

domination. This came up in the Hells Canyon fight but largely as a public relations campaign funded by the Idaho Power Company and probably by the whole private power industry which, I think, united on that. They got the EBASCO services to come down and testify against that project.

And so all of that is underlying the surface here, and that is probably one of the reasons that the magnitude of the Corps' and Bureau's programs has declined as a percentage of the federal budget. I think most people in the West have looked on the Bureau as helping them and people in the East who have benefitted from Corps' projects look on it as helping them, rather than being government run amuck.

What people are complaining about are expenditures on government programs that don't help them. This is why people think the government is too big. They don't object to Social Security or Medicare or any of the programs that help them. They're always objecting to what somebody else gets.

But there are some great abuses of the programs, for example, when the Corps of Engineers and the Bureau of Reclamation tangled in the Pine Flat case. The Bureau thinks it got authorization through its finding of feasibility on Pine Flat as a reclamation project, under which local people would have to pay their share of the costs. Some of it would be paid by power revenues, of course.

And then the Corps took the position that Pine Flat is a flood control project and got authorization from the Congress to build it as a flood control project. This kind of a struggle tended to repel a lot of people and make them feel that this is just two bureaucracies fighting and that all of these projects are just pork barrel stuff.

Arthur Maass (*Muddy Waters*)

Q: Well, Arthur Maass in his book, *Muddy Waters*, makes a great deal of the Pine Flat case, showing not only a certain arrogance on the part of the Corps of Engineers, but also, of course, the clout that the Corps has within Congress, suggesting that Congress, through the Corps, can more or less have its own way when it comes to water projects. If people don't like what the Bureau of Reclamation is doing, they can go to the Corps-and I suppose vice versa. But in this particular case, it would be cheaper for local interests if the Corps were

to build the project, so therefore it would be something that Congress would favor doing that way.

Let me ask you about-about Maass' argument, and then you can elaborate a bit about it. You know or are familiar with *Muddy Waters*?

A: Of course, Arthur Maass and I were at Johns Hopkins together. We were both in the class of 1939. He was taking a liberal arts course, and I was taking engineering. We were not great buddies at the time, but we were both involved in the student council and various campus activities. Arthur was on the social committee to arrange the dances and so forth, and I was on the student council trying to regulate the way that group operated.

Arthur was, in my view, quite liberal. And I was more or less a conservative engineer. Some of the engineers looked on Arthur as being a kind of a flaming liberal on campus, not quite as liberal as Murray Kempton, who was in the same class, or Walter Schlesinger, who was actually, admittedly, a member of the Young Communist League, right on campus. This was in the mid-'30s.

Arthur came down from Harvard one summer to work in the Department of the Interior for the Hoover Commission. I gave him a lot of information about the Pine Flat flap, because I was deeply involved in it through my role as coordinator with the Corps of Engineers. And you remember, Section 8 of the '44 Flood Control Act required the Bureau to get some reimbursement for the irrigation. I think they finally settled on a \$14 million reimbursement, which the Bureau didn't think was enough and the Corps thought was too much.

So I had a lot of information on the controversy, which, as I recall, went into the Pine Flat chapter of *Muddy Waters*. Arthur, of course, is much more scholarly than I am. Of course, he was involved much earlier when he was working for the National Resource Planning Board. My recollection is that Maass covered the fact that Roosevelt decided in favor of the Bureau of Reclamation but that the Corps, with the assistance of the Congress, overrode him. And Roosevelt was probably one of our strongest Presidents.

I don't have any problem at all with what Maass has said about that. I would certainly agree, although I haven't reread it recently.

Q: Well, during this time, at least at the political level, the criticism of both the Bureau of Reclamation, but more particularly the Corps of Engineers, was centered within the so-called first Hoover Commission, which was organized in 1947 basically in response, as I understand it, to an expansion of federal agencies during World War II. It was not organized specifically, of course, to pick on any particular agency and certainly not to pick necessarily on water resources, but Hoover spent a fair amount of time looking at the water agencies. And, as you know, one of the recommendations of the commission was to consolidate the water resources agencies.

Can you tell me something about that and something about the Bureau of Reclamation's response to that particular proposal?

A: Well, I was right in the middle of it as a representative of the Bureau on various work groups. Of course, the Bureau generally favored that recommendation because it was felt that for sure it would be the surviving agency and because there was always the argument that water resources is not a military function. So I was one of the people in the Interior Department that was providing information for the staff of the Hoover Commission.

Now, that may have been how I got involved with Arthur Maass on the Pine Flat project when he was in Washington working with the Hoover Commission. But I do remember doing quite a bit of work for them on the Pine Flat controversy. I was primarily involved in getting the agreement on how much the local people would pay. I think it came out to \$14 million. That's why I had the background in it. But I worked on background for both of the Hoover Commissions, as well as for President Truman's Water Resources Policy Commission, so unless I go back and really look into my files, I can't remember exactly what I did for which one. But the Bureau was always in favor of the consolidation, if the Bureau was going to be the surviving agency, and the Bureau felt that it should be. The Bureau's position was that if you have a Department of Natural Resources, which it favored, you certainly would have water as a part of it, and the Bureau of Reclamation was there to take over.

The Bureau, of course, always felt that its programs were more sound economically than the Corps' because each project had to come up and be authorized separately and was subject to the reimbursement provisions of the reclamation law. They overlooked such items as interest on money, and even

the fact that at one time they used some pretty fancy accounting on the basis of a solicitor's opinion that, even though they had to collect interest on the power allocation, that didn't mean they couldn't apply the interest also to subsidize irrigation. And this infamous piece of legalese was called the "Solicitor's Opinion" for years and years and years. And it just didn't make much sense, but that was how the solicitor of the Department of the Interior interpreted the law.

And this kind of thing generally turned some of the professional groups, such as the American Society of Civil Engineers that I belonged to, and various other groups of basically conservative people against the federal agencies. I'm sure the argument was made by lots of people at the time that surely the federal agencies are just trying to increase their clout and their size just for the purpose of bureaucratic aggrandizement.

And nobody can argue against the fact that both the Bureau and the Corps had strong congressional supporters. The Corps always had had an advantage over the Bureau in this area because its program covers all 50 states and the Bureau has been limited to-well, I guess counting Alaska and Hawaii, 19 states; but for a long time, it was just the 17 contiguous Western states. And the Bureau's projects came along with some strings. When they built a project, they expected to get something back.

Q: Not too much.

A: Not enough, except the local people always seemed to agree with the Bureau when the Bureau said, "The law requires us to demand full repayment on this project, " ignoring the fact there was no charge for interest. There may have been some justification for using interest-free money out of the reclamation fund in 1902 with a 10-year reimbursement period. Ten-year reimbursement without interest is one thing; 40 years is another thing. And then there was another 10-year repayment free development period.

Anyway, the Bureau did get some reimbursement, usually about 12 to 15 percent of the actual total costs which is more than the Corps got on most of its projects.

River Basin Commissions

Q: Well, there are a couple of things happening here. I suppose they complement one another, but on one level, they seem to be a little bit contradictory, too, and that is this: you have the Hoover Commission, the first Hoover Commission, and also President Truman's Water Policy Commission coming out in favor of a consolidated Water Resources Department within the federal structure.

On the other hand, those same commissions are arguing for the establishment of river basin commissions around the country. Of course, this goes back to some of President Roosevelt's ideas for a Missouri Valley Authority which never did get off the ground as Roosevelt conceived it.

That seems to be a step towards obtaining, or giving to the states, perhaps, a bit more say so in what's happening to regional water development-nonfederal interests, in any case. How do you interpret this interest in river basin commissions at this particular time, which, of course, leads finally into something else.

A: Where this got started, I think, was either the National Conservation Commission in 1908 or the National Waterways Commission about that same time in the Teddy Roosevelt era. He supported the idea that we should develop every river and use every drop of water profitably, all the way from the headwaters to the sea. There was almost a kind of a cult for river basin development-it wasn't a cult, really, in that sense, but a lot of people felt that that was the ultimate objective, and then they immediately started running into state lines and agency jurisdictions that made it impossible to do this, and that started people thinking in terms of organizations based on river basins.

The real problem, as I see it, was the need to coordinate the agencies working in the river basin. We've tried to coordinate the federal agencies as far back as 1910. I think the Inland Waterways Commission was set up really in the hopes that it would coordinate the agencies. They reported about 1912, or whenever it was. But instead of doing the job, they made another report which called for coordination. Then the Newlands Commission was authorized in the 1917 act but was never established. I think one of the reasons it was never set up was that the Corps saw a potential threat in it. Maybe the Corps and the Bureau both saw a threat in it. Instead, we got the Federal Power Commission

authorization for comprehensive basin studies in 1920. I'm sure there were an awful lot of behind-the-scenes operations that I've never seen documented.

I'm sure one of the antecedents for the House Document 308 report was when the Federal Power Commission staff decided to do these comprehensive studies and asked for funds. They put it in the budget, instead, the Congress authorized the Corps to make the list of river basins which eventually was published as House Document 308. When the studies were authorized, there was a requirement for some coordination with the Bureau of Reclamation and the FPC, and they were participants in parts of the studies but it was a far cry from the coordination contemplated when the Newlands Commission was authorized.

The 308 report on the Tennessee River basin provided the basis for the Tennessee Valley Authority, which solved the coordination problem by keeping the old-line agencies out of the basin, so they didn't like it. But the need for coordination of the agencies' activities within river basins was still evident. So when the issue came up in the water policy commissions, there were a lot of conflicting opinions. When President Truman's Water Resources Policy Commission took up the subject, one of the ways that they got agreement was what we used to call the "Quaker" method-when there's something that you can't get agreement on, you drop it out. And so when you look at the commission's recommendation for river basin commissions, it kind of got down to the fact that since you can't really resolve this Corps of Engineers/Bureau of Reclamation/SCS problem, and you have a real problem with state lines that you can't resolve, you should set up an organization to handle the problems. It was a kind of a mild recommendation and I think a good recommendation. Of course, it formed the basis for a lot of planning that we've done since then.

Certainly the Senate Select Committee was definitely working on the basis of the river basin as the organizational unit for planning and wanted river basin plans drawn for all river basins. But Senator Bob Kerr didn't have independent river basin commissions in mind. He had in mind another Arkansas-White-Red basin type of report and he wanted an authorization in each basin like the Pick-Sloan Plan-an authorization that approved a plan and authorized the initial stages, and when you find a project you want, you just bring it to the Congress and get it authorized easily because it's already in the overall plan.

So the idea of river basin commissions was never really resolved by the Senate Select Committee, and I doubt if it ever will be, now that the Reagan administration terminated them. I can argue either way, that we ought to stick with the political jurisdictions we have, the states, with interstate compacts where needed, or I can argue that from a hydrologic standpoint, it really doesn't make much sense to split some of these river basins right down the middle the way we do where the river is the boundary, as, for example, between Washington and Oregon. It would make much more sense to make one state out of the western slope of the Cascades and another one out of the eastern slope, because you've got a natural geographic division. Of course, that still would break the Columbia River basin in half but it wouldn't split it down the middle.

