniques, and so on. Inevitably, when you develop a conservation plan, you get into those aspects. So we tried very hard to take our technical guides through a committee system with the Extension Service and get agreement that this was a recommendation that was supported by both agencies, and that we weren't offering the farmers different alternatives from somebody else who was working with them on a daily basis.

HELMS: Just one small point, from the mid-1940s on, was contour farming pretty much the general practice or was that a slow change?

GRANT: No, contour farming was not used often, except in very specialized circumstances. This state is not nearly as agricultural as the states where contour strip cropping was a big part of the program. Now, we had some in the state. One of the first farms I worked on in Walpole, the R. N. Johnson farm, had one hundred to one hundred and fifty acres of potatoes. That was all terraced and contour strip cropped. We had some situations where strip cropping applied. But basically in grassland

agriculture your rotations were long and corn was on the field for a year or two and then it was in grass for long periods of time. So the emphasis was not on that particular aspect of the program.

HELMS: You were district conservationist. How long did you stay in that position?

GRANT: I was a district conservationist. We've changed titles at times between district conservationists and work unit conservationists. But I was in charge of a county program in 1946 in Cheshire County and then in Grafton County. Then I was the district conservationist responsible for the three northern counties for about three years. In those days, the district conservationist, while he had responsibility for the three-county area and worked with the district supervisors and others, still was very, very much involved in the field program because we only had a small staff. At that point the Service began to reorganize some of its field activities and area conservationists came into existence. I was appointed the area conservationist, headquartered in Durham, for the entire state, which was a rather unique arrangement and one that I think from a management standpoint was not a very wise decision. That's probably the reason why it didn't last too long. You had an area conservationist covering exactly the same area, the total state, as the state staff soil conservationist, the state engineer, and other specialists. It was an organizational pattern that was set up in such a way that a lot of conflict was possible between the area conservationist and the state office. Al Collins recognized that fairly quickly and I moved from the area conservationist position as it was abolished to the state staff soil conservationist position. This was after the reorganization of the regional offices.

HELMS: From what you could see from your vantage point and from what you saw after that point, how did you view the regional office structure as compared to the structure we ended up with--the state offices?

GRANT: That was a period of considerable controversy in the Service and a couple of regional directors were so upset that they left the Service. I'm not sure it was a couple, I know at least one did. The regional office probably was a good organizational setup when it was first conceived and we were in the process of getting soil conservation districts organized and state laws passed. But personally, I think we strengthened the program administration rather substantially when we eliminated the regional offices and went to the state offices with technical support from the technical service units around the country. If you were to ask a lot of people at the time that I was in the Service how they viewed it, those that were associated with a regional office

would probably take a diametrically opposing view and say that the regional office was a very good organizational structure. But I think the time had come to move to the state level. I'm a strong supporter and always have been of the idea that the ties from Washington to the states, with support from technical service units, make for a much stronger organization than when we had the regional offices. Most conservation programs, while you have regional differences, really ought to be national programs. And I think it became far more a national program when we went to the structure of the Washington office working directly with states.

HELMS: You eventually became the state conservationist here?

GRANT: Yes, I became the deputy state conservationist and in 1959 I became the state conservationist. At that time I guess I was the youngest state conservationist in the country and at the first state conservationist meeting that I went to, my wife and I were called "the kids." Many of the state conservationists at that time were professionals who had joined SCS from other agricultural agencies, universities, or professions.

HELMS: Did you have a certain idea as to what you wanted to try to do and certain priorities?

GRANT: In this state you have to recognize that you are not dealing with a program that could be picked up and placed in Iowa, Texas, the Midwest, or anyplace else. We didn't have the serious erosion problems that you had elsewhere. We didn't have problems with wind erosion. We didn't have snow survey programs. We didn't have many of the programs but, at that time, the Service was moving pretty aggressively into the water management field. Public Law 566 came along while I was state conservationist here, and we found several places in the state where 566 programs did fit and could be supported very well by local organizations. The first was Ash Swamp Brook in Cheshire County where I had worked when I entered the Service. Another was Oliverian Watershed, which was in Grafton County. There were several others around the state. We always tried to make them as multipurpose as we possibly could since the demand was very high for recreation. We tried our best in every watershed structure that we built to build into it the recreational aspect as well. There are some real fine examples in this state where the Forest Service cooperated with one of our watershed structures near the campgrounds, or where the state or cities built real fine recreational facilities around the watershed program.

That was a really popular program, but of necessity it's somewhat limited. The topography in the state, and the

lack of areas where you could build flood control for agricultural areas, was rather limiting. The program, while it fit very well, fit only in a limited number of cases.

HELMS: This was before recreation became a purpose for cost sharing?

GRANT: I don't think so. It so happened that some of ours were on Forest Service land so the cost sharing was basically by another federal agency. Cost sharing was in terms of the Forest Service putting in the recreational facilities. The state did support by appropriation some assistance in the watershed program. Very frankly without reviewing notes, I don't recall exactly what the cost share arrangements were on some of them.

HELMS: The impetus for the program has been agriculture. Did you have any difficulties in dealing with Washington getting your watersheds approved, since they had multiple purposes and objectives?

GRANT: No. I don't think we had any difficulty in that. We had to come into agreement with them that our watershed program did not involve the techniques that we used in cases where you were primarily trying to provide protection to large areas of agricultural land. We had agricultural land protection in all of them but to a limited degree. That's why the program itself in terms of numbers was limited. You just simply could not project a program that wasn't designed for the kind of land use that we had, except in a few places. We could tie in the protection of cities and towns in many cases for recreation. Agricultural protection was not a large part of the program.

HELMS: Were there other situations where if you hadn't needed the agricultural land you could have gone forward with the projects?

GRANT: I think there's no question that if some of the criteria had been different and you could have developed the programs around recreational water management, you could have developed a different kind of program which would have served a very, very useful purpose and probably would have been widely accepted. But that was not the intent of 566. Recreation was a part of it, but not really the basic premise.

HELMS: What was your next career move from being state conservationist here?

GRANT: My next career move was that the Service sent me to Harvard for a year where I earned a master's degree in public administration.

HELMS: Are you a believer in that sort of program?

GRANT: I absolutely am. I think the Service has a very excellent program and that it was a very wise decision to have mid-career people given the

opportunity to go back to school. There were many reasons for that, but I suppose basically, it's that most of us in the early days of the Service were primarily trained as scientists. As you moved into a soil conservationist position and other positions in the Service, the opportunity to expand your horizons in the field of public administration was one that was repaid to the Service many times over in better personnel and people who understood government and what needed to be done in management. So I whole-heartedly say that it was an excellent program, and I supported it all the way through my career into the time that I was administrator.

HELMS: Where did you go after your degree in public administration?

GRANT: I went to the state of Indiana. I was the state conservationist.

HELMS: That's a different area for you.

GRANT: That's an entirely different area and an entirely different experience which was extremely valuable to me because Indiana is a good agricultural state. It had entirely different land use, entirely different soils, and entirely different problems. We had an extremely active 566 watershed program with two full-time watershed planners and a very substantial appropriation in the construction aspects. Many of the watersheds had six, eight, or ten structures in them. Many were multipurpose structures. There was outstanding cooperation in the state of Indiana between the districts and the local organizations. The three years I spent there were three of the finest I had in the Service. It exposed me to a section of the country that was new, and to a whole series of problems that was new. Plus the program was much, much larger and I got the experience there of working with nearly a hundred districts as contrasted to the ten that we had in New Hampshire. Of course, the staff was substantially larger in all respects. The management of funds in a program of that size was experience that I needed and could use when I went on to other assignments. We also had an excellent program there in RC&D (Resource Conservation and Development) projects. In fact, we had the number one RC&D project, Lincoln Hills, in the country. It was one which the Secretary of Agriculture visited at the outset of the program. A great deal of progress was made, again with strong local organization. One of the things I remember about the state was the fact that local people really got involved in a program and followed through and did a wonderful job. They did marvelous jobs, in many cases getting land easements and rights-of-way which were always a problem in a structural program such as 566.

I want to say this, too. I was fortunate in that I had a top-notch staff there, some of whom went on to become

state conservationists after that and brought experience from different sections of the country which was quite helpful to me. We had one assistant from the state of Texas. We had another one from Pennsylvania. The opportunity to work together with those kinds of people was extremely valuable to me. Secretary of Agriculture Earl Butz was then the Dean of Agriculture at Purdue University.

HELMS: As you know, our agriculture in some areas has diminished and in other areas it's picked up. In parts of Indiana, like much of the Midwest, they'd just go to two crops. Maybe 90 percent of the land or more was taken up with agriculture. Was that perceived as a concern?

GRANT: Indiana is a state divided in half. Southern Indiana is just very different from northern Indiana. There is no question that northern Indiana was intensely cropped. I suppose you could say that there were many, many farms that were almost in a monoculture because they were raising corn or soybeans all the time. But that land is generally reasonably flat. Water management programs were essential. A lot of drainage was needed and an awful lot of underground drainage through tile systems were put in. The land that did need erosion control on it, in terms of terracing and strip cropping, was generally very well accepted by farmers. So while it was recognized as a problem, I think we were making very good progress at it. Some parts of the southwestern part of the state were really models of conservation on the land. They had intensive systems of strip cropping and terracing. Some of the southern part of the state had large areas of cropland but basically on the flatter sections. On those that did need erosion control we had good acceptance. A lot of that land was going into grass, and was better suited to grass.

HELMS: You mentioned Secretary Butz being the Dean there. You had gone from a small state where you didn't have a big agricultural college to a midwestern state where they have a big agricultural program, like almost all the land grant schools. What was the relationship of the Soil Conservation Service to Purdue?

GRANT: Excellent. I've been away from the Service for a long time now, so the things that I'm talking about were the relationships that existed during the period of basically 1963 to 1967, when I was in Indiana. The Dean was very much a part of the soil conservation program. I knew Earl Butz quite well personally. He knew and understood the program. The director of Extension was a close personal friend of mine. We worked together very, very well. We had a constant understanding that whenever we had a problem we would get together and iron it out. The soil conservation staff at the university were always very much involved in

the program and I can't say enough for the state agencies as well. The director of natural resources at that time, John Mitchell, was a close ally and supporter of conservation. I never worked with anybody in the states who was more directly involved and more supportive of the programs. I think that's why Indiana during that period made so much progress in the watershed program because the resources of the state agencies were 100 percent in back of us. I can't say enough about the relationship that existed between the Farm Bureau, the Extension Service, the state government, and the university. I think it was marvelous.

The Extension director and I got together when I first went there and began to work out a memorandum of understanding. You find so many conditions that just don't lend themselves to being reduced to a paragraph as to how you are going to operate. So eventually he and I just sat down across the table and said, "Look, why don't we just handle this thing with a minimal outline here and when we get a problem we'll sit down together and work it out and decide how to do it?" He said, "You don't hesitate to call me anytime you think one of my people is out of line and I won't hesitate to call you when I think one of yours is out of line, and we'll just work it on that basis." That was exactly how we did it for the three years I was there.

HELMS: You mentioned a strong watershed program, were any of the controversies that came up later present in the Indiana operation? I'm referring to objections by the environmental groups.

GRANT: There's no question about it. We had some of the objections even at that point. The environmental issues, which related primarily to drainage and stream channel alignment, were very much a part of the watershed program. In fact, in some cases the programs were held up for a considerable period of time while rather exhaustive studies were made as to what the impact was going to be.

I don't want to create the impression that everything was smooth sailing in terms of the details on these things; however, all the time that we were working with these groups they were basically supporting wholeheartedly most of the soil and water conservation programs. They were attempting to get money to move ahead in the soil surveys, they were attempting to work with us as closely as possible in the land use to be sure that we were getting the application of practices on the land in the watersheds and so on. The biggest differences of opinion were those involving water management on the drainage and stream channel work.

Let me tell you one reason why I think watershed programs and RC&D programs were so successful at that

time in Indiana. I was the Service representative and the USDA representative in the Ohio River Basin and Wabash River Basin. Now that actually covered Indiana and parts of Illinois. The Wabash River Basin had a very strong organization. They had a large membership and they did a lot of work in terms of getting local people informed as to what could be done on a river basin basis. The 566 watershed program became an integral part of their activities. People were used to thinking about soil and water conservation problems on a watershed basis. Many of the people who were strong supporters of the Wabash River Basin also were on the board of directors of the local watershed projects. So there was a great deal of interplay back and forth between them. I think some of the problems that existed in other sections of the country were better understood because of the closeness of the people to the total concept of the program. From the land treatment program right straight down through to the outlet, you had people who were involved and understood the total programming effort that was going on. I think that was quite helpful in bringing about better understanding of where they all fit together.

HELMS: I'd like to ask you about the matter of the river basin commissions during your days as administrator. You were saying that the whole process of having the commissions promoted the program by bringing people together. Is that it?

GRANT: I think it did for the simple reason that the same people who had to be involved at the local level had also been involved at the larger programmatic level. For example, when you worked in the Wabash River Basin, you had representatives from all of the other Federal agencies, such as the Corps of Engineers, in there too. The Corps had projects that they were involved in. You always had the problem of relating what you were doing in a 566 program into the other ongoing activities and structures that were being built for flood control by the Corps, and other work that was being done on a local level. On that basis, I think they were more used to thinking of a whole complex of people who were working together on a watershed or river basin area. I don't want to minimize the problems. There wasn't any question that you had areas of possible overlap when you were talking about upland controls, drawing the lines as to where the 566 program begins and ends and the Corps program begins and ends, and so on. It's complex. It's not easy. I found a better than average understanding as to how those things fit together in Indiana than we had in some other sections of the country.

HELMS: You mentioned RC&D. Since it was a new program, started on an experimental basis, you didn't have a well established set of rules, regulations, and guidelines. In Indiana, exactly what did you do with this new program to try to get started?

GRANT: As I recall, the first year nationwide the number of projects approved was ten. Lincoln Hills was one of them. We appointed an RC&D coordinator and a staff who were resident in the area. We had a person on the state staff assigned leadership for working with them. But the bulk of the responsibility in developing a new program like that, as I view it even now, was really a job of working with local people who recognized that they had certain kinds of problems or opportunities and had demonstrated a willingness to go ahead and put in some effort into coming up with a solution. They were far ranging. Some of the problems involved an acceleration of the conservation effort in an area. Others involved water management that was necessary to protect a small community. We got into such things as economic stimulus by helping establish a sawmill. The project covered a whole myriad of opportunities for economic development in that area with some money coming from RC&D funds. But the necessity of providing land easements, rights-of-way, operation and maintenance, and some matching funds was at the local level. The project coordinator was one of the key people. He had to move into areas in which the Service had not worked before, and in many cases hadn't had a lot of experience. He had to be one who was able to motivate the people who recognized the local problems with a willingness to expend their own time and effort because these people were non-paid people. They put in an enormous amount of time working on things for the local community good. I didn't stay with that particular project long enough to see it brought to fruition. I saw examples of RC&D all over the country. Practically every state that I visited had RC&D projects and they covered a tremendous number of diverse problems that people were working on--some cultural, some economic, and some physical.

HELMS: You went from the job as the state conservationist in Indiana to the associate administrator. Could you tell us when that happened, and how you were selected for the job?

GRANT: It happened in 1967, after I had been in Indiana for three years. The selection for all of these positions at that time was part of the career system. I was asked by the administrator if I would be a candidate for that particular job. And while I'll admit I was somewhat surprised because of the grade differential, I certainly as a career employee was interested in being considered if that was his wish. I also knew that several others were also considered--as it should be in the selection of anyone for that job. There should be multiple candidates. Sometime after that I was asked to prepare a paper and I'm sure all the others were also, of how I viewed the job of associate administrator and some of the things that, if selected, I would like to accomplish. I wrote and submitted the paper, along with others.

HELMS: You have reason to believe that this process was taken seriously and they actually read the papers?

GRANT: I have absolutely no reason not to believe that this was true. As I look at it, I think it's a perfectly legitimate request to ask of people who want to be considered for that position about some of the things they viewed as part of the job of associate administrator and how they would personally like to attack some of the problems that confronted the Service. I have every reason to believe that the papers were probably seriously considered by both the administrator and the assistant secretary.

HELMS: Now, what did you do in the job as associate administrator?

GRANT: Well, for the first year or year and a half that I was in there, the Department was deeply involved in a study of agriculturally related pollution. Shortly after I went to Washington I was asked to head up that particular study. It was a very time consuming study because it was a field that involved disciplines in many agencies. I had a very, very wide ranging and able group of people from other agencies in the Department who participated in preparing the report. We produced a fairly lengthy and comprehensive document on agriculturally related pollution. I went to Don two or three times and said, "Don, I don't really know how much I am really helping you as associate administrator, it seems like all my time is spent on this study." His reply to me was that that study was important enough in his judgment to both our agency and to the whole Department that he was perfectly happy for me to continue to spend as much time as was necessary on the study and so I did. And except for a couple of special assignments that I did for him--one of which was an overseas assignment--that was my principal occupation for the first year.

HELMS: This is interesting because this is only a couple of years before the National Environmental Policy Act (NEPA) was passed, which had a strong emphasis on both air and water pollution. In terms of the time we are talking about, water quality has never gone away but it certainly has resurfaced as a priority.

GRANT: Yes, the whole agriculturally related pollution area.

HELMS: The next step is that you became administrator.

GRANT: Well, there was a period between the time this study was completed and when I became administrator. During that period, Don realized that he was going to retire in a short time. He made every effort for me to become deeply involved in all of the programmatic aspects of the Service. I participated in hearings on Capitol Hill, I spent a lot of time going to the field, becoming acquainted with the programs and studying some sections

of the country that I had not previously worked in. It was a period of one and a half years or so that was extremely important to me in familiarizing myself with the job of the administrator. Now there was no commitment to me at that time that I was going to be administrator, but nevertheless, as associate administrator I shared the responsibility for the total program with the administrator. Regardless of whether I succeeded him or not, this was an important part of my career in terms of preparing myself for the job.

HELMS: There was a good chance that you would become the administrator when Mr. Williams retired?

GRANT: When I was moved from state conservationist to associate administrator I certainly assumed that at least I would be a candidate for the job, providing my performance during the time I was there as associate administrator measured up to what the Department felt they wanted in an administrator.

HELMS: In preparing for our interview, I looked through some of the reports of the annual state conservationists' meetings, although for a while we haven't been doing them. I think it is a good jumping off point for your tenure as administrator. You made a point to me about the Service and one of the changes you intended to make on the use of the state conservationists' meeting.

GRANT: I think an organization can be operated successfully in a number of different ways. Strong leadership at the Washington level is obviously very important. But, having been a state conservationist, I knew there was a tremendous reservoir of talent among the state conservationists. I felt that I could strengthen the program of the Service by focusing at the state conservationists' level on problems that we saw facing the Service in the year ahead, and getting the best judgment and thinking from the combination of Washington office people, field representatives, and the state conservationists. I was really, I suppose, trying to enhance the position of the state conservationist as a part of the policy making group of the SCS. I was very candid with them in terms of talking over some of the very real problems that we had in the management field, some of the problems that we had in terms of budgets, and how I viewed some of the programmatic directions that we were going to have to take. I must say they responded in a very, very fine way. I think we strengthened the linkage between the field and the Washington office by this process.

I had one other technique that I tried to use continuously as administrator. I tried to take a certain part of my schedule each year and go and spend a week in some state or some geographic area of the country reviewing the program. For example, one year the Great Plains Program, in another year we were looking at the

range program, in another year I'd go to a state that I was not too familiar with that had very urgent problems that needed to be solved. During the time that I was in that state, I always asked the state conservationist to bring together as many of his field staff as he possibly could, particularly the district conservationists. We did this in one large meeting if the state was reasonably small, or we did it in a series of meetings otherwise. We always did it at breakfast time. I would bring everyone up to date on what I saw for the Service in the year ahead. And then I opened it up to any and all questions. That was the part of the program that I felt was one of the best things that we ever did. Because it provided me with an opportunity to see what people at the working level, right out there with the farmer and the rancher, were asking the administrator in terms of what they wanted clarified, or what they thought were problems. It gave me a chance to have a dialogue with them on why we were doing certain things and why, in some cases, even though it looked like we ought to move in a certain direction, because of objectives that were important for the whole department, we had to move in different directions.

I've found many, many times years later when I would go to a Soil Conservation Society meeting or somewhere else, some DC (district conservationist) that attended those meetings would come up to me and say, "You probably don't remember me, but I want to tell you how much we enjoyed the fact that we had a chance to ask any and all questions with no holds barred." I have no idea whether this is being done now or not, but for me it was a linkage from the field all the way through to the Washington office that gave all of us insights that I don't think we ever could have gotten in any other way.

HELMS: You take out several layers through which views of the field staff could be filtered before it reaches you, is that correct?

GRANT: Absolutely true, and the written word frequently is caged in very careful terms, whereas a fellow who stands up after having eaten breakfast with you is apt to be pretty straightforward as to what he says and what he wants. One thing I always did was, I never tried to say, "That question is off the record and I can't discuss it." I tried to answer as truthfully as I possibly could every single concern that they had. A fellow that is in his twenties or thirties and starting out a career in the Service has a different series of concerns than someone who has been in the Service for twenty-five or thirty years and is worrying about the next budget hearing with the Congress.

HELMS: One thing I noticed in the reports. You said the number of studies, be they soil surveys, conservation needs inventories, or various other special ones that the agency was doing and devoting quite an amount of time, money, and effort

to needed to be reviewed to see which ones needed to be continued and which ones needed to be cut back. Was that a major effort for you?

GRANT: I think that was a continuing process without any question. Reports written for the sake of reports have never been very important and obviously some things get started and they keep going. I think you need to review about once a year what you are doing, and if you can't identify how extremely important it is you better discontinue it. One of the things that I thought needed to be accelerated and we worked very hard to find the techniques necessary to do it was to get the soil surveys published much, much faster than we had in the past because the information was so valuable and was becoming so useful to so many different groups. I wanted to get them out of the mapping stage and into the publication stage. We worked long and diligently in trying to find the techniques that would enable us to bring those reports to completion. I think we greatly accelerated the publication schedule during the time I was administrator.

HELMS: Don Williams, I think, had been interested in the loss of prime farmland and he made that something of an issue. In the early 1970s we had a couple of land use policy bills that came out. What was your position in the Service on those?

GRANT: Not only we in the Service, but many organizations were beginning to get very much concerned about the loss of prime agricultural land. A lot of studies were done in the Department and by other groups which showed how much agricultural land was being lost. This is the kind of thing that greatly concerns some people but others felt that the country had a tremendous resource, and with the new technologies that were coming into view, that it wasn't nearly as important as other things. In fact, there was not unanimity of opinion that we needed to be all that concerned about the loss of prime agricultural land. Land, labor, and capital are sometimes melded together so that you can come up with some answers that show that as long as you've got sufficient capital incentives you can get the job done on a lot less land than we have historically used.

I guess my position is geared more to the fact that prime agricultural land is a very precious commodity and the well-being of the nation for generations and generations revolves around its ability to produce food at reasonable costs. To protect the land is an ethic that we all should endorse. My experience in underdeveloped countries brought home very vividly what happens when the land is not protected and how the well-being of the people is so adversely affected. I felt that the major uses of land that were taking our prime land out of production should be looked at very carefully. The land that our total highway system eats up is fantastic in relationship to the size that most

people would think about. Not that we don't need the transportation system, but sometimes alternatives that don't cut a farm in half or can go on land which is not class one land are alternatives that need to be studied carefully. We need to consider the alternative possibilities in terms of flood prevention, when we flood large areas of prime land, as to whether there are other alternatives that might be acceptable. I was concerned. We tried to accelerate our soil survey in areas where we needed that information. However, I'll have to say this. I can remember back when there was a program that showed a dining table with four plates, and then a fifth plate. It was called the fifth plate--are we always going to be able to produce enough food for that plate? I can remember when some were saying we were on a collision course in terms of whether we could produce enough food at a reasonable price. We had policies at the time Secretary Butz was there where he had said we need to consider, in order to meet the demands domestically and internationally, farming fence row to fence row. All of these things are associated with the problem of whether we need to preserve as much first class agricultural land as we could. Producing food on poor land and land that is more suitable for other uses is more expensive. And yet I would have to agree that over a long period of time that I have looked at this, thirty or forty years, we've always had surpluses and we always keep having surpluses. The cropland base of first class agricultural land continues to shrink. So obviously our technology is taking care of some of the land that we have taken out of production.

I guess philosophically I'm still of an opinion that we ought to look very, very carefully at the acceptable alternatives before we take significant acreage of first class agricultural land out of production in those areas where farming is going to continue and the land is going to be needed in producing food and fiber.

HELMS: You mean a structure that leads to federal laws and policy?

GRANT: Not necessarily federal law but a policy requiring full consideration. But I'm not one that's going to promote scare techniques and say that we are going to run out of the ability to produce the food and fiber in a short period of time if we don't do that. I think we should take a long-term point of view and not turn over those acres that are best suited for the production of food and fiber at a reasonable cost.

HELMS: You made reference in passing there to the point in the early 1970s when the grain sales were made to the Russians. The price of some feed grains went up dramatically and there was more plowing of land that had been in pasture and other uses. We dealt with the fallout of that. I guess at one time we thought it was a new era with all these foreign markets.

We dealt with the fallout of that from a conservation point of view for some time. I know the Service did some studies which appeared in the *Journal of Soil and Water Conservation* on how much land was converted. I'd like for you to give me your recollections of whether this was something of a shock and what the Service tried to do to respond. Some of the land had had old style terraces which were lost, and windbreaks, the whole gamut.

GRANT: Well, it's a very complex issue and obviously not one that lends itself to an easy answer. Some of the land that had many, many years ago been in intensive agricultural production--cotton, tobacco, and so on--had old terrace systems and had reverted to woodland. It had probably reverted to exactly what should have happened. The land was not really suitable for long-term production. Bringing it back into production couldn't help but increase the erosion potential. If the land wasn't suitable before, even with intensive conservation practices, it seemed to me that your rate of soil loss was going to accelerate. We had to adjust some of our thinking in terms of conservation for new land coming into production and land being used more intensively, as to what systems of soil and water erosion techniques needed to be put into effect. It seemed to me that our farm and ranch planning handbooks and technical guides provided our field people all the information necessary to make those adjustments. If land had to be used more intensively, you put more intensive conservation practices on it.

Now, when you reach the point that you begin to break out land that simply was not suitable for agricultural use, and we had some of that during that period, the program gets a lot more complicated. Because even if you can control erosion to an allowable soil loss, it generally is going to cost the farmer considerably more on that particular property because the intensity of the practice is going to require maybe some structural measures that hadn't been needed previously. His profit is going to be affected by that. Not only that, the country has become very conscious of not putting silt into the streams and not providing an excess of agricultural runoff into streams. You have to be concerned with the good of everybody else just as you would with the economic aspects of the farm. I know the Service was at odds in many cases with the people who wanted to break it out or put it into more intensive farming. I know in my own personal experience in planning farms there's been a few times that I've simply said to the farmer, "We cannot really devise an economically sound soil and water conservation program on this type of land to use it as intensively as you are proposing, and therefore, I would suggest that we can't develop a conservation program that is suitable on this land that is going to be practical for you. You ought to consider leaving it in grass or

putting it into woods." That's a tough situation when the price is good and somebody wants to do it, but nevertheless, I think that as a professional soil conservationist you have a responsibility of calling the shots as they are. If you're on class four, five, or six land, it's usually going to create a problem for him on a long-term basis, and a problem for his neighbors downstream. You'd better call a spade a spade.

HELMS: Was there any way in the Department you could try to influence them not to be so enthusiastic in their advice to plant more and more land?

GRANT: Well, I think our philosophy in the Service has pretty much been that there are some lands that are suitable for almost any crop that adapts to that area, and they can be farmed intensively providing you put the conservation program necessary on the land. There are other lands that from all reasonable and practical standpoints should not be put into the category of cropland. I think we always have taken the position that you had to be sure you could adapt a conservation program to provide adequate protection to whatever land was going to be farmed. If the land was simply not suitable for that purpose and was going to create long-term problems for the country, you had better look for alternatives, that was all there was to it. We certainly promoted this philosophy at the department level and in hearings before congressional committees.

HELMS: I guess it was Bennett's idea to have a plan for the whole farm and conservation practices for the type of crops you are trying to grow, and it does make a great deal of sense. But the Service always has had the dilemma of when does writing the plan become the objective, as opposed to getting it accomplished on the farm. I noticed at one point you raised this in one of the meetings--that it needed to be studied and looked at. You had worked as a district conservationist. Was that something that the Service had to pay attention to?

GRANT: You have a tendency to always measure progress by certain landmarks. And one of the measures of progress we've always had is the number of conservation plans developed. The DC who develops twice as many as someone else is usually considered to be doing an outstanding job of developing conservation plans. But once your focus on the numbers gained becomes the most important thing, then you begin to lose sight of some other objectives.

It is vital to develop a plan that provides adequately for the protection of the soil and resource base and fits into the farming scheme of the individual farmer or rancher. It may be possible to make all the necessary decisions in a fairly short period of time. But in many cases it is better to work with this person over a period of time to develop those things which you can agree on now, then expect to

follow up and continue to develop that plan until it does meet the objectives of the complete conservation plan. The numbers game is one that needs to be very carefully considered. An important measurement is the total amount of conservation that is applied to the land. If that comes from fifty completed plans and some more that are in a stage which is not yet finalized, why so be it, you are getting conservation on the land. I would have been far more impressed with a district that had ten thousand acres of an essential practice applied than I would have been with twice as many conservation plans and only half as much conservation on the land.

It's difficult to generalize. Some areas of the country, because of long history, topography, and the problems associated with farming that land, are very difficult to handle. One of the areas, for example, that I spent some considerable amount of time in had some of the most serious erosion problems in the country. I am speaking of the Palouse area. This is one that you have to approach very carefully. There are some areas of the country where you can make adjustments in the farm operation between livestock and crops and so on that don't adversely affect the farmers' overall program or income. And you can do it rather easily. There are other areas where you are almost walled in to the current program on the farm because he may not have buildings for livestock, fencing, suitable equipment, or markets, and he simply cannot make the adjustments that are necessary to develop a conservation plan that would adequately control erosion and satisfy his income requirements. In those cases, you are going to have to approach the conservation plan on a very long-term basis, and in some cases, look for unique ways of doing it.

HELMS: You were from an era, the Kennedy-Johnson years, when there was emphasis on rural development, on the rural-urban fringe in using soil surveys, and on the sorts of expertise built up in the Service to help proper development and assistance to communities, small towns, and so on. Then we go into the Nixon-Ford era. Was there a change in the philosophy in the Department or did it continue as it was? What was the attitude in Congress as to where the emphasis of the Service should be?

GRANT: We did have a tremendous amount of emphasis on rural development, working with small towns and communities. I think that's one area in which the Service is quite skilled and one in which the more people you can get involved in the decision making process on programs the better off you are. Once you begin to pull away from that overall philosophy, programs then don't have quite the same support base and relationship between the local, state, and federal levels. You are more apt to get programs which are either federal in nature or entirely local in nature. There are probably a lot of

things that can operate on that basis. But to me the strongest point that you can make in analyzing the success of a soil and water conservation effort, a rural development effort, a Great Plains program, or a watershed program is the linkage and interrelationship that exists between federal, state, and local people. If the program is not one that generates a tremendous amount of effort at the local and state level, I think progress is going to be considerably slower. I don't really believe that we experienced any significant changes in philosophy in the Department. There always were questions in the Congress by individual congressmen or senators about the use of funds. The representatives from strictly agricultural areas wanted assurances that farmers and ranchers received full attention. Those from more urban areas were more interested in soil surveys and interpretations and assistance to communities. Overall this probably resulted in greater support for the total program.

HELMS: The Resource Conservation and Development program has had a lot of local support. Sometimes our administrations and Office of Management and Budget (OMB) haven't been as supportive. I think earlier you mentioned to me your views of assessing the economic impacts of the programs like that.

GRANT: Well, I think that's very true. When you get to economic analysis and start with the basic assumption that every dollar spent should return more than a dollar back --and programs are frequently analyzed on the basis of a cost-benefit ratio--you get into analyzing so many different things and making so many long-term projections that anybody else who looks at your figures is almost certainly going to come up with a different answer. Frequently, projects that were looked at with a favorable cost-benefit ratio, when analyzed by different economists, would not substantiate the favorable ratio. However, there are so many things that are done in small communities and small townships that generate a feeling and a willingness to cooperate and move ahead that I find it very difficult, and I think almost everyone else does too, to put to an actual cost-benefit test. When you subject these things to a rigorous examination, such as OMB frequently does, in terms of deciding where each dollar should go relative to program merit, they frequently will not measure up favorably. Yet sometimes a small federal or state input generates a tremendous amount of accomplishment in meeting needs in a small community. It may be because of personal effort on the part of local people. You go into a community where two or three leading farmers have established a real fine conservation plan, without expending another nickel, there are a lot of farmers in there who can see the benefits of what happened and it generates an enthusiasm to go ahead and apply some of that themselves. I

think that some of the rural development programs that we are working with have to fall in that category. It's a building of a spirit and a willingness among people to work together to get something done. Once you pull away the little bit of incentive or maybe the one-man leadership that can really generate enthusiasm with these people, you lose a great deal in the program, even though you can't justify it the way some people would like to see it justified on a dollar and cents basis. This is not to say that cost-benefit analysis doesn't have an important place in determining program priorities. It does. But some important actions do not lend themselves easily to such rigorous examination.

