

What I started to say about Nathaniel Wollman is that when the bureaucracy knocked him down and told him he couldn't do what he wanted to do, the next day he would come up with a way to get around their objections. This would go on, week after week, and he used a trial and error method because we were having to take a lot of short cuts to do what we wanted to do. He reminded me of a toy that we had. At that particular time, I had two daughters who were babies. Or I should say one of them was a baby and the older one was three years old. And they had a toy which was a roly-poly kind of a little figure of a man, and no matter what you did, when you knocked him down, he came back up. That was the visualization I had of Nat Wollman, because no matter how many obstacles they put in his way, he would come back up.

Q: Well, he must have impressed you because you later used him on the National Water Commission too, after that.

A: No, you are thinking of Abel Wolman.

Q: Didn't Nat Wollman, though, write one of these studies for the National Water Commission too? I'll try to check. I had the idea he had.

A: I tried to get him, but he couldn't do it. By that time, he was dean at the University of New Mexico, and he didn't have time to work for the National Water Commission as I recall it. But he had refined his study on water supply and demand, which was published with a co-author named [Gilbert] Bonem. They found all kinds of mistakes that had been made in the short cuts that we had taken, including a gross mistake that was made on the water supply side, not so much in the water supply, but in the storage calculations.

Getting back to the Select Committee, all of the studies were in draft form, and most were finished and published by the summer of 1960. To wrap up what I considered to be the first phase, I wrote a draft of a staff report to the committee. I wrote that to kind of summarize these studies. But it covered the water supply/demand study even though it was still in the very preliminary draft stage. I sent a copy to Abel Wolman, and he sent it back with many suggested changes. He really panned it and raised a lot of questions.

So I fixed it up as best as I could and gave a copy to Senator Kerr and told him that it was the first draft of the summary of phase one of the study and that I'd like to get the committee to approve so we would go on to phase two. Phase

two was to include studies of things like interagency relationships, economic analysis, cost sharing, and agency responsibilities. This was really to be the analytical part of the committee's work, which Ed Ackerman and I had looked on as being the important part of the study. The background in phase one was just to provide the data so you can do the analysis.

Senator Kerr had a fast airplane, I think it was a converted B-26 or some other war surplus plane, that he used to travel back and forth from Washington to Oklahoma on weekends. I guess it was the Kerr-McGee Company's plane. Anyway, he took a copy of the draft of the staff report so he could read it on the way down there. When he came back on Monday, I asked him what he thought of the report. I almost fell out of the chair when he responded that he felt that with a little editing it really did the job that needed to be done to complete the committee's work.

I think I realized that if we had gone into phase two, we would have needed a lot more time and money, and that it would be very controversial.

Q: That report actually is fairly succinct and quite short, considering all the work and background studies that had gone into it.

A: Yes, that's true and at that time it didn't have any recommendations.

Q: It comes down to about 100 pages.

A: Let me say that the report that Senator Kerr liked so much was only about half that long. The front part or summary was just 10 or 12 pages, and the description of the studies was about 50 pages.

Q: How did you get into the recommendations?

A: At that time, I hadn't even thought about the recommendations. We didn't have any recommendations in it, except maybe some recommendations for further studies. The water supply/demand study was not yet completed, so I felt it was premature to formulate recommendations.

Q: Right.

A: The draft report was really what we called the substantiating material in the final report. And that was basically what it was. Of course, we did an awful lot of refinement of that first draft, with the help of Ed Ackerman, Abel Wolman, and Gilbert White. We worked on it for the rest of the fall because Senator Kerr wanted to get it finished by January. You remember, this was an election year, a presidential election year, the year that the Kennedy-Johnson ticket was elected. Kerr was supporting them all the way down, and it took a lot of courage on Kerr's part, because of Oklahoma's being a Southern Baptist state and it was felt that they just didn't quite trust Catholic Yankees from New England. But Kerr came out very strong for the ticket in Oklahoma and everywhere in the South.

Q: Can I interject something at this point?

A: Sure.

Q: The recommendations that are in this report include recommendations for more scientific research, for biennial assessments of water supply/demand relationships, even something about nonstructural management of water resources.

The question in my mind is-and I'm looking at it with the benefit of 20/20 hindsight and particularly some of the things that Clinton Anderson is later involved with-was there at that time a feeling among the senators who were involved that some of this activity would more appropriately be done at the state level rather than at the federal level? Was this a call for greater state/federal cooperation? Was that-I don't want to use the term "hidden agenda"-something that was implicit in much of what was being said there?

You know, later on, of course, in '63 you had the Water Resources Research Act that gives money to the states for a lot of scientific research at the land grant universities. Was there any feeling about that? Was there any active involvement on the part of some organization like the ICWP [Interstate Council on Water Policy] or anything like that?

A: All of that came later. Let me just finish telling how we got the report finished. We did get it finished in January 1961, well within our budget. As a matter of fact, we didn't even spend all the money we had because we got some hundreds of thousands of dollars of free work from the federal agency people.

After Kerr had made the decision that the staff report would become the committee report, the consultants were brought in, Ed Ackerman, Abel Wolman, and Gilbert White, and we evolved some rather basic recommendations that we all could agree on. We had quite a number of recommendations in the first draft. Generally they were all of the nature that you just mentioned, for more scientific research and so forth. But they were all for accomplishment by the federal government in cooperation with the states.

But some of the members of the committee, Clair Engle, Phil Hart, Gale McGee, and Ted Moss, were not happy. You can see their supplemental views in the back of the committee report. They just didn't think that this report achieved what they had hoped to achieve. So when the committee met to review and approve the report, they wanted to change it.

Senator Kerr had a way of handling that. He said, "If you don't like this report, we will be glad to consider any changes that you want to make." And his technique for doing that was to read the report page by page. And so he started reading the report at page 1.

In a few minutes, they all folded. They had been pushed by staff people who wanted to use this report to beat the administration, the Eisenhower administration, over the head on water; I'm pretty sure that was the reason they wanted changes made. But when they sat there in a committee meeting, it was up to them, and they didn't really care. Anyway, they did write, or their staff wrote, supplemental views, which the committee had voted to permit them to include at the end of the report. And the primary thrust is for things that would have been considered if we had gone on with phase two of the study, as originally contemplated.

One thing in Senate Resolution 48 that was very hard for me to come to grips with is the part of the resolution that called for the committee to make studies of the extent to which water resources activities in the United States are related to the national interest. This goes to the point you raised a few minutes ago--what should the states do, and what should the federal government do--but it's even a broader question. Is it in the national interest that we provide flood control for everybody, that we provide all the water to everybody that they want, at cost?

Anyway, this was what Senator McGee, in particular, was driving at, but I think they were really trying to use it, you might say, to beat the Eisenhower administration over the head for not recognizing the national interest and for vetoing all these bills. And I think that was the original concept that led Mansfield, perhaps unknowingly, to introduce the resolution.

Q: Let me go back now to a question I wanted to ask earlier, and we got on to something else, because it seems to me this does require some clarification. You started off the discussion by suggesting that this resolution, Senate Resolution 48, was, to a large extent, a response to A-47 and the Bureau of the Budget—

A: No, I was talking about Senate Resolution 281 and Senate Resolution 148 of earlier Congresses being responses to A-47. I said that Senate Resolution 48 of the 86th Congress was a response to the Eisenhower vetoes of a number of water resources bills—

Q: Okay.

A: -the veto of the Army authorization bill, the water quality bill, the Reclamation small projects bill, and the public works appropriations. They had to cut the appropriations bill down to pass and also reduce the scope of the water pollution control bill.

Q: Would it be fair to say that there had been growing congressional disenchantment with administration policy for the eight years of the Eisenhower administration; that the vetoes culminate, in a sense, that dissatisfaction, and that, therefore, you have this Senate Resolution.

A: You've said it much better than I. That's the thing: growing disenchantment and the vetoes were the last straw, and an election coming up there and—

Q: I wanted to pursue this area a little bit further about the relationship between the federal government and the states, and what concern, if any, the Kerr Committee had about that relationship, whether in fact the committee saw some necessity on the part of the states to assume a greater burden in the research and planning and even constructing of water projects.

A: Certainly Ed Ackerman had that feeling. Remember he had served with President Truman's Water Policy Commission, which recommended decentralizing planning into river basin commissions, and also with the Budget Bureau trying to reduce the federal role to hold down the budget. So, Ed Ackerman had that at the back of his mind when he laid out the first draft of a program. This was before I was involved. We used Ed as a consultant and we talked about the role of the states. He used to say that he felt there was a resurgence in the states' ability to deal with their own water resources problems. At about the same time, you remember, there was the Kestenbaum Commission which made a report out of which grew the Advisory Committee on Inter-Governmental Relationships, and that was a current document at that time.

So Ed really felt strongly that there was a resurgence in the states. One of the things we did at the outset of the Senate Select Committee was to write to all states and ask them for their views as to what were their water resource problems, what should be done about them, and what was the relationship of water resources to the national interest. We printed the responses as Committee Print Number 6. It was a big, thick document with all these reports, but it was very, very unsatisfactory. It showed that some states, like California, were probably way ahead of the federal government. Really, the Central Valley project of California and the whole panoply of works out there was all laid out in a state of California report written about 1930, and the Bureau of Reclamation only came in when the state couldn't raise the money. A few of the other states were also well advanced in water resources.

But when we went to a state like New York with a letter to the governor, and we got an answer from the State Department of Agriculture saying that, "The real problem we have in New York with water is providing water for agriculture," some of us felt that they didn't have the ability to focus on the major problems. It seems obvious to us that the New York City water supply and the pollution of the Hudson River, which was what kept New York from using the Hudson River, were more important problems. Even at that time, the groundwater in Long Island was known to not be inexhaustible. So the response we got made us feel that they didn't know what their major problems were going to be in the future.

Then we got a letter from an assistant to the governor of West Virginia, and apparently they didn't have anything going on in the water resources field. I

could name some other states that made us feel-or at least made the senators feel-that we were not yet ready to turn things over to the states yet. So Ed Ackerman's idea was not a major thrust with the committee. Remember, the members were in positions that enabled them to bring federal largess into their states. And Kerr, at least, felt that was his role.

Looking at the recommendations, as you pointed out, there were not a great many recommendations, but the first one was that the federal government, in cooperation with the states, should do comprehensive river basic planning in all the major river basins. That came about because of Senator Kerr's interest in the Arkansas-White-Red basin study. He felt that was wonderful because it provided lists of all of the potential projects and when his constituents wanted something he could go either to the Bureau of Reclamation or Corps of Engineers and get them to recommend it. And so the river basin planning was to be a state/federal undertaking. The recommendation starts out saying, "The federal government, in cooperation with the states" should prepare the plans. In other words, Kerr's thrust always was with the federal government being responsible.

And to encourage the states to cooperate, the committee's idea was that the federal government would give the states money to stimulate state participation, so that was the next recommendation.