But to have the whole Columbia basin or the whole Colorado basin as one state would give you a rather unwieldy political organization, too big to govern.

So it's just inevitable, with the kind of government we have that there will be a lot of hydrologic inefficiencies, but so far our government has been adaptable enough to cope with them. If you go over to the Soviet Union, you get a lot of the same conflicts around Lake Baikal, for example, the environment versus development. I don't know how they're organized with respect to the rivers there, but I think our system is still the best, and I certainly wouldn't try to go back and redivide the country into river basins because then you start having clashes over other functions.

The Green Book

Q: Well, let me turn our attention to something else that's developing about the same time. You had mentioned earlier the FIREBRICK and, as you know, one of the subcommittees under FIREBRICK did develop something which—let me consult my notes here to get the exact title—"The Proposed Practices for Economic Analysis of River Basin Projects," which was published in 1950 and commonly called the "Green Book."

Can you tell me something about the background to the development of this report which has a fair amount of influence in the subsequent 10 years or so?

A: Well, it did, and I mentioned that earlier when I was talking about George Beard. George Beard was the Corps of Engineers representative, and I think Jack Dixon was the Interior representative for a while, and then later Reginald Price was the Interior representative. Reginald Price was in the department after Bill Warne became the Assistant Secretary for Water and Power.

The Green Book was developed with a great deal of discussion; another Corps person that was involved was Gene Weber. He was the staff person who took over when George Beard left to go out to the Pacific Northwest. I was only peripherally involved in that because of my staff role with the chairman and later the departmental member of the FIREBRICK, but I sat in on a lot of the meetings. There were many arguments. The big argument first was the Bureau of Reclamation wanted to use gross crop income as the measure of the benefits from irrigation, and the Corps of Engineers argued that you should take account of the on-farm costs so you should use the net benefits. Of course, when you go to the net benefits for agriculture, there's not very much and very few projects could be authorized.

But then the Corps of Engineers had its policy of using primary and secondary benefits, and also direct and indirect benefits. By the way that they were defined, you could do almost anything you want to prevent flood damages, and the gross value of the crops destroyed by floods was considered a direct benefit. That was the first battleground over the first draft of the Green Book. The Green Book in 1950 was the second draft. The first draft was put out, I think, in 1948, and there were not too many changes in the 1950 draft, but I think it got more involved with the recreational benefits.

The Corps wanted to use the cost of indulging in recreation, in water-based recreation, as a direct benefit, in other words, figuring that the people who are going to go boating or fishing or anything at a reservoir will spend a lot of money for equipment and transportation to get where they're going. The Corps was using that argument and somehow in the debates, which were dominated by George Beard, the Corps always seemed to win. I really attribute that to George Beard, but it seemed to me there were a lot of fallacious ideas on both sides. And, not having been directly involved, I'm hesitant to step into areas that Henry Caulfield and possibly Arthur Maass and some others were more closely involved with than I was.

Of course, I've used the Green Book and referred to it many times, and it became the basis for Senate Document 97 much later.

Bureau of the Budget Circular on Water Resources Projects

Q: I don't know, of course, how much light you can shed on some of these issues, but I'll ask you the questions, and if there's not too much to be said, we can just move along.

I'm interested in the relationship between, say, that publication and something that comes out in December 1952 from the Bureau of the Budget: Circular A-47, which is called "Bureau of the Budget Circular on Water Resources Projects." It comes out at a fairly interesting time because it's after Eisenhower was elected, but before he takes office.

A: Well, I can shed a little bit of light on that. It really stemmed from President Truman's Water Resources Policy Commission. When that commission was created, and, of course, the Bureau of the Budget had an awful lot to do with getting the commission created, it was hoped that it would develop criteria and standards for evaluating the feasibility of federal water resources projects. A gentleman named Ed Ackerman—that's Ed Ackerman; not Bill Ackermann—was on the staff and he was probably the executive director, or something, of the commission. Gilbert White was the resident commissioner and Morris Cook, I think, was the chairman. Isn't that the one that—

Q: Cook was the chairman. Ackerman was—I'm not sure what Ackerman's position was. In 1949, he's a professor of geography at the University of Chicago and he submits some material to the government, to the—probably to Morris Cook.

A: That's right, and he came back, and he worked on the Bureau of the Budget's response to the commission's report. Anyway, the Truman Water Policy Commission didn't come out foursquare, in unequivocal terms, for sound economics. In other words, the Quaker method resulted in some kind of equivocation in the judgment of some people, and I know I'm probably stepping on Gilbert White's toes when I say that, but it just somehow didn't do what the Bureau of the Budget wanted to do.

So the Bureau of the Budget hired Ed Ackerman. He was a full-time staff man for the Bureau of the Budget, and a number of panels were set up to critique and develop the action-you remember, the commission didn't make any legislative recommendations. In fact, it was not within their charter to make legislative recommendations. There was a draft of a bill prepared by someone which I don't think was ever introduced. I remember seeing a copy of it printed up as a congressional bill. It may have been printed at the Government Printing Office as a service for one of the members of one of the congressional committees who was interested in implementing the Cook Commission recommendations.

But none of it really satisfied the Bureau of the Budget by giving them the peg that they wanted to hang their hat on to stop all this nonsense of building projects where the economic justification was somewhat specious. And so Ed Ackerman set up all these panels at the Bureau of the Budget following the submission of the report to the President, which I guess was either early in 1951, or late 1950. The President's commission could only operate for one year.

Q: I think it was actually 1950. They operated during the year of 1950.

A: So it came out in '50, and it was probably in 1951 that Ed Ackerman worked with all of these panels. I was on a couple of them representing Interior, trying to develop ways to implement the Cook Commission report. I cannot say how they got from that to Budget Circular A-47, except that a lot of attempts were made by the panels to reach a consensus. I was on the panel dealing with navigation, for example, and I'm sure they had people from the Corps of Engineers on the one dealing with irrigation. They were trying to get down to some agreement but we were all defending the interests of our own agencies.

The Corps representative on this navigation panel was Haywood Faison, a very distinguished looking gentleman. I think he was from the Board of Engineers for Rivers and Harbors. We were working with Ed Ackerman, trying to get some kind of agreement on some principles which would satisfy the Bureau of the Budget and which would give a rational basis for making water project decisions on the basis of sound policies.

Out of all those working groups or panels came report after report after report, and then the whole project seemed to die on the vine and then disappeared until

suddenly Budget Circular A-47 appeared, as you pointed out, in the interregnum between Truman and Eisenhower. I think they got frustrated with all these panels not being able to really agree on anything. For example, on the water transportation panel, Haywood Faison, representing the Corps of Engineers, was not about to agree on a policy that would base navigation project justification on costs of alternatives rather than on rail freight rates. A Corps person just couldn't agree to knock out the economic justification for the Arkansas River Navigation project. Well, maybe he could, but they would have gotten somebody else to represent the Corps the next week.

Well, anyway, the panels didn't get anywhere, and so I think that some staff people, probably people like Floyd Peterson who was the assistant chief of what was called Resources and Civil Works produced the draft of A-47. Maybe it was even before him, possibly Charlie Curran was still there at that time, and he was a staunch critic of agency economic policies.

Whoever was responsible saw that this was their chance to put some rigorous policies in effect, with a new tough Republican administration coming in to enforce them; but with the responsibility placed on the outgoing administration. There wasn't as much emphasis on transition teams as we have now. I don't know whether the name had been invented. We had people doing it, but it wasn't as organized.

Q: And there weren't as many political appointees in the Bureau of the Budget.

A: There were only two or three of them.

Q: Yeah.

A: That's right. Anyway, so I can see the handwork of Floyd Peterson in this, and maybe Charlie Curran, because they were the ones who were the most critical of the Corps of Engineers and the Bureau of Reclamation policies. A-47 establishes very rigorous economic policies for all projects to meet. I don't remember all the details, but there were increases in local cost sharing on recreation and on fish and wildlife conservation and preservation, that would make it very difficult to get projects authorized.

But that's the way things get done. And if it had been Reagan coming in, probably, with the support of the Heritage Foundation, A-47 might well have

been implemented. But instead, the Congress had hearings which I attended, much later, with Bob Merriam who was the political assistant director of the Bureau of the Budget [BOB). The hearing was chaired by Senator Kerr and when the discussion of A-47 came up the Eisenhower administration withdrew from it. Bob Merriam said we didn't issue this; it was done before we came into office. Then they heard from some of the old-timers, staff people from the Truman administration, who said, "We didn't see it before it came out. We don't know where it came from." And this led Senator Allen Ellender to launch into a discussion of Louisiana law which defines eight different kinds of bastards, and he said this seems to be a ninth kind.

Q: Amazing. But would you say the general thrust of BOB Circular A-47 would be to exclude some projects from consideration for federal construction that otherwise would have been considered beforehand? Is that stated too strongly?

I'm talking particularly about something like the 50-year standard project amortization period versus the 100-year standard project amortization period as a justification for construction, and so forth and so on.

A: Yes, the economic standards in A-47 are much more rigorous and would exclude some projects, but the big issue in this one was reimbursement-local cost sharing-and if I remember right, A-47 recognizes land enhancement value as a major local benefit which should be reimbursed by local, nonfederal interests.

At that time the Corps was building all those projects down along the bayous in Louisiana and Arkansas, adding them on to MR&T—the Mississippi River and Tributaries project-on which the federal government, in consideration of the fact that the locals had put in so much money before the project was authorized, is paying all the costs, including operation and maintenance, and purchase of lands, easements, and rights-of-way. So, when the Boeuf and Tensas bayous projects were added on to MR&T, with the federal government picking up the tab on all of the costs, even though these were primarily land reclamation projects-clearing swamps and making agricultural crop land-there were tremendous benefits to the local landowners. Requiring local contributions for land enhancement benefits was one of the main thrusts here which would have had a major impact on the Corps. It was not to stop them from doing it, but it was just to get the local contribution for land enhancement, as well as local contribution for recreation and fish and wildlife

enhancement. You know, it's been so long since I've looked at this that I can't remember all of the details.

I don't think there were so many differences between the definition of benefits in A-47, for example, primary and secondary benefits, and but it pretty well ruled out the use of secondary benefits on the grounds that they would come from any federal expenditure, and so forth.

The big change that I see in A-47 from the Green Book and it's not so much a change from the Green Book but it's a change in policy-is increasing the reimbursement-the local cost sharing. The standards proposed were more rigorous but I'd have to go through in detail to remember them-the standards for recreation benefits, for example, and the repayment of irrigation costs. A-47 made them more rigorous, whereas the Bureau of Reclamation tended to adapt the policies to the project.

For example, when they reviewed a project that was already built and the irrigation district people wouldn't sign a repayment contract because they didn't have repayment ability, the Bureau would reevaluate the project and would renegotiate the contract under the Reclamation Act of '39. If it took the local people several hundred years to pay the project off without interest, the Bureau would renegotiate on that basis. There was one project in Oregon, just west of Pendleton, which was renegotiated on the basis that they'd pay back at 326 years. I think it was a little project that had been built years earlier, and they couldn't get a repayment contract.