HELMS: Originally, with some of the programs of the 1960s the supporters of the SCS and the National Association of Conservation Districts were concerned about taking resources from more traditional activities. Was that their attitude in the 1970s? What were the priorities of the Department, the Service, and the districts? Were they pretty much on the same wavelength?

GRANT: This was a time when the field personnel were receiving a great number of requests for assistance from other than farmers and ranchers. Anything that detracted from that activity was certainly of concern to districts and to Congress. I touched on that briefly in an answer to one of your earlier questions. However, I believe more and more it was becoming apparent that soil conservation needs did not stop at the farm or ranch boundary. Erosion problems in developing communities, on highways, on steep land being developed for housing, and in other locations all contributed to the total sediment load. Many local groups and communities recognized the need for soil survey information and technical assistance. A significant development had been taking place for some time and was accelerating rapidly--the willingness of others to share in the costs of soil surveys, technical assistance, and office personnel. We encouraged this activity, as did the districts, and very significant amounts of money were appropriated at the state and local level. The end result was a strengthening of the soil conservation program and the base of support was broadened. All of these actions required many meetings between SCS, districts, and state and local governments. It required explanations for the Department and Congress. But I believe good understanding was generally achieved and we were pretty much all on the same wavelength.

HELMS: I think you mentioned earlier that you believed that one of the problems for the Service during your era was the fact that the job had become so much more complicated for the person in the field office.

GRANT: I completely agree that it has become more complicated. When I first went to work for the Service, if you could deal with the problems associated with developing a conservation plan on an individual farm or ranch, you could be a very successful district conservationist. You had a great deal of respect, and practically everybody in the community supported exactly what you were doing. In this day and age, it's not that simple.

HELMS: You were referring to the 1970s?

GRANT: I'm referring to the 1970s. We had environmental groups which frequently took a diametrically opposed position to some of the things that we had been doing. We had strong support from district supervisors and from farmers and ranchers for a program that needed agricultural drainage and yet the people who were concerned about the preservation of wetlands took quite a different point of view. Our people, it seems to me, had to learn to become very skillful in dealing with the myriad of groups in order to develop an effective program. They had to deal with controversy, which is something that most of them had very little training or skills in. You couldn't ignore people simply because they disagreed with the position you were going to take. You had to deal with them because many of them were the leaders in the communities. So somehow you had to reach an accommodation that would meet as many objectives as you possibly could with the various groups you were working with. There would be no question that a channel might be flooding an area and causing a lot of damage. So it needed to be worked on. The problem arose when you asked, "How do you do it?" Historically, with an engineering bias, I suppose we were inclined to put in beautiful two-to-one side slopes and a fairly straight ditch that would get the water off as quickly as possible. We found we could accommodate and get the water off and instead of putting both sides on two to one slopes we could leave one side in native vegetation, and we had to aesthetically deal with leaving some areas untouched. We had to modify the program to still reach the objectives that were needed, or as many as possible, and also satisfy the legitimate concerns of other people.

In some cases these concerns went, I think, beyond the point of reasonableness. When this was so, our people had to learn how to recognize this and deal with the problem. I received letters as administrator from people who criticized the program in their state and said that we were destroying large areas of streams when in fact we had practically no stream channelization at all in that state. They were just alerted by a national organization that was focusing attention on this issue and asked all their members to write to the administrator or write to

Congress and protest something. We tried to develop training programs and we tried to discuss with our people how to handle this. I think over a period of time, step by step, we brought competing forces closer and closer together. Nobody was completely satisfied with the final solution, but perhaps most were in agreement that this was the best alternative that could be achieved.

HELMS: I know you started some training courses on the environment, but did you also have ones on how to deal with conflict?

GRANT: I took the environmental course at Georgia that you are referring to. Practically all of the people from the state conservationist level and into the Washington office took this program in order to better understand environmental concerns. But we did stress over and over again with our people in meetings that whereas they had been dealing with programs which at one time had almost 100 percent support right across the board, they didn't now. So they had to learn how to deal with controversy. We contacted people that we knew, and invited them to our meetings to talk to our people about the fact that they were living in a very complex situation and how best they could get people together and work toward a resolution of these problems. It wasn't easy. There were some days that I could get pretty discouraged about some of the letters I received. It's not easy when you are being sued for millions of dollars in terms of projects which you think are environmentally sound. It's not easy when a project that had been planned had a price tag of $5 million on it, but after constant delay, modification, further delay, and more modification, was now a $10 million project and may or may not have a favorable cost-benefit ratio. But this was a growing process and it was probably beneficial to the long-term soil and water conservation program. It helped educate and bring into understanding more and more people as we moved down the road. But at the time that the conflicts first existed, it certainly created some problems.

HELMS: Was there opposition within the Service to changing policies on watershed work?

GRANT: Oh, you bet your life! You couldn't possibly have the changes that we experienced during the 1970s and not have people in the Service who felt that we were moving in the wrong direction or that as long as we had a consensus with some groups, we ought to push right ahead and not be too concerned about some of the flak that we were getting. But by and large, before we were too far into the program, everybody began to realize that you just simply could not take a program that had as much support in the country, in groups, and in Congress, and let this sort of controversy get so important that it begins to destroy it. In some cases people who were being pulled both

ways actually would no longer be as supportive of the program as they should be.

But I have to say that by and large, even the environmental organizations that we had the greatest difficulty with in our watershed program continued to support almost unanimously other aspects of the Service programs. So they were separating out that part of the program that they didn't like and they wanted to change, but they were not withdrawing their support for the agency as a whole. For the soil and water conservation work that we were doing on-farm they were supporting, even on the watershed, the need for all of the upstream work. Now, some people were absolutely opposed to impoundments. They simply didn't want impoundments, whether they had a rational reason or not. When you get to that point that a person is unalterably opposed to some aspect of a program that really can't be changed if it is going to be effective, then you just have a difference of opinion and you have to proceed. That's about the size of it. Eventually they may come around or they may not. On practically every issue in this country there are people who are 100 percent against it, and people who are 100 percent for it. I think the Service probably strengthened itself by going through the environmental 1970s, and certainly for those people who still didn't want the continuation of certain programs, at least they had a far better understanding of what we were attempting to do.

HELMS: Now the people in the watershed program tell me they think the amount of drainage that was done with the soil and watershed program has been greatly exaggerated.

GRANT: It has.

HELMS: The other thing that there was objection to was the channelization and how that was done. You say modifications were made. If that was the source of the controversy, then it would seem that since it created so much controversy about the agency, why didn't we just modify that right away and take care of the problem? But you can't change that quickly?

GRANT: It wasn't that simple.

HELMS: Yes.

GRANT: It wasn't that simple for the reason that the interrelationship between the upstream program and the downstream program was such that if you could not do something in the downstream area, it might mean a whole major modification in the upstream area, because your water release rates and everything else were tied to a different set of circumstances. For some projects that maybe were 75 percent without controversy, while the critical part of the program may have only been 25 percent, it was such an essential part of the program that you could not proceed unless you made major modifications in the rest of it. But the point you make that

drainage and channelization was exaggerated is a very, very good one. I talked with one organization that I won't identify, that simply told me, "Ken, the only way that we can get our total membership concerned enough to try to change what you are doing is to so overstate the case it would get everybody involved in it and willing to write letters." So, that's an admission that you get people upset when you create a major controversy, not a little controversy. I think we dealt with that. I mentioned earlier a letter that I received. This letter said, "You are one of the greatest despoilers of nature that we have ever had, hundreds of miles of streams are being destroyed in my state." The total in that state was less than five miles!

HELMS: There's another issue which goes beyond the Small Watershed Program, which is that few people in the 1930s were questioning the long-term results of drainage. SCS had inherited from the Bureau of Agricultural Engineering the units that worked with that, and it had not been looked upon disfavorably in the soil conservation movement. So beyond the Small Watershed Program, don't you have a problem to deal with in terms of a traditional activity that people were looking at differently, such as the cause of the loss of wetlands?

GRANT: Well, I think that perhaps two things are mixed up in the question that you asked: historical drainage and wetlands. Now with wetlands obviously you may be getting involved in pothole country and on that basis there has always been a considerable amount of controversy relative to destroying habitat for ducks and the like. At the same time, some of these groups that are so concerned about that almost totally overlook the fact that we created a couple of a million farm ponds, a high percentage of which are also duck habitat. These are the things that you have to try to bring together. The historical drainage that we've done, like in northern Indiana, on flat agricultural land or land that you need to put tile systems in, I don't think has ever been very controversial. It's only when you begin to get into the interrelationships with wildlife habitat that you have controversy. Most people haven't really been too upset about the farmer who has forty acres of flat land who needs to install a tile system.

HELMS: But within the watershed programs, it was the southern projects which would have contributed to that.

GRANT: Two things were involved in these. We were involved basically because of the interrelationship with wildlife or a wild stream--don't destroy a stream that's always been like this and so on. Frequently those were the outlets for watershed projects, so you had a real controversy right there. But you also had people who said that the stream would never, ever recover and that it would be an open sore or an open ditch for time

immemorial. Now, I did a little thing one time in one state where we had a group that was promoting the never recover theory entirely, and instead of having a before and after picture, we had an after picture and a before picture. I showed a beautiful stream with banks stabilized and clear water--just a picture perfect natural stream. And then I showed a picture of that stream with a steam shovel right down the middle of it. This, incidentally, was not done by the Service. Torn it all to pieces, spoiled banks laying out on the side, and everybody gasped, "What a destruction of a beautiful stream!" I said, "That's very, very true, the only thing I want to point out is that this is the before picture that was done years ago by a private group, and this is the way the stream looks today." Nobody could believe it. For streams that are completely clogged up with no outlet at all, if people want to keep it in that situation forever, there's no way you can accommodate them if you are going to provide drainage for watershed projects. The only answer to that one, really, gets down to "Are the benefits sufficient to justify going ahead with the downstream work, or are the wildlife benefits and others so unique and so beneficial that you can't do it?" If that's the case, maybe you can't do anything in there. And that's the decision you have got to reach. Now that's, I think, the unusual case. I am really totally convinced that in most cases we could develop a program that would accommodate the needs and desires of most of the people and reach agreement and proceed. Sometimes, after long delays and sometimes at a much greater cost, but nevertheless it could be done.

HELMS: If you are looking at a multiple purpose project, often it is going to be more expensive than simply protecting agricultural land.

GRANT: That's right.

HELMS: Mr. Grant, I want to ask you a question that relates to what the philosophy and the work of the SCS should be. If you look at a little bit of the recent history, you will see trends in the 1960s where we have concern with rural development, work on the urban fringe, and helping small towns and small communities with their resource problems. Then we'll have other groups, maybe some of the agricultural groups, saying our work should be strictly agriculture. We have things like the Resource Conservation Act (RCA) process that says soil erosion is a bad thing and we need to target these scarce personnel and resources to that. Other groups say identifying prime farmlands to try to influence their use is not the proper role of a federal agency. You've seen this throughout your career. What was your opinion during your time as administrator and now?

GRANT: Well, some of the things that you related are becoming even more in focus now than they were at the time I was there. However, the beginnings of most of these things

were in place during the time I was administrator. I found that we had little problem in less agricultural states meeting some of the resource needs of groups other than farmers and ranchers, because it was recognized that they were going to have a bigger impact on what happened in the state than the few farmers and ranchers. And we were still able to service the farmers' needs, I think, quite effectively in most of those states. At the same time, we could provide basic resource information to the groups that were trying to make solid land use decisions based on town planning, and such problems as urbanization, housing development on very steep land in the mountainous regions, and all of these other associated environmental problems.

Where you really ran into the problem was in those states where the staff was inadequate to meet the workload of the farmers and ranchers at the same time they were being bombarded by needs that were surfacing from other resource groups. And in some cases, we actually reached the point where district directors and the Service would have to sit down and sort, determine, and allocate how much time should be spent on one and how much time should be spent on the other. Of course, I was encouraging, to the maximum extent possible, that the district supervisors and others should also take some of the burden off the Service by providing the leadership in those areas as well. I met with the president and board of directors of the national association at one time because there was so much discussion taking place as to what percentage of our time was being allocated to farm and ranch planning and what percentage was being allocated to these other resource needs. The Congress was also concerned about that. There were some congressmen and senators from the heart of the agricultural areas who were quite concerned that we service all the farmers and ranchers that we possibly could, and that would be our highest priority. Whereas you'd get into other areas where one senator insisted that the highest priority in his state was that we needed to complete the soil surveys as quickly as possible so they would be available to all the groups that were making land use decisions, many of which would affect what happened in the state for years to come. You always had the side issues that were time consuming. As important as they were, you had to determine whether you could get into such things as the strip mine problems. Animal waste was another problem in which we had a great deal of interest. At the same time, practically all of my career as administrator I was fighting personnel ceilings. We had restrictions on the maximum number of permanent positions we could have and the number of temporary positions we could have, and so it was a juggling act.

In my judgment, the Soil Conservation Act and the Soil Conservation Service were supposed to take those actions with the farmers, ranchers, landowners, and users of land in such a way that the greatest good for the greatest number of people was effected. Land use problems outside of the farm and ranch were never outside of our province. We were working in soil conservation districts. All of the land within that district was land on which we could develop plans and provide basic information through agreements with districts. A person that owns five thousand acres of timberland and maybe is the controlling interest in a whole watershed that feeds town water supplies is deserving of attention if he needs information about the soils and how to manage them. So is the farmer or rancher who has a serious problem with agricultural waste management and in times of heavy runoff his overflow is going into streams that go down into towns that can affect water supplies. We had those problems and we had to contend with them. I tried to write policy guidelines in such a way that SCS people with the district supervisors would cooperatively make decisions as to where the highest priorities were. Some districts were quite different than others. That's not bad because the ultimate decision maker is whoever owns the land or controls the land and determines what's going to be done with it. I heard Dr. Kellogg say one time in one of the metropolitan areas that he'd just been in that he saw more soil erosion as a result of road construction than there ever was from agricultural land in that area. Well, if that's true, it seems important that we supply the information necessary to try to correct that problem.

HELMS: What pleases you most and what were the strong points of your administration? To end, tell us your reflections on spending your career in the Soil Conservation Service.

GRANT: Well, my reflections on a career in soil conservation are all on the positive side. If I had my life to live over again, I would certainly not hesitate in the slightest to repeat the career that I had. Some things have happened now which I am not enthusiastic about. Since I made it a public statement at the 50th Anniversary of the Service, I guess it's no secret that I feel rather strongly that the Service has career people who are eminently well qualified in the field of soil conservation as administrators, and would have liked to see the agency remain headed by career professionals. That hasn't happened and I'm not saying that as a result of it the Service can't continue to do the job it had, it's just that my personal feelings--which are what I am expressing now--are simply that I would have preferred that the Service be headed up in a different manner. That is no expression of personal animosity toward any of the political appointees. I told one of them when he was appointed that I would do anything in the world that I could do

to help him, but he might just as well know that if I had had my choice of how we selected administrators, he would have never had the job. He replied, "I appreciate that and understand it fully."

I worked rather hard for quite a long time to get the Service out of "Schedule C." Finally, just before I retired, it was done by Secretary Butz, which is I think the way it should have been. It didn't last long and so now it's a different way and there's no sense of me lamenting that, I just say it as a fact. I think the Service offered a career opportunity and an opportunity for advancement commensurate with how much effort a person wanted to put into the job and how hard they wanted to work.

I had a hand at one time when I was a state conservationist in redrafting the personnel program of the Soil Conservation Service, when Miss Verna Mohagen was the director of personnel. I have always felt that in order to get people who had the strongest qualifications and best background to do the job, that we had to be a reasonably mobile Service. Now I realize that a lot of people disagreed with that. A lot of people would not move or were concerned about the impact on their families. I wasn't asking people to do things that I hadn't done myself. I observed the impact on my own family. I moved my son out of one high school when he was a sophomore and quite interested in staying in the athletic program. I moved my daughter when she was a senior. I think, and both of them agree, that while temporarily there's a little impact from it, it was favorable to them in the long run because they went into a new environment. Particularly my daughter, who was going on to college, felt that a year in a large metropolitan area school, which happened to be Indianapolis, was very beneficial to her before she started Indiana University. However, every situation and every family is unique.

I made a statement one time and I guess there's probably no scientific basis for backing it up. But I thought that you contributed the most that you were going to contribute to a particular job in about six or seven years. After that, in spite of changing conditions, you would have to be making changes to programs that you yourself had implemented and there was always the natural resistance to change when something has been successful throughout a certain period of time. But my observations were that people in the Service who went into the most responsible positions were basically those who had the broadest kinds of experience. From the time that I was an area conservationist, I encouraged all the people that I supervised to very carefully consider moving on to additional jobs in different locations in different states if they intended to move up the ladder in the Soil Conservation Service. And probably some of the most satisfactory things that I can

remember are selecting certain people in New Hampshire and certain people in Indiana and certain people that I ran into in the field as I traveled around the country, offering them the opportunity to advance their career in positions of greater responsibility, and seeing them be successful. Even today, when people are being appointed to some job in a state, I had frequently recognized the talents of that individual back when he was a district conservationist. So did others, I'm not unique in that. At one time we had in the career system a program where every state conservationist was supposed to submit to the Washington office three names each year of people he thought the Service should watch over a period of time because they had great potential to advance in the Service. It's remarkable how many times those decisions turned out to be good ones. So the career system is something that I fought for, and I tried to develop that attitude in the employees of the Service. One of the things that I have been probably as proud of as anything in the Service is what we did do in career development for a lot of people.

One of the things that always was of keen interest to me and for which I developed a great deal of admiration was the dedication of the district supervisors around this country. The time and effort that these people put into a program--basically unpaid or only expenses paid--is unbelievable. I think it is one of the best examples of citizen involvement in the entire agriculture field. Some of these people have served ten, twenty, or thirty years. I've seen them show up at meetings in snowstorms and drive fifty miles to sit in a meeting till eleven o'clock and then drive home and have to get up and milk cows in the morning, or go on to some other activity. I have the greatest admiration for them. I think we developed with the presidents of the NACD (National Association of Conservation Districts), when I was administrator, a real spirit of cooperation between SCS, SCDs (Soil Conservation Districts), and other local organizations that were involved in the total conservation efforts. Some people criticized this a little bit, I suspect because they got the opinion that it was almost one, that SCS and SCD was just the same thing. The difference between the responsibilities of the districts and the national association, and the Soil Conservation Service and its national office is very pronounced. Their hopes and aspirations may be tied to the same star in the sky, but the road they travel to get there is quite different. And I think that another thing that I tried quite hard to do was to develop a program with our people so they did not take over the responsibilities of the districts. At the same time, I resisted in a few cases when districts tried to get too far into the business of SCS like selecting people, and so on. So it was a two-way street.

Now, I guess somebody who starts in the field, working with farmers and ranchers, is always going to say that that's the time you felt like every day you had an opportunity to make a tangible contribution, one that was written down, and one that would last for a long time. As you drove around you could see your own landmark on the land in what the farmer, himself, had accomplished. So you took a great deal of satisfaction out of that. I personally liked the state conservationist job just about as well as any job I had in the Service, because I felt that it was a job with enough parameters to it. You could develop a far-flung program, one that involved a lot of people and one that made a lot of accomplishments. You had enough latitude to make independent decisions on both personnel and program activities so that you got a great deal of satisfaction out of the job.

I might just say as an aside, my wife always was with me in every career move that we made. She used to drive our personal car oftentimes to meetings while I was writing my notes for the speech on the way there, so she got pretty involved and she always said, "Be sure you keep one state conservationist position open for you because that's one we really could always enjoy."

The Washington office is different. It's unique, there is no question about it. It's a position where you have tremendous latitude for independent decisions but at the same time you are within the guidelines that are being laid down by the Department and OMB. Sometimes you have the problem of explaining and justifying to Service personnel why you can't move in certain directions because there are other programmatic responsibilities in the Department that also have to be considered. That's why I always tried to be as frank and straightforward as I possibly could with the state conservationists and considered them members of my immediate staff. I made out their efficiency reports and so on. I felt that they contributed to the policy decisions, therefore they should know the background as to why certain decisions had been made when they weren't particularly the ones that they wanted to hear. Like personnel cuts, which nobody likes.

I worked with a number of secretaries and a number of assistant secretaries. And like every position, you develop closer working relationships with some than others. But I always felt that in the time that I was administrator we got a fair hearing from each Secretary and we got a fair hearing from each of the Assistant Secretaries. They all had different ways of operating. Some would go to hearings with you and simply turn the whole procedure over to you with Congress. Others would make a statement themselves and would get

deeply involved in the discussions throughout the whole hearing, which anybody can find out by reading the congressional hearings.

I enjoyed the years that I was administrator. I enjoyed the overseas assignments and I enjoyed the opportunity every year to occasionally get back into the field with field people. I walked away from my career with no hard feelings and no misgivings. I worked as hard as I could and did the job as best I could while I was there. I've maintained that interest in conservation ever since. I would, as I told you earlier, criticize the Service to some degree and maybe a part of it is my own fault too, because I was an administrator. I do not think that we captured the talent, the know-how, the background, and the experience of enough of our people when they retired. I know in my own case I felt that after being away for only a short period of time it was difficult to talk with other people about the programs the Service was administering because things were changing very rapidly and there was little if any effort that I could see to keep me or others like me informed. That may be something that future administrators ought to think about. Now, I will say in all fairness that every administrator since I've retired has invited me to attend their annual meetings and I have attended some of those. I have, I think I'm correct in saying, visited at least once or more with every single administrator. But I would also say that the opportunity to contribute to the program after retiring has been pretty slim.

One state conservationist once said that they ought to call the period that I was administrator the "environmental period." Even though depositions with lawyers and things of that nature are not necessarily the things that you like to go through every day, nor are interviews with national magazines when they are obviously trying to focus in on the problems associated with soil and water conservation such as channelization and you can't even get a line in there about all the other things which the Service has accomplished, I do think that someone had to serve as a focal point to try to bring some rationale to the positions that the Service, the Department, and many of the environmental organizations were taking. I tried to do that. I tried to stay on a working basis with the heads of the agencies in the Department of Interior and with many of the national wildlife organizations, even though at times we were receiving sharp criticism for some aspects in the program. Nevertheless, I thought we had too much in common to fail to make a maximum effort to reach some sort of accommodation and agreement.

Oftentimes people have played environmental groups against farmers and ranchers. Nothing could be further from the truth. Farmers and ranchers control the land and most of the resources on which the wildlife in this country exists. They have

certainly as much reason to be concerned about the environmental problems as anybody does. I think the interests of the owners and the users and managers of the land, and the environmental concerns of other groups are such that they are natural groups to work together if they are ever going to solve some of the problems that they face. You know, the pothole country is one example. Farmers and ranchers own much of that land, but many other groups have very real concerns about what takes place. It's much better if we can work out a series of policies and actions that allow these groups to participate in the decision making process. And I think I contributed something to that aspect. I know I received a couple of citations and awards from environmental groups that at one time probably wouldn't have even come to my office, so at least we made some progress. And I know that the people that followed me have moved much further than we had an opportunity to do. I feel good about many of the things that we accomplished even in a period of considerable controversy.

The strength of an agency such as SCS with its many different programs and responsibilities, and with its presence in so many locations, is entirely dependent on the excellence of its personnel. As administrator, I was always proud of the outstanding quality of SCS people at every level of the organization and their devotion to soil and water conservation. The future will always be full of new challenges. I'm sure the program will take new directions, but the need for dedicated men and women will always remain.

R. M. (Mel) Davis

Contents

Biographical Sketch

Mel Davis was born in Ambrose, North Dakota in 1927. After graduating from North Dakota State University he worked as a vocational-agricultural instructor. He served in the Navy in 1945 and 1946.

Upon joining the SCS in 1952 he was a soil conservationist in his native state. Following several promotions, he transferred to Pennsylvania in 1963 to serve as assistant state conservationist. From 1968 to 1972 he was state conservationist there. While in Pennsylvania, Davis became field representative for the northeastern United States in 1972, a position he held until his promotion to assistant administrator in 1974. He was also director of the SCS Technical Center in Upper Darby, Pennsylvania during this time.

Following the retirement of Kenneth Grant, Davis served as administrator from June of 1975 to September of 1979. During these four years, SCS responded to a variety of pressing problems and outside criticism while under tight budget constraints. He also led SCS when it took on three major new projects: the Rural Abandoned Mine Program, the Soil and Water Resources Conservation Act, and the Rural Clean Water Program. In 1979 he moved into the newly created position of special assistant for international science and education under Secretary of Agriculture Robert Bergland. Shortly thereafter, he retired from government service.

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July 20, 1993

Interviewed by Steve Phillips, Historian with the Economics and Social Sciences Division of SCS, in Mechanicsburg, Pennsylvania.

PHILLIPS: I would like to start out by asking if you could talk a little about your family and educational background.

DAVIS: I'm a native of Ambrose, North Dakota. I was born and raised in the very northwest corner of that state, a point of entry into Canada about thirty miles from Montana. I grew up there during the drought and the Depression. You can say I was born in the 1920s and educated in the 1930s and 1940s because you must include everything from grade school, high school, military service in the Navy and going to North Dakota State University. My educational background is basically one of graduating from North Dakota State University in the field of agricultural education. That was where I started working. I graduated in 1949 and started out teaching vocational agriculture. At the time I enjoyed it very much but decided that I would like something more in the line of conservation or conservation education. At that point, I joined the Soil Conservation Service because it was active in southwestern North Dakota. I knew a little bit about it, having grown up under these droughts and depressions and dust storm conditions. I thought I could make a contribution with my background, my educational training and desires for the future.

PHILLIPS: Was there anything in your education or studies directly connected to soil conservation or soil science?

DAVIS: Not especially. We all had to take soil science. We all knew about Dr. Charles Kellogg who headed the Soil Survey Division in Washington for a long time because he led the soil science activities at North Dakota State University. So you could say that there was an association, but nothing direct or planned on my part. It was one of those situations that just happened more than it was planned.

PHILLIPS: Your decision to make a career in SCS was based upon a growing interest in conservation in general?

DAVIS: Yes, and in production agriculture. I had seen enough of problems with agriculture, problems with those people trying to make a living from agriculture. I really thought, not only from my background but from the agency and organization of the Soil Conservation Service, that we could make a definite contribution to the American production of food and fiber and yet conserve the soil and water resources. So that was sort of my analysis when I started. When I started at the lowest rung of the SCS

professional ladder, of course, never did I dream of ending up at the highest rung of that same ladder some day.

PHILLIPS: What year did you join SCS?

DAVIS: I joined SCS in the summer of 1952.

PHILLIPS: And at what position?

DAVIS: As a soil conservationist in Mott, North Dakota.

PHILLIPS: What specific problems did you see in North Dakota? What specific soil erosion problems were present?

DAVIS: The big problem, of course, in northwest North Dakota was that of wind erosion. We would have liked to have had more water than we did. This related to drought conditions in my earlier times but later related to some of the tillage conditions and practices being used.

PHILLIPS: Could you tell us a little bit about an average work day?

DAVIS: Well, at that time, that area was all farming and ranching. Our average day was to work with farmers and ranchers in development of conservation plans and, perhaps more importantly, the application of conservation practices. Our day was as long as it took. I didn't come to work by the hour or the day or the week or the month. I took an annual salary and I thought I had to work as many hours as it took, as many days as it took, year-round and that's what we did.

PHILLIPS: Was a lot of evening time taken up with conservation district meetings and such?

DAVIS: There were educational meetings, conservation district meetings, cooperating agency get-togethers, field days, and tours. There seemed to be no end to it and thus there was no lull in activities.

PHILLIPS: What was your next promotion?

DAVIS: I went from soil conservationist to what was then known as a work unit conservationist position and served in that position in two or three locations in southwestern North Dakota. It was the first line officer position that I held in the Soil Conservation Service. The line at that time was the administrator, the state conservationist, the area conservationist, and the work unit conservationist. Those were the four levels of line organization we had.

PHILLIPS: One of the things all these oral histories have done is focus a bit on the states, since each person comes from a different background. You mentioned you went to southwest North Dakota. Was that different from what you said before about where you grew up?

DAVIS: Yes, I grew up in the northwest and when you went south of the Missouri River, there was a difference in soils and farming practices, but basically the same dry conditions existed. So there wasn't a lot of difference. In North Dakota, the eastern third of the state, the area east of the hundredth meridian, is mostly level farm land--Red River valley--flat country. That's quite different from where I was in the western third of the state, which is in the thirteen-inch total precipitation boundary, or in southwestern North Dakota, where I started with SCS.

PHILLIPS: You mentioned that you went from soil conservationist to work unit conservationist. What specific criteria did they have for deciding who moved up? What did you have that helped you advance in your field?

DAVIS: Well, of course, you never knew. You were selected and assigned and you went. In other words, my understanding of Soil Conservation Service then was that they wanted me to become a work unit conservationist, a line officer. That was the top individual working with these conservation districts or with a conservation district in a county. In other words, your paycheck was going to be sent there; you went there to happily receive it.

PHILLIPS: So it was more in the line of being ordered.

DAVIS: No, you weren't ordered but the selection process was such that it usually was advantageous for you to go.

PHILLIPS: How about comparing a work unit conservationist to your soil conservationist job? Can you give us a daily schedule?

DAVIS: Well, it really wasn't that much different. In other words, I sort of had a theory all through my career in the Soil Conservation Service that there were jobs to do. There were seasons in which to do them or times in which to do them and when that time was right, you did them. We did similar things as soil conservationists and as work unit conservationists because they needed to be done and that was the only time we could do them. It didn't make much difference if you were a professional or a technician or an aide or whatever they were called at that time. You did your job to help those farmers and ranchers in conservation districts apply conservation measures to the land. In North Dakota, the season when you could till fields, apply practices, and the like was short. We worked as a team more doing things on a seasonal basis than they did in other parts of the country where they could do the job twelve months in a year. You don't soil survey in North Dakota in January. By the way, that's no derogatory remark about North Dakota.

PHILLIPS: One of the big changes was the move from the regional system to the state office system.

DAVIS: The regional offices were in existence when I joined the Soil Conservation Service and there was one in Lincoln, Nebraska. As I said a bit ago the line officers were the administrators, state conservationists, area conservationists, and work unit conservationists. The regional office was headed by a line officer at that time as opposed to what it later became, a technical service center. When the Eisenhower Administration took over there were some thoughts of changing SCS from an organization that had been very active and very successful, to one of no existence at all. The regional offices were the casualty of that type of thinking and thus they were eliminated as a line office. You could ask what happened when they dispersed the regional offices. I was in the field working in conservation when that happened. I don't know all the ramifications of that but my observation would go like this: they moved the regional office and its functions and responsibilities down to the state office. They just shoved everything down the ladder one notch and kept a core of technical people at the regional level to later work in regional technical service centers. There were many arguments over whether that was good or bad and I expect it still could be debated.

PHILLIPS: Did SCS employees have any particular views on this change?

DAVIS: Every SCS employee had a view and those views were very different. You had to have an official view which was maybe this way but an unofficial opinion which was the other way. So there were lots of views--strong, good, bad, and indifferent. Some states loved the abandonment of the regional office. Some states and some employees were assigned to those states out of those regional offices, like it or not. It was more of being ordered than being selected, as I discussed a moment ago.

PHILLIPS: This is a broad question but some of the debates in the Service seem to be over what the state level should handle versus the headquarters level. Do you have any comment on that for the soil conservation work? What was the best division of labor?

DAVIS: First, I'm a firm believer in line organization and delegation of authority. The state conservationist, I believe, needs to have full say and full control within the broad national policy or guidelines handed down or developed jointly with Washington. When it comes to operations, I think the state conservationist has to be the man in the chair and the man who will accept the responsibility and make the decisions and carry out the program. When it comes to state agencies and organizations, that's another question. I believe strongly that you need to

have a strong national program of developing standards and specifications, as an example, for soil and water conservation practices. The Soil Conservation Service was created to be the technical arm of the United States Department of Agriculture in the field of soil and water conservation just as the Forest Service is in the field of forestry. In that setting then I believe it behooves the Soil Conservation Service to be the leader, to know more about soil and water conservation problems and solutions and developing standards and specifications than anybody else. That's the only way you can do it. The only way you're going to be top salesman in a private company is to know more about your product and perhaps your competitor's product than anybody else. I believe that the Soil Conservation Service needed to do that in order to carry out its responsibilities as delegated from the Department of Agriculture and the Secretary of Agriculture to the administrator, to the state conservationist, down to the area and field offices.