And then, I guess because of the fact that we couldn't really resolve the questions about desalting or weather modification, scientific problems which are still far from resolution, the committee recommended that the federal government should mount a coordinated scientific research program on water.

### **Water Resources Research Act of 1964**

So, the idea that eventually became the Water Resources Research Act of 1964 was not really considered by the committee, even though at the hearing in Detroit, probably in December of 1959, the idea was broached by a Professor [Raleigh] Barlow of Michigan State-the hearing was in Detroit but he was from Michigan State-and he said something very simply, like, "This problem is just as serious and it should be approached in the same way as we approached agriculture almost a hundred years ago in the Morrill Act. We need to establish university programs to find answers to water resources problems,

the same way we did with the land grant colleges in the Morrill Act.” I think it was 1862.

So Barlow was really the instigator of this idea which was incorporated into the Water Resources Research Act enacted in 1964. A lot of other people have claimed credit, and later I guess you’d have to give Senator Clint Anderson the credit for getting it enacted. Clint Anderson was a member of the Kerr Committee. He wasn’t at the Detroit hearing, but I may have discussed it with Ben Stong, who was Clint Anderson’s staff man on the Senate Interior Committee. He pursued the idea with Clint Anderson and lined up support from the land grant colleges. Ben Stong was the person who was assigned by Senator Anderson to help with implementation of the recommendations of the Select Committee. I was back at the Legislative Reference Service by that time and worked closely with Ben Stong. Senator Kerr had died on January 1, 1963, which was almost two years after the report was published and before any of the implementing legislation had been enacted. Senator Anderson, picked this up as chairman of the Senate Interior Committee, because the water research program was the responsibility of that committee.

One thing happened which was not remembered very much, but you remember I mentioned how closely the Geological Survey had worked for the Senate committee. They set up a whole section under Roy Oltman, and we had five or six people there working as hydrologists, providing the data which went into the Nathaniel Wollman study, as well as coordinating with all the other federal agencies.

The first thing that happened after the Select Committee report was issued was that President Kennedy, who had just recently taken office, sent a message to the Congress which more or less embraced the report with both arms. I sometimes wondered if he really loved it so much or whether he was trying to get Bob Kerr on his team because of some votes that were coming up. Anyway, President Kennedy’s message to Congress outlined what he was going to do. Among other things, he asked the National Academy of Sciences to do a study of water research, and he ordered the federal agencies to look into the planning side. That’s what really got things going.

At the Geological Survey, the Water Resources Division was headed by Luna Leopold at that time, and he proposed the establishment of a Water Resources Research Institute to make the research study that the committee recommended.



The survey sold the idea to the Bureau of the Budget, and in the budget that went up to Congress in January 1962—this would have been the budget for fiscal year 1963—there was a recommendation for establishment of a Water Resources Research Institute as a part of the U.S. Geological Survey Water Resources program. This was in the budget, and the Geological Survey has always taken the position that they didn't really need any more new legislation on research because they've got a broad, organic act which authorizes them to do almost anything in the water resources and natural resources area pertaining to research. And so the Water Resources Research Institute was put in as a line item in the 1963 budget. I don't remember the amount. It came up to the Congress and was favorably considered by the House Subcommittee on Interior Appropriations. This was in the spring of 1962.

I don't know exactly what happened after the subcommittee reported the item favorably, but it was not included in the appropriations bill when the appropriations bill passed the House. I was told that staff of the House Interior and Insular Affairs Committee had felt that this item needed legislation. I don't have any documentation of that, but I believe at that time Eugene Eaton was on the staff of the House Interior Committee and he was always very critical of the Geological Survey.

One way that the states got into this is that Ben Stong asked me to draft letters to all of the states and ask for their views about how we ought to approach water resources problems. Senator Anderson eventually published all of the responses in a committee print and out of that grew the draft of the Water Resources Act.

I don't know whether Ben Stong drafted the bill or whether he got the Interior Department or the Legislative Council to draft it, but it was introduced and eventually became law. It first passed in the Senate, but Wayne Aspinall was chairman of the House Interior Committee and he was not in favor of setting up new federal programs. It took a lot of persuading, which was done largely through Ben Stong, working with the president of Colorado State University, who helped to convince Wayne Aspinall that this would be a great thing.

Originally, in talking to Ben Stong, we had agreed that there should be not 50 research institutes but a series of regional research institutes to lessen redundancy. That idea was soon rejected because it was pretty obvious that

politically you more or less had to have something to get enough votes, something in every state.

In the meantime, it was still the Public Health Service that had the Water Pollution Control program. They moved right in and they set up a number of research laboratories, including the Robert S. Kerr Laboratory in Ada, Oklahoma. They set up a laboratory in the Great Lakes, and they took the regional approach, and they had these several laboratories and really were much closer to the idea that the Kerr Committee had than was the Water Resources Research Act. But, politics being what it is, the Water Research Act had the benefit of something for every state, and that's why it got through. Clint Anderson didn't have anything to do with the water pollution control labs because they were handled by another committee in the Senate, but they were certainly an outgrowth of the Kerr Committee. They may have even been entitled before the Kerr Committee report was completed because this was something that we talked about a lot when we were working with Mel Scheidt trying to get the Public Health Service to help us during the process of preparing the program report.

The other outcome of the Kerr Committee report-I'm talking now about the major recommendations-was for the river basin planning and the support for the states. My first efforts on that line, which were for Senator Kerr, were to draft a bill. For this I had to consult with the Legislative Council, which had to draft all bills.

They insisted on a rather arcane formula for dividing up federal grants among states. It was the same formula that had been used earlier for dividing up the money for the water pollution control grants. You should remember that the early water pollution control effort was grants for planning, coming out of the 1948 and the 1951 or '52 Water Pollution Control Acts. The formula was a rather difficult thing to understand, the way part of the money was going to be divided up according to population and part of it divided in accordance to problems, and this was so complicated that the first bill didn't get very far.

I'm not sure whether it was ever introduced, but later a bill was sent up by the Interior Department which eventually became the Water Resources Planning Act. This went far beyond what Senator Kerr had envisioned because it started off with establishing the Water Resources Council, and Senator Kerr was not

at all interested in the Water Resources Council. He was interested in comprehensive plans.

He had no problem with the river basin commission idea, but the report had said, “the federal government in cooperation with the states,” was to do the planning. he had been thinking in terms of the AWR [Arkansas-White-Red] approach, which was essentially a river basin commission although the authority for it was in the Army Corps of Engineers. So Senator Kerr would have taken a position against the idea of a water resources council because he liked the system the way it was. He was getting what he wanted for the state of Oklahoma and didn’t want to complicate the system.

The bill went through several drafts over the next several years and finally became the Water Resources Planning Act of 1965. I have documented all this in a report called “The History of the Implementation of the Recommendations of the Senate Select Committee,” and I’m hesitant to go into any more detail because it’s all laid out in that committee print.

**Q:** Well, let me ask you some conceptual questions. Maybe that might help us focus on what you’re talking about. Again, I don’t mean to sound like a broken record. However, there has been some dispute among people-historians and others-about what was the intent in setting up something like a water resources council.

Some people argue it was an attempt to decentralize the administration and the power, really, in relationship to water resources development in this country, so that you would have more input from nonfederal interests, not just states but regional authorities and people like that. Others would argue that there really was no reallocation of power or anything like that, that it was purely an administrative convenience, almost, rather than anything else.

How do you see this?

**A:** Well, that brings up something else that was happening about the same time. You remember we had the FIARBC, sometimes called the FIREBRICK, and eventually the ICWR, sometimes called the ICEWATER, that had a Subcommittee on Benefits and Costs, which produced the Green Book on economic analysis of water projects. So it was probably as a result of the Senate committee recommending that the federal government should prepare

and keep up-to-date the river basin plans, that the Inter-Agency Committee on Water Resources [ICWR], issued a set of standards and procedures which was sent up to Congress and published as Senate Document 97, setting forth the procedures for doing the planning and analysis. And so I guess you might say that was a response to the Senate committee's recommendation, but not in exactly the way that the Senate committee had in mind. But it did come up and it provided a kind of a framework.

But it certainly couldn't be taken as a shifting of power to the states; at least, I never took it that way. It attempted to standardize the federal approach, it went into the interest rates and the economic analysis and so forth, and it went into the environmental side, the fish and wildlife, and the recreation. But it wasn't anything that Senator Kerr had envisaged. It may well be that Senator Anderson had some kind of hidden agenda on turning power over to the states, but he never divulged it to me. I don't think Senate Document 97 ever became congressional policy. It was really just a statement of the policies the administration was going to use in project analysis. I'd have to read what the President said when he sent it up, but I don't think it ever had as much standing as Budget Circular A-47, which I believe it replaced.

Q: Well it makes a strong pitch, of course, for multipurpose planning.

A: Yes, that's true but multipurpose planning has been an idea that's been in existence ever since back in the conservation movement when it was espoused by the National Conservation Commission and the Inland Waterways Commission. I'm not sure that anybody ever really understood what it meant back in 1910. But as the ICWR studies evolved into Senate Document 97, they eventually provided a kind of a foundation for moving ahead with the principles and standards promulgated by the Water Resources Council.

I'm probably wandering away from the thrust of your question, but I didn't sense at that time any real consensus that the Congress wanted to move power back into the states. And I think any thrust of that nature in the administration was largely as a result of the Bureau of the Budget's wanting to reduce the federal budget. But they were approaching it more through cost sharing than through putting responsibility on the states.

## **Water Resources Council**

When the bill to create the Water Resources Council and the river basin commissions-the Water Resources Planning Act-when that first was introduced, the states were pretty much dead against it for quite a while until languages evolved that essentially gave the states one vote and the federal government one vote, which made the states **feel** equal. But I always looked on the river basin commission as a team consisting of one horse and one rider, the federal government being the horse and the states being the rider.

I think there may have been some commitment made to the states in order to get the Interstate Conference on Water Problems to support the bill. At first, the states wanted to have a representative on the Water Resources Council, but the Justice Department and other federal people opposed it, arguing that it would be unconstitutional to have a federal agency with an officer appointed by states and not a federal employee. But I think as a kind of a sop to the states, they agreed that one of the principal officials of the Water Resources Council would be from the states, and the states did see that Harold Wilm from New York was appointed as an assistant director. I guess he was supposed to be the state representative in the administration of the council, but he was not a member.

One of the big mistakes when the staff was set up was the agreement that there be on the staff one person from Interior and one from the Corps of Engineers and one from the Agriculture Department, just to kind of, you might say, protect the interests of the various departments. In a way, it kind of emasculated the council; kept it from really doing any staff work that adversely affected any of the agencies. And there's a provision in that act that said nothing in this law setting up this council shall have any effect on the activities or authorities of existing federal agencies. So, the council was kind of emasculated before it was created.