So A-47 attempted to eliminate any new projects like that by requiring a more rigorous economic analysis.

Q: Well, the circular, in a sense, does seem to anticipate some of the general philosophical predilections of the Eisenhower administration. I'm talking generally about the idea of what we'd call the cost sharing, the sharing of financial burden, or more of an emphasis on smaller projects than larger ones. So, you know, were they anticipating, do you think, what Republicans might be bringing into town?

A: Yes, there's no doubt that Floyd Peterson and Charlie Curran anticipated that the Republicans would move toward what I would call sound economic policies and you might call them conservative policies. I don't really feel that

Eisenhower himself was any more, or even as conservative as Truman, for example. But a lot of this is in perception. If Taft had been elected, it would have been more conservative. Taft was an old-line Republican, but Eisenhower was not. In fact, I'm not sure that Eisenhower knew whether he was a Democrat or a Republican until they asked him to run for the presidency.

And there were a lot of liberalization in policy made in the Eisenhower administration. One that I was directly concerned in, for example, was the Corps' single user policy for navigation projects.

Resources and Civil Works Division, Bureau of the Budget

Q: Was that after you went over to work at the Bureau of the Budget?

A: Yes. I went over to work on the staff of the Resources and Civil Works Division of the Bureau of the Budget in 1954. The division director was Carl Schwartz, and Floyd Peterson was the assistant director for the water and power side. There was another assistant director for the agriculture side, and there was a special projects branch also. My immediate superior was Charlie Warner, and Charlie Warner always called himself an "old mud digger" from the Corps of Engineers Philadelphia District. He grew up in Delaware and worked in the Philadelphia District in the dredging unit. He eventually ended up in the New York Division office and was involved very much in dredging. He knew every inch of the Delaware River and all the other rivers up and down the Delaware and New Jersey coasts. He was brought into the Bureau of the Budget to work on the Corps' budget and he knew where a lot of bodies were buried,

Floyd Peterson was another old Corps hand out of Minneapolis, or somewhere in the Midwest, possibly up where Gene Weber came from. And Pete had come into the Bureau to replace Charlie Curran after he had gone up to the Library of Congress as their first senior specialist in engineering and public works, a job that I had later. Charlie Curran was a very rigorous thinker, a conservative on economic principles, and the A-47 Circular would have probably been a little bit too liberal for him, but he was gone by the time I got there. Ed Ackerman may have had some involvement in the preparation of Circular A-47, but he had left the Bureau of the Budget before I got there. Ed Ackerman was really a brilliant man. I have great respect for him-a real

facilitator to get things done within the bureaucratic system. I think one reason was that he was willing to use Gilbert White's Quaker method, whereas Floyd Peterson or Charlie Curran wouldn't. No, sir. They would stick to their guns, no matter what. Anyway, I'm just telling you the set up I went into in 1954.

Charlie Warner and Floyd Peterson, between them, had taken on the project of getting rid of a lot of the district engineers' survey boats. The government would confiscate these boats from people running drugs or some other illegal activity. Many of them were fancy 40- and 50-foot cabin cruisers which the Corps claimed as survey boats and which turned out to be used as a kind of a district engineer's yacht when he needed it. A lot of that type of thing was corrected during the Eisenhower administration.

Another thing that happened in the Eisenhower administration was in connection with use of airplanes. The Bureau of Reclamation was one of the first agencies to have its own airplane. It had a Lockheed Lodestar, which was a very nice airplane that Mike Strauss used for travel. I flew out to Phoenix in it to help write the Central Arizona project report in 1947, so it must have been acquired shortly after the end of the war.

And the Eisenhower administration decided to get rid of all that kind of folderol. A government agency having its own airplane! That was unheard of. So they made the Bureau of Reclamation declare it surplus, to reduce government expenditures. But that didn't happen. The chief of the Forest Service decided that he needed a plane, so it was picked up for the Forest Service, which hired the Bureau of Reclamation's pilot.

Q: The Corps had about three planes, I think, at one time.

A: Yes. The Corps, had a DC-3, which was called the chief's plane. I remember flying in it on an inspection trip over the lower Mississippi valley when I was working for the Bureau of the Budget.

Getting back to the way the Bureau of the Budget dealt with the Corps of Engineers' budget. We had people there who knew a lot about the Corps from first-hand experience. I had worked for the Corps in the Baltimore District and the Seattle District and had been the liaison between the Corps and the Bureau of the Budget. I had been eight years with the Bureau of Reclamation here in Washington and had had a lot of familiarity with the Corps' programs. So the

Bureau of the Budget hired me not to work on the Bureau of Reclamation budget, but to work as an examiner on the Corps' program. And we had Charlie Warner and Floyd Peterson, both of whom had had that experience in Corps offices.

But we didn't leave it at that. Every year, every member of the staff went out to the field for three or four weeks to look at the projects and become familiar with the program. That was the plan, so that we had staff that really knew those programs. I went up and down the Missouri River one year and even crawled up into the scroll cases of the turbines that were under construction at the Garrison Dam. I don't know why, but that was my nature, to see what it was like in there before the water came in.

And I went up and down the Mississippi. I remember seeing some places along the Mississippi levees that seemed just like the old plantation days-Moon Bend on the Mississippi River within a few miles of Memphis, for example. We drove the levees maybe for 50 miles or so south of Memphis.

So the budget examiners really knew the programs very well. At that time, Joe Tofani was the budget officer for the Corps, and we had a very good arms-length relationship. Incidentally, Joe had come to the Corps from the Bureau of Reclamation and so we had a lot in common. I had known Joe off and on since the middle Rio Grande fight when we first met, which would have been 1946 or '47, before the '48 act, anyway.

So we had a lot of respect for each other and we worked well together and the Corps was very responsive because they knew that they couldn't put anything over on us. At that time, I wasn't working on the Bureau of Reclamation program at all, but the Bureau was always fighting us. The Bureau had been fighting all the time because the Bureau of the Budget wanted to eliminate the use of secondary benefits for project justification. They would write really nasty letters back to the Department of the Interior, trying to stop projects like Central Arizona and the Santa Barbara project in California. The Bureau of the Budget, as I recall, rarely ever approved Bureau of Reclamation projects.

Q: You're talking about the Santa Barbara dredging project.

A: No, the Santa Barbara County project. There were two or three aspects of the Santa Barbara County project-the Cachuma Dam and a tunnel through the

mountains to bring water into Santa Barbara. And they eventually called it the Cachuma project. The Bureau of Reclamation fought that project through in spite of the Bureau of the Budget's objections and made a finding of feasibility on it, because it was one of the really good Bureau projects. It was fully reimbursable, except for the interest, because they were growing avocados and nuts on the agricultural lands. Most of the water was going to be municipal water.

Q: Right.

A: Anyway, what happened most of the time was that the Bureau of Reclamation fought, and if they lost, would take their arguments to the White House and lots of times win over there, even in the Eisenhower administration. The Corps never did that. They never went to the White House to get something reconciled. They always said, "Yes, sir." "Yes, sir." And they agreed to put it in the budget, or the letter or whatever we were arguing about. Of course, then on the Hill, the Corps always got what it-mostly always got what it wanted-through the committees.

Executive Order 9384

Q: Let me ask you a question about that. I have to go back and although I don't like to intrude myself in an interview, but I need to repeat some information. As I understand it, beginning in 1940, actually, President Roosevelt directed all federal agencies to send their reports and studies through what was then the Bureau of the Budget—

A: That was under Executive Order 9384.

Q: Right. And the Bureau of the Budget was to submit the comment on that report. What I'm trying to get to is this: throughout this period, beginning with 1940, the federal agencies would submit reports to the Bureau of the Budget, and the Bureau of the Budget would—could do one of three things: have no comment on the report, say that the report was not in accordance with the policy of the administration or words to that effect—

A: They could say it was not in accord with the program of the President.

Q: -not in accord with the program, or is in accord with the program of the President. But, regardless of what was said, the report went forward to Congress, so far as I know. Now, that's different than it is today. I don't know when it changed.

A: I don't know what's going on today, but I think Executive Order 9384 came out of the work of the NRPB before it was abolished. I'm not sure when it came out, but I don't think it spelled out in detail what the Bureau of the Budget could say. I think what it said was that the Bureau of the Budget's comments had to accompany the report to the Congress. They made simply devastating comments on the Santa Barbara County project of the Bureau of Reclamation. I remember arguing with Charlie Curran about it when I was still with Reclamation. I don't think we won the argument, but it didn't stop the department from sending it up to the Congress and getting the project authorized.

Q: That's right.

A: If they said it was not in accord with the program of the President, it had to go up saying that. Writing those letters was my job in the Bureau of Reclamation; writing the commissioner's report to the secretary, the secretary's report to the President, which got to the Bureau of the Budget and then when the Bureau of the Budget comments came back, sending it up to the House and the Senate with the comments.

Milliken-O'Mahoney Amendment to the 1944 Flood Control Act

Now, the other thing that we haven't discussed yet is that the Milliken-O'Mahoney amendment to the 1944 Flood Control Act-I guess I did mention it-required the Corps to comment on the Bureau's reports, and vice versa. The states also had to be given an opportunity to comment on any project, and all of the comments had to go up to the Congress when a recommendation went up. But you could send them up, no matter what the Bureau of the Budget said, although an agency would probably try to modify a project to get into accord with the President's program, if it could. And that's why we had all this haggling over the Santa Barbara County project, which became the Cachuma project eventually.

We haggled over some other projects, too, and would override the Bureau of the Budget once in a while, by somebody going to the White House. By going over their heads, sometimes you'd get the Bureau of the Budget to change their comments or tone them down or something like that. And this, of course, was a political matter where the secretary would be the only one that could go to the White House, or maybe an assistant secretary, not a staff person like me.

That went on once in a while, but I don't know that there was ever any prevention of a secretary of a department sending a report to Congress as long as he would send the comments.

By the time I got to the Bureau of the Budget in 1954, they had prohibited the Bureau of the Budget from saying something was or was not in accordance with the program of the President, unless it had been taken to the President himself. Now, of course, with Eisenhower, that meant to Sherman Adams, but still, that was pretty close, and Sherman Adams would probably mention it to the President .

The reason that happened was that during the Truman administration, Truman went out somewhere with Senator Clint Anderson and said, "We've got to build this dam and we're going to put it in next year's budget." And then the Bureau of the Budget wrote that the project wasn't in accord with the program of the President. Clint Anderson just went to Truman and raised hell. This was when Clint was a senator not when he was Secretary of Agriculture. And that's when, I think, the Bureau of the Budget got its instructions. I never saw it in writing, but it was understood we could not say something was or was not in accordance with the program of the President unless he had definitely approved it.