PHILLIPS: What role should the state governments fulfill?

DAVIS: I believe the state does have a responsibility, not only for the lands under their jurisdiction which they own, manage and operate, but also to assist or to be the local entity. Keep in mind, the Soil Conservation Service had no land under its control. I can qualify that a little bit; we used to have the old grazing land management program back in the early 1930s and 1940s, but that's history. SCS was never designed to have nor did it ever have the sort of control over land that the Forest Service had. The only thing we could do then was have the standards and specifications, the knowledge, and the technical assistance in the planning and application of conservation practices to a point where we could sell our product based on the need. Congress, when they created the original soil conservation district law, declared that soil and water conservation was in the public interest. Therefore, the Congress, the United States government, the Secretary of the Agriculture, and the Soil Conservation Service had a direct responsibility. In that setting, I believe the states can do more. I believed during my tenure and in later years they have come into their justifiable role in carrying out conservation programs up to and including, if necessary, enforcement of land use requirements. I don't believe the Soil Conservation Service, then or now, should do that. I believe state and local governments are the ones that can do it. With our knowledge, background, advice and expertise they should carry that out.

PHILLIPS: You've already mentioned the lack of water and wind erosion. Is there anything else you would like to add about North Dakota?

DAVIS: Well, keep in mind that these things constantly changed as we went from the horses to the tractor to the big machinery. It constantly created new conservation problems. The problems we had in my tenure in North Dakota are not necessarily the problems of the 1970s or 1980s because of the change in tillage methods, the changes in farm machinery, the difference in size of farms, and the change from livestock to small grains. Our problems, as I have indicated earlier, were those of wind erosion; thus we worked on such things as stubble mulching, strip cropping, and one row tree planting to try to provide a barrier to stop the wind and hold the snow, because moisture conservation was a big single item. In range conservation, even before the laws were passed, we did such things as trying to reclaim some of the old spoil banks from strip mining in northwest North Dakota up to and including hauling a native plum seeder around and dropping seeds to see if we couldn't get trees to grow by accident. We had no authorities, we just did it. You had to do a certain amount of these things, I don't want to say illegally, but almost so in order to get them accepted. And we did some of that. I'm not saying we broke the law, but we stretched it a little bit.

PHILLIPS: So you took the initiative for some areas that had been strip mined?

DAVIS: We tried things because it was creating problems for farmers. We did many things on what we called water spreading, just putting dikes in so that when the snow melted the water flowed slowly over the land and spread and soaked in rather than just ran off. Those things were forerunners. I was then and still am now a firm believer that conservation practices constantly need to be changed and adapted. I had no qualms with having people who had maybe been doing wind strip cropping--narrow strips in one direction to slow down the force of the wind--taking them out and putting them into contours. Once we got the wind erosion under control by other methods such as good stubble mulch then we moved to moisture conservation and contour farming. As long as you were going up the ladder with conservation practices I had no problem with even erasing a practice that at one time we thought was sacred but now could be replaced with something better.

PHILLIPS: Could you give us a little taste of your relationships with the farmers when you went out? How did you approach them? I know at times this is a very sensitive issue--convincing a farmer to try something.

DAVIS: We tried many things. Again I go back to North Dakota, but let me say this, North Dakota is different from the state we're sitting in now, and in which I worked, Pennsylvania. It was entirely different in North Dakota, where the farmer, the rancher, the land owner, or the

operator, because of their experiences with drought, Depression and all these other things were much more knowledgeable of the Soil Conservation Service. We worked together hand in glove to try to help them.

How did we approach them? We approached them any way we could, through educational meetings and group meetings. We had a program at one time called "finding Elmer." In "finding Elmer" we had group meetings to see who was the local leader--if he did something the rest would follow. It worked to a degree but never forget, when working with people, it's that individual who finally makes the decision and it's that individual who needs to be made to feel important in his role or he will not carry out or keep a practice. You can't go by and talk to a farmer and let him say, "Well, I don't have any erosion but my neighbors got a little." He maybe asked you to help him solve one little segment of his problem, such as a wash-out in the field. That really wasn't the problem; that was the result of the problem. Therefore, you had to then use that as your "in" to get him to plan and apply a total conservation program.

PHILLIPS: What years were you in North Dakota?

DAVIS: Well, I was there from the time I was born until 1963.

PHILLIPS: And went to Pennsylvania in what position?

DAVIS: I came to Pennsylvania as an assistant state conservationist.

PHILLIPS: Tell us about that position.

DAVIS: The time I came into that position, it was a new position in Pennsylvania. I came in there as an assistant state conservationist for special programs. That position was created primarily because the state conservationist, the late Ivan McKeever, was appointed the U.S. Department of Agriculture representative on the Susquehanna River Basin Study and other things. So Don Williams authorized an additional position here to handle a lot of the special programs. I don't even remember what some of them were but it had to do with relations with the college and Extension Service, the state's own soil and water conservation commission, and the reclamation laws that Pennsylvania had. We were trying to assist them. When you work for an organization you really work for a man. I guess you can say whenever I was given an assignment I did my best.

PHILLIPS: Could you give us a quick sketch or a comparison of Pennsylvania's conservation efforts and North Dakota's?

DAVIS: You're comparing apples and oranges. It was entirely different. Let me say Pennsylvania had a good conservation program in those areas where they had one. The history of conservation districts and the problems between various agencies and the Soil Conservation Service in Pennsylvania, I'm sure is quite well known, and I don't choose to get into that. We had to do a lot of work in the creation of soil conservation districts even after I came here thirty years ago because the Extension Service in Pennsylvania had fought the creation of districts for some good and valid reasons. There had to be a lot of work done in what I call general relations with cooperating agencies and county commissioners who, under Pennsylvania law, created the conservation districts as opposed to North Dakota where they were created by a vote of the general public. You had to work with county commissioners and those sorts of people to get conservation districts created and then we were quite successful. We got districts created in just about every county by the time I left in 1972.

PHILLIPS: Can you give us some idea of where the districts weren't set up when you arrived? Was there any particular part of the state?

DAVIS: There was no rhyme or reason; there would be a small district covering eight townships of one county until Pennsylvania passed Act 217 that required districts to be created on a county-wide basis.

PHILLIPS: What were some of the specific erosion problems in Pennsylvania?

DAVIS: Well, in Pennsylvania, there were erosion problems because of the high moisture--rainfall--as compared to North Dakota and many other places. Pennsylvania was farming country where erosion was a big problem from water, not from wind. Soil conserving and soil building were important. You can go to northeastern Pennsylvania; the old rock fences were there. When the snow melted and the water ran, it followed these fences down and just eroded the heck out of it. Historically some of them should have been kept. We were into programs cost shared by our sister agency, the Agricultural Stabilization and Conservation Service (ASCS), to remove these rock walls and eliminate that sort of problem. I would say it was geared more toward conservation, crop rotation, and erosion water than perhaps it was ever in the Midwest and western United States, except for the Rocky Mountain area.

PHILLIPS: Were you more involved in certain types of work due to strip mining in Pennsylvania?

DAVIS: Yes, we became more and more involved with the strip mining work in Pennsylvania as the years went on. They had more money and more serious problems as a result of

mining, particularly deep open pit mines, to say nothing about sink holes and a whole group of other things.

PHILLIPS: What about Public Law 566, the Small Watershed Program, in Pennsylvania?

DAVIS: It was an excellent program nation-wide, and could be adapted almost anywhere. Pennsylvania had a good program of public law 566 watersheds in planning and development at the time I came to the state. We carried it out vigorously and we did one thing in Pennsylvania, I think, that was highly beneficial. Not that it wasn't done elsewhere, but we did incorporate multiple use of the water-retarding structures wherever possible. I'm talking about municipal water supply, recreation, and all those sorts of things.

PHILLIPS: Do you have any comments on relations with the Corps of Engineers? Did they have many objections to the watershed projects?

DAVIS: Well, the Corps of Engineers and the Soil Conservation Service had many areas of conflict. In my personal experience in Pennsylvania, the Corps of Army Engineers, whether it be the Baltimore district, the Pittsburgh district, or the Cincinnati district, was generally good. We understood each other. We got together and called a spade a spade. Two hundred and fifty thousand acres or less, we took a look at. Over two hundred and fifty, we said to the Corps, "You take a look at it." We communicated, which perhaps was the most important thing. There were areas of conflict and areas of concern but no real problems.

PHILLIPS: Where did you go after the assistant state conservationist position?

DAVIS: I became state conservationist for Pennsylvania in 1968, upon the retirement of Ivan McKeever. I served in that position for four years. In 1972, I left the position of state conservationist and went to Upper Darby to head up our technical service center. I directed the technical staff that provided support to the thirteen northeastern states and the Caribbean area at that time. I was also the administrator's field representative. It was not a line officer position but you were sort of called the administrator's eyes and ears to the various states. The administrator, even though he had fifty state conservationists reporting to him, couldn't possibly keep a finger on all of them. So he worked with and through the field representatives to see what was going on and why.

PHILLIPS: Was it unusual for a field representative to have the other post that you held concurrently?

DAVIS: No, they all were set up that way. From the time they were created, which was an evolution after the abolishment of the regional offices back in 1954, it evolved so that all of

the technical service centers were headed by a director who was also the administrator's field representative.

PHILLIPS: How did you come to be selected for the state conservationist position?

DAVIS: It's like everything else, you never really know, I guess. I was selected to became a state conservationist in Pennsylvania by Don Williams. Mr. Williams, a fine administrator and a fine gentleman, never really talked to me about the position. I was in a training center at the U.S. Coast Guard Academy out on Long Island, New York, when I got a phone call about my becoming state conservationist. Actually, my wife and kids knew it before I did. Mr. Grant was administrator then and I'm assuming they went through a panel process where the personnel office and other people at the national level made a list of qualified people for the job. The administrator made a decision on who he would like to serve in that position Anything above a grade thirteen at that time had to be approved by the Department. That was the way it went.

PHILLIPS: Just to back up a bit, I have a couple of broad questions. Could you address the shifting emphasis in SCS? During the 1960s and 1970s, the trend was first toward more environmental concerns and second more toward urban and suburban concerns, correct?

DAVIS: I would like to separate out environmental. I'll get into that a little later. The first shifting of emphasis, I think, was toward the urban areas. When I say that I don't mean that was bad. They had soil and water resources, they had soil and water conservation problems, just as the farmer and rancher did. I don't think the original legislation or any interpretation of it thereafter really said farmers and ranchers. Now some people wanted that and, true, we worked mostly with those people because they controlled the large areas of land. But I had no qualms with providing technical assistance to urbanites, to conservation groups, and organizations that were trying to solve problems that were not strictly related to agricultural land. True, we were a part of the Department of Agriculture but that didn't limit us to them. Again, local conservation districts and others needed to set the priorities and we, the agency providing technical assistance in the field of soil and water conservation, needed to help carry out those priorities.

PHILLIPS: Wasn't there growing concern over water pollution, pesticide use, run-off, and such?

DAVIS: Yes, they become more and more concerned about water quality and water pollution, primarily because of erosion. Due to erosion, soil particles, silt, and sediment carrying nitrogen, phosphorus, and potash flowed off the farm fields and caused algae to grow on the ponds. True,

there was a greater concern. The problem was always there but the more you urbanize the country the worse it became. Keep in mind now, I came from North Dakota, the most rural state in the union yet. I came to the east coast where the most urban states in the union were. You can say the problem was different, but had you had blacktop over half of a county in North Dakota, you would have a similar problem. It was the change in land use from producing crops to producing houses that caused many of these problems. The Soil Conservation Service didn't cause it. Many times people said the developer caused them or the planning commission caused them or somebody else caused them. Well, this thing had to go on, you had to change land use. We, the Soil Conservation Service, should have been trying to advise, to counsel people well enough so that changes in land use were well-planned, well-managed, well-intentioned and not using up the best farmlands of this country. We had several alternatives in some places. There were places where you didn't have much of an alternative but that's another story.

PHILLIPS: What about Resource Conservation and Development (RC&D) in Pennsylvania?

DAVIS: Pennsylvania, in fact, before I became state conservationist and afterwards, was sort of a leader in RC&D. Mr. McKeever, with his staff, took the initiative to see that we assisted local people in developing RC&D applications, and, once approved, in getting things to happen within the RC&D. The Resource Conservation and Development program was really developed out of one line of the Food and Agriculture Act of 1962 and it was expanded considerably. I think maybe Pennsylvania and some other places were leaders in causing that to take place in Resource Conservation and Development areas. I'm not saying it should be applied all over.

PHILLIPS: I know this is almost thirty years ago, but do any specific projects stand out that you were particularly proud of?

DAVIS: You hate to single anything out, just like you hate to single out one of your kids over another one. I suppose that one is the RC&D in northwestern Pennsylvania in Mercer, Crawford and Erie counties, because it was the first one, and a place where I put in a lot of time and effort. In fact, my wife thought for a while that I had a second home at Mercer because we went out there so often to assist with the application and planning. That would be the one that stands out. In my experience and tenure here, it was the one in which there were the most accomplishments because it was the first one developed.

PHILLIPS: What about Hurricane Agnes? Did SCS play a major role in helping in the aftermath of that?

DAVIS: Yes, Hurricane Agnes, of course, came on in 1972. At that time, I was just leaving the state conservation job in Pennsylvania and going to the technical service center in Upper Darby. We played what I would call a major role in the emergency work that was needed. It was not all to prevent the flooding, because the flooding had already occurred, but to reclaim the lands that were damaged by the flooding situation. It included everything up to and including debris removal so that if we got another storm, the next day or the next year, it wouldn't recreate itself. So the Soil Conservation Service and the Department of Agriculture, using primarily the authorities of section 216 of the Flood Control Act of 1950, played a major role. We did a good job and we got a good amount of credit for what we did, not only in Pennsylvania, but also all up and down the Hurricane Agnes trail which covered many states.

PHILLIPS: As director of the technical service center in Upper Darby, can you give us an idea of your job? What did you do on a day-to-day basis there?

DAVIS: Well, that's pretty difficult to answer. When you're in that kind of a job, the things you did changed every minute and sometimes every phone call. In other words, if the administrator called and wanted something done, you gave it a pretty high priority. I suppose I spent half or more of my time visiting the state conservationists and their staffs in reference to soil and water conservation problems, pushing development, and even the selection of people for everything from going to graduate school to heading up an EEO (Equal Employment Opportunity) program, which was coming into its own at that time. I spent about half of my time directing the technical people and the staff there and the rest of it being with the state conservationists and their staff on various problems.

PHILLIPS: I have the impression that you think it's very important to get into the field.

DAVIS: Oh, you have to get into the field, you can't do anything from behind the desk. If you are helping a farmer plan a practice or if you're helping an SCS person develop a plan, you have got to have some front-line involvement and knowledge. You must get out of the office and move around.

PHILLIPS: Did you enjoy that position in Upper Darby, Pennsylvania?

DAVIS: Yes, I did. I was in that position two years, from 1972 to 1974. In the spring of 1974, I was selected to become an assistant administrator under Ken Grant. The same process was used, but the Department got more involved as you got into the positions in Washington. I went to Washington in April of 1974.

PHILLIPS: Well, what were your duties as assistant administrator?

DAVIS: Well, as an assistant administrator, I did much of what I'm going to call not directing people in programs, but rather assisting in carrying out programs. Anything from having a successful meeting of the state conservationists, which at that time was held annually--and I helped develop and plan and organize and execute those--to doing special assignments for the administrator or for the Department. I'm sure the Soil Conservation Service still does a lot of special studies, almost assignments, for the Department of Agriculture. So it was, as Ken Grant operated it, a rather broad-brush approach. Again, you work for the man and not for the organization, so I did those things he assigned me to do and it involved all aspects of the program.

There were many interesting things happening during that time. When I went into Washington, a fellow of the name Richard Nixon was President of the Unites States. One day the Secretary called us all over to the then Secretary's theater and announced that Nixon was resigning and that Gerald Ford would be President at three o'clock. Well, those were interesting times. They were unfortunate times, perhaps, for the country, but interesting times to be around Washington.

PHILLIPS: Did difficulties among the top leadership trickle down and cause difficulties for SCS in carrying out its mission?

DAVIS: I would say not. Truly, any time there's a change of administration, whether it be the President or the secretary or assistant secretary or whoever, it's going to have some effect. At that time, the Soil Conservation Service had a good, stable, professional organization. The Department of Agriculture had a good, stable organization headed by Dr. Earl Butz and they kept things on an even keel and thus it didn't really affect us, the Soil Conservation Service, or the people we served to any significant degree. Above all, we at the national level always attempted to keep these things from affecting field operations.

PHILLIPS: During your tenure as assistant administrator one of the controversies was Earl Butz and the encouragement of increasing the amount of land under cultivation. Do you have any comment on SCS's reaction to that?

DAVIS: Well, Dr. Butz was a fine Secretary of Agriculture but he would say things, in public speaking or otherwise, that would get both him and the agencies he directed in trouble, whether it be SCS or somebody else. Of course, he made a statement one day, "food production top notch, plow fence row to fence row." This type of thing caused the agencies and organizations a lot of problems--not only to comply with Dr. Butz's wishes, but also to try and

keep the programs that we had in soil conservation on track. When the boss, Butz, said something, you didn't run around the country and contradict him. You maybe had to run around the country and try to pick up after him but you didn't run around and contradict him.

PHILLIPS: Could you give us some background to your selection as administrator in 1975?

DAVIS: I can't give much background on that. Assistant Secretary Bob Long was in the chair over in the Department at that time. He went through the SCS career people and made the selection and that was it.

PHILLIPS: Shortly thereafter the Carter administrator came on the scene. Was there a change in priorities or the way things were done?

DAVIS: When I became administrator Dr. Butz was the head of the Department of Agriculture and Gerald Ford was the President of the United States. The election, of course, changed all of that and thus we had the Carter Administration as you referred to. Did it bring about any change? Now, we'll come back to that question you alluded to a bit ago about environmental issues. We should never forget this--maybe I should have woven it in earlier--in 1972 we had an energy crisis in this country. I was in Upper Darby at that time. Simultaneous with that and continuing on to this day with the energy crisis was the environmental surge. The Carter Administration happened to come in then because of the desire of the American electorate. With it came a group of the environmental types. So when you ask did it have any influence or change priorities or SCS policies, an accumulation of those things, including a new administration, caused changes.

PHILLIPS: Can give us any specific areas where you saw those changes?

DAVIS: Environmentalists were more and more calling the shots and I did not necessarily call them environmentalists. Some were true preservationists. In any case, perhaps the first impact of this had been years before Carter and his people came to town in the channelization argument on watersheds under the Soil Conservation Service and the Small Watershed Protection and Flood Prevention Act. Whether we should clean out stream channels and all those sorts of things would be one example. At the time of the change in administrations, the more environmentally inclined people came to Washington, including President Carter. There were more and more demands and pressures to change our rules and regulations under which we carried out a program. These, of course, were developed by the Soil Conservation Service in cooperation with others and carried out by us

because we were expending the dollars through local sponsors. There became more and more pressure to change these things, to quit doing this or do this another way. On the other side of the coin was still the same group of land owners and operators out there having the same problems of flooding or drainage. I maintained then and I maintain now that the two can live together. As long as you have private ownership of land in the United States, you cannot just stop something that has been going on, farming, for example, in certain areas for hundreds of years and do something else. I hope forever that we have private ownership of land and those who own and control it will have the largest say about the use of it, while not disregarding laws, not disregarding rules, not disregarding regulations, and not disregarding the environment, but rather working together so that agriculture, food production, and fiber production can prosper. Floods cannot necessarily be stopped. You can't design everything to stop everything. Floods can be minimized and everybody can live together along with the birds and bees and other things.

PHILLIPS: How did you try to reconcile these two groups? Did you find yourself meeting with environmental groups' representatives a lot?

DAVIS: Yes, you had to meet with the environmental group representatives. Let me say this of those people who were most critical of the Soil Conservation Service and its activities: Those environmental groups, and I can take the National Wildlife Federation as a specific example, gave me hell up one side and down the other, yet they never came to my office to sit down and talk to me about these problems. They would leave it up to you to come over there because they thought that they were in the driver's seat now. They were, to a degree, because they had people in power. Congress, the president, the secretary, and the assistant secretary were much more lenient toward environmental preservation. Don't misunderstand me, I think conservation, planning, application, development, food production, and fiber production can go on in a very environmentally sound setting, but you just can't ignore everything for one particular mission.

PHILLIPS: I see you received pressure from the other side then, from farmers' groups.

DAVIS: Oh yes, you were sued and got pressure from farmers' groups. I kept one sign when I retired and it said this, "I consider the day a total loss if I don't catch hell about something."

PHILLIPS: I assume that happened just about every day.

DAVIS: I never lost a day!

PHILLIPS: Other than those two groups, who else did you deal with as an interest group involved with this? What about ranchers?

DAVIS: Oh yes, ranchers. I include farmers and ranchers right together. The farmer, rancher, and agriculturist basically have the same interests. They weren't the only ones. Cities that wanted to channel through towns to prevent flooding were in some of the same categories as the farmers and ranchers who wanted to get drainage on their land. So who were the other groups? It was the same groups we had worked with for years. I would have to say in all honesty and candor that I believe the Soil Conservation Service, the Department of Agriculture, and local soil and water conservation districts have contributed more to the environment and quality of life from the standpoint of food and fiber production and conservation of natural resources than was realized or recognized.

PHILLIPS: As long as we're talking about other groups, what about relations with the National Association of Conservation Districts? Do you have any comment to make on that?

DAVIS: The National Association of Conservation Districts was an organization made up of the state and local conservation districts. The Soil Conservation Service, based on the original soil and water conservation law or Soil Conservation District Act, made them very close partners in all of this. They were close partners and I expect still are in carrying out conservation programs. Our relations with the National Association of Conservation Districts at that time were very good. We had no particular problem. Certainly, we had to agree to disagree on certain issues. If a law was passed and the policy of the Department was to do this or do that and the Soil Conservation Service was assigned to carry out that policy, you had to do it, it was the law of the land. Many times conservation districts and organizations didn't fully understand or appreciate that. Keep in mind that that's democracy and you're always going to have that. My tenure as administrator, and my work with the National Association of Conservation Districts was generally good. I have no qualms or regrets about it.

PHILLIPS: Were there any specific conflicts with the National Association of Conservation Districts? Over environmental issues, for example?

DAVIS: We had conflicts over the environment. It depended upon who controlled the board of directors of the National Association of Conservation Districts. They would have different thoughts. The people from Kansas on that board had different thoughts than the people from Massachusetts, and I had to work and live with all of them. So yes, there were conflicts but not unresolvable ones. We had a generally harmonious relationship

with them at the national level, and I believed that carried over to the states. Keep in mind that state by state there was always some little fracas going on.

PHILLIPS: What is an example of a state level conflict?

DAVIS: In a state level conflict they may want the Soil Conservation Service to do nothing with urban people. The Soil Conservation Service and its mandates under the law were to help all people, but there were states that said, "We don't want anything to do with those folks. You spend all your time with farmers and ranchers." Well, to answer that, we had an obligation to all the people, they were all citizens and all taxpayers. We had conflicts and that's just a "for instance."

PHILLIPS: Were you satisfied with progress in the soil survey under your leadership?

DAVIS: Yes, I would say so.

PHILLIPS: Anything you would have liked to have done differently other than devote more resources to it or another program?

DAVIS: There are always things you would have liked to have seen differently. As you look back you see things differently than when you sat up there looking forward. Sure, I suppose we would have liked to have seen more emphasis on the Great Plains Conservation Program, a program designed for an area of the country to solve a specific problem, wind erosion. I'm still a believer that you can't have one design in one program administered the same way all over the United States. Otherwise we'd only have one dam design that would fit the Grand Canyon and a little tributary of the Yellow Breeches Creek near Harrisburg, Pennsylvania. Therefore, you have to have local adaptation. I still believe that that's a good approach to soil and water conservation problems and solutions in this country. It's going to have to be designed much closer to the problem. I don't know the answer, maybe it should be designed more on the basis of rainfall belts or something of that sort rather than on a general broad brush--Maine to California, Hawaii to Alaska and everything in between--including the Caribbean area.

PHILLIPS: So you see the creation of programs like the Great Plains program as very good, based on specific problem areas and regions of the country?

DAVIS: That's right, but I also think you also have to have a national program. You have to have a national leadership. I believe that's important. For example, I believe the Boy Scouts of America would have failed fifty years ago if it hadn't been for national leadership, because you saw local councils go up and down. Leaders come and leaders go. To a degree, the

same thing is true of the Department of Agriculture and the Soil Conservation Service. Leaders come and leaders go but you have got to have a national program and a national focus and a national direction of those programs with flexibility to allow things to be done and done right. Timeliness, the right people at the right time at the local level, is a very difficult problem for an administrator or any of his staff.

PHILLIPS: The other administrative question I have concerns your reorganization in 1976. You ended up with three deputy administrators serving under you. What was your reasoning behind this change?

DAVIS: My reasoning was this; it started with the administrator of the Soil Conservation Service way back in 1954 when they eliminated the regional offices. The span of control of the administrator just got to be too great; there was no way he could put his arms around everything. I thought it advisable back then in 1975 and 1976 to take a look at the organization. That study was looked after by former deputy administrator for water resources, Bill Davey, and he made the recommendation to me. I, with the Department, because you had to have departmental approval to make these changes, decided to go with the three deputy administrators: for administration, for technical services and for programs.

PHILLIPS: You had to check with the assistant secretary?

DAVIS: Oh yes, the assistant secretary and other people in the Department had to sign off on any of these reorganizations. Don't think that the Soil Conservation Service administrator can do these things unilaterally, he can't.

PHILLIPS: But they placed enough trust in you and they were receptive, correct?

DAVIS: They were receptive and did, in fact, approve my proposal. Thus we reorganized into the three deputy areas. It was done primarily to try to achieve more harmony between the common functions there. In other words, we had a deputy administrator for soil survey and a deputy administrator for watersheds but there was much more involved. The soil surveys were just one part of the program needed to carry out a soil and water conservation program, so when we reorganized we tried to put like functions under a single head. We tried to put them together, and I still think it was a pretty good grouping. How has it worked out since then? I don't know the present organization, I'll admit.

PHILLIPS: One of the other big issues, not only today, but certainly during your tenure as well, was budgetary pressures.

DAVIS: Of course, we suffered budgetary pressures back at the time I was administrator, there was no secret about it. The Soil Conservation Service at that time had some fifteen thousand people. The big change that came in my direct experience as administrator was when the Carter Administration came into being. We were told to tighten our belts and I tried to do this: tighten the belt but keep the focus of the program. I tried to instill in our people that we could perhaps do more with less by improving our efficiency of service. All of the other things that were cost cutting complied with the wishes of the administration and of Congress.

My basic push as administrator was to do what some people would later tag as "getting back to basics." We couldn't do everything for everybody. We should have never tried, but in some cases, local conservation districts and SCS people would try to do everything for everyone. You just can't make everyone happy doing everything for everyone all the time. So I said, okay, we will carry out the rules and regulations for which we are responsible and we'll cooperate with agencies which work with us. To the best of our ability, we'll set some priorities. We can't do all things but we'll get back to our basic job, the planning and application of conservation practices to protect the natural resources of this country.

PHILLIPS: Another problem connected to budget issues was the Government Accounting Office (GAO) reports on the Soil Conservation Service, as well as some rather hostile press reports about the Department of Agriculture employees and their productivity in general. What are your views on those reports?

DAVIS: GAO made many studies. They made a study of the Great Plains Conservation Program as I recall. They made a study of conservation operations. Let me say right off the bat that when they made those studies, the people making them and the agency they work for, GAO, will readily admit that they didn't make them for the purpose of being complimentary. They didn't make them for the purpose of helping an agency. They made them for the purpose of trying to find problem areas in government--problem areas with programs that the agency itself was so close to that they overlooked. I never expected those agencies and organizations to make a flowery report or to issue a clean bill of health to any agency or organization, let alone the Soil Conservation Service. Now unfortunately, some of those studies were done by people who knew little or nothing about agriculture and the organization and they didn't really bother to do too much listening. In some cases they jumped to conclusions. I vigorously defended the organization. At the same time I had to agree that we needed and could make some changes in the Great

Plains program or in the conservation operations program or whichever one they were looking at. I never refused to sit down with them and discuss the details of why they came to this conclusion and why was I doing it this way. We could generally find a common ground. Not always, but generally.

PHILLIPS: Can you detail any specific changes that came out of their comments or criticism?

DAVIS: Are you asking me a question that I maybe shouldn't answer? There were some subtle changes that took place with the approval of the Department. There weren't big changes that came about even when these reports were transmitted to Congress. We answered a lot of mail from congressmen and others about those reports and press articles but they never really caused any big change, in my judgment, during my tenure.

PHILLIPS: Every two or three years another article comes out saying, "There are so many farmers in the United States and so many more USDA employees. Why aren't we cutting the programs like the Soil Conservation Service of USDA?"

DAVIS: You can't respond and make everybody happy. Keep in mind that some of these are new reporters and young thirsty news editors and other people who are doing this. True, there are many employees at the Department of Agriculture. If you get right down the basis of all of this we still have so many acres of land in this United States and we have to feed many more people each year. The soil and water resource problems are the same or worse now than they were back then. When I say "back then," don't ask me when that was, it's sometime in the past. So when they say we have too many employees at the Department of Agriculture doing the wrong thing, I can't agree with them. We may have a few too many or may be a few short in some agencies and organizations. I can't defend, of course, every agency in the Department of Agriculture. I did then and I still believe now that I can defend the agency of the Soil Conservation Service and its many thousands of employees. I hope that there's reason and justification in the national interest to keep this thing going.

PHILLIPS: One of the figures that several people have mentioned is Verna Mohagen and her role in systematizing career advancement in SCS. Do you have any recollection of her in that capacity?

DAVIS: Well, yes, I have recollections of Verna Mohagen. First, she was a North Dakota woman. She came from Grafton, North Dakota, and started work for the SCS in the old project days there. I never knew Verna Mohagen in those days. I first learned of Verna Mohagen at one of our training centers in the old Fort

Robinson Center in Crawford, Nebraska. That's where I met her. Verna Mohagen made an impression of various kinds on anybody she met, worked or talked with. She was truly the director of personnel and perhaps the individual closest to the administrator and state conservationist in the selection of and the development of SCS people, from my perspective. At that time, there weren't many women in those types of positions in the Soil Conservation Service. When you went to a meeting, you really didn't see any women except for the waitress at the restaurant you ate in. They weren't involved in the organization to any degree.

PHILLIPS: I read that on at least one occasion you met with the Federal Women's Program coordinators and were involved in efforts toward what is today called work force diversity. Could you comment on that a little bit for us?

DAVIS: I commented back in the beginning about Verna Mohagen, one of the few women you'd see in the Soil Conservation Service during my tenure. During my tenure as administrator of the Soil Conservation Service, the Department and outside people, women's organizations, were pushing for more and more people to get involved in what they heretofore considered a man's occupation. I never thought that a woman couldn't do some of these jobs. I guess I was involved in the appointment of the first woman work unit or district conservationist of the United States, a woman who happens to still work in that capacity in the county in which I now live in Yuma, Arizona. We tried to do what we could to carry out equal rights for women's programs and we made special emphasis to try to train them, to bring them up, if that's a good word, in our organization. But keep in mind that we were basically professional and what I call technically professional. They may not have had a BS degree from Penn State but they had a heck of a lot experience that was needed in the planning and application of conservation practices. The colleges and universities weren't providing us with the fodder. They weren't providing us with women graduates. So they blame it on the organization for not hiring them, but how can you hire them when they're not available? Well, we put special emphasis on colleges and universities. We made a special emphasis with the black institutions. I went to Tuskegee.

PHILLIPS: Would this be the 1890 schools?

DAVIS: Yes, 1890 colleges. I went to Tuskegee University myself and met with the Dean of Agriculture and the President of the college to try to spur on more and more graduates of that school, in this case blacks, to become interested in work with the Soil Conservation Service. I met with federal women's groups and coordinators and, I believe that at the meeting you referred to, I was the

only administrator there. The rest of them sent somebody else from their agency or organization, but I was there as an administrator of an agency because I felt that strongly that there ought to be equal opportunity regardless of race, creed, color or sex. In that setting, I tried to promote these programs. I'm not saying people before me didn't, but in some cases they simply couldn't do much. There could be a woman graduate in business administration, but the technical standards and technical qualifications set up by the Civil Service Commission into which the Department and SCS had input were such that she wasn't available on the registers of employment because she hadn't had a college degree in agronomy or soils or something. Those who were available were highly sought after when the big push came to increase the number of minorities, be they women, blacks, or Hispanics.