## **Department of Natural Resources**

Q: Well, if you don't mind, let me go back a bit and I want to trace a couple of things here. First of all, Henry Caulfield, when I interviewed him, suggested that in 1961, soon after Kennedy became President, a small group of people within the Department of the Interior agreed for the creation of a Department

of Natural Resources, obviously with one intent being to assimilate the civil functions of the Corps of Engineers into this department.

But the White House staff basically said, “No, we don’t want to do it that way.” The White House, according to Caulfield, was under the influence of Richard Neustadt, a Harvard political scientist who argued that the separation of functional areas can work to the advantage of the President. The argument was that you don’t want to have big departments with so much power that they can actually undermine the power of the President.

And so the Department of the Interior people fell back on the idea of having the Water Resources Council bring all of the agencies together. In other words, Caulfield argued that the idea for the council came up in the Department of the Interior. Whether it came up before or independently or whether Clinton Anderson or other people in the Congress were involved I don’t know. I don’t think Caulfield answered that question. Do you have any knowledge of any of this sort of stuff?

A: What I can verify is that there was a group of people in the Interior Department promoting the idea that there should be a natural resources department when I was working there in the 1940s. At the time of the first Hoover Commission, we did a lot of work on material that was sent over to the task force on water and power or whatever they called it at the first Hoover Commission on this subject. As I recall, it was about the same time that I worked with Arthur Maass on the Pine Flat Dam history. I think the idea of having a Department of Natural Resources was also under consideration in the early years of the Eisenhower administration. The member of the Senate Select Committee who favored having a Department of Natural Resources was Senator Frank Moss of Utah. It never came up in the committee, but he later introduced legislation several times.

But I was not privy to the arguments within the administration about the proposal to create the Water Resources Council. When the proposed legislation came up from downtown, I thought it might lead to something that might evolve into an independent agency like the Federal Power Commission. You remember, the original Federal Power Commission created in 1920 was not an independent agency. It consisted of the Secretary of War, the Secretary of the Interior, and the Secretary of Agriculture. It was set up in 1920 with a staff that was supposed to do comprehensive planning to provide a background for

licensing hydroelectric power development. I don't know the details of how it evolved into an independent agency, but I think it started when it tried to do comprehensive planning on its own. The Corps of Engineers saw this as a threat to its water resources authority and started the actions which eventually led to the Corps' being authorized to make the 308 reports. It was not my idea, or the Select Committee's recommendation to set up the Water Resources Council, but I had the hope that once it was set up, it might evolve into an independent agency, and we would have a group with some power to do rational comprehensive planning with the states.

That was an idea of mine, but I can't remember whether I've ever articulated it in a published article. I may have said it in a speech or answered a question, but anyway, that was the idea in the back of my head. It would have been something like a Department of Water Resources which might well have expanded into a Department of Natural Resources if Henry had said there was a group at Interior that had something like that in mind. I'm sure there was, because he was there, but I think they were primarily interested in aggrandizing the Interior Department by bringing in the water resources programs of the Corps. I don't know exactly what was Henry's role in the department, either in the Truman administration or when he came back in the Kennedy administration with Stewart Udall. He was one of these people in the department that always came to meetings, but you never did know really what they did except that when they stopped you from doing something, they could pretty well do it because they had the ear of the secretary.

Q: Let me ask you another question along the same lines. The relationship between Senate Document 97 and the Water Resources Council, now, it may be that there's no real relationship, but if I as an historian look at the Water Resources Council some time after 1965 and I also look at some of the guidance offered in Senate Document 97, I can easily jump to the conclusion that there was a relationship. In particular I have in mind that Senate Document 97 talks about regional planning, river basin planning basically. It talks about multipurpose planning in the sense of treating hydroelectric power generation and recreation facilities and fish and wildlife conservation as subjects that have to be responded to and integrated in any kind of water project plans.

So, you know, the Water Resources Council, with its strong emphasis on river basin planning, would seem to be a natural outgrowth of that kind of approach. Am I wrong?

A: No. There's a direct relationship. But it didn't spring full-blown in Senate Document 97. It came out of the Green Book, for example, and all the other work of the Federal Inter-Agency River Basin Committee. You remember that FIARBC set up a Missouri basin inter-agency committee, and one in the Columbia basin. Then, of course, the Arkansas-White-Red and the New York-New England and the Southeast River basin committees or commissions, set up legislatively, were all part of the evolving consensus on river basin planning. So I don't really see that there's any great difficulty in getting from the work of the FIARBC down through the ICWR to Senate Document 97 and the Water Resources Council.

The impetus for Senate Document 97 was to let the Congress know how it was going to be done. I think the President demanded that they send it up to show how they were responding to the Senate committee. And the same people were involved: Henry Caulfield from Interior, Reuben Johnson from the Army Corps of Engineers, and Harry Steele from Agriculture. They were all involved with the Inter-Agency Committee on Water Resources and its task forces or subcommittees, and they were the top staff people in the Water Resources Council. Of course, there were many others involved over the years.

So you basically had the same people doing essentially the same thing, but within a different organizational framework. But in the Water Resources Council they had a mandate to have principles and standards and procedures, which gave them a much more sturdy peg to hang their hat on because all of the FIARBC was voluntary, and even the ICWR, while the President had set it up, had no enforcement powers. No department had ever formally adopted the Green Book. In other words, they all agreed to publish it, but they never said, "We will follow the Green Book." They said, "We will follow the Green Book as long as it doesn't interfere with our statutory responsibilities."

Q: Well, there again is one of the reasons why it would seem, going back to Senate Document 97, that while you can trace the evolution of that document back to the Green Book and some other early inter-agency reports, it would seem like there had to be a catalyst. Obviously a Democratic administration coming in was important, but it had to be responding to something. Otherwise, you know, it wouldn't have received that presidential imprimatur and become executive branch policy. It was not executive branch policy until 1962, even though you can see the evolution, so something happened, whether it be the Kerr Committee report, whether it just be just general dissatisfaction with the



way things had been treated or whatever, to convince Kennedy that that document was necessary at that particular time, and I guess—

A: Well, I wasn't in a position to know why he sent it up at that time. Remember, I was in the legislative branch then, back at the Library of Congress. But I feel sure that Senate Document 97 was presented to Kennedy for his signature—and I haven't looked at this document for probably a decade or more—in response to his decision to implement the Kerr Committee report. I think the real reason was that he needed Kerr's vote on other things, and he saw promoting the Kerr report as one way to butter him up.

Q: Don't forget, he also, shortly after he became President, sent a special message to Congress—

A: Yes, that's what I referred to a few minutes ago, and in that message he told them to do what was needed. That was the basis for the Geological Survey's attempting to have a Water Resources Research Institute. But whether this group within the Interior Department that was pushing for a Department of Natural Resources was using the message, hoping to take over the whole water resources area had anything to do with the President's message, I don't know. I was not in a position to know how it came about, and so I can't trace the history of it the way Henry Caulfield probably would. But Henry was in the Interior Department; he would see things as a part of Interior policy whereas if you went to Gene Weber, he would probably have seen things differently from the viewpoint of the Corps. I don't really know who in Agriculture was involved in this.

Agriculture was more or less left in a shambles, as far as water policy was concerned, after Secretary Benson disbanded the Office of Land Utilization. The way it looked to me, there was no real overall coordination in the department, so I don't know what they were doing in the beginning of the Kennedy administration. I can't even remember who was the Secretary of Agriculture then. There was an assistant secretary who served on the ICWR, but I can't remember his name either.

So, I don't think I can help you in getting the rationale for Kennedy's actions.

Q: Well, let's go back to you and what you were doing specifically. How long were you actually working for Senator Kerr then?

A: Really, just for about 20 months, from May 1959 through January 1961, and then I went back to the Library of Congress. Of course, there were all kinds of things waiting for me to do. I was still the senior specialist in the engineering and public works field, and I had a lot of other responsibilities in the public works area, but most of my work was in water resources. I did a lot of work with the House Interior Committee. One of the first reports I did when I started work in the Legislative Reference Service was on the accomplishments of the reclamation program. It was published as a committee print. Later I did another study highlighting the problems of the reclamation program. They decided not to publish it because it unmasked the idea that this program was reimbursable by just laying out the economic facts that showed that some projects were paying back 2 percent and some projects were paying back 15 or 20 percent, but the average was somewhat less than 15 percent, probably even less than 10 percent of the total economic cost.

I guess Wayne Aspinall, God rest his soul, didn't think that would be helpful for what he wanted to get done in Colorado and what the committee wanted to get done in the West, so that report was never published. But I still worked with the committee quite a bit on specific projects, but if you asked me, "What did you do, what did you contribute between 1961 and 1968—"

### **Public Works and Water Resources, Library of Congress**

Q: That was my next question.

A: -it's hard to really put my finger on things. But just to get some levity into this discussion, which has been so serious for the last few minutes, I remember I used to lecture to the planning associates or whatever they called them at the Corps of Engineers and also the district planning officers. One time they asked me to go down to Dallas to talk to the group. Of course, they said they would pay my way and make the reservations. But the Library demanded that the Corps not pay for my ticket but that I buy my ticket and that the Corps would reimburse the Library which would reimburse me. So the Corps made the reservations for us all to fly on American Airlines to Dallas. I think it was American Airlines because I remember it was what they called a champagne flight on a Lockheed Electra and we sat up in the front there, four of us at a table drinking champagne with our lunch because the Corps had made reservations to travel first class.

When I put in my travel voucher to the Library, with the appropriate papers for them to get reimbursement from the Corps, they wouldn't reimburse me. They said, "You don't have authority to travel first class, so we can't reimburse you for any more than the coach fare." Of course, I responded, "But I didn't make the reservations. The Corps of Engineers made the reservations and I just bought the ticket. They made the reservations, and they're going to reimburse you, so why don't you just pay me and they'll give you the money and it won't make any difference." And the reply I got was, "No, positively only the librarian can travel first class-not even the deputy librarian can travel first class-and you have to have authorization."

And so I called up whoever I had been working with in the Corps of Engineers, and I said, "How do you guys get to travel first class?" And they said, "Oh, it was simple. We just wrote that we were traveling with a high official of the Library of Congress that justified first class travel."

So then I wrote a memo back to the Library's accounting office saying that this trip was arranged for me to travel with high officials of the Corps of Engineers and it was deemed appropriate that we travel first class, and so they paid me.

This was just indicative of the kind of bureaucratic approach that the Library of Congress had. Everything had to be in accordance with the rules.

Q: Well, let me ask you about some specific projects. If they register in your mind, let me know; if not, we can just pass right over them; but there were some very, very controversial projects being developed or considered during this time, and I'm wondering whether you had any chance to provide some input. The Rampart Dam in Alaska. Were you ever asked by a congressional committee to do any kind of study or report on that?