Let me mention one time when the Eisenhower administration liberalized the Corps' policy. The Corps, as far back as the beginning of the century, had what they called a "single user" policy for navigation projects. If you were going to build a project which was going to be used by just one user-for example, dredging a 50-foot channel, up to Baltimore-and if the only shipping that needed a 50-foot channel, deeper than a 40-foot channel, was the Bethlehem Steel Company, the Bethlehem Steel Company should be taxed by a local port agency to pay half of the cost of deepening the channel from 40 to 50 feet.

That was a long-standing Corps' policy. Another Corps' policy was that if you were dredging a new channel into a new area such as Portland Harbor in Oregon where they had to dredge the Willamette River to allow ships to get up to Portland, or the Houston ship channel, which was built to bring shipping up into Houston where there was no existing channel, the policy was that local districts or authorities, "local interests" is what the Corps calls them, had to pay half of the costs. The Corps couldn't take money directly from an industry. It would always have to be through some kind of a political body which was authorized to do it. The local interests paid half of the costs for the initial deepening of the Portland Harbor and also for the Houston ship channel when they first started. I'm sure they did it on a lot of others.

So when General Lewis Pick sent up the report recommending deepening of the Delaware River up to the Fairless Works of U.S. Steel near Trenton, but on the Pennsylvania side, he recommended that local interests pay half of the added costs of dredging a 45-foot channel above Philadelphia because the ore carriers were the only ships that needed more than 40-foot depth. I don't remember whether it was 50 feet or 45 feet that was recommended.

But anyway, because you needed that extra 5 feet of draft, the single user, in this case the U.S. Steel Company, under the long-standing Corps' policy would have to pay half. This, of course, would have to be done through the Delaware River Port Authority, which would somehow arrange a way to tax U.S. Steel. And that was the policy when the report came up in the Truman administration.

The report may have been cleared by the Bureau of the Budget during the Truman administration, or it may have still been in the Bureau of the Budget. All of these reports, would pile up while we were working on the budget in the fall and didn't have time to review reports. I usually had a stack of reports on the table in my office, because I was responsible for reviewing them for the Bureau and writing comments back to the Corps. And the stack built up right before the omnibus bill.

When the Eisenhower administration came into office in 1953 all of the project reports, including the upper Delaware, were sent back for review, and my recollection is that the Corps reiterated the recommendation for local cost sharing under the single user policy. I don't remember exactly the timing of this but it must have been in 1954.

Ben Fair-less was the chairman or maybe by that time the ex-chairman of U.S. Steel and was a member of the Hoover Commission and I'm sure he was a staunch Republican. One day we got word from the White House, down through the staff, that we should relax the single user policy for the Upper Delaware project. One of my very astute staff members brought me a newspaper clipping the next day showing that Ben Fairless had been a dinner guest at the White House the night before we got that directive.

So, the feeling was that he was the one that had influenced the President. We took this as a definite order from the President to the Bureau of the Budget to the Corps of Engineers. So when the Upper Delaware project was cleared by the Eisenhower administration, they put some language in the Chief of Engineers' report to the effect that, even though the only use of the project at the present time is for the steel works, eventually it will attract other traffic and will be used by other shipping, and therefore it should be carried out fully at government expense.

The staff argued against it on the grounds that it didn't make sense, because U.S. Steel was paying for dredging the Orinoco River for bringing the ore out of Venezuela. They were actually going down there and dredging the Orinoco River, but they wouldn't dredge their own.

Dredging the upper Delaware River was expensive, because it was digging into rock to get that extra 5 feet, so it was a very substantial amount. I don't remember how much, but it was tens of millions of dollars that local people would have had to put up.

This is just one example of how the Eisenhower administration was willing to liberalize their philosophy when it was necessary to bend it to achieve some political end. I like to think that Taft wouldn't have done that if he had been the Republicans' choice for President, but—

Q: Well, Eisenhower did organize his own water commission, as I recall.

A: Well, it wasn't a commission. We called it PACKRAT, the Presidential Advisory Committee on Water Resources, or something like that. It consisted of three secretaries, the secretary, I think, of Defense not of Army, Interior, and Agriculture. We called it PACKRAT because it took on such a broad mission and tried to cover all the bases. I was not directly involved because by

the time it was created I was at the Library of Congress, but I recall that their report recommended establishment of the Inter-Agency Committee on Water Resources. So then we were able to say they accomplished something. They changed the FIREBRICK to ICEWATER.

Q: Didn't amount to anything, so far as—

A: No, it wasn't that much of a change. Gene Weber had quite a hand in that committee as I recall, and it eventually led to the production of Senate Document 97, but by that time I was up at the Library of Congress.

Chiefs of Engineers and Water Resources

Q: Ted, I would like you to talk some more about your work within the Bureau of the Budget. The period is the mid-1950s. I want to explore that a little bit more with you, particularly the relations between the Bureau of the Budget and specifically between yourself and various people in water resources at this time.

Let's start with the Corps of Engineers. At this time General Sam Sturgis was Chief of Engineers. Can you give me a little thumbnail sketch, perhaps, of General Sturgis, what you might remember about him and his concerns about water resources?

A: Yes. I recall that Sam Sturgis followed Lewis Pick as Chief of Engineers, and I guess all I can say is we had very cordial relationships but not too many direct relationships with the Chief of Engineers. We dealt primarily with the chief of Civil Works and also the staff, and particularly Joe Tofani, who had succeeded Ken Bousquet as the person who was primarily responsible for the budget. We had very good relationships with Joe Tofani and with members of his staff. I knew them all very well, because I had been meeting quite a bit with the Corps' staff when I was in the Bureau of Reclamation. And so I don't have much recollection about Sam Sturgis.

Then, General Emerson Itschner succeeded him, and I was much closer to General Itschner, because-you remember, I was there in the Eisenhower administration, which was purported to be and had the perception of being a conservative administration-we didn't feel that Sturgis was really on our side.

Q: What does that mean?

A: By that, I mean that he was still the old Corps of Engineers which looked on itself as being engineer consultants to the Congress, and the Bureau of the Budget was looked on as a kind of a Johnny-come-lately on water resources. You realize that the Bureau of the Budget wasn't a part of the Executive Office of the President until 1939.

Somehow, General Sturgis was a much more remote figure. When General Itchner became chief, he seemed to be with us 100 percent and he was a very methodical person. When we said something, he immediately took steps to wholeheartedly put it into effect. He was methodical. Joe Tofani used to say how he read every letter that went out of the Civil Works Division. General Itchner was chief of Civil Works when we first started dealing with him and had the feeling that he really understood the position of the Bureau of the Budget much better than Sam Sturgis had.

Q: Well, let me ask you this, though. Sturgis can't defend himself, so let me see if I can try to defend him a little bit. I'm thinking about some of the material I've seen in Sturgis's files, which are voluminous, which we have in our archives.

There's an awful lot there, of course, in response to concerns that the Corps of Engineers might lose the civil works functions. You have the second Hoover Commission which, in the end, does not recommend that, but still and all, there is this concern and also perceptions that the Bureau of the Budget is trying to exert more control over the Corps' program than perhaps had been the case before.

So in other words if, in fact, Sturgis was a bit paranoid about what might be coming around the bend, particularly from other parts of the executive branch, was there some justification for it?

A: Yes, I guess there was, and I'm sure I would have felt the same way, if I had been the head of an agency in which I had a lot of pride. I hate to use the word, but the Corps is a little bureaucracy, and it has enjoyed a very close relationship with the Congress. In fact, the first few reorganization acts specifically eliminated from consideration any change in the civil functions of

the Corps of Engineers. That was in the reorganization act that was passed during World War II, I remember.

So when the Hoover Commission task force recommended a consolidation of the water resources agencies, even though it was later rejected by the full commission, Sturgis certainly had reason to be concerned. I'm merely talking about my perceptions as a staff man. And remember, at that point, I was merely the staff member on the Corps of Engineers' program, and it was a year or two later that I was promoted to be the staff person for all the **water** resources programs.

Q: Who were you reporting to at that point?

A: Well, I was still reporting, at that point, to Floyd Peterson. Then Floyd Peterson moved up to be General [John] Bragdon's staff person-

Q: Into the White House itself.

A: -as public works coordinator to the President.

Q: What was Floyd Peterson's position before he went into that position?

A: He was assistant chief of the Resources and Civil Works Division under Carl Schwartz, who was chief.

When Pete left to go upstairs, Charlie Warner-he's the old Corps hand from the Philadelphia District-moved into the position. At that time I was moved into a position where I was responsible for all the water programs, and someone else had all of the power programs in the Resources and Civil Works Division. We kind of split the TVA in a way, which was difficult. I had the Panama Canal and the Canal Zone government, and eventually the Saint Lawrence Seaway Development Corporation, as well as the Bureau of Reclamation, even though, of course, it and the Corps had power programs. But the power marketing agencies were in the power unit, and we all worked well together.

Anyway, relationships with the Corps always were good. I think I mentioned yesterday that we had the feeling that we always got what we wanted from the Corps, but then we didn't always get it through the Congress. I'm sure that

congressional staff members of the committees got help from the Corps' staff to get the Corps' program through, even if it was in opposition to the Bureau of the Budget's view.

One of the Corps' generals that I remember very vividly was Jack Person, who was director of Civil Works. He had come in, or maybe he went out to, the Ohio River Division. I always associate him with the Ohio River somehow. He had a very strong personality. One of the irreverent things I remember about him is when he would come in for a hearing, he always made a beautiful presentation because he had been educated in what we called Joe Tofani's "college." Then we would go to lunch with Jack and Jack would indulge himself in two double Martinis before lunch and Joe and I would kind of weakly follow on with singles. When we went back to the hearing Jack was right on the ball, the true Army general, and continued the presentation, and you never could see any trace of any influence of imbibing.

Some people could drink like that. My brother is one who could. He just could really hold his liquor and you never could tell he'd had a drink. He gave me my first drink of straight whiskey when I was about 15 years old. It made me feel so good that I didn't want to have a chaser.

So I had very good recollections of Jack Person and I was awfully sorry he had a heart attack. He had to kind of change his lifestyle somewhat, but he was a wonderful person, and we got along well. But my primary recollection, though, was with Joe Tofani who really held the whole budget of the Corps together and we knew we could count on him.

Now, with the Bureau of Reclamation we had a number of people whom we dealt with, and we were always fighting with them. Always arguing with them.

Q: Why is that?

A: Largely because the Bureau of Reclamation was primarily oriented toward irrigation at that time. They looked on power only as a source of revenue to subsidize irrigation. And at the same time in another part of the government, we were financing programs to restrict production and still the country was producing vast surpluses of crops. The Bureau of Reclamation refused to face up to the fact that this was a dichotomy in the federal programs. It was a bureaucratic agency fighting for its life. And the clash between the Bureau and

Corps was part of this fight-the Bureau did not have the political backing that the Corps had because of its limited focus in the West, and so it fought the Corps tooth and nail over projects like Chief Joseph and Lucky Peak and Hells Canyon.