PHILLIPS: Did you run into any resistance within the Department or at the state level, or was it more a matter of simply educating people?

DAVIS: You ran into resistance, no question about it. There were people in organizations, local conservation districts, who didn't want a black work unit conservationist. They didn't want a woman soil conservationist. They didn't believe a woman had any place out there in the dirt doing this, that and the other thing. It was more old-line thinking than it was any problem with the technical ability of those people. You had to work to overcome this. We've overcome it, I hope. The government of the United States has overcome it but I was a little bit leery then and now that people were sought, considered, and put into jobs that they weren't qualified to do either from training or experience background. They might have had a degree in it, but they were put into a job that maybe did more harm to the movement than it did good. I tried as an administrator to keep a balance in this whole thing.

PHILLIPS: What was the best way that you found to keep morale up, was it traveling? You mentioned you traveled a hundred thousand miles in your first year.

DAVIS: Yes, I think the boss must be seen. I think the boss must be a working boss, not a chair boss. I believe it was Dr. Hugh Hammond Bennett who said that he was sure that the local conservationist, then called a district or work unit conservationist, didn't need a chair and doubted that he needed a desk. In other words, he should be out working. Well, how do you achieve morale? I think you have got to achieve morale by keeping programs interesting. You have to be involved and you have to stimulate people. You have to stimulate the organization and you have to be willing to go to the Department and fight for the organization. You could ask me how certain programs--rural, urban, mining or otherwise--got assigned at the Department of

Agriculture. When the laws were passed by the Congress, they didn't specifically say SCS. In most cases, they said the Department of Agriculture. You immediately recognized what was going on. You set up a group working to develop an assignment of responsibilities or a delegation of authority and get that over to your assistant secretary so he understands. Then, when the Secretary gets a signed law that he wants to implement quickly for political reasons, he has somebody right there ready, willing and able to get the job done. These are the types of things you have to do and it's not easy. It's not easy to talk about and in most cases it's harder to do.

PHILLIPS: Did the heads of the agencies within USDA get together and meet on a regular basis? What were these meetings like?

DAVIS: Well, it varied considerably. The Secretary had a staff meeting, usually weekly, but sometimes only monthly. I served under various secretaries, Butz, Bergland, and others. The assistant secretary would get his agency heads together usually on a weekly basis. Unfortunately, about half of the time the secretary and assistant secretary were gone. The agency heads were traveling so it was only about half of the full voice there.

PHILLIPS: So were these meetings, when you held them, contentious?

DAVIS: It varied from meeting to meeting. Surely you tried to have a calm meeting. If I had a bone to pick with the Forest Service, I would go see John McGuire, the chief of the Forest Service, and hopefully he and I would have it ironed out before we got to the assistant secretary. Normally, we would; but it was a matter of give and take. I respected all of the other agencies and their missions. I respected the administrators that they had at the time I was there. Most of them were professionals as was the head of SCS. I respected them in their fields and their organizations. I knew that we couldn't have everything and that we shouldn't. There was no way we could do it all as an agency. I respected that and tried to work with them on all of the assignments from the Department of Agriculture that had to be delegated to an agency: SCS, Forest Service, Agricultural Marketing Service, Economic Research Service, Farmers Home Administration, or Agricultural Stabilization and Conservation Service.

PHILLIPS: Let's talk about relations with some other agencies, specifically the Environmental Protection Agency (EPA) and the Clean Water Act, during your tenure.

DAVIS: EPA come into being before I became administrator. They were still developing when I came. The

Environmental Protection Agency was given many varied and wide responsibilities and the Clean Water Act was one of them.. We had a direct involvement in and had a direct input into clean water all through the years. That's part of soil and water conservation and you cannot separate them. I generally had a good relationship with EPA. EPA was a new young organization. Many qualified people were trying to decide what direction or which way to go and they were settling into things. At the same time, I was maintaining that we in the Department of Agriculture, the Soil Conservation Service specifically, could make a major contribution to the mission assignment of that agency. They had a responsibility much broader than soil and water conservation, while we had one little segment.

PHILLIPS: In what specific ways did SCS support EPA?

DAVIS: EPA was involved in many things including stream cleanup, cleaning up the Chesapeake Bay, and studies like that. We made a major contribution in the erosion and sediment control facets and nonpoint source pollution. That was a new term that came into being while I was there. In other words, point erosion was coming out of this stream for this purpose while nonpoint was coming off a feed-lot or a farmer's field. Sometimes people didn't realize the difference between the two so we came up with "nonpoint."

PHILLIPS: Where did the impetus come from for the examination of nonpoint source pollution, SCS, EPA or environmental groups, or a combination of these groups?

DAVIS: I think it came from a combination. I think the conservation districts of some states were important. Maryland was one of the early leaders in taking a look at nonpoint source pollution. Having said that, the Department of Agriculture was maintaining that farmers and ranchers were getting blamed for certain things. We in the Soil Conservation Service and the Department of Agriculture had to come to their defense on these things.

PHILLIPS: I remember reading that you signed a memorandum of understanding with the head of the Forest Service, John McGuire. Could you describe the conflict and what was resolved?

DAVIS: I can't recite it chapter and verse but we signed it and it was very amicable. The biggest deal about signing a memorandum of understanding is that before you ever sign it as an administrator or an assistant secretary or secretary, lots and lots of hours and hours and reams and reams of paper and staff work have got to go on to achieve the understanding. The memorandum of understanding doesn't do a thing except formalize it with a photographer. All of the work, all of

the committees, and all of the studies that go to develop a memorandum of understanding are really where the benefits come.

In our case with the Forest Service, this memorandum of understanding had to do with lots of things. We agreed in the memorandum of understanding who would do what in the Small Watershed Program. The appropriations were made to the Soil Conservation Service but we actually transferred money to the Forest Service for them to use either themselves or with their cooperative state agency, such as the state forester, to carry out certain studies of runoff in the wooded areas for the Small Watershed Program. It was just having the best available technicians at the time do the work necessary to solve the problem. That was the purpose.

PHILLIPS: How about relations with Congress? You testified frequently on the Hill I assume?

DAVIS: I testified on the Hill many times. I would have to classify the relations between Congress and the Soil Conservation Service before my time and during my tenure as good, excellent as a matter of fact. Sometimes the Department of Agriculture didn't like the relationship we had with Congress because we could respond. We had an organization that if somebody wanted to know something out of Congressman Whitten's district in Mississippi, with a phone call or two we could have it because we had an organization out there to get and supply the information and respond to Congress. Congress knew that and the Congress liked that. I'm not saying the Department of Agriculture always liked it because we could respond so much quicker than they could. Our relations with the Congress were good because they not only liked our program but knew what our program did and why we were doing it. We kept them informed.

PHILLIPS: Others have mentioned Congressman Jamie Whitten, would you care to elaborate on his role in soil and water conservation efforts?

DAVIS: Jamie Whitten was called the "permanent Secretary of Agriculture," but nobody new in town knew that, particularly, the new Secretaries and administrators. Jamie came into office in 1941. Jamie Whitten was involved in many things and he never let anybody forget his influence. We never forgot the influence that he had on dollars, principles, and on programs.

In reference to my relations with Congress, I kept them informed but I never let the political process control the organization. In other words, I kept my workers away from that and Jamie Whitten and others respected that. They did not get involved in my appointments, jobs or positions but I kept them informed of actions I had taken and actions I was going to take. They understood and respected us for it.

PHILLIPS: Other than Whitten, are there any other Congressmen who come to mind as major supporters of SCS or USDA?

DAVIS: Well, there were a lot of them we could talk about. Of course, being a native of North Dakota, we had a man known as Mr. Wheat, Senator Milton Young, an excellent supporter who served on the Agriculture Appropriations Committee in the Senate. Mark Andrews, a Congressman from North Dakota, likewise. He was a Republican but his office was right next to a Democrat, Jamie Whitten. These people had quite an influence really on what was going to happen. Because in the Congress, there are a few people in each specialty--agriculture, defense, you name it--who are the ones the rest of the Congress looks up to. If Jamie did or said something, very seldom did the rest of the Congress or the rest of the committee ever go against him. You had to have the right relations with these people. There's maybe too many of them to mention that were friends of the Soil Conservation Service. You could go to Ed Jones of Tennessee and William Natcher of Kentucky and the list goes on and on.

PHILLIPS: Are there any generalizations you could make about what Congressmen wanted to see SCS doing?

DAVIS: Most of your strong supporters in the Congress wanted SCS to keep doing more of the same. I'm not saying they weren't broad minded and weren't concerned about the environment or doing some things important to environmental issues, but generally you found that your supporters were from the old-line agriculture from the standpoint of production of fiber and food, and then conservation. It's in that setting that they supported you.

PHILLIPS: Was there much opposition from any Congressmen?

DAVIS: You always had opposition. There were Congressmen, I don't want to get into naming them, who "took us on."

PHILLIPS: Did they have any particular explanation for disliking SCS?

DAVIS: Sure, they had two reasons. One, an environmental group got a hold of them. They were fed the wrong information. They were not willing to open their ears to the total thing. There are two sides to every story. We had our friends and we had our foes. On balance, we had many more friends than we did foes. The same thing is true in the Secretary's shop. There were many people in the Secretary's shop other than the Secretary. I'm talking about career type people, such as the director of budget and personnel, whom we had to work with and through to get our budgets approved. We had our friends and we had our foes there, too. We had people in the White House in the

Office of Management and Budget who were examiners of the Department of Agriculture. Specifically some of them were assigned to the Soil Conservation Service. We had our friends and our foes there. Part of it, of course, was simply created because there are only so many federal dollars available and when you're administering a program, there's got to be give and take. Various budget people, various examiners, and various congressmen just simply picked up on one, two or three issues and that was what they pushed either directly or indirectly through their staffs. They would oppose others and that's the way it was. That was the ball game.

PHILLIPS: We'll move on now to initiatives, new responsibilities, and specific programs such as erosion control guidelines. What was your role in the development of those and what's your feeling about them?

DAVIS: Erosion control guidelines were nothing more or less than putting down in black and white for everybody to use and understand, not just the Soil Conservation Service employees, a set of rules or guidelines. I don't mean to call them rules because they aren't rules until they are adopted by some local authority who has authority to adopt an ordinance or a rule or a regulation. These erosion control guidelines were developed with the idea in mind that we provide them to anybody and everybody to use in developing their local ordinances for local land use, zoning or planning if that was what they wanted. That was the purpose or design behind it. That was my hope when we started them, and it would be my hope today that they're still being used that way.

PHILLIPS: Was that a major thrust of your tenure?

DAVIS: Yes, I would say that it was a major thrust of the times to keep up with the environmental push and to keep up with demands when the Soil Conservation Service couldn't do everything for everybody as we were expected to do and we had sort of done in the first twenty-five to thirty years of our existence. Now, we couldn't do that anymore so we had to do things like the guidelines and make them available to others to use and implement.

PHILLIPS: Did that include state highway departments, did you work with them much?

DAVIS: We worked with highway departments. We spent considerable time, in fact, with them. Some state highway departments had a man who was a specialist in erosion control who worked with us very closely. We developed and helped them develop standards and specifications for erosion control on new highways. The type of soil sometimes determined the slope of the road bank and the type of vegetation that went on the bank.

PHILLIPS: Such as crown vetch?

DAVIS: Crown vetch is an excellent example and we did a lot of work with it. The Soil Conservation Service administered the plant materials centers, not research centers. That was done by another agency, ARS (Agricultural Research Service), and the states. We had plant materials centers which strictly took local seeds, seeds developed by colleges and universities, and tested, reproduced, and increased them for use on specific erosion problems.

PHILLIPS: Now we move on to RCA (Soil and Water Resources Conservation Act), a huge topic. I wonder if you can first tell me, did SCS have any specific role or any input into what came out in the RCA? Was RCA something SCS had been pushing for?

DAVIS: Well, to a degree we, the Soil Conservation Service, then the Department had been pushing for a resource assessment. That's really what RCA is. We had a role in pushing for and causing the original work, the original language that caused the appropriation or an allotment of money to make a resource conservation study. It was a very complicated and difficult thing. We tried to do it by soil types and by soil phases on a nationwide basis--a difficult thing to do--and put it all together in one package. If there was going to be an assessment of resources the Soil Conservation Service should have been involved and we were involved.

Much of the implementation of the RCA came after my time. It passed in 1977 but by the time we got everything up and running and funds to carry it out, time had slipped away. This administrator was about gone when the first reports were coming out.

PHILLIPS: What about the Rural Abandoned Mine Program (RAMP). We can talk about it in Pennsylvania or Appalachia in general.

DAVIS: Well, the Rural Abandoned Mine Program was another program passed by Congress to reclaim mined areas. It happened that Pennsylvania, West Virginia and some of the states in which I worked had a lot of these areas. The Soil Conservation Service had a lot of expertise that could come to bear on reclaiming these areas, so therefore we were and should have been involved in the reclamation of abandoned mines. We had a lot of information on erosion and sediment and it was no use for some other agency or organization to go out and recreate the wheel. We were involved and we got funds from the Department of the Interior and others to do this particular job. I think we had a role, we have a role, and it will be an ongoing role.

PHILLIPS: We've been talking about things other than conservation work on the farm. Were farmers and

agricultural groups unhappy over this apparent broadening of responsibilities during a time of budget constraints?

DAVIS: In a particular county or conservation district, they were not necessarily unhappy because it was the biggest problem in that county or conservation district. But as an administrator, if you start pulling resources out of a strictly agricultural area of North Dakota or Ohio and putting them into an Appalachian coal mine area in the hill country of Kentucky, the answer there is completely different because those people were not happy that they were losing. That's what you have administrators for, to make those hard decisions.

PHILLIPS: In particular, was the National Association of Conservation Districts unhappy?

DAVIS: Not necessarily, it might be the National Association of Conservation Districts, it might be the local farm bureau. It might be representatives of the Farmers Union if you were taking a man out of the strong Farmers Union area of Kansas. You never knew who these groups were. You had friends and foes in all organizations and during my tenure as an administrator, I tried to maintain relations with all of the groups. I never refused to go face any of them on any issue at any time and any place.

PHILLIPS: Did you attend some fairly hostile meetings?

DAVIS: Oh sure, you like to go into a meeting and know how you're going to come out, but during those times you were never sure. You couldn't plan because you didn't know what was coming up. You had "warm" meetings and I was perturbed, disturbed, and all of the other "turbs" that you can mention, but I never left one of those meetings without gaining some knowledge and some insight into what both our organization, the Soil Conservation Service, and theirs should or should not be doing or changes that could or could not be considered.

PHILLIPS: What about prime and unique farmlands?

DAVIS: Associate administrator Norm Berg was deeply involved in this program to try and identify prime and unique farmlands around the country. It was a good program, but we pretty much knew where they were. What destiny they would have, due to such things as urban pressure, was another issue. The identification of them was one thing--how they were going to be handled after properly identified or delineated was quite another. We had to use our influence on local people to adopt the rules, regulations or whatever they might want to do to protect some of these prime and unique lands.

PHILLIPS: Did the scope of P.L. 566 work expand during your tenure?

DAVIS: Yes, P.L. 566, the Small Watershed Protection and Flood Prevention Act, was considered to be a program--and this is an over-simplification--of dams and dikes and channels and these sorts of things. During my tenure, we attempted to expand and did expand into land treatment type approaches to solve problems. In fact, we added a couple of strictly land treatment type watersheds. There were no structures, we just took the money and treated the land in these areas to keep the erosion water and floods from coming down. It works but there is room for both structural and nonstructural. I maintained that then and I maintain it now.

PHILLIPS: Could you tell us a bit about the plant materials center in Colorado?

DAVIS: The plant materials center in Colorado was out in the western part of the state. It was designed for the study of plant materials in relation to strip mines and mine reclamation and using native adaptation. That's why it was created out there--to fit the area we were trying to serve. We had one plant materials center in New York. We also had one in Cape May, New Jersey to fit erosion on the shore, and yet another one to fit erosion in Appalachia. We tried to gear our plant materials centers and what they did to the problems of each area. That's what I alluded to earlier. Trying to take one program and administer it in the same way nationwide doesn't work in many cases.

PHILLIPS: One topic that comes up time and time again in these oral histories is the Palouse region of the Pacific northwest. Could you comment on your experience?

DAVIS: My Palouse experience goes about like this; it was the same as Don Williams, Dr. Bennett, Dr. Salter, and Ken Grant. I would guess the present chief has the same problem with the Palouse, a tremendously productive and highly erosive agricultural area. I don't think you're ever going to solve what some people perceive as a problem there. I think we have to recognize that it's going to continue to be used for agricultural purposes, primarily the production of wheat, as long as it is in private ownership. In that process there is going to be erosion; however, I believed then and I believe now that there are many ways to minimize that. I don't know if it's stubble mulch. I don't know if it's no-till. I don't know if it's chemical farming. I don't know the full answer, but alternative practices to just planting wheat, summer fallow, then wheat or whatever are important. I think we have got a similar problem, in some cases, where they're planting corn on corn on corn on corn. Something has to be done or that soil is going to be depleted for one or more reasons--lack of organic matter,

erosion, you name it. All of these things are not going to be solved by any one administrator or any one program. It's going to take a combination of several things over time. When I say time, in some cases that means new ownership. Time in some cases means what the farm machinery manufacturers are doing now. I still go to a machinery showroom or two. They have done a tremendous job in changing their machinery design to try and achieve better soil and water conservation, in my opinion. In my days in the field, they sold a tandem disk and tractor with road gears and that created a problem. Now they are doing other things and doing a lot of research to help solve that same problem.

PHILLIPS: Could you give a short overview of the preservation of windbreaks? Especially given your background as a native of North Dakota.

DAVIS: Windbreaks were established back in FDR's days. He was going to have a row of trees from the Canadian border to Mexico. The purpose was to solve wind erosion problems, and protect farmsteads and feedlots. The Soil Conservation Service and soil conservation districts were deeply involved in this. It was a good effort, but it's an effort that should maybe be a constant part of a changing landscape. What I mean is this: before certain technology was available or before certain farm equipment was available maybe we had to plant windbreaks every twenty rods to keep wind erosion at a minimum on sandy soils or to hold snow and put moisture there. Unfortunately, some of those windbreaks were planted using the wrong species or on the wrong line. By that I mean they should have been on a contour rather than up and down the slope. As technology changed and times changed, those windbreaks served a purpose. They're still serving a purpose but the time has come when many of them maybe should be removed and replaced with a better practice. I simply say, as long as they're going up the conservation ladder--protecting the soil, water, land and air quality of this country--to take out a windbreak and use good crop rotations or good erosion control practices for wind and water is no sin. But a lot of people say it is.

PHILLIPS: Did the number of windbreaks decline during the 1970s due to increased agricultural production?

DAVIS: Yes, they started tearing out primarily the old ones that had served their purpose. Again it's very difficult to generalize, but some of them hadn't been removed, some of them perhaps should have been removed, and some of them were designed wrong. If you plant fifteen rows of trees side by side, you get a snow bank there that didn't thaw out until the middle of June and that wasn't what the farmer could cope with. Then he had a drainage problem because of the snow

melt laying there. So they were taken out, some of them were replaced with one row belts, a great improvement over the multi-row belts, and so it goes. This was a change in time, a change in technology, and a change in thinking.

PHILLIPS: Today wetlands have become a very controversial issue at the Department. During your tenure was it an issue, was it talked about?

DAVIS: Yes, and it was just as hot among the same groups of people who are still there. We developed wetland guidelines with the Corps of Engineers, the Department of the Interior, and the Fish and Wildlife Service. All of those guidelines helped achieve an understanding but did not solve the problem. The wetlands problem in the United States has been and always will be here. How it's going to be resolved finally I'm not one to sit as the final judge and juror. Yes, I had my share. Perhaps wetlands caused me more problems with the environmentalists and with the Department--Assistant Secretary Rupert M. Cutler as an example--than any other single issue.

PHILLIPS: Did you have any progress on the criteria of defining wetlands, which seems to be one of the major problems now?

DAVIS: We had problems with that then and I'm sure they have them now. There were people who, if they discovered a cattail growing forty feet above a marsh, said the whole thing should have been classified as a wetland. There were people who said that wetlands were undefinable. There were people who said all of this area should be classified as wetlands. You go plug that drain up and see what happens. The issue of definition is still going on. I predict it is never going to be resolved to everyone's satisfaction, particularly at the national level. They may get it resolved in some states but it's not just a state problem; it's across state lines, and it's across international lines like the United States and Canada. The issue of wetlands, their definition, how they're going to be handled, and how much should be preserved will go on forever.

PHILLIPS: Sort of changing track a little bit, I know both Ken Grant and Don Williams were involved in international work. Did you devote any resources to that or have an opportunity to spend much time in that line of work?

DAVIS: Yes, I devoted resources and went on many trips overseas myself both as assistant administrator and as administrator. I was one for proposing or seeing to it that as much as possible, the Department of Agriculture took its expertise and spread it to those countries. I went to Afghanistan two or three different times. To send wheat to Afghanistan didn't do much good because there wasn't a seaport and there wasn't a railroad. By the time the donkey

hauled it over the mountains to the people who might need it, the donkey had been hungry and he had eaten it. So therefore, the results of some of the programs weren't good. I was a believer and still am that we need to provide technical assistance to developing nations, old and new, to help them solve their problems on their soil under their conditions. Truly, we in the United States will always have to help feed and clothe the world.

PHILLIPS: Other than Afghanistan, can you remember other trips?

DAVIS: I was in Afghanistan, Pakistan, Saudi Arabia, and perhaps the poorest country I was ever in was Haiti. I was in Argentina, Venezuela, and Egypt. After I left SCS, I spent a lot of time between Egypt and Israel. I guess I've been in a couple of dozen foreign countries.

PHILLIPS: Were many of these arranged by AID (Agency for International Development)?

DAVIS: AID was involved always because they were the ones who had the leadership responsibility. They needed those departments that had the technical skills and they would come to us for technical people.

PHILLIPS: Today, the head of SCS is a political appointee. Was there any talk of that when you were moving up the ranks or when you were there?

DAVIS: The two administrators of the Soil Conservation Service before me, Ken Grant and Don Williams, were Schedule C appointees; that is, they served at the pleasure of the Secretary. They were career people, but in those jobs it was a different type of appointment. At the time I became administrator, I met with Dr. Butz on two or three different occasions and he asked whether I wanted to become administrator of the Soil Conservation Service. He asked if I wanted to do it on a career basis, a GS-18 basis, not a Schedule C or a political implication type of appointment. He got the Civil Service Commission, which later became the OPM, the Office of Personnel Management, to change the system and I became a career GS-18 head of the agency and not a Schedule C.

I was also the only administrator of SCS to have served at all levels that the Service had then--district conservationist, area conservationist, state conservationist, field representative and director of a technical service center (TSC), and administrator.

During the time I was administrator, government was changing. The Carter Administration was in power most of the time and the major change was the creation of the Office of Personnel Management. Part of that change was the Senior Executive Service system. I was never a proponent of the Senior Executive Service system. It merely meant that above certain levels in the

organization, people could be reassigned at will. Most of the people who had the authority to do that, of course, were political appointees. I was serving as a career head of the organization, then I was switched over under the Senior Executive Service system. They gave you a choice, either you switch or go. Now that's an exaggeration, but really that's how it turned out, so I went over and became a part of the Senior Executive system.

Now you asked about implications. The assistant secretary at that time, Dr. Cutler, was basically of the environmental branch. He and I did not have a long love relationship. We understood each other but stood back from each other. I carried out the mission of the organization. Well, to make a long story short, under the Senior Executive Service rules, he made a proposal to reassign Norman Berg, who was my associate, to the head of Soil Conservation Service and me into his position. I met with the Secretary of Agriculture, Bob Bergland, and his deputy. I went into another position in the Department outside of SCS.

PHILLIPS: Was this 1979?

DAVIS: This was 1979 but let me add that my replacement, Norman Berg, was my associate in my four years there, and before that, an associate administrator to Ken Grant. I wouldn't categorize him as strictly in the career ranks because there were many political movements going on at that time. I knew about these things, but I would not put the agency in jeopardy. Dr. Cutler and I did not see eye to eye on these things. He wouldn't yield and I wouldn't yield. I think as time goes on, if you made a study of what happened among the heads of SCS you could say that the transition of SCS out of a career professional group started at the time the Senior Executive Service came into being. It started at the time they moved Norm Berg into the position and shortly thereafter resulted in a political head of SCS, which is still there today.

PHILLIPS: Just to wrap up a few questions, are there any other issues or problems you wish you could have addressed while administrator?

DAVIS: In hindsight there's always something, but at the time I was there, with reorganization of the Soil Conservation Service and new responsibilities assigned to us from the Department with the limited people and budgets we had available, I thought we had about as good a program--as good an esprit de corps among our people, good relations with cooperating agencies and organizations outside of the Department and at the state and local level--as we could develop. There were problem areas, yes, but that's why administrators have jobs.

PHILLIPS: You already briefly discussed changing jobs in 1979. What specifically was the job in the Secretary's office?

DAVIS: Well, I became an assistant to the secretary for international science and education and in that capacity, of course, I did quite a bit of foreign work for him. As a matter of fact, I was involved, very interestingly, in going to Egypt and Israel several times. That had to do primarily with the peacekeeping mission and the agreement between Carter and the heads of those two countries. They had several committees or assignments and I was on the agriculture group. At that time, I'd go to Israel and talk to the agriculture people. I couldn't fly directly to Egypt because they didn't have relations. I had to go to the island of Cyprus and become "neutralized" and then fly back to the other country. So I had a lot of interesting experiences along that line.

PHILLIPS: I don't know how much you have kept up with the 1985 FSA (Farm Security Act) and what some people feel is a shift in SCS from a voluntary to more regulatory approach. I was wondering if you have any comments on that?

DAVIS: Yes, my comment on that is that I still don't believe that the Soil Conservation Service should be involved in regulatory programs. I think we should be the technical arm. We should develop the standards and specifications, write the specifications, and do all of those things, but I don't believe that the same fellow who arrests the man should serve as the judge and jury for the man. I think that there needs to be a clear division. I don't believe that the Soil Conservation Service should be involved in what I'm going to call enforcement. They maybe should be involved with cross compliance between programs to see that if there is a requirement under one program it is being followed under another. But I don't believe the Soil Conservation Service ought to be the one who goes out and does the police work, and I use that term respectfully.

PHILLIPS: In conclusion, do you have any general comments on your career with SCS?

DAVIS: I would only say this; I think I had a good career with SCS. I think myself looking at it and anybody else looking at it would say that. I suppose like any other type of a job, position or profession, I was at the right place at the right time. That's what happened to me in the Soil Conservation Service. I had no regrets at all about the time I put in or the accomplishments I had in a local conservation district or nationally. Certainly, you can always find areas where you might have done something differently but that's all hindsight. I liken it to driving a car down a road. You got a big windshield to see where you're going and little rear view mirrors to check on once in a while

where you've been. I shouldn't be looking back, I look forward. I left the organization, but I'm not disgruntled with the organization at all. I still have a tremendous respect and love for the agency and always will have. For what happened or is happening to the agency, I have some questions and some grave doubts but somebody else will worry about them.

PHILLIPS: Have you been involved in soil conservation since your retirement?

DAVIS: Not really. I haven't done many things and I have refused to do more because I don't think I should be involved. It's sometimes embarrassing to a local group to have a former administrator included. I have done such things as emceeing the 50th Anniversary Banquet of the Soil Conservation Service in Washington. I've done things of that sort but I'm not involved and do not desire to be involved further.

Norman A. Berg

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Part Three: May 4, 1993

Biographical Sketch

Norm Berg was born in 1918 in Burlington, Iowa, but grew up on his family farm in Pine County, Minnesota. After receiving a B.S. in agricultural education from the University of Minnesota in 1941, he briefly taught vocational-agriculture to adults in St. Louis County, Minnesota. In 1943 he joined SCS, but his early career was interrupted by three years of service in the Marine Corps.

After World War II, Berg held various SCS positions in Idaho and South Dakota. In 1956, he obtained a Masters in Public Administration from Harvard. He was tapped for the post of assistant to the administrator in 1960. In 1962, Berg took a leadership role in the Great Plains Conservation Program. In July of 1965, he rose to the post of deputy administrator for field services and in January of 1969 he became associate administrator. During this period, he became a member of the first graduating class of the Federal Executive Institute. From September of 1979 to April of 1982 he was chief of the SCS, making him the last career employee to hold that post.

Berg played a key role in many USDA projects, including chairman of the U.S. section of the Great Lakes Land Use Reference Group of the International Joint Commission, chairman of the USDA Land Use Executive Committee, leader of the Resource Conservation Act Management Group, and member of the Secretary of Agriculture's Coordinating Committee for the Soil and Water Resources Conservation Act.

Many inside and outside of the government have recognized his service. In 1973 he received the USDA Distinguished Service Award and in 1980 the National Wildlife Federation honored him with its Conservation Award for "outstanding contributions to the wise use and management of the Nation's natural resources." Also in 1980 he was among the first group of Senior Executives to receive the Presidential Rank Award of Meritorious Executive. Berg received the Hugh Hammond Bennett Award from the Soil and Water Conservation Society and is charter member and fellow of that organization.

Since his retirement from SCS, Berg has served as Washington representative of the Soil and Water Conservation Society and senior advisor to the American Farmland Trust. In 1992 the Soil and Water Conservation Society, with the support of Ken Novak and Frances Robinson Novak, established the Norman A. and Ruth A. Berg Fellowship. Each year, it enables about fifteen experts to meet and discuss conservation policy.

Part One: April 9, 1992

HELMS: Norm, my idea about this is to go in chronological order. We may need to do this more than once and not really rush. We'll just start out with the basics, when you were born and something about early childhood and growing up.

BERG: I started life in Burlington, Iowa, a town on the Mississippi River. It's also the home of Aldo Leopold. My dad worked for a railroad as a machinist. He had been in the Navy as a chief petty officer and came back to Burlington and worked for the shop that kept the steam locomotives running. My mother had been born in Burlington. My dad came from Sioux City, Iowa, and his ancestors came from Norway and settled in southeast South Dakota and moved to Iowa. He eventually ended up at Burlington. My mother's background goes back to her mother being a Rohleder. Her grandmother was a Kelly having come from Ireland. There's a mix of backgrounds in my family, including some German background along with the Irish. Both of my parents were American born. My mother lived until she was ninety-three. She'd be one hundred and one as of the end of March 1992 had she continued to live.

My dad had bought a farm in Minnesota about eighty miles north of Minneapolis/St. Paul, close to the Wisconsin line. He bought that farm in 1914, four years before I was born, with help from his dad in terms of financing it. As I remember our summers, when he had a break from working he would drive me and my brother, who was two years younger, up to that farm in Minnesota. We would go across Iowa and up through southern Minnesota heading for the farm in a Model T Ford. The land that he bought was originally forested as was all of northern Minnesota, Wisconsin, and Michigan. It had been logged-over in the late 1800s and most of that land came back to second growth timber. If it was cleared it became agriculture. That was the objective of the farm that he had purchased--to clear it of the second growth and make it into a combination livestock and grain farm. It was really and truly a family farm.

I don't remember much about Burlington, Iowa, except that I think I started a preschool activity there and maybe a little bit into the third grade before we were moved permanently up to the farm in Minnesota, probably in the mid-1920s. By that time, there were four in the family, myself, a brother two years younger, a sister two years younger than that, and a sister eight years younger than me.

I do remember the hills in Burlington that we had for sledding. Obviously, we were able to have a sled. I can remember sledding on the hills close to where Aldo Leopold's family lived. I did not know that at the time, but since I have gone back to Burlington to honor Leopold at a city function I

have noted how strategically located they were up above the Mississippi River in a very affluent area compared to my background.

As we moved up to the farm permanently, the first task was to clear that land. Somehow my dad had been able to get enough together in terms of cropland that he could have some Holstein cows, chickens, and pigs. All the power was literally horsepower. We had at that time three horses. I can remember in the early days having to help do some of that land clearing. It required cutting down the trees that had gotten, in some cases, to be fairly good sized. They could be made into fence posts that we needed to fence the farm and firewood for the following winter. It used to take about one acre of cut wood that was sawed and split to provide the fuel for the heating and the cooking. All of the cooking and heating during the winter was done by wood. He had also managed to construct a small home there along with a partially built barn, a silo, a chicken barn, and a place to have the hogs corralled.