A: No, I never got involved in Rampart. Let me mention one other thing that was happening during the middle years of the '60s: the enlargement of the federal responsibilities in water pollution control. There were several very important acts, under which the program moved up from the \$50 and \$100 million-a-year program, which had been first vetoed by Eisenhower and passed over his veto, into the billion dollar class. They kept the responsibility in the states, but each state had to get a plan approved and standards approved to get the federal money.

It was really peculiar but I never got involved in that program. As far as I can remember, the Legislative Reference Service was never asked to do any work in that field, which became one of the biggest water resource programs of the federal government. On the House side the committee that was handling that program didn't seek any help in that field of its activity, and on the Senate side it was largely Senator Muskie who carried the ball on water pollution control. I was never called on to help that subcommittee, although I worked quite a bit with the staff of the Public Works Committee on other programs. Water pollution control legislation was handled in a different subcommittee.

Incidentally, talking about Senator Muskie, I mentioned that the Senate Select Committee had held hearings only in the states where the members were from, except for Massachusetts and Maine. Senator Muskie asked that a hearing be held in Maine, and we had that hearing in Augusta on a cold, wintry, blizzardy day in Augusta. All of the state officials came before the committee and said, "We don't really have any water problems here. Everything is fine," but the environmental interests came and complained about the polluted rivers and other environmental hazards.

We had briefed Senator Kerr and given him questions to ask about East Coast salmon-there used to be quite a salmon run in the East Coast-and the clam beds and other water pollution related problems that were not being taken care of. When he asked about the environmental interests, they told him there was no salmon because the paper mill wastes had pretty well wiped out all of the biota in the streams.

When Senator Kerr was asking the state officials about these problems, they squirmed and gave some rather weak responses, so he continued with some rather pointed questions. It was like a cross examination, and Kerr was good at it, and he started boring in on state officials, cabinet officials in the state government. He was asking the questions that I'm sure Senator Muskie knew and could have asked but thought it was better not to be too rough on his home-state constituents, and so he let the out-of-state senator ask them. In a sense Kerr was more or less beating the state officials over the head and embarrassing them because they were not giving him the same answers that he had been getting from the environmental spokesmen.

The local people in the back were clapping while Senator Kerr was giving their officials a bad time, and Senator Muskie seemed to be enjoying it. I had the

feeling that this was a kind of epiphany for Senator Muskie and made him realize that coming on strong for the environment was good politics. Later on, he made pollution control a major thrust in his campaign for the presidency in 1972. Unfortunately he was knocked out in the primaries, but he continued his career in the Senate as “Mr. Clean.” I always felt that the Augusta hearing of the Select Committee is where he really got the message about the political importance of being for pollution control by watching the way Senator Kerr handled the water pollution issue there and seeing how it was so popular with the people in that hearing room.

Another interesting thing at that time which is completely irrelevant and I probably shouldn't mention. The request to have a hearing in Massachusetts was from Senator Jack Kennedy. There was a blizzard or a bad storm, so we had to drive from Augusta down to Boston and at 70 miles an hour in a snowstorm because there was a reception for us that night before the hearing the next day. When we got to the Massachusetts line, there was a phalanx of policemen on motorcycles and squad cars with sirens blaring to speed us along. I remember it well because Senator Kerr and Senator Muskie were riding in a big Cadillac limousine and I was riding in a Rambler, driven by somebody I didn't even know. They were driving at 70 and 75 miles an hour with this police escort, and we were trying to keep up on snowy roads and hoping we would get there in one piece.

We finally got there, to the Copley Plaza Hotel and they had laid out a reception and a spread for us which could not be equaled, followed by a sumptuous banquet. The next day we had the hearing in the Federal Courtroom, with Speaker John McCormick sitting up there with us; Senator Kennedy wasn't there. And they brought in a very fancy luncheon, which we had to take turns eating because we didn't plan to have a luncheon break. Because of my conservative nature, I kind of protested and told them we were not used to being treated like that.

But I was told that having this hearing was very important to Jack Kennedy and that he had asked that we be given the best of everything. So I thanked them profusely, saying that we appreciated it very much, and I said something like, “This must be costing you guys a fortune.” And again I was told that Kennedy had asked for us to be given a royal treatment.

You remember, this was at the time of the beginning of the 1960 campaign. It was December 1959, and Jack Kennedy was already a candidate and so was Lyndon Johnson. And I don't remember just when it was, probably several months after the hearing, Bob Kerr announced that he was supporting Lyndon Johnson.

About a week later we got a bill from the people in Massachusetts for \$1,500 or \$1,800 for the banquet and the reception and the luncheon, and maybe even for the police escort. I'll always feel that they didn't send that bill as long as they thought maybe Senator Kerr might be on their side.

Q: Amazing.

A: Well, I had a lot of interesting times with that committee.

### **Recreation Act**

Q: Ted, there were several acts passed in the mid-1960s of rather important significance to the environmental community and others. One act, for instance, was the Recreation Act in which Congress mandated that the value of recreation could be used in calculating the cost-benefit ratio to justify projects. Did you get involved in that legislation? Then there was another act, establishing the Land and Water Conservation Fund, in which Congress specified that funds collected from park fees and so forth could be used to purchase more park lands; there are some other aspects to that legislation. Were you involved in that?

A: As to recreation, the agencies had used that all along. The Corps of Engineers had a law, going back as far as 1930, which said that recreational boating shall be considered as coming within the definition of commerce and as commercial navigation.

Then the 1944 Flood Control Act authorized the Corps of Engineers to include provisions for recreation in reservoir projects. That law, in my opinion, makes recreation a federal purpose just like flood control or navigation.

Q: But the '44 act authorized the Corps to build recreation facilities. It did not specify that recreation should be calculated towards the cost-benefit ratio to justify a project.

A: Well, remember, the defining statement that Congress made about benefits in the [1936] Flood Control Act was that if the benefits to whomsoever they may accrue shall exceed the costs, then federal participation was warranted.

But the Congress never specified how you calculate the benefits. That left the door open, and so the Corps could use recreation benefits. If that had been an authorization for the Bureau of Reclamation and Michael Straus had been the commissioner, they would have picked up the ball and run with it. As it was, they had nonreimbursable allocations to recreation in some of those reclamation projects. This was one of the things that Budget Circular A-47 tried to put a stop to by requiring a local contribution of half the cost of whatever the benefit was.

### **Land/Water Conservation Fund Act**

I may have commented on the recreation legislation to the staff of the House Interior Committee, but I didn't do any major study on it. And the Land and Water Conservation Fund Act more or less stemmed from the work of the Recreational Resources Review Commission, which broached that idea. The Interior Department picked up the idea from the commission report and sent up the proposed legislation. But no, I wasn't consulted on that.

Q: How about the Wild and Scenic Rivers Act? That was passed in '68, I believe.

A: Yes. Incidentally, one time somebody wanted to give me an award for being the father of the Wild and Scenic Rivers Act because there is somewhere in the Senate committee report some kind of a favorable comment about this concept, suggesting we ought to consider the importance of preserving some of these rivers in their natural state. I couldn't accept an award for that because the idea came from the National Park Service in the report that they wrote for the Senate committee. The report was prepared by Ben Thompson, a staff member of the Park Service. I think he originated the idea. And so when somebody called me about that many years later, I referred them to Ben Thompson.

But I was sympathetic to the idea of preserving natural streams because I had been involved in promoting the Wilderness Act when Howard Zahniser was the executive director of the Wilderness Society. I've been a member of the Wilderness Society for a long time starting when I was in Seattle. And also, at one point, I was on the Secretary of the Interior's advisory committee on conservation as a representative of the Seattle Mountaineers. I became a member of the Seattle Mountaineers when I lived in Seattle. One of my friends was the president, and since I was living in Washington he asked me if I would represent the Seattle Mountaineers on this group.

This was an informal advisory committee, set up long before the Federal Advisory Committee Act, and what we did would probably be illegal now. It was a group made up of representatives of conservation interest groups like the Outdoor Writers Association and the Izaak Walton League and many others. I developed a friendship with Fairfield Osborn from the Conservation Foundation, and Howard Zahniser from the Wilderness Society, and a lot of other representatives of the so-called conservation organizations. That was before the term "environmental organization" came into use.

So I had been supporting the conservation of the wilderness areas and maintained a liaison with Howard Zahniser when I was down in the Bureau of Rec-lamation, but I didn't have anything to do with the Wilder-ness Act authorization. I was spending my vacations climbing mountains out in the West—the Wind River Range in Wyoming, the Cascades,



Theodore Schad at camp, Wind River Range, Wyoming. August 1948



the Sierras, and the Colorado mountains, as well as the Selkirks and the Canadian Rockies. I had a personal hope that the mountainous areas could be preserved as wilderness. That's why I was sympathetic when Ben Thompson suggested the importance of preserving wild and scenic rivers in the Park Service report to the Select Committee.

I never did get further involved in the passage of the Wild and Scenic Rivers Act. But among other things, I used to enjoy white water rafting, and it's nice to think that there will be some streams that don't have dams on them and will still have rapids. But it is a fact that some of the best white water boating in this area is below the Corps dam on the Youghiogony and some of the other rivers where they make releases specifically for that purpose. I suppose this is under the authority of this Recreation Act.

Going back to the use of benefits to justify projects, the Corps, when it recommended the Salem Church project on the Rappahannock River in about 1948, about 60 percent of the benefits were recreation benefits. The project was never built, and I'm not sure what the percentage of the benefits was for recreation, but it was at least half. So in preparing for the Interior Department's comments on that report, which were required under the Flood Control Act of 1944, we took in a holier-than-thou approach, and pointed out that we couldn't really see the great advantage of having that much flat water recreation when you had the whole estuary of the Rappahannock below Fredericksburg and the Chesapeake Bay, and so we questioned those benefits.

I have the feeling that the recreation legislation just put some new parameters, with congressional and executive office sanction, on what the agencies had been doing for some time.

**Q:** Let me turn away from legislation for a moment and talk a little bit about what's happening within the engineering community in terms of water resources and planning development. In particular, I wanted to get your response to what's coming out of Harvard University. I'm talking, of course, about the Harvard Water Program, of multiobjective analysis as distinct from multipurpose. Did you get involved in any of this activity from the Harvard Water Program. When did you first learn about it and what was your response to it?

A: I didn't get involved with that program at all, and I suppose my first involvement with it was when the book was published. I had several very close friends who were involved in that. Maynard Hufschmidt, with whom I had been associated in the Department of the Interior, was one of the people who had quite a hand in that along with Blair Bower, who is another very good friend of mine. There were some others, members of the Bureau of Reclamation and the Corps' staff who were working on that, and Francis Murphy who was an expert on flood control that I knew from my Corps of Engineers days.