The Bureau and the Corps eventually got together on the Columbia River basin and the Corps conceded Hells Canyon to the Bureau, but I think that may have been because the Corps knew that the project wasn't going to be built because of the public power ramifications of Hells Canyon, which eventually killed the high dam.

Q: Of course, the Corps also built more dams in California, though, beyond Pine Flat.

A: Yes, so they did. In California, starting with Pine Flat, the battle between the two agencies was intensified. Of course, the Californians egged them on, because the more federal money they can get in there, the less state money they'd have to put up to meet water demands. Eventually the state did have to come through with its bond issue and build the California water project.

But the Californians knew what they were doing, and I have great respect for the political abilities of people like Harvey Banks the way they played the Bureau against the Corps. They knew what they were doing, and they pretty much got as much as they could out of the federal government. Then when it became too hard to get enough federal money, they went on their own-it was originally their project, of course. But it has been costly, particularly when the Bureau of Reclamation tied up all that water for 50 years at a price of \$3.50 an acre foot, and then fought to keep that low rate as new units were brought into the project.

Saint Lawrence Seaway Authority

Q: Ted, there are at least two or three major issues, water issues, in the Eisenhower administration that I would like to get into in some detail. You mentioned one of them already, the Saint Lawrence Seaway. It seems to me you were in a kind of interesting position in the Bureau of the Budget, vis-a-vis the Saint Lawrence Seaway. You were the contact for both the Saint Lawrence Seaway Development Corporation and the Corps of Engineers.

You must have been aware of the rivalry between those two organizations, that is, you know, the Corps at one time was hoping, and made its hopes known, that it would operate and maintain the seaway once the construction was finished, and evidently, according to what I've read, there was not a heck of a lot of love lost between a person like Sturgis, for instance, and the head of the Saint Lawrence Seaway Corporation at that time.

Can you shed any light on that?

A: Yes, but first let me say that even though this was the Eisenhower administration, I don't think it was so much Eisenhower that originated policy as the business interests that controlled the Republican Party. To me, Eisenhower was what I would call a warmed-over Democrat. I don't know whether he was a Republican or Democrat until they offered him a nomination from the Republican side. But he was what the Republican Party needed after 20 years of the Democratic Party's hold on the presidency. He was electable, which Taft may not have been in 1952.

So the partnership philosophy of getting projects and programs financed by nonfederal money was developed as a means of reducing the size of the federal government. The seaway was one of the partnership projects-the power phases of it were done by the New York State Power Authority and the Saint Lawrence Seaway Development Corporation was created as an independent government corporation to handle the navigation project. You remember, the Saint Lawrence Seaway has been discussed back as far as the Harding or the Coolidge or the Hoover administrations and maybe for a lot longer than that. I think the Bureau of the Budget had the feeling that they could get a better partnership arrangement there if we had a government corporation to do the navigation with the New York State Power Authority doing the power.

Up until that time, when the Corps built projects like John Day, which was in the mill then, and The Dalles project, the Corps did the power and the navigation and there hadn't been any thought of separating responsibility for the two functions. But then the Eisenhower administration decided that the next dam on the Columbia should be a partnership, and so Priest Rapids was to be done that way. We called it a partnership, but really the project was turned over to the public utility district. But I don't think there are any navigation locks.

Anyway, in the Eisenhower administration, Joe Dodge was the first director of the Bureau of the Budget and then Roland Hughes succeeded him. They were bankers, and they liked the idea of government corporations, and so the Bureau of the Budget never really considered that the Corps should have any role in the Saint Lawrence Seaway project, which was of an international nature, and we had to have relationships with the Canadians and the Canadian Seaway Authority.

So I guess if the Corps thought it was going to run the seaway, it was whistling Dixie, as they say, because, from my recollection, there was never any real consideration of the Corps on that.

Q: So the Corps did construct the seaway? I mean—

A: Well, the Saint Lawrence Seaway Development Corporation had a chief engineer, who was Ellis Armstrong, and he managed that project, not the corps.

I suppose I was maybe a Johnny-come-lately on the Saint Lawrence Seaway because originally the responsibility for the Saint Lawrence Seaway was being handled by the staff of the Commerce and Housing Division of the Bureau of the Budget. We had our own little bureaucratic struggles within the Bureau of the Budget, and I felt, of course, that the responsibility should be in Resources and Civil Works.

We already had responsibility for the TVA, which was a government corporation, and so when the decision was made to make the seaway into a government corporation, we fought to get it. We finally got it. I think the basic decisions had already been made, but Resources and Civil Works handled the budget each year. Reese Harrell, who was an expert on government corporations, with the GAO [General Accounting Office], became the controller of the seaway authority, and he was the one that we dealt with on the appropriations, and on setting the tolls, and all that.

But I never, never-I guess I'd have to go back and look at the record to see how the Corps fitted into that picture. But let me say that if there was any problem between the Corps of Engineers and the authority, it was nothing compared to the fight with the Coast Guard over the aids to navigation. This was a tempest in a teapot that went on for some time. We had a meeting with

the admiral who was in charge of the Coast Guard. He felt that the Saint Lawrence Seaway was trying to usurp the control of navigation there, and he said, "Why, if you let them put up these navigation markers in the seaway, they're going to want to move on up into the Great Lakes which are international waters." And he went on to say, "We'll have two systems of navigation in this country."

The Coast Guard, of course, puts up the buoys and the markers in all of the harbors that the Corps of Engineers improves, and I really got a kick out of that bureaucratic fight because it was such a small amount, amounting to maybe a million dollars. But the Coast Guard saw it as a real threat to its authority over the navigable waters of the United States.

McClellan-Kerr Waterway

Q: Interesting. Let me turn our attention to another issue, and this is going to introduce one of the most interesting personalities of the era, Senator Bob Kerr of Oklahoma. The issue that I wanted to first mention, though, or get your response to, was the development of what came to be called the McClellan-Kerr Waterway in Arkansas. Let me, just by way of getting your comments, mention to you an observation that's been made to me, and I've never been able to really document it, and that is that I guess it was in 1956 when the Interstate Highway Act was being considered, that the agreement was made that Senator Kerr would support the Interstate Highway Act in return for some support from some highway supporters for the construction of what came to be called the McClellan-Kerr Waterway.

Do you know anything about that? Could you give us some background?

A: No, I was not aware of anything like that, but I'm not surprised. I don't remember in which act the Arkansas River Waterway was authorized. Do you remember which year that was authorized?

Q: I think that goes back to the late '40s, actually.

A: Yes, it was an authorized project when I was in the Bureau of the Budget.

Q: '48, something like that.

A: That's what I remember and so each year the Corps came in and asked for money and each year the Bureau of the Budget turned them down. And I shouldn't say "each year," because I was only there for four years, but we did turn them down. Then the Congress finally put in \$1 million to start the project, and the Corps started by buying some land and building an access road, or something like that, the way they would do, and started the design.

When that came up in the budget for the second year of construction in the budget, and the Corps was asking for \$5 million, the way the construction progression goes: \$1 million, \$5 million, \$10 million, \$100 million. This became a policy issue. Should we continue this project? We didn't think it was economically sound, I should say the staff didn't think it was economically sound, and it had been started in opposition to the Eisenhower no new start policy. It was felt that the only way you could hold this program within the budget was to eliminate any new starts. The total Corps program at that time was about \$450 to \$500 million, but the Corps program plus the Bureau program and the SCS program amounted to maybe 2 percent of the budget, which is a lot bigger share of the budget than it is now. That was before the social security trust fund was incorporated into the budget.

So a policy decision was made on the second year of construction on the Arkansas Waterway. We just zero budgeted it, and, of course, that was in the budget that went up to the Congress. I think the Congress put it back in, and the Corps continued the work.

And then I recall that in the third year there was a big meeting in the White House at which I wasn't present but Senator Kerr came in-probably with Senator John McClellan and a lot of power from the Hill, plus a lot of local people-and they met with the President himself. I'm not sure whether Sherman Adams had been released at that time or not. You remember the Vicuna Coat scandal?

Q: Yes.

A: Anyway, after the White House meeting, we got the word that from then on we were going to fund the project. I don't know about this deal with the highway interests that you speak of. I've told you all that I can remember about my involvement with the Arkansas Waterway which was that we recommended against it as long as we could.

Rivers and Harbors and Flood Control Act of 1958

Now, at about that same time, there was another really major issue that came up to me and that was the omnibus bill that eventually became the Rivers and Harbors and Flood Control Act of 1958. There hadn't been a rivers and harbors bill for a few years, and the traditional two-year cycle had been broken, but in 1957 the Congress passed a bill, and because it was the first bill for several years, they put a lot of projects in it on which they didn't have completed reports. They also had a number of projects in the lower Mississippi valley which they were going to add to the MR&T project, which meant that the federal government would pay all the operation and maintenance costs.

And these projects-I think it was Boeuf and Tensas bayous, probably in Louisiana or Arkansas, and several other projects really were land reclamation projects. We were still operating under the provisions of A-47, or, you might say, trying to operate under these provisions, even though there was little political support for them. So the staff still would object if an agency didn't follow those provisions which called for local cost sharing for land enhancement projects.

And so, when this enrolled bill came to the White House for signature, proposing authorization of what seemed like a very large amount of money, it was carefully reviewed. There were lots of projects without reports, or with district engineer reports only, and no Board of Engineers report or no division report, and definitely no Chief of Engineers report. And then there were a number of them where they had a Chief of Engineers report and the report was still sitting on my desk for comments as to the Bureau of the Budget's position. I was able to get most of those out, but still, there were a lot of them that didn't have a House document number-hadn't been published.

It was obvious that enactment of this bill would be breaking the President's budget policy. At the same time, the bill for the Soil Conservation Service, which really got the Soil Conservation Service into small flood control projects with both feet by liberalizing the cost sharing, was under consideration.

Modification of Public Law 566, The Hope-Aiken Act

Q: So you're talking about the modification of Public Law 566, the Hope-Aiken Act.

A: I'm talking about the amendment which eliminated the cost sharing on flood control.

Q: Yes, that's what I was asking about.

A: The Hope-Aiken Act, Public Law 566, had cost sharing, and in 1957, they were considering removing that cost sharing on small reservoirs. At the same time, the Bureau of Reclamation was trying to get its Small Reclamations Project Act through, and those three bills moved down through the congressional committees and came up to us as enrolled bills for advice as to whether the President should sign them or veto them. Our staff took a position against all three of those bills, because of our feeling that they were all liberalizing federal policy and would result in increasing demands on the federal budget, even though on the small reclamations project bill there was going to be repayment, it would be without interest.

So our staff recommended that all three of these bills be vetoed. Of course, the Bureau of the Budget also asked all of the agencies for comments on all three enrolled bills. I didn't handle this directly, but our Office of Legislative Reference, as it was then called, handled that routinely. That office was headed by Roger Jones, and he gave us an opportunity to review all of the comments before he made the Bureau of the Budget's recommendation to the President.