The farm itself, if I had known then what I know now, was not good land to move into agriculture. It had a mix of very heavy soil. They told me in my early days it was called gumbo. The roads were unpaved in those days and in the spring when the snow melted and the ground thawed, the wagon wheels picked it all up. They just ballooned in size. That is the way it was out in the field when it was wet.

We also had some wetland--swampland--primarily peat that was being moved into agricultural use. That was very difficult because it required getting rid of the excess water. But on that farm we also had some very sandy soils that tended to blow when it was windy. In helping to clear the land, I can remember as a boy helping my dad set dynamite under the tree stumps to loosen them up so we could get them out of the ground. He would vary the length of the fuses on the dynamite under maybe a dozen different stumps. Then he would take half of the fuses to light and I would take the other half, light them, and run for cover behind the nearest standing big tree. So that was pretty exciting for a young man to have the Fourth of July practically every day.

I entered a school there and my dad drove the bus. We had to build the bus. He was successful in winning the bid to transport the children to school. We were at the end of the line. I can remember when he bought a Whippet truck and we built the school bus, that is, the carriage itself. The school board provided what was called a bus that would go onto a snow sleigh if the roads were so bad that you couldn't get through. The horses would then be used to pull the sleigh and this so-called "covered bus" that fit on the sleighs. That was used quite

often during the winter in northern Minnesota because the roads were not that well kept at the time I started school.

The school was a consolidated school, which was fairly rare in that time, in Grasston, Minnesota. It was a school that had the first and second graders in one room, the third and fourth graders in another room, the fifth and sixth graders in another room, and the seventh and eighth graders in another room. Then in the high school, all four classes were in one large room. In the back of that room was the school library. There was a separate facility that would be used for some of the chemistry and other experimental work that they did, but otherwise that was the extent of school activity. A consolidated school in Minnesota was pretty progressive because there were other counties fairly close by that still had one room schools where the people going there would spend all eight years in the same room. My class, as I remember it now, diminished considerably at the end of the eighth grade. Many children did not go beyond the eighth grade. I don't think my dad had an education beyond the eighth grade. My mother did. The high school class that I ended up in had six boys and six girls. We stayed together for the full four years and all of us graduated.

HELMS: Had your father grown up on a farm in South Dakota?

BERG: No. He had no farm background. He was eager to learn. I can remember him getting literature from Iowa State, not the University of Minnesota, but Iowa State in terms of farm research and that sort of thing. He was very concerned about the production of each of the dairy cows. We kept measurements on the butter fat content from each cow and tried to weed out the ones that weren't producing as well. He was also concerned about getting a high grade bull to upgrade the calves. It was pretty primitive. I do remember that he was able to get from Iowa State University a grass that did well on wetlands called reed canary. During years when we had a pretty droughty summer, it was those lowland reed canary fields that provided the hay that we needed for the cattle and the horses. We also had rotations on that farm. It was a good mix of alfalfa mixing with the years that we had grain or we tried corn. We had the silo that we put silage in. He actually had a pretty good farm management scheme. We did not see any technical assistance or Extension help or any other kind of help.

We did not have electricity all the time that I was on the farm. We did not have anything but a hand pump that drew the water, the wood to cook and heat, and kerosene to light the lamps. We didn't consider ourselves underprivileged because as we came into the Depression we could hear and read about the economic stresses in the big cities and the people who were

unemployed. We had all of our own resources in terms of food, butchered hogs and calves. Of course, we had chickens. The only cash we had came from our cream that was separated from the whole milk. We used to turn the separator by hand. The cream was the only thing that was salable. The skim milk went to the pigs and chickens and we even gave some of it back to the calves. The cash came from a Land O'Lakes creamery in Grasston where we would bring our butter fat. That kept us going during the Depression days.

My dad was active in politics. He was engaged in the county government activity and in the elections in terms of those sorts of things that had to be monitored. I can remember hearing the conversations with the adult farmers regarding the politics. Minnesota at that time went through the initiation of what they called the Farm-Labor movement. That produced some very outstanding people like Hubert Humphrey and others.

My days on the farm, though, were very difficult in terms of hard work, but we had the advantage of living in northern Minnesota with the lakes and the wildfowl where I had good hunting and fishing. My dad taught us how to fish. He let me take his twelve-gauge automatic Remington to hunt when I was twelve years old. We had good duck hunting. We still had the prairie chicken in that area, and the partridge in the woods. As a young boy, I had all of the advantages of the outdoors along with the hard work and a good educational background. That school offered no electives in high school but it qualified graduates for the University of Minnesota.

When my dad died in 1934, I was sixteen. My task, along with staying in school, was to help get my brother through high school. He was one year behind me. And, of course, my two sisters were also going to school. My mother was trying to keep things going when we were at school. That meant that we had to do a lot of work when we got home, before school in the morning, and especially during the summer.

After I finished high school in 1936, I stayed out of doing anything for a year except running the farm and helping my brother finish school. I was eighteen when I graduated from high school. I wanted to be certain that he finished high school. The understanding was that he would come back and help out on the farm. He came out of high school and immediately enlisted in the CCC (Civilian Conservation Corps) and was sent out to the state of Washington as one of the Corps members. I looked around after he left and thought I was not going to be able to make it on the farm without additional training.

HELMS: The idea was that after he graduated from high school you would go to college?

BERG: I had hoped that one of us would get more technical training in the agricultural area as we did not have vocational agriculture (vo-ag) at our high school. We did have a vo-ag department at another high school at Pine City, six miles in the other direction. I went to some evening classes there after I came out of high school and when I was home that year. I found that they had books on agriculture and there were people that knew more than I ever dreamed you could learn about agriculture. They also had a shop there that helped in terms of learning how to weld and do woodworking and that sort of thing. The Smith-Hughes instructor, the vo-ag teacher at the adjoining school, suggested that I look into the Minnesota School of Agriculture down at St. Paul, Minnesota. Secretary Bob Bergland went through that sort of exercise, as you may know from his history.

In the fall of 1937, I went down to the University of Minnesota to enroll in the School of Agriculture. I laid my transcript on the registrar's desk. It was a woman who looked it over. She told me I qualified for the University, full-time. Why not enroll in that? I asked if I could afford it and she said it was twenty-six dollars per quarter. I did have that much with me and I was able to enroll at the University of Minnesota, at least for the first quarter.

What to do about the farm? My mother by that time had decided to sell the farm, move to town with her two daughters, and help them finish school. So I became a University of Minnesota student. The choice was somewhat limited in the agricultural field, but I began in the broad agricultural area that would qualify me to be a vo-ag teacher or an Extension agent. I was looking at courses broadly in terms of crops, soils, animals, and that sort of thing. I also was concerned about the possibility of the military even back in those days because we were heading in Europe into the beginning of World War II. So I enrolled in ROTC (Reserve Officer Training Corps) at the University.

The University of Minnesota is split in terms of campuses. They have the main campus in Minneapolis where most of the basic courses are offered for the first two years and what they called the farm campus in St. Paul where they had the College of Agriculture, Home Economics and Forestry. That's where they had the experiment station. Much of our work in the later time in school was on the St. Paul campus, but all of the ROTC work was on the main campus. So I took enough mathematics courses to qualify to be an ROTC student because, I think, the primary emphasis at that time in that particular unit was engineering. I was debating then about whether I should pursue a career in engineering or stick with agriculture.

I had an opportunity, I think it was in 1938, to get into pilot's training in what was then the Army Air Force. I took a very rigorous physical exam and passed everything and they said there is one last thing that we need to have you do and that is to read a color chart. I went into that room and for the first time found out that I was partially color-blind. That dropped me out of the qualifications to be a candidate for the Air Force, which was probably fortunate. Many of those who I knew qualified and ended up going over to England. They were fighting Germany over London and other places. Many of them never came back. That convinced me that I had better begin to concentrate on what I needed to do. I had two years of ROTC and I then concentrated on agriculture. I went into Smith-Hughes training and ended up continuing in that way. In the early part of 1941, I would have graduated in June, but the head of the vo-ag schools at Minnesota said they needed me to go out to a school that was losing its Smith-Hughes person because he or she was being drafted. I said I wanted to finish and get a degree and they said no problem. They would guarantee me that. We had a quarter system and it was coming into the second quarter. They said they would guarantee me that I would get nothing but straight A's from there on until I graduated, from this quarter and my third quarter coming out in June, 1941.

I had met the girl that later became my wife, Ruth, in the spring of my sophomore year. She had transferred after the first year from North Dakota State University to the University of Minnesota as a home economist. We had made up our minds during our later days at the University of Minnesota that we would become married at some time. I said I would go out and start my Smith-Hughes work in the school in northern Minnesota up in St. Louis County at the request of the dean of the school. She finished her home ec. degree work in June and went to work for the Farm Security Administration on the western side of the state at Crookston as a home ec. advisor. She would go out and help women who did not have the necessary background in canning and sewing and that sort of thing. It's the kind of thing that is now fairly accepted and Extension does that sort of thing with some of their home ec. people. The Farm Security Administration had a very good staff in that regard back in the early 1940s.

HELMS: Was this mostly the people who had the rural rehabilitation loans?

BERG: Right. They were trying to take people who were perhaps getting into farming for the first time or having a tough go of it. They were offered technical advice all the way, help on the farm, and help in the home, that sort of thing. I ended up at a school in Meadowlands in St. Louis County. It's about fifty miles west of Duluth.

HELMS: Let me interrupt. During your study at the university, was there much in the way of what we think of as conservation activities?

BERG: There wasn't very much. We didn't hear about this sort of thing. I mentioned the fact that on the farm we never did see the kind of assistance that I know is now available from USDA. The first contact we had with a governmental agency was some time in the mid-1930s when somebody came out to measure the amount of ground we had in alfalfa and said that we would qualify for having a crop conserving farm. We qualified under the old AAA (Agricultural Adjustment Administration) for some subsidy for having a rotation that we had just had as a matter of course all the time. But that was our first and only contact with government.

At the University of Minnesota, the courses I did take were good in terms of soils and crop agronomy, genetics, and that sort of background. We had excellent courses in economics. The forestry school was there so we had some courses in forestry. It was not in terms of what people would be getting now in the way of resource management, environmental courses, and soil and water conservation. I did take a federal exam that was offered by the Soil Conservation Service when I was at the university.

The teaching was very demanding and vo-ag teachers were year-round instructors. I not only had the people in that high school between the time I went out there in the early part of 1941 until they finished school that spring, but also I had classes through the summer, including a Future Farmers of America group. I got acquainted with the county agent. St. Louis is a big county up in northern Minnesota and he was very helpful. He used the Smith-Hughes or vo-ag teachers as his outreach throughout the county. That was a good combination because I then learned the kinds of things that Extension was doing and the kind of things that we could help on. This included the fact that he and I went into a venture of buying about fifty sheep, finding a place to keep them, and doing all the things it took to have an ongoing enterprise. Eventually, we sold them and it turned out to be a worthwhile endeavor. That area was also getting some help from the governor, at that time Governor Harold Stassen, because the iron mine area had been depressed and they were trying to build the agricultural area. Therefore, there were some funds available to help strengthen rural America.

I had been at Meadowlands for only a short time when a larger school close by, maybe twenty-five miles away, at Floodwood offered me the chance to be their instructor. They had two people on their staff for agriculture and they wanted me to take the top position. That was to teach the senior class and then work with the adults. They would have another person for the freshmen, sophomores, and

juniors. That was a more attractive assignment. My wife and I were planning on being married and she was still working over at Crookston so we decided that we would take the Floodwood job. That activity had an effort underway with the local cooperative creamery. I found when I was in that area that the co-ops were very strong. Many of those farms were the result of cut-over forest areas that I had experienced on my own farm. They had to turn to farming as a last resort. The area around Floodwood was primarily Finnish farmers. Many of them could not speak English, but they wanted help and the cooperative creamery was able to afford help. The co-op would help fund part of the job that I had with the school district if I would work primarily with the dairy farmers to improve their operations.

One of the things included setting up an artificial insemination ring. I had some background in that at the University of Minnesota. They were doing some early experimental work there. The previous person who had been at that location was an expert in that area. He was moving on to establishing a full-time insemination activity in southern Minnesota. So I had the help of that sort of expertise. We actually then had five bulls. There were three Jerseys and two Holstein bulls to service the cattle that were in the vicinity of that cooperative creamery. And that became a very interesting kind of a side line. I had another person hired to help do that, but I was the expert, along with being a teacher for the senior class, arranging evening classes for farmers on a broad array of subjects, plus capturing some of the work that was coming out of the state agency to help build that rural area. I had a network of people who were working on other activities that would generate some additional income in northern Minnesota to supplement the income that had dropped off because of the mining problems. Mining wasn't totally done in. They hadn't invented the taconite process yet and it was pretty badly depressed.

In the fall of 1941 I started teaching at Floodwood, Minnesota. We were married on the twentieth of November 1941, which happened to be on Thanksgiving Day. President Roosevelt had moved Thanksgiving up one week because people at that time didn't start shopping for Christmas until Thanksgiving was over. To attempt to revive the economy, they added another week of shopping. Some states did not adopt that, but Minnesota did. She finished her work over at Crookston, Minnesota, in June of 1942 and came to live in Floodwood. About that time, I got an offer to come with the SCS. I hadn't heard anything since I sent in the exam and now here was an offer to come to a town in Idaho, Downey.

I knew something about the West because I had to work each summer to keep things going. The Great Northern Railroad ran the hotels in

Glacier Park. Their headquarters was in St. Paul, Minnesota. They recruited staff for all their work during the summer, out in Glacier Park, from the University students. During my time at the University of Minnesota, I had developed and was quite skilled in meat cutting and worked for the commissary that served the whole University in terms of the dormitories, hospital, student unions, and so forth. With that background, they said they needed a meat cutter for one of the hotels in Glacier Park. I went out there the last summer I was in school, 1940. I hadn't been there but two weeks and one of the persons they'd brought out as a porter--and that was the best paying job because they got the tips--just didn't fit. They sent him back home and offered me that job. That gave me good income that summer because I would carry bags and people would give silver dollars as tips at a beautiful place at the Sun Lodge in Glacier Park on St. Marys Lake. Tourists were traveling to see our country for the first time because the European community was tied up in the War. Many of these people who had traveled abroad during earlier times were amazed to see our own scenic areas.

Going back to the work I did during the summer, between my freshman and sophomore years, my uncle, Paul Berg, an Iowa State graduate as an engineer, was a chief engineer at a packing plant at Ottumwa, Iowa. They were building a new hog plant. He got me a job on construction that first summer. Between my sophomore and junior years I went back up to the farm area that I had grown up in and helped a person wire farmsteads that were getting REA (Rural Electrification Administration) power for the first time. I wasn't an expert at that line of work, but I learned from this person who I worked with how to do the electrical work. The gratification of people, when they were able to turn that power on and get their yard lights and lights in the barn and house, and the fact that they could go out and buy electrical appliances, was just unbelievable.

Coming back now to the fact that I got an offer from the SCS, my wife had never been west of the eastern part of North Dakota. She said, "What are we going out to that part of the country for?" She didn't know much about it. Well, I had seen that beautiful mountain country in Montana and I thought if Idaho was anywhere like it maybe I could get a combination of what I had in Minnesota where I could have the lakes and streams and also the mountains. My thought was that maybe they would assign me to northern Idaho, up around Coeur d'Alene or someplace. As a matter of fact, they assigned me about as far south as you could get in Idaho at Downey.

HELMS: The motivation wasn't that it looked better, in the long run, financially?

BERG: It was a little bit better. I went to work full-time as a Smith-Hughes teacher in Meadowlands at eighteen hundred dollars per year. The Floodwood offer was a little better, but not much. The first offer from SCS was twenty-one hundred dollars, I think.

HELMS: What year was that?

BERG: Because I had to disengage myself from the school, it took until February of 1943 when we finally reported to SCS out there. I gave the school the deadline between Christmas and New Years that I was going to make the break. They kept us on for a short time afterwards because they just didn't have anybody there at Floodwood. We finally reported into Downey on the fifteenth of February in 1943. That was a six-day work week at that time that brought in the twenty-one hundred dollars. At that time, I was labeled a P-1, professional grade 1. They had what they called the sub-professional grades and the professional grades that went from one on up to eight.

My first assignment at Downey with the SCS was at a former Civilian Conservation Corps camp. It was not with Civilian Conservation Corps people. These camps that we had in the SCS were now being utilized for people who were conscientious objectors who were not going to be able to enter the armed forces. The camps went into public service. The SCS had responsibility during the full work day, six days a week, to find work for these people out on the farms and the ranches. That's what I ended up getting involved with first.

HELMS: They called them Civilian Public Service Camps?

BERG: That's exactly right. The camps themselves during the off hours were run by churches. We had more than church or religious objectors. We had some objectors on political grounds and we had some objectors that came in from the Jehovah Witnesses. If they did not stay in the camp, they were treated as deserters. Then it became the follow-up responsibility of some governmental agency, probably the FBI, to find out where they were. The people at the Downey camp were the Amish and Mennonite people who had come from the eastern part of the country, Pennsylvania, Indiana, and so forth. These turned out to be very conscientious people and hard workers.

Our job was to go out and plan the conservation work needed on a farm, then get acceptance from the farmer that these workers could come in and do what had to be done. We brought in everything. We brought in the labor, we brought in the machinery, and we brought in the grass seed. If we needed to build a structure--we had all of the structural needs--we brought in the concrete, the cement, everything. I developed probably about fifty of those plans with the help

of the key person at that location. The conservationist there was Verne Heidenrich. He was an excellent teacher. He had come from a ranch background. The culture in southern Idaho was completely different than what I had known in Minnesota. In Idaho, they had irrigation of the valley lands, and dry land farming with the wheat fallow on the sloping lands that were just below the forested lands on the public domain. Then they had the range lands. Verne was an excellent teacher for me because he understood that culture and led me through all the things I needed to know about what they did in irrigated agriculture, dry land agriculture, and range country heavily mixed in with the public lands.

HELMS: Most of the work, I would gather, was in the irrigated area?

BERG: The work for the CCC camps was primarily on the irrigated land, but we did have some work on the dry lands building terraces and trying to stabilize the grassed waterways, and on the range lands developing water. So it was a combination.

HELMS: The farmers were accepting, of having the conscientious objectors work on the farm?

BERG: No problem. It was easy to get cooperation. Before I leave that, though, it was a good lesson for me. Most of those farmers felt that this was government work. They felt very little responsibility. I am sure you have heard that before. They said, "That was the government's conservation measure and I don't worry about it." It needed maintenance but it didn't get any. It was the worst possible way to try to engage the local landowner. But it did provide work for these people and it did get some conservation work established in an area. That district was one of the oldest in the country. It was the Portneuf Soil Conservation District.

The CCC camp that was established first in that district was just outside of Pocatello. That was the headquarters for all of our operations in that part of Idaho. That CCC camp was brought into terrace and contour all of the land above the city. The city was in the valley. That land above Pocatello had been severely over-grazed for years. Every time they would get heavy snowmelt in the spring or a summer storm, the damage to the city from the overflow from the upper plateau was very serious. So the CCC went up there and dug terraces all over the hills on both sides of town. That was one reason they had this camp at Downey. They were doing some work down there.

Also, the Service had what they called the land utilization projects in an adjoining county. They had been buying land that had been formerly wheat land but was marginal and putting it back into grass. It was west of Malad about sixty or seventy miles. We actually had a "spike camp," as

we called it, out of our Downey camp during the summer months to work out on this land utilization area. I did some work out there. We had a conservation plan there on that big holding. I think it was over 150,000 acres of land. We dug wells, we fenced the area, and we reseeded the area. We were working on a plan based on public money coming to the SCS. At one time I analyzed the money coming in on that property. I did this after I came back from World War II, but I'm getting a little bit ahead of myself. It would have taken a hundred years to establish the plan on that land based on the money that was coming in from the federal government. I'll tell what we did about that later. We had those camps that had been CCC camps that lent themselves to this public service work during the War. I had decided I was going to go into World War II at some time.

HELMS: It sounds as though the assistance given under the Civilian Public Service Camps was more than typically given in the demonstration projects. They had labor and equipment.

BERG: They built very heavily on the experience that they had. The camp superintendent for the SCS work, Stubb Hattan, had been engaged in some of the early CCC work in some other parts of the West. Incidentally, the SCS at that time was divided into seven regions. Our regional headquarters was at Portland, our state office was in Boise, and the area office that represented that southern Idaho area was in Pocatello.

Most of the districts in that south-eastern part of Idaho had already been established. There was one in Bannock County, which was the Portneuf district, one in Bear Lake, and one in Oneida County. There were three very strong districts there already and they all had some CCC background. There were some counties that hadn't organized districts that were close by.

I went into the Marine Corps in September of 1943 and came back to Downey in May 1946. I ended up being in Washington, D.C., towards the end of my Marine Corps' time. I was stationed at the Naval Research Lab down on the Potomac. The training I had gotten in the Marine Corps was comparable to what I had gotten in the early days of my ROTC experience. They made me into an engineer with very intensive training in several locations throughout the country. I started boot camp in San Diego, California, got training eventually at Wright College in Chicago, Grove City in Pennsylvania, and then at the Naval Research Lab in Washington. I was eventually assigned there to develop instructional material for the students that were going through the courses that I had taken earlier. They looked at my background in terms of teaching and

that is where they ended up putting me. They wanted me to stay in after the war was finished but I decided I would go back to Agriculture.

I had the opportunity while I was in Washington to come down and get acquainted with the SCS office in Washington, at the same location as it is now. That was the first time I went into the chief's office.

HELMS: Which is where it is now?

BERG: Yes. The chief was in Africa as I remember it and J. C. Dykes was acting. For the first time I had that acquaintance. However, before I left Washington on May 1 of 1946, I had a chance to meet the chief. He had come back and I remember going into the office there. He was lounging on a couch that used to be in that office. It was still there when I took over. He handed me a booklet that had just been published by SCS and said, "This is what you need to go out and do more about." He knew I was going back to Idaho, although Dykes at one time had waved his hand to a big map in back of his desk and said, "You can go anyplace in the country." I ended up going back to Downey. The chief told me, "Young man, your job is to help get those districts organized in Idaho." They were having trouble getting districts organized.

My assignment was back to Downey at the same grade, P-1. I had been gone for three years. The first thing they did was send us up to the Palouse school to be reoriented. That was my first exposure to that Palouse country. They had a school at Pullman, Washington, for returning vets.

HELMS: What was the purpose of that? To learn about new techniques?

BERG: New techniques. There hadn't been much change in policy as I remembered it, but they were, I guess, assuming that we really needed to be refreshed. It was a good opportunity to get acquainted and it was a great opportunity to see some of the problems of Palouse. They were much more severe than anything I had seen in the country. We also established contacts with some key people out of the Portland regional office and met returnees from other parts of the West. Our region had California, Nevada, Idaho, Washington, Oregon, Hawaii, and Alaska. It was an interesting mix of western people. I got acquainted with some key people that I have followed all these years, and we're good friends even today.

Shortly after I got back to Downey, they wanted me to go to Pocatello and begin to get myself ready to work as a work unit conservationist. The person that had been the work unit conservationist was going to be moved over to the western part of the state. There were three of us that came back about the same time from World War II and we ended up right in the Pocatello area. They were going to send John Hull over to the western part of the

state. They were going to send Harold Harris over to the Aberdeen Plant Materials Center. They wanted me to become, when I was ready, the work unit conservationist which then would have moved me from a P-l to a P-2. I think that must have been in the fall of 1946 or early 1947. My wife and I moved to Pocatello. We had one daughter at that time. She was two years old the day we left Washington on May 1, 1946.

We went back to Idaho without a dime. It was really rough going. I had some money sent in from my Marine paycheck to savings bonds and that allowed us to have enough money to buy a refrigerator, a stove, and that sort of thing, but we could not see our way clear to do anything but rent to begin with. We did find a friend there, though, who had a place to rent. He was a high school teacher. We met people through a Methodist church there who were very helpful. That allowed us to begin building a foundation for a family and for the future.

I was able to do a reasonably good job as a work unit conservationist and attracted attention on up the line. In 1950 they asked me to take over what they called a work group. Then it was called a district conservationist. That was the person who is now the equivalent of an area conservationist. The district conservationists had in their job description that they would meet with every conservation district board every time they had a meeting. The local person, the work unit conservationist, did not represent the Service with the district. The district conservationist represented the Service with the district. I had board meetings in several of these districts every month, plus helping get the new districts established. I had been working on that. We were able to find the younger landowners coming back, like I had, from World War II who were willing to carry the petitions to get people out for hearings and get people out to vote. My area was the first to get all the districts organized. This was not easy to do.

HELMS: What were the reasons for that?

BERG: It was a mix. There were people, and there still are, who feel that any government activity is going to interfere with their private property or raise their taxes or do something. That was some of the propaganda that was brought in. Extension had very strong programs through the state and there were some people at the university level of Extension who didn't feel that we needed to duplicate what they were doing. We didn't find that necessarily at the county level. In fact, these Extension agents at the local level became our best allies. There was some objection to an additional bureaucracy from ASCS (Agricultural Stabilization and Conservation Service). I can remember going to hearings where people would hold up a map that came out of Portland showing how many districts

had been organized in the state. It showed the districts colored red and they'd hold that map up and say, "Look, if you're wondering what kind of an organization you're heading towards, this is it! (laughs)." Several of us suggested that they change the color to green. If we had a district in the county, it became green. We also had to defend the fact that there wouldn't be any additional taxes and that was a very sensitive matter. It's unfortunate, but that was built into the law.

The business of helping outside of a conservation district was changed somewhat when the Department decided that SCS would be responsible for the technical practices related to ACP (Agricultural Conservation Program) cost sharing. That changed our rules somewhat. But we still held a pretty tight line as to how much we would do outside of the district even on that type of work. Some delegations went into the "white counties," as we called those that didn't have a district, to certify that technical work was properly done on the more permanent type practices. That was a requirement that the Department placed on the SCS at that time.

HELMS: The predecessor to the Agricultural Stabilization and Conservation Service (the Production and Marketing Administration) sometimes had its own people for the agricultural conservation payments on the technical side, correct?

BERG: They did. The SCS did not want to have a duplicate technical agency so we did more and more of that work. Once the district was established, it wasn't a problem at all. Incidentally, we had been doing a lot of work with the old Production and Marketing Administration even before they made that assignment. But this made it more formal. It also provided eventually for that five percent transfer of funding that Congressman Jamie Whitten wrote into the act even before I came back to the District of Columbia.

The work in southern Idaho was very well accepted from the standpoint of the SCS. Many of those irrigated farms had been developed going back to the settlement of the Mormons. They were using primarily flood irrigation. There was a lot of erosion and there were a lot of problems from the standpoint of their return flows, the excess water coming off. Especially if they were irrigating elevated areas, if there was too much irrigation--and in a lot of cases there was too much application--it was showing up down below them and developing wetlands on lands that had been previously fairly well drained. They had been farmed well and then they began to get a higher water table because the land up above was putting out too much water.

We also had some severe gullying as it came off the upper benches into the lower valleys. There were rivers in all that area that really were of great concern. The Bear River and the Portneuf River had that kind of problem. But we helped make those irrigated farms with the techniques that we had such as the ability to map not only the soil but the engineering, the topography, of the area. We had engineers that would then design a system that would provide for the proper distribution of the water, where to lay out the ditches, what kind of rate it should have, and all that sort of thing. We, without question, made many of those farms much more profitable. We also introduced into the system a rotation that would allow the proper mix of grain, sugar beets, potatoes, and alfalfa for hay or pasture. The sloping areas with limited moisture--maybe only twelve to thirteen inches of moisture per year--had to be fallowed every other year to conserve the moisture. But there was a lot of runoff on that land that was fallowed. It was just bare or no cover at all. We began working on what is now known as crop residue management. We called it stubble mulch back in that era.

My first task with those dry land wheat farmers was to get them to keep the matches in their pocket so that they would not burn their stubble after they had finished harvesting their fields. The whole area used to just go up in smoke in the fall because they didn't know what to do with the stubble. They also, I thought, at that time were not at all acquainted with the fact that highly erodible land needed contouring with a mix of fallow and wheat. To the extent that we could sell terracing, we were doing that. That was more difficult. Some of that land should have never been cropped. It should have been kept as grassland. Some of those farmers, if they had livestock, were willing to move the land back to grass, but it wasn't easy to do.

I learned another thing from the early days in SCS and then being gone for three years and returning. For many of those people that I had worked with on the farm to develop a good conservation plan, when I came back and picked those plans out of the file and went out to see those farmers or ranchers, they would look at me and ask where I had been. They had been waiting for me to come back. They had not done very much about what we had planned. They had accepted a complete conservation plan on paper, but it meant absolutely nothing in terms of what was needed in the way of follow-up. My early concern was that our national policy--and here I was just a little new field person out there--was wrong. The planning process had to be incremental and the establishment of the work had to be incremental. It was never finished. It was a dynamic process. So we put that into practice with people that we were working with, even though policy may not have supported that. We recognized that you could put on a

piece of paper a complete resource management plan. But you better be prepared for the fact that they are going to take it one step at a time. Many of the people asked for help based on a single problem, not looking at the whole resource. You tried to get them to broaden their thinking. When we brought a soil map out and brought a topo map out and went over that with the farmer, we knew more about his land than he did, even though he or she may have been farming it for over forty years. I also insisted that I would never meet only with the man of the family. I wanted to sit down around the kitchen table after we had walked the farm or ranch and be certain that they were both in on what we were talking about and would agree to the kind of things that had to be done. That made sense even back in those days. It was a cooperative effort.

HELMS: The idea then was even if a farmer just wanted help with a single problem you didn't just deal with that problem. You had to do the whole farm?

BERG: Our orders were, "Do the whole farm. Lay out the whole system from A to Z. Get them to sign as a cooperator with a conservation plan on that basis, a complete plan, a basic plan." When we got into the ACP requirements as to servicing their work, the Service came up with the three-tiered plan approach. It was some sort of an initial plan, maybe just to service the ACP request on a single practice, and an advanced plan that brought them half-way to what ended up being a basic plan. In other words, it was a three-step approach. It was more in line with what I am talking about now.

We analyzed that even after I got back into Washington as to what still needed to be done. It was a matter of understanding from the very beginning that these people who owned and operated the land really were prepared to do something immediately and maybe half-way through the year, but beyond that you really had to stay with them. That's going to plague the SCS on the conservation compliance plans. Obviously, in the implementation of those plans, numbering something over one million three hundred thousand, people may not have understood what it was that they were expected to do without an awful lot of follow-up.

The work as a work unit conservationist was really very satisfying. It allowed a mix of being in the office to do the things that had to be done to keep track of what had been agreed to, to get the basic data together so you could talk to people intelligently about what their problems were, what some of the options were in terms of a plan, what option they'd select based on their enterprise or their finances or their timing, and working out a schedule and all that sort of thing.

Then there was the actual work of doing it. We had the so-called "sub-professionals" to help us do a lot of that work. But SCS had to gradually wean itself in those areas by getting out of doing everything and turning the cost and the doing of it over to the farmer. Even in the early days when I came back from World War II, we were buying the stakes to go out and mark the one hundred yard markers on every field. Then we'd go out and mark how much of a cut or how much of a fill on each stake. We'd actually get on the bulldozer and show the operator what we meant. I learned how to do that. We began an effort to try to say, "What could we have the farmer do?" We were just swamped with requests and we had to get out from some of that other work that we were doing.

HELMS: By that time it wasn't a problem of convincing the people to do a lot of this work, it was a matter of getting enough people to do it, correct?

BERG: Yes, and we found ourselves doing more of it than we probably should have. We could train them to do it. I am going to cite a case. On fairly sloping fields, where they flood irrigated after they put the crop in, they would put in what they called contour ditches temporarily for that year. They were ditches with enough grade to let the water run across that particular field. We'd come out and lay those out every year. One day I was out on a farm and I said, "You know, I looked in a catalog, either a Montgomery or Sears, and you could buy a level fairly reasonable and you could do your own. I'd show you how to do it, where you read the target and how much to drop it next time you go across the field so you get a contour with a little grade." The guy looked at me and he said, "Come on over here and look at this." Then he took me into the shed and he showed me a two-by-four about thirty feet long with two legs on it, one about one half inch shorter than the other and he had a level strapped on the top of it. He said, "When I can't get a hold of you people, here's what I use." He walked that thing out across the field and obviously it gave him the grade. If I came out and did it, he loved it (laughs). He liked the conversation and he liked that professional approach. So I began to work on the basis that we could find other ways to do business including letting them buy the stakes and letting the contractor have his own level. Maybe the farmer would have a level, too.

HELMS: We hear a lot about salinity problems, but, with proper drainage and controls, that has been an irrigated area for a long time.