I may have talked to some of them about it earlier, but my first fixed recollection was when Arthur Maass, who was one of my college classmates, came to testify about it before—probably before Senator Anderson's committee on Interior and Insular Affairs. I hadn't even read the book at the time and it's not exactly the kind of report that you would read unless you were having trouble sleeping, but it had some good concepts in it. I knew that just from knowing a little bit about it and having heard what Arthur said about it. So, when Arthur and I were having lunch after the hearing, I suggested that we should try it out on a sample basin. I'm probably exaggerating a little, but my recollection was that Arthur—I don't think he would like it if I called him by the nickname we used to call him at Johns Hopkins, which was Otts—

Q: How do you spell that?

A: I never had to spell it, but I guess it was O-T-T-S.

Q: Why did you call him that?

A: I think it may have been a childhood nickname, but I don't think he liked to remember it. Anyway, he seemed to recoil in horror and said something like, "Ted, no, this is a theoretical analysis. This isn't ready to be applied yet." Of course, my idea was to try to apply it in one basin and see if it worked. That was my recollection of my first introduction to it, and eventually I referred to it a lot and I used it in discussions, but it needed a lot of practical work to be of value. If it had been available to the Select Committee, I would probably picked it up and run with it, and probably stubbed my toe.

But about that time, the Water Resources Council, starting from the base of Senate Document 97, started to prepare the principles and standards. They did

such a voluminous job with their salmon-colored reviews and blue-colored reviews; there were levels of reviews that pyramided one on top of another to an extent that, to be frank, it was hard for me to follow it, and I didn't have time because I had other responsibilities at the Library. At one time I found that I was the only engineer or scientist of any kind in the Legislative Reference Service, so I had to get involved in all kinds of requests for advice in connection with the space program, which was not my primary interest.

Then there was another thing that interrupted my work at the Library of Congress, and I should have mentioned it when we were talking about the origin of the 1964 Water Resources Research Act. A colleague of mine, Ed Wenk, who was executive secretary of the Federal Council for Science and Technology in the early years of the Kennedy administration, was having great trouble dealing with the problem of water resources research. There was a Committee on Water Resources Research with members representing all the agencies which had research programs. The Interior Department was represented by Luna Leopold from the Geological Survey and by Eugene Eaton who had just come into the secretary's office. According to Wenk, those two could not ever agree on what the departmental program was or should be. So every meeting of the Committee on Water Resources Research had erupted into arguments. Why the Secretary of the Interior had two representatives, I don't know, but when it came time for the representative of Interior to chair the committee, it would have been a donnybrook, because the two could never agree on anything.

So Wenk asked me if I would come down and essentially chair or staff a committee of which I couldn't be a member because I was in the legislative branch and it was an executive branch committee. The objective was to get a report to the President on the subject as a part of the response to the Select Committee's recommendation for a coordinated research program, necessary because the Geological Survey's proposal in the FY 1963 budget had been rejected. This was in the fall of 1962. I'll never forget the time because it was at the same time that the Cuban missile crisis erupted. I was working day and night on this project, and my wife said that I was the only person in the United States who didn't know about the Cuban missile crisis.

We were working against a very short deadline, and I was hard pressed to try to bring some sense out of the work of this good committee. There were at least 15 or 20 members, most of whom were easy to get along with and did

their share of the work, but I was not able to defuse this argument between the two representatives of the Department of the Interior. I hate to bring this up because it was such a nasty personal fight, and it kept us in a turmoil. I was down there only for a couple of months, working in Theodore Roosevelt's former house with a bay window on Jackson Place overlooking Lafayette Square.

The way we finally resolved this conflict within the department was that Stuart Udall appointed Roger Revelle as his science advisor, and he became the departmental representative. I had no problem at all working with Roger Revelle. In fact, he was wonderful to work with and was a very staunch supporter of my work. My only problem was that I never could get any work out of him. I had to write all of his stuff because he would promise to write something and wouldn't do it, but he gave me the ideas. I've had that happen to me many other times. But anyway, so I was down there working very hard on that in 1962, and that report on federal water resources research activities was eventually sent up to Senator Anderson's committee. It was published as a committee print.

That was another antecedent of the Water Resources Research Act. There's a provision in the Water Resources Research Act calling for coordination of federal water resources research activities, and Jerry Weisner asked me to stay and chair it for the first year, but I wanted to get back to my work at the Library, so they got Bill Ackermann from Illinois.

Q: One of the reasons why I asked you about the multiobjective system that the Harvard Water Program came up with is because in the water bill that was passed in 1970, the Congress directed the Water Resources Council to develop the principles and standards in accordance with four categories or what were later called "accounts"-national economic development, environmental quality, social well-being, and regional development.

Do you have any knowledge about whether the multiobjective approach that came out of the Harvard Water Program influenced Congress to direct the Water Resources Council to prepare the principles and standards along those lines? I'm trying to see whether there was at any time direct cause and effect, of course, between the theoretical approaches being developed at Harvard and the latter planning guides that come out of the Water Resources Council.

A: I can't really say for sure how that evolved, but I think that the Congress was responding to the studies of the Water Resources Council. Remember, the Water Resources Council was created in 1965 and the staff was appointed early in 1966, so they had been working several years on this, producing what I referred to as the salmon-colored books and the blue-colored books, as they went through several stages of review. I think the reason that the Congress put that provision in the law is that the Bureau of the Budget didn't like the four objectives. They were called "objectives" at first. The Bureau of Budget never really liked anything that the Water Resources Council did as far as I know. And the Bureau of the Budget wouldn't accept anything but the national economic objective. I'm sure that somebody from downtown went up to the committee staff and told them that the Bureau of the Budget was opposing multiobjective planning, and so that provision was put into the 1970 act. I'd have to look at that to see whether it was applied to all agencies or just to the Corps because it was the Corps' authorization.

Q: It was the Corps' act, that's true.

A: But you have jumped ahead of the time when I had an important career change. And again it happened to me in a very embarrassing way. In 1965 I was at an Engineering Foundation Research Conference for a week, at a small college someplace in New England. It was a conference on the subject of solving difficult problems. There were all kinds of people there, including General "Weary" Wilson from the Corps. Whether he was still Chief of Engineers then or whether he had retired, I don't remember. This was a conference patterned after the Gordon Research Conferences, where you have a session in the morning and then you interact in the afternoon among your participants, and then you have a session in the evening. So you really put in a full day, but it's divided into morning and evening, and the afternoon is this informal reaction around a swimming pool or on the golf course.

While I was up there, the director of the Legislative Reference Service, Lester Jayson, called, trying to get me, and he was told that I was out playing golf. He called again the next day, and I was again out playing golf. So when he finally got through to me, he said, "What are you doing up there? I didn't send you up there to play golf. You're supposed to be learning how to solve problems." Well, it kind of put me off my guard, so when he told me that Ed Wenk, who by that time had left the White House staff to serve as chief of our Science Policy Research Division, was wanted at the White House to direct the

National Council on Marine Resources, and that Ed wanted me to head up the division temporarily, while he was gone, I felt that I had to say yes.

So in 1965 I became acting chief of the Science Policy Research Division, while still holding the senior specialist position. The dual role continued two years later when they asked me to be deputy director of the Legislative Reference Service. This gave me much broader responsibilities, so I didn't do as much in the water resources field. But I kept the two offices, and my research assistant, Elizabeth Boswell, so we were able to field some of the important requests, writing papers on congressional interest in water resources and preparing legislative histories of the Water Resources Planning Act and also the Water Resources Research Act and the history of the implementation of the recommendations of the Senate Select Committee.

But that's why I have trouble answering the question "What did you do in the 1960s?"

### **Legislative Reference Service**

Q: So you were doing a lot of supervision as well as your water resources work.

A: Yes, that's right. The deputy director of the Legislative Reference Service at that time really could have been called the director of research. The deputy director was responsible for all of the research output responding to over 100,000 inquiries every year. Most of those were very simple inquiries for information, but many of them were very significant research projects, and those were the ones that I had to kind of supervise.

Q: How many people did you have working for you then?

A: Well, the service had about 300 or 320 researchers and support staff. The director handled the budget and liaison with other divisions of the Library. If he was not there, I had to fill in for him. But it was not a big agency at the time and we had no assistant directors. There were just a director and a deputy director and about six division chiefs and a dozen independent senior specialists. As deputy director, I was de facto chief of the Senior Specialists Division and they all reported to me.

Well, anyway, that does bring us up to my work on the National Water Commission, which I consider the most important work I have done in water policy. Actually, the Kerr Committee had a much better reception and was essentially implemented within a few years which is unusual for a study commission report. The key reason was that the study was made by people who were in a position to influence the implementation of the recommendations, which is a lot different from a presidential commission where the appointees are appointed and do their work and then are gone.

The legislation for the National Water Commission was passed in September 1968. It was proposed in the comments of the Bureau of the Budget on the Bureau of Reclamation's proposal for a Lower Colorado River Basin project. This project was proposed after the end of what we used to call the "long suit," the Arizona versus California law suit over the division of the waters of the lower Colorado River.

The flow of the river had been more or less allocated between the upper and lower basins by the Colorado River Compact in 1922. Of the 7.5 million acre feet allocated to the lower basin, California was to have 4.4 million acre feet, Arizona was to have 2.8 million acre feet, and Nevada was to have 0.3 million acre feet. In addition, Mexico was to have 1.5 million acre feet. Projects to allow the upper basin states to use its 7.5 million acre feet had already been authorized, so it was quite obvious that there wouldn't be enough water for all of the projects, since the average virgin flow was down below 13 million.

When you allowed for Mexico's allotment, there wasn't nearly enough water. In the meantime, California had started using, oh, something over 5 million acre feet. The Supreme Court decree had set up a procedure for allocating the shortages, but I won't go into that because it's a very complex decree.

But the Bureau of Reclamation moved right in after the decree was made final and proposed the Lower Colorado River project, which at various times and through various stages involved Bridge Canyon Dam and Marble Canyon Dam bracketing the Grand Canyon National Park on the Colorado River. Glen Canyon Dam had already been built near the division point between the upper and lower basins and provided storage for the upper basin to make its delivery to the lower basin.

When it made its recommendation for authorization of the Central Arizona project, which was to be the primary user of Arizona's water, and if there obviously wasn't enough water, the Bureau of Reclamation had a very simple solution. In the same legislation, they proposed authorization of studies of means of augmenting the water supplies in the Colorado basin. This could only be interpreted by the people of the Pacific Northwest as a threat to their water supplies by diversion from the Columbia River basin. Scoop Jackson stood guard against this eventuality in his position as chairman of the Interior and Insular Affairs in the Senate, so the authorization was not likely to be enacted.

The authorization of the studies could obviously have led to recommendations for very expensive water projects, which was anathema to the Bureau of the Budget. So in commenting on the Bureau of Reclamation's report on the Lower Colorado River project, which is primarily the Central Arizona project, Elmer Staats signed a letter saying before we authorize anything like this, we ought to have a study of all the water problems in the whole country and evolve policies for future water development so that we don't get into this procedure of authorizing something which becomes essentially a blank check for a lot of further studies, which will require a lot of money to implement and particularly a lot of money to solve the problems.