Well, interestingly enough, the Bureau of Reclamation recommended that both the SCS's bill and the Corps' bill be vetoed, and each agency did the same: recommended that the other two be vetoed. One of the things I remember particularly was that the Corps, in its comments on the SCS's bill said, "This act would take away the one significant indicator of the value of a flood control project: the willingness of the beneficiaries to pay a share of the costs."

Well, I took great delight in using those very words in drafting the President's veto message on the Corps of Engineers' act. I think those words must have been written by either Gene Weber or Howard Cook.

But anyway, the omnibus bill was vetoed on the grounds that they didn't include reimbursement for land enhancement in the flood control projects, which really hit those Louisiana and Arkansas projects hard, and they had all these projects that they didn't have complete reports on.

Do you remember the book that Elmer Peterson wrote—

Q: *Big Dam Foolishness*.

A: *Yes. Big Dam Foolishness*. Well, Elmer Peterson went in to see the President about that time and gave him a copy of the book. The President was very much impressed by the book so the President vetoed the Corps' bill, and he vetoed the Bureau of Reclamation's bill, but he signed the Soil Conservation's flood control bill and it became law in 1957. Neither of the vetoes was overridden.

The next year the Corps' bill, with some modifications was passed again, in 1958. Many of the reports had been finished. I had cleared my desk and got all the comments on the reports out, and so a lot of the objections because of the lack of completed reports were eliminated. But there were still some they didn't have reports on, and they were left out of the new bill. But no change had been made in land enhancement. So the President vetoed the bill again. I don't have as vivid a recollection of that, but we felt that we were breaking some new ground, vetoing a Corps of Engineers' authorization bill for the second time.

Everybody said, "It's never been done before." As a matter of fact, it had been done, and it was done many times in the 19th century. There's one thing that people forget, that until the Republican Party was formed in 1856 and succeeded in electing a President in 1860, Abraham Lincoln, the President had rarely ever agreed with the Corps, had vetoed most of the rivers and harbors bills, and they were passed over his veto. It wasn't until the liberalization of the federal programs by the Republican Party that Presidents agreed that undertaking internal improvements was an acceptable function for the federal government .

Most people don't know that. I'm indebted on that, I might say, to some research that Henry Caulfield did when he was at Resources for the Future. I opened my eyes to the origin of the Republican Party, and I did some research on the history of federal participation in public works later on when I was up at the Library of Congress.

But it's an interesting facet of our political history that the Republican Party really was the liberal party. My family, I'm sure, were all Republicans. I was named "Theodore" because my mother and father had such a great respect for Theodore Roosevelt.

Now we've had a complete changing of the political spectrum, starting with Taft when he changed the nature of the Republican Party and when Teddy Roosevelt with his Bull Moose campaign was defeated.

Q: Let me continue on that for a second, because actually, while on the one hand, of course, the Eisenhower administration was trying to exert some control over the enormous costs of water resources projects, on the other hand there was some legislation passed in the 1950s that, in some senses, expanded the federal role in water resources. I'm talking specifically about legislation involving coastal engineering projects and also legislation involving water supply, the 1958 Water Supply Act.

I wonder if you might give us a little bit of background on either one or both of those acts? I'm particularly interested, frankly, in the Water Supply Act, because that seems to be something that is of some interest to us today. Did you get involved in any of the—

A: The Water Supply Act of '58 was Title III of this bill that I was talking about that was vetoed, and that was one of the reasons that we vetoed it twice. That was one of the objections, because it opened up a whole new area. The Bureau of the Budget, at least, was dead against it, and the President supported us.

Now, I have to say that, on the third try, they took out more projects and the recommendation on cost sharing for changed land enhancement. The President eventually signed the bill, but that was after I had left the Bureau of the Budget. But Title III stayed in the bill and became law.

Legislative Reference Service, Library of Congress

I think I ought to tell you how it came about that I left the Bureau of the Budget to accept the position of senior specialist in Engineering and Public Works at the Legislative Reference Service at the Library of Congress. The reason I got that job was they had interviewed Howard Cook, and also Eugene

Weber, to fill the position that Charlie Curran had held before he went to work for the second Hoover Commission. A fellow named Wally Vawter, whom I never met, filled in for Curran while he was at the Hoover Commission. Interestingly enough, they had both been in the Bureau of the Budget before moving to the Library of Congress. When Curran didn't want to come back to the position they had held for him and Vawter had already left, they had to fill it.

Howard Cook called me up one day to tell me about it. He said they had invited him to come up and talk to them about the position, and he said something like, "I don't think I want the job because I think I can do more good at the Corps." Howard really felt that he was helping to reform the Corps' policies. Howard was a wonderful person with great integrity. I think I've mentioned that I'd worked with him when he was in the Office of Land Utilization in the Agriculture Department. The Corps was lucky to be able to hire him when he was booted out of Agriculture when Ezra Taft Benson became secretary.

Anyway, Howard asked me if I would be interested in interviewing for the position. I told him that I hadn't really thought about it, but if it were a promotion I might consider it. Then a few days later Gene Weber called me and told me that he had been up there talking to them, but that it was not the kind of job he wanted. You remember, Gene was involved in the International Joint Commission, but I don't know whether he was a commissioner yet. However, he had a very public image and at one point had received a very important public service award. I think he felt it would be a step backward in his career. I think he said that he was not the kind of person who could sit at a desk and do research. Then he asked me if I would be interested. And I gave him the same answer I had given Howard. So Howard and Gene apparently gave my name to Ernest Griffith, director of the Legislative Reference Service, who invited me to come up for an interview. And when they offered me the job, with a promotion, I left the Bureau of the Budget to join the staff of what is now the Congressional Research Service. So I was up there when the omnibus bill finally was enacted with a lot of those projects out.

One of the ironic things that happened over the next few years in my role at the Library of Congress was that Senator McClellan and Senator Ellender and various other members of the Congress whose projects had been curtailed in that 1958 act asked for my help in getting what they wanted reinstated. The

most egregious of these requests was for help in taking the cost sharing out of the land enhancement in the Boeuf and Tensas bayous project. I felt that it was kind of ironic that here I had been one of the people fighting to keep certain things out of the federal program, and now I had to help put them back in because it was my job to help members of Congress.

But I have always looked on my role as primarily a staff role in which you do what it's your responsibility to do. I guess that's why my philosophies never became imbued into the policies until much later.

Q: Let me just ask you, before we get off the Bureau of the Budget, one last question. You've been talking about your relations, and the Bureau's relations, with various Corps personalities, but there are some people whose names have not popped up and, in a sense, they're notable by their absence. I'm talking, in particular, about people in the Department of the Army, as distinct from the Corps of Engineers.

I think, by this time, Dick Hertzler was already over in the office that became the Office of Civil Functions. That particular responsibility shifted among various offices in the '50s and early '60s in the Department of the Army, so it depends on what year you're talking about. But the question is, did, in fact, to your knowledge, the Department of the Army try to exert some control over the Corps' civil works functions, or was the relationship really between the Corps and BOB as sort of short-circuiting the Department of the Army?

A: Dick Hertzler was another refugee from Ezra Taft Benson when he reorganized the Department of Agriculture, and was our primary contact with the office of Civil Works. We had a lot of contact with Dick Hertzler, but, frankly, Dick did not have the power or the knowledge that Joe Tofani had. Dick was a wonderful person, and I liked him a lot. We had been friends for years before he went to the Department of the Army, and we always tried to work through him, but he had Dewey Short as assistant secretary. So the top-level relationships were between Bob Merriam, assistant director of the Bureau of the Budget and Dewey Short. But when it came down to getting something done, we relied much more on Joe Tofani. Dick had the role, I think, of trying to rationalize decisions that were being made by powers that were more powerful than his particular office. That was the way I looked at it. Dick was in a difficult position because he basically agreed with us, and we had pretty good rapport with him and Howard Cook, but when it came down to the decisions,

I sometimes felt that they were just voices crying in the wilderness, trying to bring more cost sharing into the course of programs, and trying to bring more conservative cost-benefit analysis and better economic analysis into the program.

And Gene Weber was another one we dealt with on policy and he seemed to have somewhat more, if you want to use the word, “clout” in the Corps. He eventually became an assistant chief of Civil Works, I believe—one of the few times that a civilian has reached that stage.

So I didn’t have lots of contact with Dick Hertzler, but it struck me that there wasn’t any real power there, and I don’t think he exercised much control over the Corps. When we really wanted to get something done, we just had to go through Joe Tofani.

Q: Okay, well, I think it’s time to turn our attention to the Kerr Committee, unless you had something else you wanted to cover.

A: No, I had first met Senator Kerr when the Bureau of the Budget had testified before his subcommittee on A-47. I think there were several attempts in the Senate during the mid-50s to liberalize federal water policies. I am thinking of Senate Resolution 248, and Senate Resolution 281, but I can’t remember which Congresses. They were introduced or adopted in an effort to counteract A-47, because A-47 was still on the books even though everybody had disavowed responsibility for it. Because it was still on the books, the Bureau of the Budget could use it in reviewing reports. So the Senate—this was the Public Works Committee—was trying to impose its views, which were toward the liberalization of policies with respect to recreation and the environment. At that time they wanted nonreimbursable allocations of costs for such environmental programs as providing water for dilution downstream from reservoirs. Dilution of—

Q: -pollution?

A: Yes, pollution. It was looked on as a way to get more projects. You provide space in reservoirs for water quality storage, which could be drawn down to dilute pollution. It was proposed as another nonreimbursable allocation that could help to justify a project.

I think Senate Resolutions 248 and 281 were in separate Congresses. I think 281 came first, and then 248, and they both were attempts to liberalize policy. The Bureau of the Budget testified against them, although these were not laws. These were merely Senate resolutions which the President didn't have a view on, but we were consulted, and Senator Kerr seemed to delight in attacking the Bureau of the Budget; Bob Merriam stood up beautifully against Senator Kerr, and there was a lot of interesting repartee. Senator Kerr was always a great one to ask his staff for a dictionary and quibble about some word.

He was a very well-educated man, as well as a brilliant man, and I can remember one exchange where Kerr said, "Well, this word means so-and-so to me, " and Bob Merriam said, "Well, Senator, I have to accept the dictionary's definition, as long as it's a Merriam-Webster dictionary." Bob Merriam, as well as his father, was very much involved in public administration. I enjoyed working with him. Incidentally, Bob died just a few months ago. I had been briefing Bob on water policy, so he was well versed on the issues and he had several sharp clashes with Bob Kerr and Senator Ellender. It soon became evident that Kerr and Ellender were not really very conversant with the issues we were talking about. It was all very theoretical to them, and they had been prodded by staff people to hold the hearing, and when the staff people weren't there, they weren't able to make much of a case at that particular time.

Senate Select Committee on Natural Resources

Anyway, about a year after I went up to the Library of Congress, I was very surprised to get a call from Don McBride, who was Senator Kerr's principal staff man in the water resources area, asking if I would come over and talk to Senator Kerr about serving as staff director of the Senate Select Committee on Water Resources.