BERG: It has since the mid-1850s. But there were some severe problems. We had an expert come out. Incidentally, we used to get technical help out of the regional office. They were called zone people. There would be a team of two people. One would be an engineer and one would be an

agronomist or plant scientist or something and they would give us extra help. As a matter of fact, my first contact with Don Williams was when he was the engineer coming into my area to help on irrigation problems. And these were experts that really helped us. I had good technical advice from the best that the SCS had in every field that you could possibly imagine. I was really privileged to work with people who were experts. Harold Tower was our agronomist. Don Williams was our irrigation specialist.

I had a group of farmers in the new district that I'd helped get into place. It was west of American Falls, in a big flat area. It was about fifty thousand acres that was dry land wheat. This was out in the lava rock country, which was the Mennonite country. One of the board members who ended up being chairman came to me one time and he said, "Do you have a geologist?" and I told him, "Yes, I'll get a man out of Portland." We sat down and talked about the strategy for that area and this geologist went out and looked at it. We actually found a site on this person's farm where the geologist said, "If you poke a hole down here you'll find water." That took a private investment and a chance on this person doing it. He had to convince his dad into doing it. This was a younger man. And they found water. That area turned from a class four area in terms of land capability because of the limitation on precipitation, to a magnificent irrigated area because everybody else went for wells too. They went to sugar beets and potatoes, and much more intensive cropping. Those were the kinds of things that we got called in on. We would kind of hold their hand while they decided, based on the best technical advice that we could give them, what kind of a risk to take. I had some Japanese-Americans that came back from World War II. They were taking over their family operations. They would go through what they should do in the way of an investment and the kinds of things that had to be done to make that farm area look like it does today, magnificent.

HELMS: Where were they located?

BERG: They were out in the irrigated area north of Pocatello. There are so many things that go back to those days when you start reminiscing about it. The combination of the field and the office work was why most of the SCS-ers came into SCS in the first place.

In 1950, I was asked to take over what I called a work group and become a district conservationist. That gave me the responsibility for the districts in southeastern Idaho. As I said earlier, that included meeting with the district boards and doing all the things you have to do to represent that level of operation in the Service. It turned out to be a very challenging job because you got very well acquainted with all of the people who work in the field and their families and children. You

also tried to represent the things that somebody else wanted, such as the regional office or the state office. We never heard about the Washington office. The Washington office staff did come through one time. They had a tour in the West. The regional conservators used to meet in different regions of the country and they met in the West one time when I was there in Pocatello. Chief Bennett and several of the top officials came out of Washington with all of our Portland staff. I had to set up a tour for them. Most of our direction came from the regional office. That's where the technical offices were. The state offices were fairly weak at that time. The district conservationists that had this work group function, and I think there were six of us in Idaho at that time, were primarily supervisory. They did not do the field work that I had done as a work unit conservationist. You could give advice to the people if they needed more training and that sort of thing, but you didn't have time to do much more than that. I also had the responsibility for this land utilization area, this big 100,000 acre-plus area out west of Malad. I already mentioned looking at the plan and how long it would take to get the practices installed with the federal money that was appropriated every year.

HELMS: That was reseeding?

BERG: Reseeding, fencing, finding water, and doing the kinds of things that would manage the area. I asked, "Who was using the grass?" It was the local livestock people. I said, "Can I meet with them?"

HELMS: Was there a cooperative agreement with the district?

BERG: Yes, with the district.

HELMS: And then the district rented it to the contractor?

BERG: Yes, it was mostly SCS, though. Incidentally, a person who eventually became governor of Idaho, his boy came from that area, Evans. His dad was on the district board and the state commission. But it was an enlightened group down in that area. I went to the livestock users and I said, "If we could speed up the seeding on that area you, the users, would get this advantage much quicker than if you just wait for government." So they agreed to go out and seed thousands of acres of that land. They bought the seed, they brought in their own equipment, and we got crested wheatgrass all over that area in a hurry compared to what it would take for the government to do it.

I think it was during the reorganization that we went through or maybe it was when they did it in the regional offices. There was a reorganization order that the land utilization areas would be turned over to either the Forest Service, if they were close to a national forest, or to state governments.

HELMS: I think that happened a little before the reorganization.

BERG: It did, right. Because I remember the people that we used to have here. Ed Grest was the top LU (land utilization) man back here. He came out there to see how I was doing in Idaho. He moved over to the Forest Service in that reorganization. He may have still been here when I came back in 1960, but I'm not real sure.

When the transfer of that land went to the Forest Service, my office was in the Federal Building, the Post Office Building, in Pocatello. Right across the hall was the supervisor of the Caribou National Forest. He had the closest forest to that land utilization area so that was where they were going to transfer that LU holding. It was done on the first of January, whatever year that was, and out in that country they didn't have snowmobiles at that time. You couldn't get there. I had on my records, hundreds of miles of fence, it was a property. Therefore, I had to have a property record on every well, on every piece of machinery that was out there, and on hundreds of miles of fence. I can remember he and I looking at each other and I said, "Well, I know it's there, now you'll just have to take my word for it. If you want to go out and look, you go right ahead, but here's the file. Here are all the property records on that." The LU became Forest Service property.

HELMS: I wanted to back up a moment. What you're saying is that you got the ranchers who were using the land to buy the seed, correct? It was mostly crested wheatgrass?

BERG: Right, crested wheatgrass. There were some other grass strains that began to come in from our plant materials centers that were better. But a lot of it in the early days was crested wheatgrass. Now, there were people who were skeptical about that because they said, "That gives them a right to claim that they have a right to graze." And I said, "Who else is going to come in here?" They were the adjoining ranchers. You were not going to bring ranchers from someplace else in the state or the country to graze on that property. It's too far away. They were charged a fee and the Forest Service took it over and continued that arrangement as far as I know. It became their National Grasslands. The fact is, we did a pretty good job of managing that area in terms of what the idea was when they bought it in the first place.

The assignment then in terms of that work group changed when they changed from the P grade. Incidentally, those work group district conservationists were P-3's. That was an advance in terms of being able to take on an additional line of work.

It was in 1950 when I got that assignment and my wife and I were able to buy our first home. I think we put down five hundred dollars. I used

a VA (Veterans Administration) loan. It was no easy trick either. There was one time between 1946 and 1950 when the SCS had to go through a very drastic personnel reduction. Apparently each region was asked to pick three people who could be in jeopardy because they were fairly new in the organization that they did not want to lose and I was one of them. I was the one from Idaho, Tom Helseth from Oregon, and Arnold Bolle from the state of Washington. They protected us somehow. I had to drop back from a P-2 to a sub-professional because I had 120 on my score in terms of my veteran status. So they said, "Norm, we'll protect your salary and your job and we won't bring in somebody over top of you, but you'll have to drop back for six months." So I went back to a sub-professional grade for six to eight months. I took advantage of that because I said, "Well, now I can go out in the field!" Tom Helseth ended up being a state conservationist in California and Arnold Bolle went on to Harvard a little bit before I did to study for his Ph.D. He went back to become the dean of forestry at the University of Montana. He's still there, Dean Emeritus. In fact, I periodically see him written up on the national news.

There was an interesting exercise when I was there in southern Idaho. William R. Van Dersal was our chief of operations. Don Williams was there in the regional office. J. H. Christ was our regional conservator. It was a combination of brainstorming and I think Van was probably the one that was instrumental in putting the ideas together. First, they had gone to a sociologist to learn how important it was to understand what motivated people. I'll go back to some things that Pete Nowak has done. You know, the business of what motivates people to do something. That early work was dedicated to finding what they called the "Elmers." You know the story on that. They selected one of my districts, the Power District, as one of those experimental districts. It was west of Pocatello out at American Falls, a fairly new district that I had helped organize. It had a good county agent. We would simply claim that everybody in the district was a cooperator, not this business of one-on-one-on-one. We'd just say that every land user in the district was a cooperator. Then we'd look at the overall strategy of the area in terms of its resources and that sort of thing as to what kind of plan each one of those people needed. Then we would construct that plan in the office, take it out to them, and try to talk them into it. In other words, the dry land was practically all the same. On the irrigated land, many of the practices were practically the same, and the range land was very comparable. We'd develop one plan for the area that represented that particular type of land use. Then we'd carve it up into sections based on the ownership and go out there and say, "Here's a plan for your property. Wouldn't you like to be a cooperator and become engaged in this activity?"

I had that activity in Idaho, Bolle had it in Washington, and Tom had it in Oregon. It was kind of an experiment in terms of what could be done to expand our limited SCS force dramatically. But we'd do this through the leaders that were identified, the Elmers. We'd go to the people that were obviously the thought leaders of the area. That was the beginning of an activity that still makes sense today.

HELMS: Did they decide to try this everywhere? What was the result of the experiment?

BERG: It broke down because the regional offices were disbanded. It came just before we had that reorganization during the Eisenhower/ Benson Administration. There were some uneasy feelings within the SCS. Some of the old-timers felt that we were giving away the store. In other words, we were just becoming Extension agents with information that we printed and passed out. There were many people who felt that all SCS did was go out there and hold the hand of the person who was doing the work. You just had to do it. It just came out of that kind of background. And that was the way it was. There were others who felt that this was so far-fetched that it would never work. It was just too simple. Hugh Bennett had come out earlier and said that with additional funding, we could do all the work that needs to be done within fifteen years. We'd button up the soil conservation job. And this was part of that effort, to try to accomplish that mission. There were many of us in the younger age in the ranks that said, "Hey, I plan on making this a lifetime career! You were gonna button this work up in fifteen years?" We didn't think it would ever be that kind of deal.

HELMS: I wonder why he went on saying that?

BERG: Well, it was a good thing to do to try to get the funding. It was a funding strategy. And I could see that after I understood what it was really all about.

When they changed the grade level from P to GS, they also changed the way in which an area conservationist would function, as opposed to a district conservationist with a work group.

HELMS: Norm, could you tell me about what year that was?

BERG: I think it was 1954. What had been the P-3, the equivalent of a GS-9, as a work group district conservationist (DC), became an area conservationist at a GS-11. The field level had not yet been changed. That was still called a work unit conservationist. They were allowed to be either GS-7's or GS-9's eventually. We set up some sort of criteria that said some were more difficult districts and that sort of thing. But the number of area conservationists came down. I think we ended up with only four in

Idaho instead of six. So we had more districts to be concerned about. And we did not have to meet with the district boards directly. The work unit conservationist became the SCS representative with the district. We would meet with them as often as we could. I had one district, fairly new, that used to meet every Saturday night. And it was seventy miles from home!

The area conservationists had new assignments in terms of a lot of other activities that were beginning to show up in the mid-1950s. The ground work was being laid for the watershed program, what became P.L. 566. The Great Plains Conservation Program began at about the same time. There were several things that the national leaders could see coming that they were preparing the field for.

HELMS: Before the reorganization of 1953, there was some activity with legislation that was introduced in 1948 that was sort of important. I was wondering if, out in the field, you heard very much about that. You did for the 1953 reorganization.

BERG: Oh, no question about that. We were heavily engaged in that. Incidentally, Idaho didn't have a state SCD (soil conservation district) association, and I was in the Service before they had a national association. I had helped in the background to organize that in Idaho. The president of the state association was from the area that I represented and he was a good friend who I had helped in many ways. He had served in the state legislature and so forth. We got very heavily involved in the business of reorganizing. All of the district governing boards in southern Idaho were Mormon, as were all of my field conservationists. The Secretary of Agriculture, Ezra Taft Benson, was a Mormon. I had the role of going to those people that I knew out there in Idaho and asking them to contact Mr. Benson directly and tell him he was doing the wrong thing. And we played a key role. It wasn't Benson that was doing this, it was J. Earl Coke from California, who had an Extension Service background.

We were part of Waters Davis' effort to publish the "Tuesday Letter," which alerted conservation district leaders. We helped with that. We could help generate the kind of grassroots support that had to be done in our area, as it was done all over the country.

HELMS: So how did you get the message out?

BERG: The Tuesday Letter.

HELMS: It wasn't a matter of somebody from the regional office in Portland telling you?

BERG: The guy that wrote the Letter, from this level, was Ray Heinen. Ray was still here when I came back. When I came back here, I looked around and Ray and I were in our early forties and everybody else

was in their sixties, running the outfit. And I said, "Ray, we're the people that are going to have to take this organization over." Well, Ray turned out to be the person who was doing many of the things that had to be done in terms of strategy. He had contacts with people like J. C. Dykes and others who were instrumental in this strategy. That's why the Eisenhower/ Benson group had told Dykes not to go to Capitol Hill for those eight years, and he didn't.

HELMS: Concerning the Small Watershed Act, I've been interested to know what the strategy was in the SCS to get people to form watershed associations. It wasn't just something that happened on its own. Was there a strategy involved that encouraged this?

BERG: No question about it. It developed comparably to what we had developed in other areas. Of course, we had that river basin strategy for P.L. 534 in some of the big river basins that people drew on. We didn't have any in my area, but we knew what this was. That got us into a lot of the project work that was and continues to be very comparable to P.L. 566. Except that was even better in terms of what they could do in those areas. The reorganization was very real at the field level because we knew that the regional offices were threatened and, in my background up to that point, that was our only source of help. Not only were they going to "do in" the regional offices, they were going to "do in" the whole SCS. But we began to see the strategy develop through what came out, weekly, in that newsletter (the Tuesday Letter) as to the hearings that were being held here and throughout the country and what could be done in lieu of total disbandment. Other New Deal organizations were also threatened--REA, Farmer's Home. Anything that had come through the New Deal was also reviewed for the first time in the new Republican administration in the 1950s.

What we ended up with was the strategy of giving up the regional offices and putting much more responsibility in the state offices. We kept a semblance of regional offices because we had this watershed work. Those ended up being the technical centers that were left at seven places to begin with, along with our cartographic operations. By the time I got back from Harvard, the state offices had become the focal points and the regional offices were gone. They'd helped me get into Harvard. Being back here and coming into Washington every time I had a break, I was privy to what was going on.

HELMS: You mentioned your time at Harvard.

BERG: I had noticed that they had an announcement out for people who were qualified to go to Harvard for a year. Arnold Bolle was one of the people who had gone earlier, as had Ralph Sasser from Tennessee. He's

the dad of the present Senator. I met him and the Senator when he was a boy. There were a few others around the Service that I had contact with and they were encouraging me to look that way, too. I think I applied one year and didn't hear anything. In 1955, I was accepted to go to Harvard. Now, unbeknownst to me, my wife had been tucking a little money away, because we had to do this on our own, there was no government help for that kind of thing. She said, "If you qualify, we'll find a way to make it." At that time we had four children, the youngest being about a year old. And I was accepted at the Littauer Center, as they called it up at Harvard, which is now the Kennedy School. It was the public administration graduate school. We were notified of that in the early part of 1955. We had until September to report there. So I began the process of phasing out what I was doing in Idaho and buttoning up the home that we had bought in 1950 and renting it, because we planned on coming back to Idaho. We spent that year at Harvard; it was a very fascinating experience.

I won't spend too much time on that, but that was really a great year. The people that came in from the several organizations became kind of a group, working in the natural resource area. They represented a mix of people from federal and state government. A friend of mine, who had been a graduate from our class in Minnesota, showed up. I hadn't seen him for fifteen years--Leonard Harkness. He was the head of the 4-H activities at that time in Minnesota. Ruth and I had known him, and he had married and had a family. He had been a very outstanding World War II Navy flier. While we were there at Harvard, he was approached by the Minnesota Republican delegation to run for governor. He came to several of us and asked our advice. We suggested that he stay right where he was (laughs)! There was one other SCS-er, Al Mangum, who eventually became the state conservationist in Louisiana. There were people from the Bureau of Reclamation, the USGS (United States Geological Survey), and a couple of other agencies, including some state governments. But that network stayed together in school.

We had the unique opportunity there of getting acquainted with people who were emeritus, like John D. Black, who had been one of the top economists that formed the strategies for the farm programs in the 1930s. We had Ayers Brinzer as our daily contact. He had been very instrumental in some of the work that Harvard had been doing in the natural resource area. We had Arthur Maass, who was one of the world's water leaders. We had Charley Harr, who used to come over from the law school. He ended up being back here in HUD (Housing and Urban Development) during the Kennedy-Johnson days. We had Merle Feinsod, and John Gaus, and we had some of the top professors at that

time. At the time we were there, they were devising the soil bank as agricultural legislation. Earl Heady came back for a semester out of Iowa State to teach some of our classes. John Kenneth Galbraith was there; then he went someplace to write his book on the affluent society. We had an unbelievable amount of talent there that impressed me not only from the standpoint of their own individual disciplines, but the fact that Harvard had that much knowledge about agriculture. Periodically, our seminar would invite a key person to come out of Washington. J. C. Dykes came up, Charles Kellogg came up, and Marion Clawson came up. Clawson was the head of the BLM (Bureau of Land Management) at the time. So we had a chance to mix with those people.

Whenever I had a break, SCS, to help financially, would put me on the payroll and bring me back into Washington. Carl Brown was here running the watershed program. He wanted help from the standpoint of what I knew was going on up there, because he knew Arthur Maass. Art had written that book, *Muddy Waters*, criticizing the Corps. Verna Mohagen was a great champion; she was the head of personnel. By that time, the reorganization had occurred and Don Williams was back here as the administrator and Van Dersal was back here as the deputy administrator for administration. Dykes was still here. Because of my year up at school, when I came to Washington in 1960, I had had a chance to get acquainted with Hollis Williams and so many others.

Aside from the fact that that was a challenging year in terms of the exposure to those academics, it was a very real world from the standpoint of having to live on our own. I had accumulated many days of leave time and I used that and it took me to Christmas time. And from then on until June we were without any funds. Now we did have a Littauer Grant, administered by Resources for the Future (RFF). Joe Fisher from Virginia, who died here recently, was the president of RFF at that time. It was through his group that we were able to get enough money to pay the tuition. I think it was eighteen hundred dollars. Now it's twenty-one thousand dollars! It was touch and go; I could not even stay for the graduation. I had to get back on the payroll. I could have stayed another year and gotten my Ph. D. They offered me that opportunity, but we just couldn't afford it. We had the four young kids from two to eleven. We just had to get back on the payroll.

They said, "Well, there are people who want you to come into Washington." Carl Brown wanted me to come and join the watershed people just getting started here. Verna Mohagen wanted me to come to personnel. Don Williams was the administrator. Don said, "I want you to go to South Dakota." I said, "I had planned on going back to Idaho." He

said, "I would have preferred to stay in Portland! But somebody has to work in other parts of the country." What he had in mind was, South Dakota was having some very tough problems. I didn't know that at the time. I didn't know anything about South Dakota. I'd lived next to it in Minnesota. It was the Dakotas that produced the dust during the Dust Bowl days that drifted over farms in eastern Minnesota. Yet the four years there turned out to be great.

HELMS: You went there as the.....

BERG: Assistant state conservationist, in charge of the watershed and Great Plains Conservation programs. I was kind of a chief of operations. I don't want this to be misunderstood, but the people that had been scattered around the country from the regional offices really had a morale problem. The people in that area, the Plains, came out of Nebraska. There were several good people that had come out of Nebraska. The state engineer, the other assistant state conservationist, and the state administrative officer, had all been down at the Lincoln, Nebraska, regional office. And that had happened all over the country. It was a matter of fitting those people into a situation that was pretty provincial. These states, with the state conservationists that had been there from the days that they were state coordinators, were pretty much in control of what happened in the state. The fact that they had gotten more authority was still being tested, as to how much that really represented. Some of them took it as a very strong mandate to do almost anything they wanted and there was concern that we'd end up with a national Service or end up with fifty programs instead of seven. It was obvious, because South Dakota was Don Williams' home state. He was born in a little town called Doland and had gone through South Dakota State University at Brookings. Don and I had about ten years of history. All that left me no choice but to take that assignment. I said, "Well, we have got to go back and sell the home in Idaho and move the family in time for school in Huron." So we did that. That turned out to be a totally new experience, because the Great Plains are different from the Midwest and different from the West. Huron was the northern part of the Dust Bowl during the 1930s. But again, a great group of professionals were there with the Soil Conservation Service, and a great group of district leaders and farmers.

HELMS: You mentioned the coordinators. They didn't really have direct supervisory authority over the field offices, did they?

BERG: In the beginning they did not. They eventually became state conservationists but still with limited staff. About all the staff they had at the state offices when they had the original offices, were the administrative overhead people and maybe a state soil scientist. Later on, they built a very substantial staff in terms of

engineering, agronomy, biology and everything you needed. But the states approached this job in a variety of ways depending on the leadership that they had. During that time in South Dakota, the decision was made back here in Washington to assign the Great Plains Conservation Program to SCS.

Those who did not want SCS to have the new program formed an organization called FARM (Farmers Association for Resources Management). This is all written up in Neil Sampson's book, *For Love of the Land*, if you want to go back and read about it. Don came to me and said, "We've got people in Washington that will help you do whatever has to be done out there to beat this. We've got to fight it." What they were going to do was to petition the districts to go out of business. The state law was very simple. It only took twenty-five names on a petition to get a district hearing and then a referendum if the hearing was favorable. It only took the same number, at least in the model act, to start the process the other way. Somebody found that out, and the state committee in South Dakota was given something like fifteen or twenty petitions to dissolve districts through this organization called FARM. It was organized with private help through people who were here, the ASCS network, to do in the districts. Why? They felt that the cost sharing functions of Great Plains should have been assigned to ASCS.

It developed into a nation-wide battle just like the reorganization. It called for hearings and people got into the act, including the Secretary. The help I got included a mix of people from the conservation districts, both at the state and national levels, but especially Ray Heinen, Harper Simms, Glen Loyd, and Phil Glick. Phil had left the Department many years earlier. We brought him back in to begin to analyze what that model act represented in the way of what districts should be and what the theory was behind the districts, and why they were so different from anything else that we'd ever had out here. And Phil turned out to be as good as he was in the beginning, delighted to get back into this area, and did many of the things that we needed to do in terms of analyzing the legal implications. We went through three referendums in South Dakota. The first one we lost, because it was called much too early, before we were ready to deal with it.

HELMS: This was about 1957?

BERG: In that area. The first one was out in the western part of the country in a fairly newly-organized district that wasn't all that well equipped to deal with this kind of thing. And the district governing board members, after we lost that thing, came to me and said, "Nobody ever told us what our jobs were. We are really very unhappy about what happened here. We'll get a district back someday, but somebody should have helped us understand what our

responsibilities were as local district governing board members." Tony Krebs was on the national board; he was from Wall and a big rancher. Howard Gears was the state agency representative, and I represented SCS as kind of a background person. We would travel day and night to the districts that were threatened with these petitions and explain to them what they were, what their responsibilities were, and what could happen if they lost their district.

The second district that petitioned and came up for a vote was out at Mitchell, the hometown of the state association president. He was a dairy farmer and a good one, a younger farmer. We held that to a tie. And then there was one other one, and we won that one. We only lost one district. And then, based on legal advice, probably including the help that Phil Glick gave, the state attorney general said, "To go through this process is a waste of public money." And they threw the rest of the petitions out. And that was the end of it. By that time, the national level had gotten its act together, the assignment for Great Plains had been solidified in SCS, and the Secretary had gotten into the act to write what had to be done in cooperative arrangements between ASCS and SCS.

HELMS: This happened after the assignment of the program to SCS, right?

BERG: Right after. It hit us like a brick wall, because we didn't understand all the ramifications of why that had happened back here, like I do now. It was an assistant secretary out of Oregon, Ervin L. Peterson, who had insisted that the SCS have this assignment. Of course, Don Williams was not in favor in ASCS. He had been at ACP (Agricultural Conservation Program) for a while, when it was an independent agency. He had actually gone to the Hill and testified that they didn't need as much money as they were getting. They were spending money on lime and things like that. That upset the bureaucracy. When he became the administrator of SCS and got the Great Plains assignment on top of that, that was more than the old bureaucracy could stand over there in the ASCS.

HELMS: The National Limestone Institute was involved in that effort?

BERG: Expert at lobbying.

HELMS: I've seen their newsletter.

BERG: There's a file some place that just has to be very fascinating on this whole area. I had gone through the process of helping to get districts established in Idaho and had acted in the background. I understood how important it was to have that process followed--a petition, hearing, and referendum that succeeded. I also understood that some of those districts had to vote three or four times to get

established and how important it was to defeat attempts to get districts dissolved. I went to people who had written the original act and I said, "Look, it's a mistake to have the state conservationist as a voting member of the state commission." Many of the state laws were changed to make them advisory. Up to that time, they had been voting members.

HELMS: Why was that? It looks bad?

BERG: It was. They became part of the process as a governmental agency representing the state government and yet they were federal agency representatives. They should only be advisory.

HELMS: From my interview with Glick, I think that their view was that it was another expert voice.

BERG: Yes, it was at the time. The state conservationists at that time were key to getting district laws in place all over the country--the model act. There's no question about it. But in too many cases, they tended to dominate the process. They dominated the commission or the committee or whatever they called it in that state. They were hand-picking the members to be on that committee or commission. In South Dakota, it came back against us because they were running against the state conservationist as much as they were running against the districts. One of the reasons that I had been sent to South Dakota in the first place was because we had a morale problem.

HELMS: So you'd have the people outside of the government bureaus more involved and have more support when problems hit?

BERG: Then you had the confusion that existed as to whether the ASCS people were to get beyond the federal level or were federal employees. They got all the benefits and everything else, they structured that very carefully, but you get out to the local county and they put their money in the bank and write their checks on the bank (laughs). It was a political arm of the Department. It was very effective when it was brought into play and was powerful.

Part Two: January 28, 1993

This interview was conducted at the offices of the American Farmland Trust in Washington, D.C.

HELMS: At our first interview, we ended just as you were about to take a job in Washington. Please explain to us your duties, as well as any important topics and events.

BERG: The administrator at that time, Don Williams, reassigned me from South Dakota to the Washington, D.C. headquarters of the Soil Conservation Service and I reported in December of 1960. The job that he had in mind for me to do was to replace two people. One had been his confidential assistant, Glenn Rule, who had worked with Don and previous administrators and chiefs of the SCS from the beginning of the Service. The other was Henry Abbot, who was assigned the task of working with Congress and had been in that position since the beginning of the Soil Conservation Service. The combination of these two jobs presented an opportunity to do many things that were associated with the activities that represented the top level of the Soil Conservation Service not only internally, but also with USDA and Congress. It also was an opportunity as a young person coming into the Soil Conservation Service at the national level to get acquainted with the activities in other regions of the country. That was very high priority on my part because although I knew the Midwest, the Great Plains and the West very well, I had limited experience in the other regions of the country including the Southwest, the South and the Northeast.

HELMS: What did the job of confidential assistant involve? I don't know that we use that term anymore.

BERG: Glenn Rule, when he occupied that position, was obviously an advisor in many ways and was also a good writer. So he did a lot of the writing for the chief's talks and that sort of thing. Now it would be more related to perhaps a political assignment. At that time, it was not. Neither Rule nor Abbot were political appointees from the standpoint of the administration, but they were very close to many of the things that were being done in relation to those activities.

HELMS: Since you were replacing Abbot, let's discuss your work with Congress.

BERG: The opportunity to work with Congress was very interesting. With the help of others, I got acquainted with key representatives and senators. One of the things that I learned when coming back to Washington, D.C. that impressed me about the Soil Conservation Service was the work that we were doing already in districts and regions of the country that were rapidly becoming suburbia. We had the movement of people from the

inner city out into the suburbs. Also the metropolitan areas became much larger with the growth of our U.S. population. But the soil and water conservation problems remained on the land regardless of the ownership. So the Soil Conservation Service in many of the conservation districts that were experiencing heavy population growth had some very challenging assignments that went beyond what I had had in the way of background working primarily with the farmers and ranchers in Idaho and in South Dakota. That led us to re-analyze the types of technical assistance that we had, not only at the national level, but also in the state offices, that would fit the local conditions in these rapidly urbanizing districts where there was still an important workload in the agricultural area, but also an increasing workload because of the transfer of land to nonagricultural uses. It was very demanding to try to stop the soil from being eroded during construction. We began to see the outlines of what eventually led to concern about water quality.

HELMS: During that time we changed the law so that we could do soil surveys in urban areas.

BERG: We did several things, Doug. One of the interesting things that happened early in my experience was due to the leadership of Gordon Zimmerman and the National Association of Conservation Districts (NACD). Zimmerman was their executive vice president. The NACD established a district outlook committee of members of their own association and state agencies, and asked the administrator to assign SCS people as advisors. I was the leader of a five-person team in that effort.

HELMS: This is about when?

BERG: That was in the early 1960s. That led to an analysis of what had been the experience of conservation districts for the first twenty-five years of their work and what still needed to be done. This led to additional authority for the conservation districts to deal with some of these problems that went beyond just the farm and ranch and agricultural sector. We also recognized that there were new opportunities, especially the work related to the small watersheds, the watershed protection and flood prevention work. That authority had come in the mid-1950s to the Soil Conservation Service and the districts were playing a key role in sponsorship of those activities, as well as what came in the early 1960s from the decision of the administration under Secretary of Agriculture Freeman to do more about rural development. That led to the Soil Conservation Service getting authority to carry out what we now call the Resource Conservation and Development (RC&D) projects.

HELMS: The Orville Freeman administration also had an emphasis on helping urbanizing areas. This emphasis had started somewhat before the beginning of that administration, correct?

BERG: The Freeman leadership was willing to look at some of these problems that went beyond the traditional agricultural area. He had come from being the governor of Minnesota and he was a classmate of my wife and myself at the University of Minnesota. He asked me to co-chair a conference with the Department of Housing and Urban Development (HUD), a first, really. We labeled it "Soil, Water, and Suburbia" because we felt that this area between the downtown city and the very rural areas was a no-person's land out there that wasn't getting the proper attention. We brought together people from all sectors including the traditional people in the conservation world and the people who were the planners in HUD. My co-chairman was Norman Beckman, who was a top-level person for then Secretary Weaver in HUD. We had an excellent conference and talked about the problems that developed when land was moved from agriculture to other uses such as highways, airports, shopping centers and homes. That gave us the first chance to do more as an agency regarding that area of concern. A person I brought in when I had the opportunity was Minot Silliman, who came from the Illinois and Wisconsin area around Chicago and Milwaukee, where we had been engaged in a variety of activities that went beyond soil conservation on farmland.

HELMS: I guess to avoid the implication that everything is made in Washington, there were some city officials who were instrumental in this.

BERG: The regional planner for southeastern Wisconsin headquartered in Milwaukee and there were many others. We had a very top-level conference, as I look back on it, setting the stage for the kind of work that represented something more than just working with farms, ranches and forests. That led eventually to another conference where we dealt with the problems of sediment produced by development, and that was an early forerunner, as I mentioned earlier, of getting into concerns about what happened off-site from farmland erosion, including the impairment of water quality.

HELMS: I think since the two are related we could go ahead, even if it doesn't track chronologically, and mention your involvement and the agency's involvement in the erosion control laws for states. Particularly since Maryland, where you live, has been one of the leaders in that.

BERG: One of the things that we recognized was the importance of dealing with the problem of where development occurs. It's now labeled

growth management. In those days, in Maryland for example, some of the suburban counties, like Montgomery County and Prince Georges County around Washington, D.C., Baltimore County around Baltimore, Maryland, and Fairfax County in Virginia began developing local ordinances or authorities to deal with this problem. In Maryland that eventually led to an authority to deal with the whole area around the Patuxent River and it became a state law. The way that we kept this fairly high level of interest was that each year we would organize a kind of a soil, water, and suburbia tour to show people what was happening as land was moved from agriculture to other uses.

This also led to something that was the beginning of how the Department and the federal government, as well as state and local governments, addressed the problem of land use. What is the best use of land? We were concerned that some of our prime and unique agricultural land, the important farmland, was being covered up with nonagricultural uses. If in the development of the different structures and other things that are needed for civilization we had alternatives as to where it should be done, we recommended that we should pay more attention to class one soils being wiped out, in terms of agricultural use, forever. Some very critical areas that were producing fruits and vegetables in the citrus regions of California, Arizona and Florida were all brought into the picture. We developed for the first time, and I think it was a breakthrough, a policy for the Department on how land use could be analyzed, and a policy for land use. I can remember Secretary of Agriculture Earl Butz asking me to chair a committee that led to a land use policy statement.

HELMS: What generally were the reactions of the conservation districts and the traditional agricultural interests in the Department to getting involved in some of these areas where we had not been involved before?

BERG: At that time it was very favorable. I don't think there was any question about agriculture in terms of the concern about what was happening as land moved from agricultural to other uses. They wanted to be involved in what was being done. That's why they took an interest in the land use and growth management activities and the need to control soil loss if it was going to housing or a shopping center or whatever.