So this letter was sent up to the Congress with the request for authorization of the Central Arizona project. Carl Hayden was still in the Senate, still the president pro tem, so there wasn't any question that the Central Arizona project was going to be authorized. There were enough chits out on that, so the votes were going to be there. And so the legislation for the National Water Commission was authorized. The authorization for the commission at one time was in the same bill as the Central Arizona project, but they took it out and they had a separate bill.

There had been several earlier efforts on the part of a congressman from California to authorize a water resources study. I cannot remember his name, but he had introduced a bill calling for a national water commission to evolve water policy. And it had probably been introduced in 1965 and again in 1967, but no action had been taken. I don't even remember for sure who introduced the National Water Commission Act on the Senate side, but it was probably introduced by Wayne Aspinall by request on the House side.



On the Senate side, I think the bill went through right away without any problem, but on the House side, Wayne Aspinall had some problems with it. I think I told him I didn't see the need for the study because it seemed obvious to me that water resource policies were going to continue to be evolved on a case-by-case basis, such as the Recreation Act which you mentioned, the Wild and Scenic Rivers Act, and for specific projects. The one comment that I made was that if this was going to work, you had to put the full responsibility in the chairman, subject to general policies laid out by the commission. This was based on my observation of the Water Resources Council, which I didn't think was working very well because the chairman didn't really have any authority. While he had appointed the executive director, it appeared that each of the other members of the council had appointed an assistant director from his agency, and it was not at all sure that the staff was independent.

The only other input that I had to that act was to recommend that the commission's report be sent simultaneously to the President and the Congress.

The Central Arizona project legislation was passed first, and the National Water Commission Act was passed soon afterward in late September 1968. Scoop Jackson had a lot to do with the negotiations that led to the appointment of the members of the commission. In fact, at one time a draft of that legislation had called for the members to be appointed by the President and confirmed by the Senate, however, it was argued that it was not appropriate for members of a study commission to be confirmed by the Senate. When they took that provision out, the legislation stalled and it was rumored that Scoop wasn't going to let it pass until he knew who the members were going to be. One of my colleagues called it preconfirmation-all of the members confirmed by Scoop Jackson before he'd let the legislation pass. It was quite obvious that they knew exactly who was going to be appointed because the appointments were made soon after the bill was passed.

The membership was very well balanced politically, geographically, and environmentally. The chairman was Charles Luce, chairman of Consolidated Edison of New York, who had been Under Secretary of the Interior. Then there were Russell Train on the environmental side, Ray Linsley, a professor of civil engineering at Stanford, and Frank Diluzio, from industry who had worked in government on the saline water program. Another industry representative was Mike Wright, chairman of Exxon U.S.A., from Texas. Sam Baxter, a civil engineer who was chief engineer of the Philadelphia Municipal

Water Department, and Clyde Ellis, a public power man and former congressman from Arkansas rounded out the group. I think they were well balanced politically, three Democrats and three Republicans, and nobody ever knew where Ray Linsley fit in, but I remember he supported Common Cause. None of the original commission's work ever had anything to do with partisan politics.

### **National Water Commission**

**Q:** How did the committee interpret its charge? What did it set out to do?

**A:** I don't know what they did at the first two meetings of the commission in the fall of 1968. I don't think any record was made because they didn't have a staff. I met with Chuck Luce for the first time when he telephoned me and asked me to come and talk about the commission. He was staying at the old Wardman Park Hotel, now the Park Sheraton, in a very nice suite looking out over the trees. At that time, I hadn't applied for the position of executive director. I can't remember ever applying for a job after I took the civil service exams when I was in college. Somebody always asked me to come for an interview. And then I'd fill out the application blank. It was funny, but I never really did apply for a job, except unsuccessfully during World War II when I was unhappy at the Bureau of Reclamation.

So I went and talked to Chuck Luce without any commitment because I did know a lot about the legislation. I was still at the Library as deputy director of the Legislative Reference Service and we were getting ready to plan for our new offices in the Madison Building which had just been authorized, and I was having fun doing that.

One thing had happened which made me think I would not be interested in the job with the commission. For one thing, there had been a disagreement on the compensation of the staff when the first draft of the bill was sent down to the executive branch for comments and the Civil Service Commission had demanded that it be given control. The Congress didn't like that for a short-term presidential commission but finally compromised by putting in the legislation that the Civil Service Commission shall determine the compensation of the executive director. Then the executive director could fix the pay for the rest of the staff without regard to the civil service rules and regulations.

I was already compensated at the equivalent of grade 18 under Public Law 3 13 in one of the two top scientific jobs at the Library which more or less kept pace with the top scientific positions in NASA, and it was expected that the pay would go higher. So I couldn't see that there'd be any promotion for me at the National Water Commission, and there was an indication that the Civil Service Commission would never agree to another grade 18 position. At that time they were all allocated by the CSC. I guess it was just a coincidence that so many of them were in the Civil Service Commission. If you look at the record you will see that they had more super grades, proportionally, than any other agency. This was before they had the Senior Executive Service.

So I wasn't really interested in leaving the Library. But several people talked to me, including Ken Bousquet who was on the staff of the Senate Appropriations Subcommittee on Water Resources and Gene Wilhelm who had a similar position on the House side. They both encouraged me to apply for the positions, as did Sid McFarland, staff director for the House Interior Committee. I don't know whether Gene Wilhelm or Ken Bousquet had anything to do with it, and I never asked them, or whether a member of the appropriations committee was responsible, but the committee wrote into the first appropriation for the National Water Commission an executive level IV position for the executive director.

Probably they were angry about the Civil Service Commission's having been obstinate in demanding that everything be in accordance with civil service rules and regulations. So they wrote into the appropriations act providing the first \$150,000 to start the work of the National Water Commission that funds shall be available for compensation of the executive director at level IV of the executive schedule.

I guess I must have known about this when I first talked with Mr. Luce. However, I think we talked mostly about what the committee should do, and I must have told him that I didn't have any preconceived ideas as to what should be done. But I'm sure that I told him about my experience with the Senate Select Committee which had decided against doing the things that I thought were most important, such as the economic analysis and the allocation of responsibilities among agencies. At that time I thought those were the major problems.

So anyway, when I met with Mr. Luce we eventually discussed the subject of salary of the executive director. There was another Quadrennial Commission report coming up, and he suggested that it seemed obvious that they were going to make some recommendations for increasing—

Q: What sort of commission-I'm sorry, what was this?

A: The Quadrennial Commission is what they called the Commission on Executive Pay, which has just recently made some new recommendations-that's what they used to call it. Now, I don't know whether they still call it that or not. I think somebody did call it that in the newspaper article. It has a long name. Well, anyway, that was in the mill, and he felt sure that the level IV would be a promotion for me. The executive level V was the same as grade 18, and so it seemed obvious that there would be a promotion.

As soon as I met with Mr. Luce, I found that we had an almost immediate rapport. But I have to mention one thing; someone had told me that he had had polio. He walked with a limp, the same as I do. All my life I'd wanted to find somebody whose left foot was smaller than their right foot, especially size 11 or 11½, in the hopes that we could buy two pairs of shoes and split them because my right foot is smaller than my left foot. But unfortunately Chuck's polio was in the right leg also. He was attacked by the polio just about a year before I was when we were both babies.

I guess I'm just being facetious bringing that up. But we did have a good rapport. He had come out of the Interior Department having been in the Bonneville Power Administration when I was in the Pacific Northwest. We knew a lot of the same people and he knew and loved the Northwest just as I did. We both knew and liked Scoop Jackson. He had been my congressman when I lived in Seattle, and when I came back to Washington I still voted in Seattle until the District of Columbia residents were able to vote. Of course, I had worked with him when he was a member of the Senate Select Committee.

One of the interesting things that Scoop did that I was involved in was he brought young lawyers back to work with the Interior Committee. He brought Tom Foley back, and he brought Bill Van Ness back, and one of the first things he usually did was send them over to talk to me at the Library about water resources, so I got to know and work with Tom Foley, for example.

**Q:** While he was still a staff member?

**A:** Yes, he was a staff member on the Senate Interior Committee for several years. I don't know whether Scoop had any idea that Tom was going to go on and be the majority leader or anything like that, and I certainly didn't. Tom was just a very nice guy. And Bill Van Ness was very nice and stayed on to be staff director of the committee.

And then on the other side, Tom Kuchel had brought Steve Horn back to work for him, and I did the same thing; spent some time briefing him on water resources because I could give them a briefing about the committee from a different viewpoint and the senators were a little too busy sometimes to break in a new staff member.

So I had a good rapport with Scoop Jackson, but I never talked to him about the commission more than once or twice during the course of the five-year study.

When Mr. Luce offered me the job after another unrecorded meeting of the commission I agreed to take it and started work on the next to the last day of 1968, bringing with me a secretary from the Library of Congress. I was working in a building at 1016 Sixteenth Street across from what I still call the Statler Hotel, now the Capital Hilton Hotel. The government had a small building there, an eight-story building with just a few offices on each floor that they used for temporary commissions. I had the office on the second floor at the front of the building and planned to meet there with Mr. Luce on the first Saturday after I started work.

I had to use a key to get in the building on Saturday and was up there working when I kept hearing something that sounded like hail on the window, a tapping noise. I looked out the window, and there was Chuck Luce down on the sidewalk throwing pebbles up against the window because he couldn't get in. And I thought, "My god, if the police come along and found the chairman of Consolidated Edison Corporation down there throwing pebbles up there, they'd probably want to lock him up."

I went down and let him in and we started to talk about what we should do. As I think back on it we certainly didn't "hit the deck running." We had talked a little bit about what should be done in the interview, when he had asked me

what I thought should be done, and I had gone through the whole rigmarole of cost sharing and allocation of responsibilities among agencies, as well as a lot of the other things we've been talking about today, which were things I had been working on for years.

All we could agree on at that time was that we were going to have to have a program of studies looking at specific areas in some depth to provide a basis for making recommendations. Which, of course, was so obvious that we didn't need to have a meeting to decide it, but I was there with one secretary and no staff at that time and had barely begun to think about who I was going to get to help me, and I didn't even have any stationery on which to write a letter. We had to type on the address.

On Monday Bob Blakeley, who was the administrative man for the Corps of Engineers, called me and offered to help with administrative details. I don't know whether he was operating on his own or whether somebody at the Corps had told him to call me. I think he was hoping to get the job as the administrative director for the commission. I don't know what motivated him, but he came over and helped me. He helped me get stationery, he helped me get anything that I needed in the way of office furniture and equipment. He told me that the Corps was glad to help, and that they had helped a lot of commissions. He mentioned the names of some of them.