Q: Okay. Now, just to get the chronology straight, in April 1959 you had Senate Resolution 48, which, of course, calls for these studies of water resources and some 20 months or so afterwards, I guess it's 1961, is when the report is finally submitted. Okay.

A: Well, let me go into the background of that. I should have mentioned that first. Senate Resolution 48 was introduced by Senator Mike Mansfield. It stemmed

from the fact that the President had vetoed the Army Corps of Engineers' authorization-the bill that eventually became the Rivers and Harbors and Flood Control Act of 1954. The President had vetoed it twice. The revised version that eventually became law was passed at the end of the session. In addition, the President had vetoed the Bureau of Reclamation's small projects bill and the expansion of the water pollution control program. This was a big issue we haven't mentioned, but it was a big issue through the '50s. And the President, I think, had vetoed the Civil Functions Appropriations Act.

This was near the end of the Eisenhower administration, and I think some people on the Hill decided they had to make a record in the water resources field to help in the 1960 election. And the studies authorized by Senate Resolution 48, which didn't have to go up to the President for signature, were going to be used to provide the ammunition they needed to beat the administration over the head in the 1960 elections.

I didn't really know much about it when I got the call from Don McBride. Don McBride was the former executive director, or maybe they called him the executive vice president, of the National Reclamation Association. Then, later, he had been state engineer of Oklahoma and had come to Washington when Bob Kerr was elected to the Senate. I got his call while I was at a civil engineering meeting out in Cleveland, which is why I remember it. When I got back from Cleveland, I went over and met with Senator Ellender and Senator Kerr. I remember Senator Kerr saying, "Mr. Schad, we've been talking about you as if you were a sack of meal or a sack of flour-or wheat or something-as if you were an inanimate object, and we wanted to meet you and see if you meet our specifications to run this committee."

Allen Ellender didn't say very much. He was rather laconic, and in some ways he was more political than Bob Kerr. Anyway, nothing at all was said about my political affiliation, Kerr obviously remembered that I had been before him representing the Bureau of the Budget, and so he knew where I had come from. But I think he relied also on Don McBride's knowledge of me. We had a little talk at the end of which I agreed to take the position of staff director for the Senate Select Committee on leave from the Library of Congress.

When Senate Resolution 48 was passed, it was co-sponsored by Senator [James] Murray of Montana, and I think it had been assumed that Senator Murray would be the chairman of it. Senator Murray was chairman of the

Senate Interior and Insular Affairs Committee, Dennis Chavez was chairman of the Public Works Committee, Allen Ellender was chairman of the Agriculture Committee, and Warren Magnuson was chairman of the Commerce Committee; and they were all going to be members of the Select Committee because it cut across all of their responsibilities. But Senator Murray had medical problems-I don't remember just what it was-and Clint Anderson took over the responsibilities of the Interior Committee.

When it was found out that Senator Murray would not be able to serve as chairman, and then since Senator Kerr was chairman of both the Rivers and Harbors and Flood Control Subcommittee of Public Works and the Subcommittee for Civil Functions of the Appropriations Committee, he seemed to be a natural person to serve as chairman. I don't think he had had anything to do with the passage of Senate Resolution 48, and he probably didn't even know about it until it was passed because it came out of the Interior Committee. It was also felt that if one of the four full committee chairmen took it, there might be a violation of the rule about how many committees you can chair in the Senate, but I am not sure that rule applies to select committees.

So that's how Senator Kerr got to be chairman, and to show that it was going to be a bipartisan committee, Senator Tom Kuchel of California was made the vice chairman. There were a number of powerful senators on the committee in addition to the four chairmen: Henry "Scoop" Jackson, Magnuson, and, of course, Senator Murray, who was ex officio, but he never came to the meetings. On the Republican side, Milt Young and Francis Case. Case was very much involved in water resources, having been one of the sponsors of the Case-Wheeler Act back in the '30s.

Then there were some of the newcomers. Well, Clair Engle was a newcomer in the Senate, but he had served a long time in the House, and Phil Hart and Gail McGee and Ted Moss. So we had some really powerful committee chairmen, and then we had some new, younger senators who were a joy to work with because they were so open with me and relied on me to educate them about water resources.

Q: There seems to be a strong Western representation on the committee.

A: Yes, very strong Western representation, but we had Phil Hart from Michigan and Hugh Scott of Pennsylvania. I should also mention Thomas Martin of

Iowa. But otherwise, it was all Western, but that's where the primary interest in water is in this country.

Q: How about the Southeast, we've built a lot of projects there?

A: No. Nobody from the Southeast. And we had two from California, two from New Mexico, and two from Washington state, so it was not well balanced geographically. Anyway, I accepted the position but remained on the Library's payroll and I didn't have any commitment to support any particular policies or anything like that. My role at the Library was to serve members and committees of the Congress, particularly the Public Works and the Interior Committees of both Houses and their members, so it was quite natural for me to take on the responsibility.

The director of the Legislative Reference Service, Ernest Griffith, didn't want me to go because he said he needed me, but didn't stand in my way because by taking the position I was, in effect, serving the committees which I was responsible for serving.

So I went over to work in what was then called the New Senate Office Building, the first occupant of Room 3206 still on the Library's payroll, but the Library was reimbursed by the committee. The Library was very particular about that, and I think even when I traveled for the committee, the Library had to buy my tickets and the committee had to reimburse. The Library was very particular about any staff member not receiving any outside compensation, even from another government agency.

I started to work for the Senate Select Committee about May 1959 and I found that Clint Anderson had already taken a leading role in the planning for the committee's work. He had been in touch with Ed Ackerman, the Ed Ackerman who had been at the Bureau of the Budget. I don't know whether this is a fact or not, but I believe that if Ed Ackerman had been willing to take the position of staff director, Clint Anderson might have accepted the chairmanship. But Ed Ackerman had been appointed as executive officer of the Carnegie Institution, which is a very prestigious position; he couldn't be expected to consider going to work on the Hill. I have a feeling that that's another reason that Senator Kerr was made the chairman of the committee.

They're all gone now. Nobody can ever prove or disprove that and I doubt if anybody else but me remembers or cares about it.

But Ed Ackerman had worked out a rough outline of how to attack the problem. Of course, it was very thoughtfully and professionally done. It was, I might say, very academic, remembering that Ed Ackerman had been a professor of geography at the University of Chicago. It was a good program; it was to be accomplished in two phases. The first phase was to lay the groundwork and develop all the physical and economic information, and the second phase was analytical.

This plan was given to me by Senator Anderson and it looked good to me. Ed Ackerman was a friend of mine and he met with me several times to discuss his ideas. At first I pretty much worked as an individual on this because I was used to working as an individual. Later, I got a gentleman with whom I'd worked in the Interior Department named W. G. Hoyt to assist me. Hoyt was an old-timer with the U.S. Geological Survey who had been the executive secretary of the Water Resources Committee of the Interior Department, and I had very close relationships with him on all the work I did through the FIARBC.

He was retired and had been living up in Connecticut but had just moved back to Washington, so I took him on as a consultant. I think we paid him about \$25 a day, because he was a federal annuitant, and the rule was that you deducted the amount of their federal annuity from their normal pay.

I also took my assistant from the Library, Barbara Jibrin, over with me, and Senator Kerr assigned Paul McBride-not Don McBride, but Paul McBride from his staff-to be the administrative man for me. I think that Paul McBride was supposed to keep an eye on me, but he was not the kind of a person that was very intellectual in the water area; he was really the only committee clerk, so we called him the "Chief Clerk."

We also had a secretary, Maggie Duckett, who had formerly worked for Robert Kennedy on the staff of the Labor-Management Relations Committee. She was a very good secretary. We also had another secretary, and that was the extent of the staff. We didn't have a lot of money. I think the resolution provided only \$175,000 for the first year, and we were supposed to get help from the federal agencies. I was able to enlist the aid of Abel Wolman, Gilbert White,

and Ed Ackerman as consultants, and I think we were able to pay them \$100 a day.

That gave me a lot of intellectual power. I don't think we could have done what we did if it hadn't been for those three gentlemen helping me. We met several times, and they met with the committee as a group once or twice and with the chairman and me individually several times.

I started with the Ackerman program and developed it into something that I felt would be easier for the senators to understand-a little bit more practical covering federal programs in the first phase and problem areas in the second phase. Most of the studies were done by federal agencies in response to requests made by the committee, or I should say, by the chairman. At one point, Senator Case had an assistant that he wanted to get involved with us, and so we did have a gentleman named [A. M.] Eberle, from South Dakota help us with a report on weather modification. Later-I don't know whether the Corps put him up to it or not-I was asked to appoint Herb Gee, a former Corps of Engineers officer who had left the Corps with a lot of publicity because he couldn't get promoted, or something like that. He had a consulting firm down in Palm Beach, or West Palm Beach. He was named as a consultant, I think, on the recommendation of Allen Ellender.

Q: Is that G-e-e?

A: Yes. But Gee and Eberle were kind of on a different level than the first three consultants that I mentioned. They came to some meetings but didn't get involved with the overall program, which had already been adopted by the committee. We went through that whole list of studies one by one. I won't enumerate them now because they were all published as committee prints. We made a special effort to get the Government Printing Office to change their standard format for committee prints which was 6 x 9. We had to pull a few strings to get the Joint Committee on Printing to agree that we could get those printed up in a larger format, 8½ x 11. You just can't believe how much red tape had to be cut just to make that one little decision. It was almost as if we were undermining the foundations of the Capitol to make that change. I think Senator Kerr had to take it up with Carl Hayden. There have been other slick-paper committee prints that have been on that format.

Q: Why were you so interested in getting the size changed?

A: Because we wanted them to stand out as different and more important so people would pay more attention to them. Both Gilbert White and Ed Ackerman felt one of the problems is that the Congress really doesn't really understand the importance of proper management of water resources. The whole thrust of Ackerman's original program was to lay out an academic background on the theory of water resources, as a way to educate decision makers.

So, at one of the first meetings of the committee, we had the Geological Survey make a presentation with attractive charts showing all the different aspects of water resources-of groundwater, water quality and quantity, and so forth. These charts would not have looked good in a 6 x 9 format, but they looked good in the larger format, and that became Committee Print Number 1, and that is why the decision was made.

Maybe it wasn't all that important, but Senator Kerr wanted it done, and so we did it that way. And I'm glad we did because it set our work apart a little bit. But you're right, maybe it wasn't all that important. But why did they make such a big deal out of it? I guess I have a stubborn streak in my nature, and when they said, "You can't do it," I said, "Well, I think we will do it." We eventually went to Carl Hayden. He was president pro tern of the Senate, but he was probably also chairman of—

Q: -the Joint Committee on Printing?

A: I don't know whether it was the Joint Committee on Printing, or the Committee on Administration of the Senate.

Anyway, the reports were printed in the larger format and lots of people liked them. Most of the reports were prepared by the federal agencies. These were the reports on the first phase, developing the background for the analyses in the second phase.