There was another debate going on at the same time. In 1965 I was moved from being an assistant to the administrator to be the deputy administrator for field services. That position had long been occupied by J. C. Dykes, and when he retired, the administrator and the Secretary, at that time Freeman, asked me to assume that position. A year prior to that, I had taken over the leadership of the Great Plains Conservation Program at

the national level when Cy Lucker, who had helped start that program, retired. In effect I had taken on three positions and combined them into one. When I went on to become the deputy administrator it was required that I have an assistant for the Great Plains Conservation Program area, which we did have, and then we had a special area that dealt with congressional relations. But my background in that area, based on the five years of experience I had, was very valuable.

The thing that led from the concern about land use policy to what the Soil Conservation Service and USDA did was really a debate about what had been happening throughout the country when we had development that impacted an area that went beyond one local jurisdiction. There were several examples: new airports that had been sited that would affect a large region in regard to transportation, housing needs, and the shopping centers that would be needed to serve the people who served those new activities. A good example was the development of the Disney operation in Florida just south of Orlando. Orlando was a very quiet retirees' town, and when they developed that large recreational activity there south of Orlando, it changed the complexion of the whole region with regard to how land was going to be used, how water was going to be used, and what the soil and water conservation problems would be. That led to the attempt during the Nixon administration to get a national land use policy through Congress. It did not happen, but agriculture had a very keen interest in what that would have been. The Soil and Water Conservation Society at that time was very forward in leading the debate on what should be done and they had two major conferences, one in Des Moines, Iowa, and one in Omaha, Nebraska. We brought together people from all sectors of our national life to talk about the implications of land use and how it should be decided.

HELMS: The administration's and the Department's position was to support a national land use policy, correct?

BERG: At that time, the Secretary of the Interior was the leader in the effort for the administration, but Senator Henry Jackson from Washington and Congressman Morris Udall from Arizona were the key sponsors of that legislation in the Congress.

HELMS: What in particular did you do in terms of the Great Plains Conservation Program? I think you were over there when it was reauthorized. Are there any particular things that come to mind regarding changes in policies that you or SCS wanted to see in that program?

BERG: I was asked to provide leadership as to how the program, which had been set up with a sunset clause, should be reauthorized after the first ten years. To get ready for

that we established a committee of state conservationists led by the state conservationist in Texas, Red Smith, to look at what should be done for the future of the Great Plains Conservation Program. There had always been a discussion about how large that area should be. The law required that it be confined to the ten Great Plains states, but we had drawn a boundary line on the east side that was in quite a ways from the eastern boundaries of each of the Great Plains states. On the western side, the same thing, it stopped the Great Plains activities as we began to move into the mountainous country. We were really dedicated to having it concentrated in the Great Plains area. There had always been pressure to add counties for cost sharing and the technical assistance under that program. One of the things that we got from the state conservationist committee was that we should pretty well hold the boundary to the program.

I remember testifying in support of extending the program and providing additional authorization for funding. We always had a backlog of at least two to three years of people who wanted in the program that we didn't have funding for. It was demonstrating out in the countryside that the best way to approach conservation was on a planned basis by offering incentives through cost sharing and technical assistance. But some of these contracts could run anywhere from three to ten years and required even more time beyond the ten years to do some of the work on the bigger ranches. One of the committees in Congress that handled this was the committee on agriculture on the House side. Congressman Bob Poage chaired the committee at that time and he took an interest in the program because he was from Texas. Another congressman who was a very influential person, George Mahon from Texas, endorsed the program. Therefore, there was no doubt that the program should be continued. It was just a matter of being careful about how much it was extended beyond the boundary lines that had been set and how it would be handled in terms of the resources available.

HELMS: Carl Brown was very influential, wasn't he, in the things dealing with water and the Small Watershed Program?

BERG: Carl Brown was my mentor from the beginning on the Small Watershed Program. I had gotten acquainted with him when I was at Harvard in the mid-1950s. He had asked me to come to Washington when I had a break at school. That was just as the program was beginning. One of my thesis papers at Harvard dealt with the Small Watershed Program. As I remember, the title was "Public Law 566: From Act to Action." In other words, what did it take to move a law of Congress into implementation? I got a lot of help at that time from Carl Brown. As a matter of fact, when I came out of Harvard, as I mentioned earlier in the

interview, he wanted me to come to work on his staff in Washington, but Don Williams sent me to South Dakota. I stayed in touch with Carl then. When I came back to Washington, we developed an even closer working relationship. He had the long-term background of how that program had come from the early days on the authorized river basin watershed activity, and our work with the Corps of Engineers, the Department of the Interior and other departments at the national level. He was able to educate me and keep me very well informed about the work of the Small Watershed Program. He unfortunately died at an early age, and I still feel keenly the loss of a person like that.

HELMS: Of course, we know Charles Kellogg was a prolific writer. What was his influence within the Soil Conservation Service and his contribution there?

BERG: Dr. Kellogg had an eminent capability to understand not only the work we were doing in this country on soils, but also world-wide. He had traveled widely and understood the work in other nations. I had the good fortune again to have Charles Kellogg take me under his wing and give me his views on many topics that went beyond soil conservation. His insight on our work concerning what soils could and couldn't do in terms of productive capability and that sort of thing was most valuable. He was a great scientist. He also had a very close working relationship with the Forest Service and through him I had a chance to get acquainted with the chief of the Forest Service, at that time Richard McArdle, and after that with the other chiefs.

HELMS: The RC&Ds have had a fair amount of political support. Over the past thirty years there has been a sort of up and down level of support by various administrations for them.

BERG: The RC&Ds came from an interesting background. I went to Capitol Hill to testify along with Secretary Freeman on something he was concerned about. He came to Washington and looked out the window from the South Building at that large expanse of area south and east that had been totally cleared of very low level housing. As he looked out that window, he made the remark, "Why don't we have something like that for rural areas? If we have an urban renewal program, why shouldn't we have a rural renewal program?" The authority that came from Congress was pretty vague. The House Committee on Agriculture and also the Senate side asked me to help write report language that would define what the Department should do with this authority. It did help lead to what we now call the Resource Conservation and Development projects. Once that authority came into law we were encouraged by a very minimal appropriation to designate ten pilot areas, which we did. To test the concept of how to strengthen the rural

economy you need to understand that this was occurring about the same time as additional attention was being given to regions of the country that President Kennedy had said needed more help: the Appalachian area; the Four Corners area in Arizona, Utah, Colorado, and New Mexico; the Great Lakes northern cut-over areas that had been quite badly depressed. We were part of that larger combination of things that were happening--giving attention to regions of the country that were in need of more economic activity. Our basis for engaging in this was that we started with soil and water resources as the natural resource base that needed to be not only conserved and protected, but also enhanced in a way that could help develop the economies of the area. This led, I think, to many activities around the country that were really forerunners of what anyone talks about in the way of realistic rural development today.

HELMS: What were some of the internal discussions within NACD? I interviewed Gordon Zimmerman on putting more emphasis on these things. Was that accepted or was it seen as taking away from traditional activities?

BERG: In the early days to get these RC&Ds off to a good start we took some high caliber work unit conservationists and made them project coordinators with practically a blank check to do what needed to be done out there. This was met with some resistance by the people in traditional soil and water conservation work who were concerned that we were taking away from their work to do things that they weren't saying shouldn't be done, but that shouldn't have the priority that we were giving them.

We developed these projects on the basis that followed an outline comparable to the small watershed activity. There would be an application for a project. It would require approval by state agencies and support by sponsors. The projects were eventually authorized by the Secretary of Agriculture, but we were limited in how many we could authorize each year, not only by the funding level but by what OMB came to label as a "new start" just like we had with the small watershed projects. However, during my time at the Soil Conservation Service the number of authorized projects had increased from those early ten pilot areas to something close to two hundred projects, and I think it's still continuing.

There were people in the traditional conservation areas who were concerned about the dilution of their help when we moved into these new initiatives. They were concerned about the fact that we were giving more attention to these suburban soil and water conservation problems. They were also concerned about the fact that the level of Soil Conservation Service help had been set in terms of

making it very difficult to get any additional assistance based on these new responsibilities.

We had people who had reached the conclusion that, since the dust bowls and gullies that had developed around the country during the first two hundred years of our development couldn't be seen because they were covered up with trees, therefore the problems of soil conservation had been solved. That led us to a couple of things that we felt were desirable. Our data had to be improved. That came from an early authority to do more soil surveys and what we ended up calling the National Resources Inventory work. That allowed us to get a better definition of the conditions of the soils and the trends in regard to soil loss and water quality and that sort of thing. That eventually caused Congress to enact the so-called Resource Conservation Act (Soil and Water Resources Conservation Act of 1977) that gave the Department, through SCS, a very clear cut authority to do two things: first, perform a very comprehensive appraisal and second, develop a national conservation plan.

From the early work leading to soil and water conservation, we broadened the areas in which we had influence in terms of the urban work, the suburban work and RC&Ds. In the mid-1970s we had an all-out push for production that brought a lot of marginal land into cultivation that should not have been sodbusted.

HELMS: While we're on that track let's go ahead and deal with that. What constituency pushed some of these ideas?

BERG: It was more an urban-based constituency that had that view. We were rapidly becoming an urban nation. That representation was beginning to show up in Congress, in key committees in Congress and in state legislatures in these highly urbanized states. They were getting pressure for other higher priority activities because the environmental movement was getting underway in the early 1970s. After the first Earth Day, many of what we call now the quality of life issues were more important.

HELMS: In the discussions within SCS the impetus for getting the Natural Resources Inventory (NRI) going was brought on by wanting to demonstrate that there was still a need?

BERG: No question about it. The first NRI of any value was completed by 1977, and it turned out to be most significant in terms of the Resource Conservation Act identification of what needed to be done. It showed several things. It showed that there was a concentration of the problem. It wasn't occurring everywhere. The losses were very heavy where it was occurring. Our traditional programs had not solved that problem. These chronic soil and water conservation

problems were plaguing the nation in very critical areas that needed to be addressed.

HELMS: Can you recount for me the events and the actors involved in getting the Soil and Water Resources Conservation Act passed and the discussions and decisions in trying to pursue that?

BERG: The people who were instrumental in helping do that included Jim Giltmier, who then served with the Senate Agriculture Committee. He called me and told me that we would get a request to help draft legislation. They had been influenced by the Resources Planning Act that dealt with the Forest Service activities. It was Jim's suggestion that we needed something comparable for the soil and water conservation area. That led to the RCA activity. The first time through this legislation was vetoed by President Ford on the recommendation of people in his administration that this was land use authority. We felt it was not. Therefore when President Carter came into office the law was signed. That allowed the Department to begin the work that led to a very extensive analysis of the conditions of the soils throughout the country, the trends, and the successes of the programs that had been in place. As I remembered, in USDA alone that included research, Extension, technical assistance, cost sharing, and credit. We also worked with the Department of the Interior on their concerns for wetlands and EPA on their concerns about water quality. We were also concerned about the role of the public lands, Forest Service lands obviously, and those of the Bureau of Land Management and Fish and Wildlife refuges.

HELMS: I guess in the beginning of the RCA work you were instrumental in supervising that. What are your thoughts on how it was done, how it should have been done, and what was done correctly, or missteps in the process?

BERG: There are still people in SCS in key positions that were very instrumental in doing much of the staff work that had to be done. But the Department had set up an RCA coordinating committee chaired by an assistant secretary. On a day-by-day basis they asked me--I was then the associate administrator in SCS--to be the chief of operations for the activity that involved eight agencies. We asked OMB to have a representative. It required a lot of detailed work along with staff help not only from SCS, but from several agencies. This was because the acquisition of the data, the analysis, and the ability to identify the results of several alternatives offered for the future had to be run through in terms of production of food and fiber, soil loss, and what resources would be required to cause that to happen. This all led to heavy public involvement. We had major ideas that went out for public review. That included, incidentally, continuation of the traditional program of the voluntary

approach instead of regulation. We also had an alternative that eventually led to the conservation compliance work that came from the 1985 farm bill, although at that time it did not get much support.

HELMS: You were chief when the administrations changed and before the first national program was announced. As I recall, there was a lot of debate and decisions to be made before we finally got a national program out. What are your recollections on that and what were the points at issue?

BERG: It was kind of interesting. When you look back at the first run that came out of the late 1970s on RCA, the world needed more food and fiber and there was an all-out push for production. But by the time the new administration arrived and Block became Secretary of Agriculture, the problem was already being turned around. Although we had forecast export needs at a level that built on a pretty healthy background and some other things that related to population growth, we found shortly after the new administration began in the 1980s that surpluses from the standpoint of crop production began to build up again. That required not only trying to hold the line on exports, which were dropping off, but also determining what kind of land use should dominate in the future. In other words, the land use allocation process came back heavily and we discerned that we did not need these highly erodible lands in the production system. The early run on RCA was concerned primarily with the on-site productivity of soil. In other words, what would be the impact of soil loss on the individual farm's productive capability? We were concerned about holding that production capability at a high level. But by the time we got around to releasing the first national conservation plan, the emphasis was already shifting to off-site problems dealing with water quality, what was happening to wildlife habitat as wetlands were being moved into agricultural uses, and what was happening to other activities that the public was more concerned with than just soil loss affecting production on a farm.

HELMS: The RCA involves long-range planning. I was wondering, during Ken Grant's administration, how did SCS develop this framework plan, Soil and Water Conservation for a Better America? Did that have much impact? How did that come about and what are your thoughts on it?

BERG: I meant to mention that. As a matter of fact that was a very forward, pioneering effort that we undertook in the beginning of 1969 when Ken Grant moved in to be the administrator and I became his associate. That framework plan, if you look back on it, covered many of the items that are still on the agenda for the Soil Conservation Service. We went through a very deliberate process to expand the

activities. It related in part to the activities I mentioned earlier of the district outlook committee examining the first twenty-five years of conservation districts. As they enlarged their responsibilities and even changed some of their state laws to broaden their authorities, that challenged the Soil Conservation Service to look at what they should be doing in cooperation with the conservation districts and other organizations to move beyond traditional soil erosion reduction, which had been the emphasis from the early 1930s.

HELMS: Now, the RCA data is more widely available and there are experts interested and people who use this to influence legislation and policy.

BERG: "Soil Conservation in America: What Do We Have to Lose," a document that we produced here in the American Farmland Trust, is an indication of how best to use the kind of data that was produced, target our efforts, and recognize that there is need for change. There was a window of opportunity because conditions in the early 1980s led to the 1985 Food Security Act, including the conservation provisions. I think you'll see in that document the results of a combination of things that came from the agency, but were demonstrated as most valuable by the work that we did for the outside. We also had the ability, away from federal activities, to work with larger coalitions and also work with the people who enact the laws in a way that is not limited by somebody having to sanction what you can say or not say.

HELMS: Let me drop back to the 1960s. Of course you were there when the Civil Rights Act was passed and I have written one article on how SCS tried to deal with that. For this interview could you recount for us the agency's reaction and how it tried to deal with meeting the spirit of the law in terms of equal employment and service to minorities?

BERG: I think you've done an excellent job in your article, Doug, of relating some of the history that goes back to the beginning of the Soil Conservation Service. We have always been disturbed by the fact that we needed to give more help to low income people who may not have been as well educated and so forth. The Service had an earlier philosophy that we would serve people on a first-come-first-serve basis when they were ready, willing, and able. That had to be turned around because we found people out there who had never heard of the Soil Conservation Service. We had to go out and seek them. They may not have been in that condition of being ready, willing, and able to work on a conservation plan and to begin implementation. That included the minorities in many cases who had not been given the attention at the field level that was needed.

Now within the agency, the development of technical staff that included more minorities was a real challenge. One of the early leaders on this was Ralph Sasser, who was the state conservationist in Tennessee. We worked to strengthen the curriculum in the 1890 Land Grant Universities that would produce qualified people whom the Soil Conservation Service would be able to put on full-time. We also found a lack of women in the Soil Conservation Service. I personally brought several into key positions. The universities began producing very highly qualified women who were able to be soil scientists, soil conservationists, biologists, or economists that the Service found to be very capable.

I have one last thought on that. I think the Service and other USDA agencies have been really pressed to do more dealing with minorities and women. They've been reacting fairly well but more needs to be done. And in many cases, we were told that we should turn off our assistance to the soil and water conservation districts if they did not have minority representation on their governing boards. This was a delicate matter because these boards are locally appointed or elected and that's under state law. The federal government was being encouraged to either provide or withdraw our technical assistance to encourage more minority participation in the governing of the conservation districts, which is still a challenge.

HELMS: Who would propose this, the Civil Rights Commission or the OMB?

BERG: Primarily, the people who had responsibility for equal employment opportunity, the civil service and the rights of the minorities.

HELMS: You did try to get the state conservationists to encourage minority candidates to run, but with very limited success. I know a few were elected but not very many.

BERG: In terms of governing board members?

HELMS: Yes.

BERG: It's been an uphill struggle to get more minorities represented on conservation district governing boards. In some cases these people did not have that as a high priority as to what they wanted to serve on.

HELMS: Let's try to go over some of the SCS's increasing involvement in water quality. Start with the Great Lakes assignment you had and with the Rural Clean Water Program. Also, please address to what extent the Soil Conservation Service and USDA influenced amendments to the Clean Water Act or was merely reacting to what was happening.

BERG: I remember clearly Ken Grant taking to the Secretary the concern that USDA was being left out

of the initiatives that needed to be developed, related primarily to the broader concerns of the environmental community, but especially water quality. I had been assigned in 1972 to lead a team from the United States and each of the eight states that bordered the Great Lakes along with a Canadian team under the sponsorship of the International Joint Commission, to look at Great Lakes water quality.

The questions we were asked to address included what impact does land use have on water quality in the Great Lakes? And if land use does contribute in some way to water quality impairment, what are the sources, what kinds of land uses are key, what are the contaminants, and what's the impact on the water quality of the lake? What should be done about it? We worked on that as a kind of ad hoc assignment along with everything else we had to do with the very excellent team and staff people from both countries. We produced a document for the International Joint Commission. We had reported to them periodically but we finally reported our findings with about a hundred back-up documents in July of 1978. We made about two dozen recommendations to the two nations as to what should be done relating land use to water quality.

It was evident that land use was contributing to deterioration of water quality. We found that not only was soil impacting water quality as sediment, but that those sediments carried fertilizers and chemicals that hadn't been utilized by the plants. These were causing some severe problems in terms of water quality, especially in Lake Erie. Our recommendations led to more attention being given to the nonpoint sources of pollution because up to that time, point sources had gotten most of the funding from the federal level. It also was the beginning of much more work in the conservation tillage and crop residue management area. They were possible techniques to solve some of the problems.

HELMS: That was identified as a possible solution?

BERG: Yes, it was very compatible with our recommendations that we extend that work. There was more emphasis on crop residue management and what we ended up calling conservation tillage. We also recommended that each land owner or land user have a plan, not only a conservation plan, but a plan that dealt with water quality. That included how to handle the waste that came from animals and other things that happened beyond just the management of the soil. The handling of the containers that carried chemicals and the livestock waste was very significant.

HELMS: That was about the time the Service as a whole began doing a lot more work in that area.

BERG: Yes, we were doing this work far beyond the Great Lakes area. Much of the work we did in the Great Lakes area was driven by what we were seeing happen in other parts of the country too.

HELMS: Your assignment on this and Grant going to the Secretary--were those two tied together?

BERG: Yes, I think there is a connection. It led to a much more thorough examination of the role of USDA, not only from the standpoint of the Soil Conservation Service, but our research activities, our Extension activities, and our funding of work. As sort of a peripheral thing I was assigned this role representing the Secretary. I was the only federal representative on this study. This was during Secretary Clifford Harden's time. He was a very astute person in terms of his knowledge of agriculture and his background. We were also concerned, as the clean water authorization was being enacted, that attention should be given to the non-point sources along with the point sources. Some of that occurred later but Neil Sampson had a very key role in conjunction with Senator John Culver of Iowa. He introduced legislation that would, in the Clean Water Act, have given the Department more funding to deal with nonpoint source pollution. That led to the Rural Clean Water Program, a pilot activity with two dozen projects that were authorized.

HELMS: That was the program SCS would like to have run but the funding never came and internal debate over the leadership occurred, correct?

BERG: There's a document that assigned the total program in terms of jurisdiction to the Soil Conservation Service, but eventually that developed into a discussion as to the role of the Agricultural Stabilization and Conservation Service, their key role in handling the funding and that sort of thing. The compromise, as it moved through the Congress, limited the amount of funding and set up only the pilot activities in about two dozen projects.

HELMS: During the last ten years or so there's been a period of adjustment in terms of accepting water quality as a major issue. Is part of this the problem of finger pointing at our clientele, farmers? Can you discuss this?

BERG: Yes, that was a key point because in our early work we ran into that as we took our ideas from the International Joint Commission study to the farmers and land users in both countries. Some of the organizations representing the farmers and the farmers themselves did not want to talk about the fact that their activities might contribute in some detrimental way to water quality. You had to relate cause and effect, which was in some cases very difficult because they were quite distant from a body of water. How did their activities hurt

water quality? So the finger pointing was one of the concerns they had. Admission eventually came that they probably were part of the problem and that they would like to be part of the plan to correct it. We especially ran into that around the Chesapeake Bay where we've had very good leadership. The whole nonpoint water quality relationship is developing and will be a major portion of the Clean Water Act reauthorization whether it occurs this year (1993) or next year. It will be more demanding in not only what can be done with the voluntary incentive role, but there also will be some concern about where mandatory activity kicks in.

HELMS: Dropping back to the 1960s again, would you discuss for us a little bit the growing criticism of the Small Watershed Program, controversies over the channelization, and the reaction of the agency to this?

BERG: On this area I'm reminded of the first day the 103rd Congress came into session and the new members were sworn in. I walked into Tom Barlow's office, the new congressman from western Kentucky. Tom had been the lead person in the early days of concerns with what SCS was doing about channels. He and I developed a friendship over the years because he's been a very strong enthusiast for the Soil and Water Conservation Society. As a matter of fact, he chaired the chapter in Kentucky. He had the background when he came to Washington.

The channel work of the Soil Conservation Service needed review. That began shortly after the Carter Administration came in because President Carter, as governor of Georgia, had been exposed to some of the problems regarding the Small Watershed Program. We had several cases that had ended up in court. Tom Barlow and others were concerned over traditional flood prevention activities that led to some of the channels being strictly an engineer's design, without involving the biologist and others who were concerned about other values.

The criticism of the Small Watershed Program may have overlooked the advantages that program has offered. First of all, it was called the Watershed Protection and Flood Prevention Act. Because of that, SCS emphasized the watershed protection portion. I had the experience in South Dakota of initiating the small watershed activities in that state. We looked at the problems on the land and the need for additional conservation plans and practices that should be installed in advance of any structural work, including reservoirs and channels. Perhaps enough emphasis had not been given to that. That led to SCS cost sharing on some of the practices that were needed on the land. It led to an examination of whether or not the channels, laid out strictly on the basis of engineering criteria, couldn't benefit by having other disciplines involved. We found in many cases that the channels did

not have to be very severe--cutting down through the floodplain in a straight line. We could leave some of the meandering, we could leave some of the growth, we could have filter strips, and we could encourage the multiple use of those areas beyond just removing water from the reservoirs.

HELMS: Wouldn't you say you involved more biologists? How was that done? Of course you have NEPA (National Environmental Policy Act) and that makes you do it to a certain extent.

BERG: The National Environmental Policy Act and the environmental assessment caused some of that. It started in the planning process and then the implementation in the design itself, once the project was approved for installation.

HELMS: Wasn't there a big conflict about whether or not we would go back and do environmental impact statements on previously approved projects?

BERG: We did. We went back and reviewed every project that had not been completed in the early 1970s. First of all, should they be continued even though they were underway? Should they be taken off the books if they did not meet the criteria that were then set up? Could they be modified? Many of them were. This was helpful because the appropriations committees provided SCS with additional funding to do some replanning on the projects that needed modification.

HELMS: I don't know if this happened during your tenure or a little later, but what are your recollections of an emphasis on what we call land treatment watersheds, those that focus on watershed protection? The emphasis isn't the same as it used to be, but what were the reasons for that emphasis?

BERG: I think it's partially what we're talking about. Could we reduce having these projects heavily involved with structures and solve more of the problems with land treatment? Here again the advantages of residue management and conservation tillage were getting emphasis that they had not gotten earlier. But we still needed some structural work if we were going to stop some of the flooding. There were additional authorities given over the years in amending the act to allow recreational opportunities, and fish and wildlife benefits to be brought into the project formation, especially in the reservoirs. Of course the municipal and industrial water and some of the other values of having water in reservoirs came up as a higher priority.

HELMS: The Environmental Protection Agency has discovered watersheds, as have a lot of groups, as a suitable way of trying to deal with resource problems. Based on your experience, what's the best way of going about these things? We have a

heritage of dealing with things like the Small Watershed Program which recognizes these watershed boundaries. We have the other side of the program where we deal more on political boundaries or deal with a wide variety of services to clientele.

BERG: No question about it. In fact, we're now coming into harmony with other agencies that recognize the watershed approach. We have long recognized the Small Watershed Program as an example. Most of the problems cannot be solved on a fence line basis or the ownership of an individual farm, ranch, or forest holding. In many cases these are community-wide and involve a fairly significant geographic area. In examining the drainage of an area, you have to look at the impact of all the land use and other conditions that are there. And so, when we're talking about solving nonpoint source problems, we're back to the basic premise of what we had in mind from the beginning of how to approach soil and water conservation. Having first laid the foundation with good work on each individual property, we then recognized that many of these problems went beyond the fence line and were really community-wide or watershed-wide.

HELMS: You came in under Don Williams. I've done an interview with Don. Is there anything you can say regarding his leadership of the Service?

BERG: My opinion of Don Williams is so high. I think he was the one administrator in the Soil Conservation Service who stands out in my memory and my work as being the best administrator that the Soil Conservation Service has ever had. Bennett was the crusader who started the program, there's no question about that. But Williams came in at a very difficult time when the SCS was even being questioned at the federal level and by the administration as to whether it should even be continued. He was able to work that through to the point that the agency became even stronger. He was an excellent professional. He was an engineer but had a broad background. I remember the work that he was helping us on in the fields in Idaho in regard to our conservation problems--hands-on type work. He had a very keen mind regarding a variety of institutions in the political setting in which we had to function. He was an excellent administrator in terms of management skills. He assembled a topnotch team that was badly needed in his tenure to move the Soil Conservation Service from the early beginnings in the 1930s through the 1950s and the 1960s and to what we inherited as younger people when Ken Grant and I moved into the top positions at the end of 1969 and the beginning of 1970. I cannot say enough about Don Williams in terms of his skills and his long successful tenure as the administrator of the Soil Conservation Service. I think anybody who worked with him would endorse that.

HELMS: A pretty ringing endorsement. So we mentioned in 1965 you became the deputy for field services, right?

BERG: Yes.

HELMS: I suppose when Don Williams retired you would have been one of those under consideration? Was not getting the chief's job a big disappointment to you?

BERG: No, not really. I'm reminded that Secretary Freeman asked, and he may have asked more people than I know about, to write what they viewed the chief's position, at that time called administrator, to represent, and what would be the challenges that should be faced. This was when the job of associate administrator was open. I wrote a several page paper regarding my views of the opportunities and challenges that would be faced in that position. I know that Ken Grant was asked to do the same thing and perhaps some others. But the result was that Ken Grant was selected to be the associate administrator and then became the administrator. I was fortunate enough to become his associate.

HELMS: What was his emphasis? Do you recall his views on the challenges and the emphasis of his administration?

BERG: Our views were highly compatible. He had come from the state conservationist position in New Hampshire, had had the year at Harvard, had been the state conservationist in Indiana, and had been brought in as the associate to Don Williams. He and I found that we were very compatible in terms of what should be done. That led to that earlier reference that you talked about, that Framework Plan for Soil and Water Conservation Work. As I mentioned earlier, he was the one that went to the Secretary about the need to have USDA more heavily involved in water quality activity. He recognized that and was heavily impacted by the debate about how the watershed program should be carried out, especially the channel work. We had to make adjustments in that area that were very healthy. We began a program at the University of Georgia under the leadership of people like Gene Odum and others, training our top level people to be environmentally sensitive if they hadn't had that kind of background.

HELMS: Since you mentioned that topic, the beginning of the "environmental period" was a shock to some people, was that right?

BERG: It was a shock because many people in the traditional agricultural area read Rachel Carson's *Silent Spring* as being far out and not acceptable. They failed to read the significance of that very important book and her findings as to what was happening to our total environment and ecosystems. She understood that perhaps better than any other person.

I need to amplify a little bit on that. There were people that really resented the fact that agriculture was being labeled as part of the problem when we thought we had done a magnificent job of producing increased yields of food and fiber every year and had adopted the technology that had come out of the research in the scientific community and moved on to new technologies. We were quite surprised by the reaction; namely that some of these activities were viewed with dismay by the environmentalists that were getting a handle on much broader issues than what we were prepared to deal with.

HELMS: There was one incident that happened in the 1970s which I want to ask your recollection of. When the Soil Conservation Service started in the Department of the Interior, it had had some big projects on Indian reservations, particularly the Navajo reservation. Then the president's reorganization plan in the early 1940s said that the Department of the Interior would do the conservation work. But in the late 1970s we re-introduced SCS by establishing a policy that reservations could establish conservation districts. Could you give your recollection on how that came about?

BERG: We were very forceful in wanting that to happen. Because, again, it was partly related to the civil rights activities and concerns. Areas that needed help weren't getting it and we had more capability than the Department of the Interior people to work on those kinds of problems. So we went after that very vigorously and had support.

HELMS: Maybe this was Freeman's influence. Did not the Soil Conservation Service get more involved in foreign assignments? Was that the 1960s? Someone I think told me that part of the problem previously was there was no mechanism for assuring people they would retain their civil service rights when they returned or even have a job. Could you straighten this out for me?

BERG: Freeman was very concerned about international activities. He had traveled widely. Les Brown was one of his early staff people in this area, obviously a very talented person who has gone on to have a worldwide reputation in his own right in the World Watch activities. We did have a strengthening of our international work and this, plus the concern of our administrator Williams, caused it to happen.

HELMS: Could you sort of review during your tenure, some views of the various assistant secretaries you've reported to and what their emphasis for Soil Conservation Service was?

BERG: The first assistant secretary that I worked with was John Baker who was Freeman's person in the conservation and rural development area. He was a very strong leader and many of the things that are now being

done came from his leadership. Secretary Bob Long was an excellent leader, no question about that. He understood the issues that dealt with not only the traditional work, but also the concern about prime farmlands. He helped get the land use policy through the Department that we talked about earlier, which led to some conferences on land use, and laid the groundwork for what eventually became the National Agricultural Land Study, as well as the organization whose offices we are sitting in here, the American Farmland Trust. There have been other assistant secretaries since I left the Soil Conservation Service, including the most recent one, whom I have a lot of respect for. That's Jim Moseley. He just served a couple of years but his leadership led to some of the continuing work the Soil Conservation Service still faces. These people come back in my memory as very outstanding leaders.

HELMS: How did you come to be chief? Why were you selected? When did this happen?

BERG: When Ken Grant retired there were two of us in contention, Mel Davis and myself. Mel was selected by Secretary Butz. He was a younger person and had great promise. I continued as his associate. But then later in the Carter administration, Secretary Bergland asked if I would serve as chief and that gave me the opportunity from 1979 to 1982 to be the chief.

HELMS: What did you want to accomplish? What were your priorities?

BERG: We were right in the midst of the very demanding exercise that I mentioned earlier, the Resource Conservation Act appraisal, a national activity to strengthen our partnership with the states. I had about a ten-point agenda in mind. First of all, in terms of management, strengthen our field activities to build our field forces whenever we had an opportunity. That included not only the federal appropriations but strengthening the nonfederal help coming from state and local governments. That had been increasing over the years but was fairly fragmented and needed to be strengthened. We had to recognize the interdisciplinary activities that involved the Soil Conservation Service, giving high priority to bringing in every possible expert to deal with the problems that cut across many different disciplines, and to not have the area dominated by any one discipline, whether it be a soil scientist, an engineer, an economist, or whatever. In other words we needed the broad cross-cutting activities that had been laid down from the very beginning in Bennett's ideas as to how conservation and the planning and implementation process should be carried out.

I was also concerned that the Soil Conservation Service should be recognized as a highly professional organization, a lead organization in cooperation with the conservation districts at the state and local level. We really should be the conscience of the federal government in regard to how best to use the private land and water resources owned for the most part by farmers, ranchers, and foresters who had to be in business and stay in business. We recognized that they had to be encouraged to be good stewards in the process. We had to engage the other members of the broad "environmental community" who were concerned about wildlife values, water quality, how land was used for development purposes, important farmlands and unique farmlands of the country.