Of course, for presidential commissions, the General Services Administration has an office set up to handle administrative details: payroll, personnel, contracts, etcetera. That's the rule. But Bob Blakeley could do things so much faster than GSA. My recollection is that he got my stationery printed in one day, and a dozen little things that you have to do to get an agency started. To be honest, I guess I was terrified. Here I was, with one little secretary who had been one of my assistant secretaries at the Library and when she knew I was taking a new job, she asked to come with me. She was only 18 years old. When she bought a car, her father had to sign for it because she was too young. But she was good! She could take dictation and was a very hard worker. But she didn't have any background about the federal government: a high school graduate, no college.

One of the first people I had contacted to see if he would be willing to work with the commission was Howard Cook. I was told that Howard Cook had been interviewed to be the executive director, along with Joe Tofani and Gene

Weber. They were all three very knowledgeable, but I didn't know whether they would like to work under me. I have a feeling that it really hurt Howard that he hadn't been selected, but he never complained about it.

When I called Howard, he immediately said that he'd be interested, and I offered him the position of deputy director because I knew that he could be depended on and I would be able to get him a promotion.

The Corps had great difficulty getting super grade positions, GS-16, -17, and -18 at that time because of the overlying military staff. When you looked at the organization chart, the responsibilities were placed in the generals and colonels. At that time they even had several colonels as assistants to the chief of Civil Works, so they had a hard time justifying getting a super-grade position for a civilian in the Corps. The only way that Joe Tofani got a GS-17 out of it was that Ken Bousquet got the Appropriations Committee to write the position in the law in the appropriations act. I understand that logjam has been broken now, but not without great difficulty.

I was delighted to provide a chance for Howard to break out of that, and so I think that's one reason he took it, but also he was highly motivated. So he was the first person with whom I really made a commitment. He couldn't get away from the Corps right away, but he came over and worked with me Saturdays and nights and whenever he could find time and helped me to lay out a list of potential studies to be included in a program of studies for approval by the commission.

Neither Howard nor I wanted to narrow the focus of the study down into our particular areas of interest. Under the terms of the National Water Commission Act, the commission members could not be affiliated with the federal government in any other way. Chuck Luce wanted me to follow the same principle in hiring the staff. He didn't want me to detail people from the agencies who might retain ties to their agency. He reminded me that the Water Resources Council had been staffed that way and that it didn't work. Chuck did not have a very high opinion of the Water Resources Council, based on his exposure to it as Under Secretary of the Interior.

Although he had delegated all of the powers of the chairman to me except the power to hold hearings, I felt that I had to consult him with respect to hiring my principal deputy. I pointed out that I had worked with Howard for many

years, that he had unusual competence, and that he had worked not just for the Corps but for the Department of Agriculture. So he agreed that I could hire Howard Cook.

So we went to the first formal meeting of the commission, just Howard and I, with a list of over a hundred possible study areas. We made up the list based on our knowledge of all the different questions that were still left after all the other studies had been done. When you get right down to it, most of the previous water studies had not really resolved any questions; they had more usually posed more questions or different questions.

Q: Let me inject a question right here. When you developed these potential study areas, did you go to staff members in the House and Senate and ask for some input from either the political, that is the elected officials, on the Hill or the staff members about what was their intention?

A: Not at that time. For one thing it was abundantly clear from the legislative history of the act what we were supposed to do. I wanted to have a meeting with the commission first. I hardly even know the other members of the commission, except for Ray Linsley and Frank Diluzio. I had met Russ Train once or twice, and I knew Sam Baxter from having served on a committee with him when he was president of the American Society of Engineers. But I didn't know Mike Wright, and I didn't really know Clyde Ellis although I had heard him speak.

So, I wanted to get their views before I got anybody else's because I wanted it to be their show. The first meeting was held at the Metropolitan Club over a \$15 lunch which shocked me because the food wasn't very good. We had given the commissioners the list of studies in advance, and we asked for guidance as to which areas they thought should be the subject of study.

My whole approach backfired when the commissioners immediately turned the question back and told us that we were the experts and they expected us to tell them what they should study. But at that first meeting, Chuck said that the one essential thing was that we have at least one study underway and a plan of studies approved by the time he went up to testify before the Appropriations Committee for the next year's appropriations, which was set for some time in March. This was in mid-January, so we had only two months to come up with



a plan of study. And it was pretty clear that the commissioners had no preconceived ideas about what this commission should do.

One of the things that they did understand was that we would have to study interbasin transfers because of the background of the commission. Actually, we were the only federal agency that could study interbasin transfers because of Scoop Jackson's provision in other legislation to the effect that no agency shall study interbasin transfer without specific approval of Congress, and we had that specific approval in the National Water Commission Act.

Although at first we didn't get the specific views of the commissioners as to what we should study, there was no lack of suggestions sent in from others. Professor Len Dworsky at Cornell sent us a publication resulting from a student project that he called, "An agenda for the National Water Commission." I was deluged with all kinds of ideas from other sources. People from TRW met with us, wanted me to contract the whole study out to them, and they would plan it and execute it and produce a report. All we had to do was give them the money. I was flabbergasted. I couldn't conceive of such a thing. But apparently they had done that for some other commissions. From the current vantage point, I guess it would be called privatization.

It was obvious to me that none of these people had anybody that knew any more about water policy than Howard Cook and I did, so we soon stopped paying any attention to them and devoted our time to recruiting a staff. And for the first study we took advantage of some water demand studies that were already underway at Resources for the Future and began negotiating a sole-source contract with them to provide us with a report on future demands for water in three sectors of the economy. This was one of the very obvious things that we knew would be needed. It didn't take much time to draw up the contract, and it didn't cost very much because Chuck Howe and Bob Young, who were going to do the work, were already working at Resources for the Future. So this became the first study, and when Chuck testified at our appropriation hearings, it was already under contract.

In order to handle our contracts, I very soon hired an administrative man. The job didn't pay enough to attract someone like Bob Blakeley, but I was able to hire a man with experience with defense contractors as the administrator. His name was Bob Baker, and he went right into action because he knew contracting from both sides, having been a colonel in the Air Force or Army

Air Force during World War II and had worked in the Pentagon Office of the Secretary of the Army. He was able to hit the deck running and knew all the personnel rules when we started to recruit the rest of the staff. We had to get that first contract going before we even had the rest of the staff. We didn't have very much space in the office at 1016 Sixteenth Street, so they made space available for us in the New Executive Office Building on Seventeenth Street. This was very nice office space which made me feel that the commission was going to be right in the middle of government policymaking.

We could have the commission meetings right there in the office and walk across the street to the Metropolitan Club for lunch. But in the meantime, Russell Train had resigned from the commission to accept an appointment as Under Secretary of the Interior, and Howell Appling from Portland was appointed. This started to upset the geographical balance of the commission because we lost an Easterner and picked up another Northwesterner. Howell was a businessman, and he very quickly developed an understanding of what we were trying to do.

**Q:** Who appointed Appling?

**A:** He was appointed by Nixon. He had been a campaign worker for Nixon in Oregon. At one time he had been the lieutenant governor of Oregon but he had given up politics because he felt that it took too much time away from his family. I had not been consulted; we read about his appointment in the newspaper.

After a couple of months in the New Executive Office Building we were told unceremoniously that we would have to give up that office space.

Howell Appling knew H.R. Haldeman and John Ehrlichman, the two guys that ran the Nixon White House, and wanted to put up a fight to keep our office there, but Chuck felt there was no use getting involved with that kind of a fight. I think Chuck realized that we had no political clout, since all of the other commissioners had been appointed by Lyndon Johnson and had submitted pro forma resignations to Nixon on January 20.

In the meantime, we were going ahead with the evolution of the study program. I had already contacted Abel Wolman, Gilbert White, and Ed Ackerman, and they had agreed to serve as consultants. All three were very

well known to Howard Cook, and we tried to get their ideas as to how we should, narrow the focus of the study. I think we had just one meeting with all three of them, and they weren't able to help very much.

I should have mentioned earlier that on my first day of work for the commission on the last day of December in 1968, I had worked up the justification for a budget of \$700,000 for the next fiscal year. I was able to get it printed in the budget which was going to press that very day, so we didn't have to go up with a supplemental which might have taken ages to get.

So we had a budget request without having had a Budget Bureau hearing, which is rather unusual. We did have a hearing on the Hill at which everything was sweetness and light. We had the House and the Senate hearings on the same day, to accommodate Chuck who was very well respected by everybody on the Hill, and I guess I was also.

There's not going to be enough time for me to tell much of the detail about the study program that was being formulated during the early days of the commission. It was a rather full program because the commission refused to narrow the study down. Howard and I felt that we could not do a good job on over a hundred potential studies that we had on our list. These were all in areas of possible improvement in water policy, and the commission took the position that it couldn't decide to throw anything out without having the background that the study was intended to provide. Some of them were in narrow areas and some of them were broad. They were grouped into 15 or 20 special study areas which I thought would provide a focus for a rather succinct final report.

I was very fortunate in being able to assemble a very competent and hard working staff. The division chiefs were Vic Koelzer, from the Harza Engineering Company, where he had worked on multiple purpose projects all over the world but primarily in the United States; Lyle Craine, on a sabbatical from the University of Michigan, who had been in the Interior Department in the Truman administration as a member of the secretary's policy planning staff; and Phil Glick, who came to us from being chief counsel for the Water Resources Council. He used to joke about being called "counsel for the council." Each division chief then recruited his own staff. Phil was the last of the division chiefs to come on board, and his immediate reaction was he wanted to bring his whole staff from the Water Resources Council over. I had to stop him from doing that, and he eventually recruited a very fine group of Western

water lawyers. Aside from this instance, I generally gave each division chief a free hand in staffing his unit, within the limits of the budget.

Q: Was Gary Hart one of your lawyers?

A: No, but he made a study for us. The star of the legal staff was Charlie Myers, on detail from Stanford for about a year. Charlie Myers was a very dynamic individual, very, very conservative, an arch-Republican. He was originally from Texas, where he had gone to law school, and was a professor of law at Stanford. He was topnotch and dominated the legal staff.

Q: Was he a friend of Linsley's?

A: Not really. Linsley was at Stanford and knew Charlie, but they were not especially friendly. I think Phil Glick recruited Charlie. Phil's primary role was in recruiting a topnotch staff. With all due respect, Phil Glick was more of an executive lawyer. He knew how to find people and how to interpret other people's work, but he was detached from the report production line. Charlie more or less took it over and helped with the completion of the final report. I think Phil was on leave for a long time after an operation.

Q: What did Gary Hart do?

A: Gary Hart was engaged. to do a study on the river basin commissions which was eventually published. We had a hard time getting him to finish it because he went to work on George McGovern's campaign.

Q: You were talking about how the staff was hired, but what interests me is how the staff, including the in-house staff as well as the contractors, developed the voluminous number of studies in really a relatively short period of time. You must have had quite an administrative problem of handling all that sort of stuff.

A: Yes, I did. At one time I remember telling the staff that, "All I can do is facilitate the work and get the money and whatever else you need to do it, and I don't really have the time to put a lot of intellectual capital into the theory and the policy."