Q: So in other words, the Corps of Engineers actually prepared the report on flood control, or—

A: That's right. It was Howard Cook, and he did a wonderful job, and I think he prepared one on navigation also. At least he was my contact person. Similarly in the Interior Department program, there were reports on Reclamation, and

Fish and Wildlife, and the Park Service. I can't remember who prepared the one on Alaska.

Water Supply and Demand Study

The principal new idea that I put into the program was the idea of developing the water supply/demand relationship. It was not an original idea with me. A gentleman named Doug Woodward, who was on the staff of the Geological Survey, had written a paper for the Army War College on the supply/demand relationships for water. He did it really for the whole country, and, of course, it does show there's plenty of water in the United States.

I had read that paper, and the idea kind of intrigued me, and so I got the idea that this would be a good focus for the committee's efforts to develop water supply/demand relationships for the individual river basins to show where the shortages were showing up.

We divided the country up into 22 water resource regions. Working with people from the Department of Agriculture, we divided the whole country into river basins, but we had to do it by county lines because all the economic data which drive the demand side was prepared by counties. The Geological Survey set up a whole section for me, headed up by a wonderful hydrologist named Roy Oltman, with a staff of five or six people to work on hydrology for the Senate Select Committee. We could have never done what we did if it hadn't been for that group, as well as other groups.

We had a committee of representatives from the federal agencies to help with the coordination of the studies. Howard Cook was the representative from the Corps of Engineers. Carl Brown from the Soil Conservation Service represented Agriculture. When I saw that I would need more help to put all this together, Ed Ackerman, who had been chief of the water resources program at the Resources for the Future before he went to the Carnegie Institution, put me in touch with Resources for the Future. They had just given a grant to an economist from the University of New Mexico on sabbatical named Nathaniel Wollman to work on water supply/demand relationships. Nat Wollman was a most unusual person in that he was-1 don't know whether to say indefatigable or what-but you could not discourage him. He was in Washington for only a year, or maybe two years, to work on this project, but he was convinced that

it could be done. He sat in on the meetings with federal agency representatives to help with the coordination. People like Nat Wollman and Howard Cook were really the indispensable glue which helped me pull all of this together.

Out of it we developed a water supply/demand study which was going to be done by Resources for the Future with the aid of the federal agency committee to provide the data from their agencies. Of course, this was wonderful for Resources for the Future, because otherwise, they'd have had an awful time to get all this data together, and really, we got hundreds of thousands of dollars' worth of effort out of the federal agencies.

So we developed that study as the means to pull together all of the background studies contemplated in part one of the original Ackerman outlines. The water supply/demand relationship study hadn't been in the original Ackerman plan of study.

Q: Did you get into any questions of urban water supply?

A: Yes, we had a study on municipal water and we had a study on pollution abatement, so we got into urban water problems, which were handled at that time by the Public Health Service under the new Department of Health, Education and Welfare.

Anyway, the water supply/demand study was the first of the really analytical studies, but the rest of them I left for phase two, because we had enough of a problem to get these 20 or 25 background studies pulled together.

I'll never forget the way Nat Wollman helped pull together those meetings with the federal agency people. And the Geological Survey staff was wonderful also. They said, "Yes, we can do it." Of course, they were hydrologists, just looking at the strictly hydrological part of it.

But some of the other agencies, particularly the Public Health Service which handled water pollution control, was very negative. Their representative was a good friend of mine, Melvin Scheidt, and he was very much concerned about some of the short cuts that we were taking in putting together this water supply/demand study.

But we went ahead, and we published the agency studies as we went along. During the same time, the committee held 23 public hearings in 21 different states. The way we decided where to have hearings was whenever a senator asked us to have a hearing, we would agree to have a hearing. For that reason, the hearings were almost all held in states where we had members, and we kind of left the Southeast out of it. We didn't leave New England out of it, however, because Senator Edmund Muskie asked us to have a hearing in Maine and Senator John Kennedy asked us to have a hearing in Massachusetts. And Hugh Scott, of course, was a member of the committee, so we had one in Philadelphia. So we had three hearings in the Northeast, but we didn't have any in the Southeast, although we did get to New Orleans.

We had this series of hearings during the fall and winter of 1959-60 and that pretty well occupied my time while the agencies were working on the background studies. We used a military air transport plane which was assigned to us, and we flew all over the country. During those trips I found Senator Kerr to be a very interesting and stimulating person to work with.

One of the things that happened is that my father had died just before I started working for the committee, and this kind of leaves a gap in one's life. So Senator Kerr became a very fatherly figure to me. He had one faculty that my father had. My father could look at a column of numbers and add them up in his head. I'm talking about a column of numbers with four digits or something like that. He could just somehow add them up in his head. He never could understand why people had trouble adding each column of numbers and carrying the tens over to the next column and all that business that they teach you in grade school, because he seemed to be able to add columns of numbers by inspection. And Senator Kerr could do the same thing.

Senator Kerr used to take the staff to lunch sometimes and we'd have maybe 10 or 15 people with many different entrees. When the waiter would bring in the check Senator Kerr might take one look at it, and he didn't look and see who had what or anything like that, but he'd look at the total, and he'd hand it back to the waiter and say, "There's a mistake here." And the waiter would take the check and add it up again, and he would come back and say, "I'm sorry, Senator, the cashier made a mistake." And there had been a mistake of a dollar or so in adding up a check which came up to \$50 or \$60. And Kerr would pay it, and maybe give the waiter a \$20 bill for a tip. He always paid cash; I never saw him use a credit card.

So Kerr had that kind of a brain. I guess we could all train ourselves to do it, but we don't, and it's probably not important now. But this was one of the characteristics that reinforced my feeling of respect for Senator Kerr, especially because my father had the same ability.

So I really had a lot of loyalty to him, and the relationship was reciprocal. But all of his staff felt the same way about him and felt close to him in a personal way. He had a press assistant named Malvina Stephenson who traveled on all these trips with us and who eventually, I think, wrote the first draft of his book, *Land, Wood and Water*. She was an ex-newspaper person from Oklahoma, and there was a bitter feud between her and Don McBride as to who was really closest to Senator Kerr. Everybody always wanted to feel they were his number one assistant. Everybody on the staff.

I didn't feel quite that way. I knew I wasn't, and I was still on the Library payroll. I got a big kick out of traveling with him to the hearings. We traveled on a twin-engine Convair plane provided with a pilot and staff by the Military Air Transport Service. It had tables in the back where two people could ride backwards, and Senator Kerr always took one of the rear-facing seats. On one of the trips he asked if anyone played bridge. From then on we started to play bridge on the airplane trips. You'd think we would have been working, preparing for the next hearings, but no, he wanted to play bridge. It was always Senator Kerr and Malvina playing Senator Hart's assistant, Muriel Ferris, and me. I had played a lot of bridge when I was growing up, but hadn't played much after I got out of college. And I don't think I was a very good player. I don't think I even knew Stayman. But inevitably it was just like sometimes you get a streak of luck. Maybe Muriel Ferris was good enough to make up for my shortcomings, but anyway, we almost always beat Senator Kerr and Malvina, largely because Malvina wasn't a very good player. This really irritated Senator Kerr, and we wouldn't be off the ground in the airplane on the next trip when he would get out the cards, because he was just determined to beat us. I think he even got Malvina to take lessons.

This rivalry even extended to when we had a staff picnic for everybody at Muriel Ferris's house in McLean. All of the staff and their families were invited, and we had a picnic one Sunday in the summer. When we got there the first thing Senator Kerr wanted to do was play bridge. So we started in at 11, 00 o'clock, or whenever we got there in the morning, and we played all day, and he lost all day. My wife was furious and said I should have circulated with

people and been more sociable. But Kerr was determined to avenge himself, and he never was able to. I guess I never knew how to win friends and influence people by letting them win.

Kerr was really a good bridge player. We were just playing for fun, and the cards were running against him. It was just a friendly rivalry, and it was relaxing. I still like to play bridge because it gets your mind intent on something other than things that you may not like to think about.

So I got along very well with Senator Kerr, and he had a great respect for me and what I was doing. When he got the draft of his book, *Land, Wood and Water*, he had a lot of technical questions, but he didn't ask me to help review it. He said, "Ted, you just can't take time. You've got too much to do." So I found someone else well versed in water resources that he contracted with to review that book for accuracy. It was a paid contract. Kerr was not at all stingy; when he asked somebody to help him, he was willing to pay them.

Q: Well, who actually, then, wrote the final book?

A: It was autobiographical, but he gave credit to Malvina Stephenson and Tris Coffin, as editors.

Now getting back to the Select Committee studies. Let me tell you one other thing about how Kerr operated. We wanted the Census Bureau to break down their population projections by river basins and by states because we needed them to work on the water demand side of water. The head of the Census Bureau was Conrad Taeuber, and we met first with staff and then with him to tell them what we wanted. They finally said they couldn't do it, that it would be very time consuming, and that they never did it that way, and if we wanted it done, we'd have to sign a contract that would probably cost about \$50,000 or \$60,000.

When I reported that back to Senator Kerr, I told him that I didn't think we could spend that much money, and if we started to pay one agency, we'd have to pay the others. And he said, "Who did you say was the head of that agency?" and I said, "Conrad Taeuber." And he said, "That's under the Department of Commerce, isn't it?" And I told him that it was.

A week or so later, I got a call from Conrad Taeuber, and he said something like, “We have now reevaluated your request and decided that it would be a very interesting study for us, and we will be able to do it just the way you wanted it done.” About a week or two later, the nomination of Louis Strauss to be Secretary of Commerce was voted on in the Senate. Louis Strauss, as chairman of the Atomic Energy Commission, was one of the architects of the Dixon-Yates fiasco and was anti-public power; he certainly had nothing in common with Senator Kerr who had been a public power man from way back. And Kerr voted for his confirmation.

I don’t know for sure whether there was any connection or not, but the vote seemed unusual. Nobody expected Kerr to vote for confirmation. Of course, Strauss was not confirmed, so it didn’t make much difference.

Q: Well, it’s an interesting anecdote.

A: There were a lot of little incidents like that which I look back on with a lot of interest because it was my first close association with political figures. Of course, having been in Washington for 13 years I knew how they operated.

Getting back to the putting all of the federal agency contributions together in the water supply/demand study, we hit a roadblock in the Public Health Service. My friend Mel Scheidt said, “We just can’t do it. You’re making some gross assumptions here that we can’t substantiate.” After a lot of arguments they agreed to help us by paying George Reid, a professor at the University of Oklahoma, to make the study that we needed. This was trying to get from pollution loading to dissolved oxygen in each of the water resources regions. There’s a formula called the Streeter-Phelps formula which is used to do that for a particular project. If you put the effluent from a sewage plant into a river, immediately the BOD [biochemical oxygen demand] in the sewage uses up oxygen in the river. The Streeter-Phelps formula is the one that tells you how the river recovers as the pollution is assimilated in the flowing water.

George Reid was paid by the Public Health Service to help us with this, with the understanding that the work would not be attributed to them. George Reid was another of those people who were fearless in the face of bureaucracy, as was Nathaniel Wollman.