My first action as chief of the Soil Conservation Service was to look at the organization itself. We moved the title of the position back to chief from administrator, and strengthened the role of the assistant chiefs and the deputy chiefs. We also recognized that we had to consolidate some of our functions that had been left over from the old regional office days. We asked the employees throughout the agency to make recommendations for how we could improve our way of doing work. We got many excellent recommendations. One included the fact that at the national level we really didn't have a national support office. In other words, we had state offices that were equipped with personnel, finance, and other operations. But, we didn't have that at the national level. I established that under the leadership of Pearlie Reed, who is now [in early 1993] the state conservationist in California. That was really a management need. We needed to get our own headquarters operation, where we had several hundred people, in order.

HELMS: Looking back, what things are you pleased with and what things are you disappointed with?

BERG: What I'm most pleased about as I look back after over a decade of being out of the Soil Conservation Service is the fact that, based on much of the data and analysis and planning that we did that related to the Resources Conservation Act, we were able to take that material and utilize it in developing activities that led to coalition building, and the enactment of the conservation provisions in the 1985 farm bill: the Conservation Reserve Program, the swampbuster and sodbuster provisions, and of course the conservation compliance work that's still underway.

The other activity came from the National Agricultural Land study that revealed the need for more concern about the important farmlands and the prime and unique lands of the nation. That has been very compatible with why the American Farmland Trust is in business. In all of this, when I look back on how this related to the disciplines that represent the member-

ship of the Soil and Water Conservation Society, I see that these organizations are highly compatible with the missions of federal agencies. They can do a lot to help. When I look back at the successes it comes from a background in an agency that allows a continuation of that work in the non-profit setting.

I also moved to become, at the request of my local county citizens, a member of my local conservation district board. I've been a member for over ten years and that allows me to see all of these activities that we represented within the agency at the federal level from the other side. In other words, providing the guidance that a governing board needs to have and being a very strong supporter of the state association and the National Association of Conservation Districts.

I guess the thing I would look back on in terms of disappointments stems from the fact that the SCS is the most elite corps of professional conservationists that the world has ever seen. The SCS is rewarded for that prestige by the actions in Congress and other places of being given more responsibilities, but we have not been able to generate the kind of funding support that's needed to develop the resources that would do a more comprehensive job of taking on these added responsibilities. It would reduce some of the stress our people feel about all of these added responsibilities.

Part Three: May 4, 1993

HELMS: As we start out, Norm, could you reiterate your reorganization plans for SCS? It was a fairly extensive reorganization of the national office. What were the reasons for it, the new disciplines that were hired, and some of those things?

BERG: First we asked for ideas throughout the Service on what could be done to improve our operations. We got many excellent ideas, as I mentioned earlier in the interview. I set up a committee of key people, including some people from the field, to meet and begin discussing what we had now, how it was working, and what needed to be changed. After several months of meetings, we decided on an organization that included adding some deputies. Primarily, we were concerned about separating the planning process from the resources needed. It related partially to the RCA work in terms of getting a budget for the next year or the next several years. We wanted to separate that function from the day-by-day operations of a budget office. To do that we set up a separate deputy who looked over that activity, including a separate division. That's still in the organization and is most useful as a way of dealing with budget problems each year.

We also, as I mentioned earlier, set up a national support office that coordinated all of the activities related to procurement, funding of travel, and office space problems and the day-by-day business-type operations headquarters has to worry about. We had several hundred people in our national headquarters and we needed an office or division that gave that full-time attention.

We also wanted to strengthen the inventory and monitoring process that came from the appraisal authority in the RCA, which allows the gathering of data on the status, condition and trends of the natural resources of the country. This was based on the best field data that we could have. That required periodic field activities and then the very complicated job of digesting all that data and turning out usable reports focusing on what the priority problems were and what had to be done over a longer period of time.

There were some other functions that related to the assignment of the assistant chiefs and what their role would be. As you may remember, I suggested that we change the name of the organization leader from administrator back to chief. That was reflected all the way through the top level of positions because then the associate became a chief, the deputies became chiefs and the assistants became chiefs. We spelled out their role, especially the assistant chiefs, in relation to their regional technical service centers and their responsibility of representing the chief to the state conservationists in their region. In

effect, we gave them line authority at that time. It was stated so that everybody in the field knew that. There were some other activities that came from our study and realignment which required approval by the Secretary of Agriculture. The reorganization of agencies has to go through a fairly detailed process. It also was related to the proper use of the executive service idea that had come during the Carter Administration. The way in which people could be properly utilized, based on their talents, and moved from one position to another or even from one agency to another recognized that flexibility is important in the proper implementation of the executive service.

Going back to the reorganization of SCS, you mentioned the disciplines that we brought in. You're one of those, as a historian. SCS didn't have that sort of person or pay attention to that area. We brought in people who were more understanding of some of the sociological problems that had to be dealt with. We strengthened the environmental initiatives by adding emphasis to the need for a biologist or people with broader environmental backgrounds. We recognized that the conditions we were facing in regard to getting data required being much more open to the remote sensing and to the computer that was coming on very strong. We tried to get the necessary equipment and mechanical ability to deal with some of the problems in the Service.

HELMS: Could you explain how SCS's work group and Congressman Whitten worked on conservation and watershed programs? What about the early period when there were disagreements with him?

BERG: One of the earlier experiences when I joined the headquarters staff in the early 1960s was to accompany the administrator and his deputies to the appropriation hearings. The subcommittee on the House side was chaired by Congressman Jamie Whitten who had already been in Congress for a long time when I first met him. I got well acquainted with his staff person, Ross Pope, at that time and we worked very closely on many of the issues that dealt with SCS appropriations. I can remember an early remark when we came to an appropriation hearing. J.C. Dykes, the deputy at that time, had been barred from Hill contact during the previous administration and he came with us to this first appropriation hearing. Whitten welcomed him back to the Hill and the appropriation process. Jamie Whitten was very concerned about protecting what he identified as the traditional programs related to conservation districts, the cost sharing administered by ASCS, and good cooperation with the Extension Service. He more than once admonished the Service that he wanted SCS, ASCS, and Extension to work very closely together and if there was any doubt about that he would monitor the situation and take corrective action.

HELMS: Norm, I thought Clifford Hope and William Poage were more important in the start of P.L. 566.

BERG: Whitten was the grandfather of the Small Watershed Program, starting it with pilot activities in an appropriation bill that eventually led to the action by Congress that passed the Public Law 566. He protected that area because he had one of the early river basin authorizations that dealt with flood prevention. He wanted to expand that activity nationwide through the Small Watershed Program. There were points that he needed help on. He recognized each year when the appropriation bill came to the floor that wetlands were increasingly a problem. Therefore we helped him. I worked with Ross Pope on the language that would be inserted in the ACP (Agricultural Conservation Program) cost sharing activity that prohibited drainage on certain types of wetlands if cost sharing money was going to be utilized. It was based on U.S. Fish and Wildlife Circular 39. That's now been updated. It had identified twenty types of wetlands and we specifically spelled out the types of areas in the pothole regions of the Northern Plains that should not be drained with federal cost share money. That set the pattern for later work which led to the Water Bank and additional acquisition activities in the Department of the Interior. Even today it is kind of a precursor of what we have in the 1985 farm bill--the swampbuster.

HELMS: This is about what time?

BERG: That goes back more than twenty-five years as I remember. We also found in working with Mr. Whitten that any new activity that was going to be proposed that required funding, such as the early efforts to get involved in nonpoint source pollution that eventually became the Rural Clean Water Program, started on a very limited pilot basis. He was always concerned that we not introduce something new at the expense of traditional programs. That was evident when we first began to implement the Conservation Reserve Program coming from the 1985 farm bill in which there was specific language that it would not be at the expense of any other programs related to conservation. He was a great person in terms of understanding how programs in USDA related to the work that he knew first-hand in his rural area. Forestry was important, watershed protection was important, and direct help to the land users in terms of technical assistance, Extension, research, and financial help were all important. He was a very strong voice on how agriculture should continue to be recognized as a key economic activity in our country. When we took up the eleventh commandment that Walter Lowdermilk had introduced when he was in the Soil Conservation Service, Whitten then began to use that in practically all of the reports that accompanied the appropriation bills.

HELMS: He was not in favor of a lot of the requirements and restrictions in the environmental laws, correct?

BERG: After the Environmental Protection Agency (EPA) was created during the Nixon era, his committee had the jurisdiction over its appropriations. He found that it really didn't fit with his views of what should be funded and how they should operate. It eventually went to another committee. For anything new that dealt with moving away from the productive capability of agriculture or that might be viewed as a restriction from the environmental standpoint--the use of chemicals and that sort of thing--he was very cautious as to whether we should endorse it.

HELMS: What significant things happened in the first round of the RCA? A lot of it, I think, was targeting. What was your view?

BERG: We were very much in favor of it. We were able to shift some resources, both technical and financial in terms of cost sharing, to some of the key areas that were facing very serious erosion problems such as Iowa, western Tennessee, and other areas that had been neglected. This was very beneficial in stepping up the work that would result in some increased conservation; however, Congress again began to be concerned about shifting some of the programs from the areas that they felt should be getting more, not less. Therefore, they limited how much we could do.

HELMS: Can you recount the background to the delay in releasing the RCA? The Reagan administration had to become familiar with it and it took a little while to finally get out. For them, I guess, the point was the influence they wanted to have on the final national program.

BERG: The RCA had gone through a very lengthy process of getting public comment back on several alternatives. Some of these alternatives were fairly far reaching and they finally showed up in the 1985 farm bill, but they weren't about to be endorsed without further study by the incoming administration. We were also beginning, as I've mentioned earlier in the interviews, to turn around from the conditions in the 1970s when all-out agricultural production was needed. Now we were overproducing, surplus crops were building, exports had dropped off, and there was not that much concern about the productivity of the agricultural area as we began to see the off-site conditions that had to be dealt with. How did we recognize that what happened beyond the fence line, soil erosion as an example, impacted water quality? As we continued to drain wetlands or bring marginal lands into production, we needed a reevaluation and there had to be some priorities set. Although the RCA was envisioned as a way to get additional resources, OMB had gone through that experience with the Forest Service and the RPA (Forest and Rangeland Renewable Resources Planning Act) and they were not about

to give the Department the latitude to mandate additional resources. Anything that was going to be done was going to be at the expense of something else. Early in the appropriation effort, we were able to get an effort to rededicate about five percent of the cost share funding with additional technical assistance to some targeted areas. That was very beneficial and was the beginning of the process that led to some of the initiatives that we ended up with in the 1985 farm bill.

HELMS: You, of course, were our last career chief in SCS. Why were you asked to retire from that position and what were your feelings and reactions at the time?

BERG: I don't know just exactly how much of this story will ever be told, but I was at the National Association of Conservation District's Annual Meeting in Phoenix, Arizona, in February of 1982. At that conference, Secretary Block was there for another purpose, but we asked him to come in and talk to the people in attendance from SCS, primarily the state conservationists and the Washington office staff. There was no indication that he had it in mind to change the leadership of SCS. Shortly after that meeting in February, Assistant Secretary John Crowell told me that the Secretary wanted to put another person in the position of chief. That was the first I heard about that. John Crowell had been a lawyer for the Georgia-Pacific Company in Portland, Oregon. He was primarily in the business of trying to get more timber harvested from the national forests. Incidentally, his confirmation process in the Senate was very long and drawn out. There was really a battle about that. There were three people that kind of fit the pattern at that time: the administrator of EPA, the Secretary of the Interior, James Watt, and John Crowell were all viewed by the environmentalists as being very much against the kind of things that they felt should be done. But John Crowell was a good friend and he had advised the Secretary not to make a change but asked that I keep this quiet. He was going off on a trip and suggested that we not do anything about this until he came back. In another couple of weeks, the news people began to pick up that something was developing. Jim Risser, who had long been the Washington-based representative for the *Des Moines Register*, the paper out of Iowa, had written some excellent articles on soil and water conservation for *The Smithsonian Magazine*. He came to me and asked whether there was a possibility that there might be a change. I suggested that he talk to the key people that might be contemplating such change and that I had heard something about this but was in no position to give any details. And he did break the story. It was picked up then by Congress through several conservation and environmental organizations and some farm organizations since SCS had become quite a well-liked activity. There were some oversight activities

from Congress, but in the end, the Secretary prevailed and brought in Peter Myers. I decided after nearly forty years of service that I would leave on the second of April 1982.

I did not agree with that decision. I was asked to step down when Secretary Block decided to bring his friend, Peter Myers, in to be the head of the agency on the basis that the agency ought to be run by a farmer. I was offered a chance to be his assistant and stay in the Department but I felt that was really just a fifth wheel operation. After Peter was assigned that position, I made certain that the agency did a very careful job of helping in the transition with all the information that he needed.

Not only did Myers serve as chief of the Soil Conservation Service, he then moved on to be the assistant secretary that had responsibility for the Soil Conservation Service. In that position he was able to lend considerable support to enact the Food Security Act activity and was very tolerant of having the outside organizations come in, get briefings on what the Department was doing, listen to our points of view and resolve any differences to the point that as we testified we did not have the differences showing up in public. As he moved on to be the deputy in the Department, we stayed very close to what we needed to do to brief the Department on outside activities. It was a very healthy relationship.

It's kind of interesting when I look back on whether or not the Soil Conservation Service should be headed by a career person or a politically appointed person. If the political appointment would have resulted in more resources coming to the Soil Conservation Service because they would have had more influence on the administration that appointed them, that would have been a great plus, but that hasn't happened. As a matter of fact shortly after Myers became chief, there was a suggestion from OMB that the Soil Conservation Service be totally abandoned and the budget be taken down to practically zero. It was only because of the outside influence that we brought to bear that we kept that from happening. What I'm saying is, if a political setting of that position is helpful, it ought to be that way. That has not happened. There are at least a thousand fewer staff equivalents in the agency now than when I left and it still seems to be heading in the wrong direction. You may want to ask other people who have had that position. Anybody who has served in that position will recognize how career and professionally oriented the organization is and how it should have that kind of leadership.

HELMS: How did it happen that you ended up here at the American Farmland Trust?

BERG: I was one of the people at the beginning of the American Farmland Trust, which was building primarily on the National Agricultural Lands Study that we have been a part of. I was one of their early counselors, working with Pat Noonan and Doug Wheeler. Of course, Bob Gray was one of the first people to join the American Farmland Trust and he had headed our National Agricultural Lands Study. When I had announced that I was leaving, Doug Wheeler and Bob Gray asked that I give consideration to becoming a part-time senior advisor for the American Farmland Trust at a time of my choosing. I took a couple of weeks off to think about it and decided that it was good way of rounding out my career. It's been eleven years now and it's been a very healthy and fruitful relationship.

HELMS: Should we talk about the events leading up to the passage of the 1985 farm bill, the agricultural climate that allowed it to be passed, the working groups that you were involved in, and some of those issues?

BERG: This comes back to my joining the American Farmland Trust. One of the reasons that they asked me was that president Doug Wheeler and his chief associate Bob Gray had just begun, with the approval of the Board of Directors of the American Farmland Trust, to expand their activities beyond farmland retention into soil conservation. They had a small grant to begin that work and that fit my capabilities very well. With field work, we were able to get some added evidence as to how the farmers viewed what should be done. We set up an advisory committee of key people representing a mix of farmers, government officials, commodity groups, bankers and so forth. From that came a study that ended up having a series of recommendations as to what should be done. Ken Cook was involved in the writing of the report. We contracted with about twenty people who developed technical papers. That included key people on many of the issues that related to farm bill activity.

I had also been asked in the beginning of 1983 to be the Washington representative for the Soil and Water Conservation Society. We were able to bring that organization into the circle of discussions along with the American Farmland Trust and about a dozen of the conservation and environmental organizations. These included the older organizations such as the National Association of Conservation Districts, the Society of Range Management, the Society of American Foresters, the American Forestry Association, the National Wildlife Federation, the Wildlife Institute, the Audubon and Sierra organizations, and the Izaak Walton League. There were several of these organizations that found a particular reason for being concerned about the use of land and water, whether it be reducing soil loss, improving water quality, protecting wetland, increasing the number of trees that were planted,

or improving the grass cover. The broad array of interests that we had represented here found common ground related to their particular interest. In combination it ended up a fairly broad-based and effective coalition.

HELMS: In working with the conservation coalition, were you not sort of unique in being a long-term federal employee as well as closely aligned with the agricultural community?

BERG: Yes. I think that was an advantage because much of what we did in the coalition required that we have compatibility with what key staff people in USDA, the Department of the Interior, and to some extent EPA were doing. Even though they were not members of the coalition, we invited these people to come and join us and keep us updated as to what they were doing. For instance, the RCA process was still underway over in USDA. There were several activities, especially in the U.S. Fish and Wildlife Service, that we needed to monitor, and concern about non-point source pollution was developing. We needed to have not only the federal agencies involved but also the state agencies that dealt with soil and water conservation. We also found interest from the standpoint of the governors through the National Governors Association.

HELMS: How were the exact provisions of the 1985 farm bill put together?

BERG: The first thing that we did was get an agreement on principles so that we could have a broad cross section of interests prevail, regardless of the special initiative of any one organization, whether it be wildlife or soil loss reduction or whatever. From that came the need to draft legislation. Key people on both the Senate and House agriculture committees and the staffs of those congressmen and senators were instrumental. There were also key people in the agencies who had the ability to draft legislation, or they could ask their general counsel's office to help. When looking at the 1985 farm bill, the first thing that people had to understand was what a farm bill really was and where its history had come from, the mid-1930s. The early interest was on sodbuster because we had a fairly conservative group of people, such as Senator Armstrong of Colorado and others, who were not at all happy about some of the excellent grassland being converted to cropland. Highly erodible land was threatened, primarily from wind erosion. It was land going into the production of wheat that we did not need as we had a surplus. The sodbuster initiative then broadened as we looked at the need to have a conservation reserve for the land that had already been broken out that should be put back into permanent vegetation. It led to the swampbuster that was allied in

terms of protecting valuable wetlands and it led to the conservation compliance activity. That was really a surprising initiative on the part of many people. It was a very strong initiative that even today is probably the most demanding provision that came from the 1985 farm bill.

HELMS: How was the lobbying done to get the congressional support?

BERG: We developed several background papers on each of these issues. As an example, the Sierra Club put together an excellent set of documents that could be utilized in their lobbying capability. It was really just excellent. Each of these groups had key people to follow each of these activities, and special assignments were given to the organizations that had contact with certain congressmen, senators or key staff. The key to much of the work was very close cooperation with people in important positions in agencies. We needed the help because the details, in terms of data and how the programs could be implemented, had to be practical and done in a way that they were able to write the policies and procedures. We did some very excellent work on a cooperative basis.

The action on the 1985 conservation title of the farm bill really got a boost when Senator Richard Lugar of Indiana convened a hearing in the Senate committee room in April of 1985, with twenty organizations testifying. The lead witness was Governor Evans of Idaho. After that excellent hearing, it's my understanding that Senator Lugar directed his staff to begin working on a legislative package that would eventually become the conservation provisions of the Senate bill. Comparable work was going on in the House side under the leadership of Congressman Jones, who was the Chairman of the Subcommittee for Conservation Credit and Rural Development. Their efforts, combined with the actions by the Senate committee, eventually resulted in a bill that was widely circulated. We got excellent support not only from the organizations that represented the coalition, but also from the key people in federal and state governments. We had a really solid base because the 1981 farm bill was viewed as out-of-date. It was very timely that this activity was put in place.

HELMS: Let's just mention at least briefly some of the major issues on implementation. The first was how restricted the requirements would be for the CRP (Conservation Reserve Program). Could you summarize that debate, your attitude, and other attitudes on it?

BERG: What we had in mind for the CRP was to get highly erodible land that still qualified for all of the farm policy programs moved over to a less intensive use--primarily grass, but some tree planting and wildlife. This was an effort to target those highly

erodible cropland areas. The argument about what to accept in the way of a T-value. We had in mind locking up the most erodible land first. There were several modifications of policy. As we review the 36.5 million acres that are in the CRP and look to the future, what happens to that land after the ten-year contract time? There is obviously land in the conservation reserve that we do not need to protect with public money. We need to sort out those most sensitive areas that should really have a long-term less intensive use.

HELMS: What are your recommendations for that, just go to the most stringent requirement for renewals?

BERG: Well, we need to have more stringent requirements for renewal. The debate concerns areas that are not allowed to be used, for instance, for haying and grazing, except in a disaster declaration. There has to be recognition that land, if it's going to stay in a less intensive use, will have to offer income to the land user. This would require a change in the law. The possibility of converting some of these lands to a long-term easement is another option that's being examined as the Department begins to implement the Wetland Reserve Program. The surveys that we've done so far on the future use of CRP land indicate that the decisions will be driven primarily by the economics of the time, but we hope to offset that with incentives to allow the land users to keep it in a less intensive use.

HELMS: The other thing that happened during this period was the discussion of alternative conservation systems. Could you lay that discussion out for us, as well as your view and the conservation coalition's view on it?

BERG: There were some excellent oversight hearings on what should be done about compliance. The SCS did a remarkable job of developing well over a million compliance plans on over 135 million acres. There was in the Congress a discussion about how tight these plans should be in terms of reducing soil loss. There were special groups in the country that said they would have problems if the SCS insisted on a very rigid reduction of soil loss. It would put them out of business. Under a prior chief of the SCS, a decision was made to offer an alternative plan that would reduce soil loss by some rather vague measure. It was obviously something less than a good solid soil erosion reduction plan. The extent that the field people of SCS continue to have a very rigorous plan to reduce soil loss is still one of the things that we just don't know. My concern was that when we offered an alternative system and judged compliance, we wouldn't have a good solid yardstick to measure pre-plan soil loss and post-compliance plan soil loss. What was in the plan? What was expected of the land user? Is it actually being done? Many of the plans have residue management, conservation tillage, as a key component, and there have been

questions about the residue level that is expected and whether it can be met in a practical way. The 1993 and 1994 crop years are going to be the test of the application of the plans, regardless of whether they were based on the most rigid interpretation of soil loss reduction or a lesser system as required in an alternative plan.

HELMS: From the national point of view, how much were state conservation commissions, extension services, and various state commodity or agricultural groups involved in devising conservation systems? Was there pretty much just reliance on Soil Conservation Service expertise in its field offices?

BERG: Whatever is done in the way of standards and specifications should be in the field office technical guide. How up-to-date those guides are has always been questionable. But I think that the input from the research community, the best experience of farmers and ranchers up to that time, the work of Extension and others should have been part of technical guidance at the state and local level. How much of that actually occurred I frankly don't know, but the effort was sound. I know they're moving to improve the technical guides and how we interpret them to the land users, especially on the basis of what it takes to not only be a good steward of the land, but also to produce food and fiber at an economical level, in other words to stay in business in a sustainable way.

HELMS: The Soil and Water Conservation Society got involved in monitoring and appraising programs; that was somewhat unique. Did you have something to do with that?

BERG: I was on the steering committee and went out on some of the field evaluations. We did two studies and both of them were landmark activities. It's my understanding, and I have been part of a task force that SCS has assembled, that SCS is beginning to develop a much more detailed evaluation process within the agency. I think this is very timely. We were criticized by some of our members for finding and reporting some of the facts on compliance that were not all that satisfactory. The records increasingly are showing that what we found on this sampling basis is beginning to hold up as being pretty valid. There are a lot of problems that are going to have to be addressed. I think the agency and other people who are engaged in this process are getting the word from Congress that compliance needs to be taken seriously. Assistant Secretary Moseley and chief Bill Richards, I think, strengthened the emphasis that compliance was here to stay and should be implemented.

HELMS: On that thought, the 1990 farm bill added a few new things but mainly showed that there was no going back on any of the things in the

1985 farm bill. Was there ever a concern that there would be a reversal on some of the provisions in the 1985 bill?

BERG: Yes, Doug, there was concern. It ended up that the 1990 farm bill strengthened all provisions of the 1985 Act and added some additional features, especially as they would relate to off-site impacts that might damage water quality, as well as the expanded conservation reserve. They made some very clear-cut policy determinations that what was done in 1985 should be not only continued, but should also be taken very seriously. It was evident during the debate on the 1990 farm bill that many others, including the commodity groups and farm organizations, had very carefully evaluated what had happened in 1985 and were now part of the process of helping move on through the 1990 farm bill. They had to contend with a very strong element of pressure from the environmental community that provisions from the 1985 farm bill remain solid, be taken seriously and be monitored.

HELMS: As we sit here in May, there are some proposals for a Farm Services Agency which would merge the Soil Conservation Service, ASCS, and the Extension Service.

BERG: Not Extension, the proposal in the budget would merge ASCS, SCS, and Farmer's Home Administration.

HELMS: But going back to that point, I wanted to ask you a two-part question. One, as a young person in the field, can you recall what was done in 1953 during plans for merger? Two, could you recount for us in 1985 the proposals to zero out the funding? What have the conservation groups, NACD, the Soil and Water Conservation Society, and others done in previous incidents?

BERG: In the effort to examine all of the so-called New Deal programs when the Eisenhower/Benson administration took office, there was a determined effort to examine agencies such as ASCS, Farmer's Home, REA (Rural Electrification Administration), and Federal Crop Insurance to decide whether they should be continued. A determination was made at some level in the Secretary's office that SCS was no longer needed. The districts had excellent leadership from a rancher in Texas, Waters Davis. He was alerted to this plan to eliminate the SCS or at least reduce its capability considerably. As I mentioned in our previous interview, that led to what became the Tuesday Letter that went to each of the conservation districts in the country. There were hearings in the field, and in Congress there was a great deal of concern about eliminating SCS. The result was that SCS had to give up its seven regional offices. It strengthened the state offices.

I talked earlier in this interview about the key role that administrator Don Williams played. He had the difficult task of making the Soil Conservation Service work, in spite of the fact that the organization was supposed to have been eliminated. What it did was strengthen the state offices considerably. It was evident that when people at the field level knew, they in turn contacted their congressmen and senators and other people who make policy at the national level.

Later, after I left the Soil Conservation Service, an attempt was made under an OMB head during the Reagan administration to completely phase out the SCS by reducing its funding. That did not happen, again because the conservation districts and others alerted the field as to what that would mean. It was obvious that there was strong support for the conservation work and that it should be strengthened, not weakened.

HELMS: I guess the national organizations alert the field, and the field contacts their representatives and political leaders.

BERG: Well, it's a rather widespread process in terms of letting the people at the field level know what the facts are. That takes a little while and it takes some sort of focused effort from the national groups that are concerned. That includes the Soil and Water Conservation Society, the National Association of Conservation Districts, and the state agencies. State organizations include not only districts but associations of state employees who work in the conservation area, and of course several of the commodity and farm organizations. Increasingly in the eighties, the environmental community was heard from. The latest effort regarding the Farm Services Agency is still in a discussion stage with the budget released in early April, but the administration does have in the USDA portion a proposed Farm Services Agency taking all of the money that ASCS, SCS, and Farmer's Home have and merging all of the people into a single account. We're just beginning to analyze what that would mean. The conservation districts have sent an alert through their national association to look at this very seriously as to what this may mean for the relationship with the conservation districts at the local level and what role SCS would play at the national level. The society has developed a set of principles that indicate how our members and our board would view this issue. I personally feel that the merging of SCS, ASCS, and Farmer's Home may need considerable discussion. If they're seeking to save money and people, there are ways that this can be done without destroying the effectiveness of an agency that was created by law.

HELMS: Tell us again how many years you have been in this business and perhaps tell us your thoughts, or how you sum up your career in the conservation field.

BERG: Doug, I've been privileged to have this long association with the soil and water conservation movement for something over fifty years now. It's gratifying to have had the privilege of working in the Soil Conservation Service. It's really the best federal department in government. I think the SCS is the best federal agency because of the highly decentralized activity and the work directly with the people who are responsible for the future of the land and water in the private sector of our country.

Since leaving the agency, I have had the great experience of working with two organizations that represent a long-term view of agricultural resources, including the retention of the prime and unique lands and the strengthening of soil and water conservation activities. Both the American Farmland Trust and the Soil and Water Conservation Society have provided an opportunity for me to reinvent myself, in terms of a career. I also have been a member of a local conservation district governing board for over ten years in Maryland. That's a very practical application at a county level of the policies that are enacted at the federal or state level. I've also been able to serve in an elected position as a board member and treasurer of the Natural Resources Council of America. That's a national organization with something over eighty organizations as dues-paying members. It's an umbrella organization in the broad sense. It covers the areas that represent practically anything that could be described as being in the field of conservation or the environment. My association with the people who represent these organizations and serve in these key positions has been very gratifying.

I'm reminded of an article in the *Washington Post* this past Sunday. It said that the Clinton Administration has proposed a major change in the 1994 fiscal year budget for the REA and even as we speak there are probably over 3,000 members of those local REA associations in town. Former Secretary of Agriculture, Bob Bergland, is now the chief executive officer for their association and he pointed out that it is a time for change. Coming back to the Farm Services Agency, we're not against change. We know that it is the way in which the world continues to function and it is part of the new administration's initiative. I came from an era of the Depression and the Dust Bowl, and we don't have that many people around who remember those days anymore. That's what Bob Bergland pointed out and that's why I think we're going to have to accept the fact that with the concerns of our heavily urban population, the concerns about efficiency of government service, and the concerns about the capability of the federal government to fund all of the priority needs of the nation, change is inevitable. We need to make the point again in the conservation field that natural resource conditions are important, that they need to be strong, and they need to be in a

sustainable use. We need to recognize that the off-site impact of what happens on land and water controlled by the private sector is as important as what happens on the land itself.

I'm not going to give a lecture on what I think the future should be, but we're very encouraged by the fact that younger people are continually coming into the agencies that represent a broad array of work in the resource field. That includes people who come into the Soil Conservation Service, into the research and Extension community, into the wildlife and forestry areas, into the developing water quality field as it relates to nonpoint source pollution, and into state and local governments that will complement and eventually exceed the federal effort in much of this work.

I'm gratified that a group has set up an activity called the Berg Fellowship for my wife and me. This will be the second year that we have had candidates. We have excellent nominees coming into that process to examine the way in which policy is developed to promote soil and water conservation work. Working with a network of people over the years has been not only gratifying, but also very useful in that many of the things we are concerned about take quite a long time to get in place and an even longer time to be implemented. Soil and water conservation work is never done; it's a continual activity. The next generation and the next generation after need to carry on. Because, as we look at our ten grandchildren, my wife and I feel that we must do whatever we can to be certain that they have the same options or even more options as to what kind of lifestyle and the quality of life that they will face in the future. I certainly believe that the resource base is vital.

Appendix One:

Frequently Used Acronyms

AAA	Agricultural Adjustment Administration
ACP	Agricultural Conservation Program
AID	Agency for International Development
ARS	Agricultural Research Service
ASCS	Agricultural Stabilization and Conservation Service
BLM	Bureau of Land Management
CCC	Civilian Conservation Corps
CRP	Conservation Reserve Program
DC	District Conservationist
EEO	Equal Employment Opportunity
EPA	Environmental Protection Agency
FmHA	Farmers Home Administration
FSA	Food Security Act
GAO	Government Accounting Office
HUD	Department of Housing and Urban Development
NACD	National Association of Conservation Districts
NEPA	National Environmental Policy Act
NRI	National Resources Inventory
NTC	National Technical Center
OMB	Office of Management and Budget
OPM	Office of Personnel Management
RAMP	Rural Abandoned Mine Program
RCA	Resource Conservation Act
RC&D	Resource Conservation and Development
REA	Rural Electrification Administration
RFF	Resources for the Future
ROTC	Reserve Officers Training Corps
RPA	Resources Planning Act
SCD	Soil Conservation District
SCS	Soil Conservation Service
SES	Soil Erosion Service
TSC	Technical Services Center

USDA	United States Department of Agriculture
VA	Veterans Administration
WPA	Works Progress Administration

Appendix Two:

Chiefs and Adminstrators of the Soil Conservation Service

Chief

Hugh Hammond Bennett	September 19, 1933 to November 13, 1951
Robert M. Salter	November 13, 1951 to November 2, 1953

Administrator

Donald A. Williams	November 27, 1953 to January 11, 1969
Kenneth E. Grant	January 12, 1969 to May 31, 1975
R. M. (Mel) Davis	June 1, 1975 to September 11, 1979

Chief

Norman A. Berg	September 12, 1979 to April 2, 1982
Peter C. Myers	April 4, 1982 to March 20, 1985
Wilson Scaling	May 21, 1985 to July 11, 1990
William J. Richards	December 16, 1990 to January 22, 1993
Paul W. Johnson	January 10, 1994 to present