Howard and I worked very long hours, and we had some other hard working staff people. Vic Koelzer told me that he woke up at four o'clock in the

morning because he couldn't sleep, so he started working and worked all day. When I mentioned the division chiefs, I forgot to mention that Bob Baker, as chief of the Administrative Division, did a yeoman's job in his field.

Also, we did a lot of the studies by setting up committees where our staff did the staff work. Harvey Banks chaired a committee on planning and Dwight Metzler chaired a committee on water pollution control. We knew the people in the country that knew the most about the various subject areas and we got them to help.

We negotiated contracts with universities for the use of people who were academics but had had experience with government policies. David Allee at Cornell was in charge of one study. He had been back in the Office of the Secretary of the Army for a year on sabbatical, so he was well versed on authorization and appropriations processes for water resources. I don't remember all the others, and there just isn't time to go through the whole list of studies. We actually had about 80 different studies of which 64 were completed and published. Then we had two major compilations that were published by the U.S. Government Printing Office. One was on state water law, compiled by Dick Dewsnup with the assistance of a couple other lawyers, and the other one on the federal water policies, which was done by in-house staff.

I had the feeling that I was keeping a lot of balls in the air. My efficiency was helped tremendously by the fact that I had two secretaries. In addition to the young woman who had come from the Library, Lena Crist, who didn't have much experience but worked very hard, I had Flo Broussard who had been Ed Wenk's secretary at the Library and had worked with him in the Executive Office of the President. Flo was my administrative assistant-the only fault she had was that she typed so fast that the IBM Selectric typewriters with the letters on the balls couldn't keep up with her. I shouldn't call that a fault!

IBM didn't believe it, and they sent someone to the office to check her out and found that it was true. The machine just could not keep up with a really fast typist. Not only was she fast, but she was accurate, almost unbelievably accurate. When I wanted to get something done, I could dictate it and it would come out perfectly. She corrected my tendency to be overly verbose. I have the feeling we could use her to good advantage in transcribing this interview.

We had a commission meeting just about every month after the studies were coming in. Usually the meetings would start in the evening with dinner and a discussion of some kind after dinner. Then we'd have morning and afternoon sessions the next two days concluding about three o'clock in the afternoon of the third day. Some of the earlier meetings were just one day. I tried all different ways of doing the minutes of the meetings. One time we even had the tapes transcribed, but that took too long, and they had to be edited. So finally I just made notes as we went along and then I would come back to the office and dictate the minutes.

I have had a lot of experience working with commissions and committees, and sometimes they don't really take some action that they should take or they forget to do something that they intended to do. This commission was no different. My philosophy has always been (I hope it doesn't sound like David Stockman) to write the minutes up as to what I thought the sense of the meeting was and what the committee and commission should have done rather than what the actual transcript showed. You sometimes have to do it that way; otherwise, you'd never have a good record of the actions taken.

Preparing the minutes took a lot of my time and I could never have done it if it hadn't been for Flo Broussard. She was very competent. She didn't work overtime, she didn't have to. She could do all the work in eight hours. Mr. Luce thought she was overpaid compared to his secretaries at Con Ed, but she earned every bit of her pay. She went on after she left me to be secretary for Russ Peterson when he was chairman of the Council of Environmental Quality, and then later on she was secretary to the science advisor in the Executive Office of the President. She was topnotch, and that was one of the reasons I could get so much work done.

We didn't have many meetings with consultants, but we did have one big meeting at Belmont to which we invited members of the committee staffs from House and Senate committees and from the minority and majority sides. This was probably in the spring of 1969 when we were first getting started. We also held field hearings, about five or seven hearings at various places around the country. I can remember going to Portland, Denver, Phoenix, and New Orleans. Every state was invited to make its views known at these hearings, and we amassed a tremendous volume of material. This is always an essential part of a commission study. But you get an awful lot of material, most of it about things you already know, that you can't use or don't need to use.

Sometimes you get a few good ideas, and it also helped us to determine that we were covering the things in which the states were interested.

Throughout the study I had to spend a lot of my time meeting with people who wanted to make an input to the commission's study. Some of them believed that the major purpose of the study was to beat the drums for the NAWAPA project, the National Water and Power Alliance, that was proposed, I think, by the Ralph Parsons Engineering Company. I also felt like I was flogging the administrative staff and the section heads to get them to finish individual reports so that we could get them published and get them out for comments.

Along with the work of the staff, we were having a meeting of the commission almost every month at which we would keep them up with what the staff was doing. At first we were evolving the study program and having postmortems on the hearings. When the first studies started to come in during the second year of the commission's work, we sent copies to the commissioners and discussed them at the meetings. The commission did quite a bit of reading of those studies and gave us all kinds of comments. As we moved on farther down the road and were at the point of making decisions as to what would go into the final report, we would put issues before the commission in the form of a staff paper. One of the more significant staff papers was the paper on alternative futures. It seems so obvious now, but at that time it seemed like a new idea, that demand for water is dependent on the policy decisions made by society, not on the growth of the economy.

Everybody knows that now, but when work was done for the Senate Select, there was a consensus that water demand was going to be doubling in 20 years and tripling in 40 years along with the economy.

The commissioners worked very hard to prepare for those meetings. Mr. Luce demanded detailed agenda with estimated times for consideration of each subject based on my estimate of its importance. We prepared an agenda book for each meeting. Some of those notebooks were two inches or two-and-a-half inches thick. I was embarrassed sometimes because Chuck Luce had always read every word of the agenda book and the reports it contained, and he would ask me questions about things that were in the book that I either hadn't read or didn't remember having read. He had a much better retention of detail than I.

Most of the other members of the commission also were topnotch people. Mike Wright was an intellectual power house, or maybe he had a very good staff to brief him. Strangely enough, even though he had been a staunch Republican all of his life, the White House staff, without me knowing anything about it or anybody else on the commission knowing anything about it, got the President to replace him on the commission.

When Nixon came into office, each of the commissioners had written a short undated letter saying, "In accordance with established procedure, I hereby submit my resignation to be effective at your pleasure." This is standard for all presidential appointees, even in the middle of an administration when the new administration starts. I understand that some Presidents demand that appointees give them that letter when they are appointed.

So, those undated letters were all on file, and the first thing I knew about it was when I got a call from the White House telling me that there were some important papers for me to pick up. When I got them, I found there was an appointment for Josiah Wheat of Texas, who had been chairman of Democrats for Nixon in Texas, and another for Roger Ernst of Arizona, who had been an Assistant Secretary of the Interior. Along with them were letters accepting Mike Wright's resignation and Frank Diluzio's resignation.

When I called up Mike Wright, I think he thought that I was the one that wanted to get rid of him. This was the farthest thing from my mind because he had been a tower of strength in supporting me when other commissioners came up with unrealistic ideas. Frank Diluzio just shrugged when I called to tell him, saying that he was surprised that it took as long as it did.

This happened in November 1969. We were well under way, and we had two new commissioners, and they didn't know anything about the study program.

Roger Ernst from Arizona was well versed in government procedures, having been an Assistant Secretary of the Interior, but Josiah Wheat's primary connection to federal water policy had been through the Water Resources Congress and the National Reclamation Association in Texas. From their backgrounds I thought they might want to change the focus of the commission to make it a strong supporter of Western water development.



By statute, the commissioners were allowed to be paid for the days that they worked. It was decided early on that no commissioner would charge for more than four days a month, two of which would be for the meetings and two days at home. So these positions were no sinecures. Further, we didn't provide for a commissioner to have a paid staff person in his home office,

**Q:** That would exclude travel days, I assume.

**A:** Yes. Because of that limit, they didn't charge us for travel time. Most of the commissioners were going to be traveling anyway. They were all very busy people, so \$100 a day was more or less pocket money for them. We did authorize them to travel first class, and they all traveled first class except Chuck Luce. He always traveled coach. As a director of United Airlines, he did that because he wanted to see how they were treating people who rode in the back of the plane. I was also authorized to travel first class, but I always traveled coach because I hate to waste money. I kept a very tight rein on the expenditures of the staff of the commission.

**Q:** What surprises me is that considering the number of people you hired and the number of people you contracted with, in the end you could come up with X number of recommendations that must have reflected at least a majority view if not the unanimous view of the commission. And these recommendations were not just **milksop**; they were substantive and they were controversial. Can you explain a little bit more about how that evolved?

**A:** We worked pretty hard to get unanimous decisions. Of course, the staff didn't have a vote. And we had some studies that were never finished because they weren't any good. For one study we contracted with the University of Chicago for work that Jack Schaefer was going to do. Jack Schaefer then left the university, and they turned the study over to someone else. The study was on the Muskegon project in Michigan. It was such a lousy report and we had already made a partial payment which couldn't be recovered, so I refused to pay any more and ordered the contract terminated. We were threatened with legal action by the University of Chicago, but in a phone call from the vice president of the university, I turned the threat right around, saying, "If you pursue this, I will publish that report and put the name of the University of Chicago on it." And I told him to look at the report and let me know if he wanted me to do that. Never heard another word from him.

That is an example of what I meant when I said I was tight. Another thing is that we refused to pay overhead on contracts with the universities. They passed a resolution condemning the practice. I was determined not to waste any money. One time we had to send Helen Ingram up to Cornell to help David Allee to finish his report. David always has a lot of balls in the air. He's a very good man and the contract was being monitored by Helen so she had to go up and more or less sit on his doorstep-not really his doorstep, but hound him at his office to keep him working to get that report finished in time for the commission to consider it. Dave didn't really understand that when we needed a report for a meeting of the commission in May, they wanted to get that report in advance and read it. We worked hard on a lot of those reports to get them finished on time. I mentioned earlier that we had trouble getting a report out of Gary Hart because he was working as McGovern's campaign manager. We had to get somebody after him to finish his report, but we got it and he came to our meeting in Philadelphia to defend it before the commission.

Q: Excuse me, but did it sit well with these staunch Republicans you were talking about that Gary Hart had been given a contract? It would seem likely to me that some of those people would say, "Well, gee, this guy's a little bit too far to the left to really be-"

A: I remember that some of them joshed Gary at the Philadelphia meeting about working for a losing cause, but there was never any political comment made at any of the meetings or at any other time. And one thing that amazed me was that there was never any political pressure on me to hire anybody. One of the people that I tried to hire at the very beginning of the project was Ernie Englebert, out at the University of Southern California. He'd written a lot on water resources policy, and I've known him for many years and respected his work. When I tried to get him to come to work in the position in which we eventually hired Lyle Craine, he said something like, "I'm not going to come back there. You're going to find that you're going to have to hire every political hack that the Hill sends down there, and you're not going to be able to get anything done."

The amazing thing was that, to my recollection, I only had three calls from the Hill about hiring a staff man.

One of those calls was about a man who had applied for a job with us, and I had agreed to hire him but we had not yet told him. He went up on the Hill to