ORAL HISTORY INTERVIEWS

JOE HALL

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STATUS OF INTERVIEWS:
OPEN FOR RESEARCH

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Interviews Conducted and Edited by:
Brit Allan Storey
Senior Historian
Bureau of Reclamation

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INTERVIEWER: Brit Allan Storey

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A note on editorial conventions. In the text of these interviews, information in parentheses, ( ), is actually on the tape. Information in brackets, [ ], has been added to the tape either by the editor to clarify meaning or at the request of the interviewee in order to correct, enlarge, or clarify the interview as it was originally spoken. Words have sometimes been struck out by editor or interviewee in order to clarify meaning or eliminate repetition. In the case of strikeouts, that material has been printed at 50% density to aid in reading the interviews but assuring that the struckout material is readable.

The transcriber and editor also have removed some extraneous words such as false starts and repetitions without indicating their removal. The meaning of the interview has not been changed by this editing.

While we attempt to conform to most standard academic rules of usage (see *The Chicago Manual of Style*), we do not conform to those standards in this interview for individual's titles which then would only be capitalized in the text when they are specifically used as a title connected to a name, e.g., "Secretary of the Interior Gale Norton" as opposed to "Gale Norton, the secretary of the interior;" or "Commissioner John Keys" as opposed to "the commissioner, who was John Keys at the time." The convention in the Federal government is to capitalize titles always. Likewise formal titles of acts and offices are capitalized but abbreviated usages are not, e.g., Division of Planning as opposed to "planning;" the Reclamation Projects Authorization and Adjustment Act of 1992, as opposed to "the 1992 act."

The convention with acronyms is that if they are pronounced as a word then they are treated as if they are a word. If they are spelled out by the speaker then they have a hyphen between each letter. An example is the Agency

for International Development's acronym: said as a word, it appears as AID but spelled out it appears as A-I-D; another example is the acronym for State Historic Preservation Officer: SHPO when said as a word, but S-H-P-O when spelled out.

Introduction

In 1988, Reclamation began to create a history program. While headquartered in Denver, the history program was developed as a bureau-wide program.

One component of Reclamation's history program is its oral history activity. The primary objectives of Reclamation's oral history activities are: preservation of historical data not normally available through Reclamation records (supplementing already available data on the whole range of Reclamation's history); making the preserved data available to researchers inside and outside Reclamation.

Questions, comments, and suggestions may be addressed to:

Andrew H. Gahan
Historian
Environmental Compliance Division (84-53000)
Policy and Administration
Bureau of Reclamation
P. O. Box 25007
Denver, Colorado 80225-0007
FAX: (720) 544-0639

For additional information about Reclamation's history program see:
www.usbr.gov/history

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Oral History Interviews
Joe Hall

Background

Storey: This is Brit Storey in the offices of Joe D. Hall, the deputy commissioner, at the Bureau of Reclamation, June 11, 1993, at 2:15 in the afternoon.

First of all, Mr. Hall, could you tell me a little about your early life and your education, and how you became interested in Reclamation? What your professional background was? Those sorts of things.

Hall: Sure. I was raised in Dallas, Texas, and went to school at Texas A&M where I took civil engineering, and I'd like to say that I had a deep and abiding concern with the water resources of the nation, and that led me to work for the Bureau of Reclamation, but that's not true. What I had was the need for a job, and when I got out of school, I was in the home building business with two partners in Amarillo, Texas, and there came a time, then, that they announced the closing of the Air Force Base in Amarillo. Well, when you close an Air Force Base in a town of 100,000 people, your home building business goes down in a hurry.

And that's what happened to our home building business, and I did have, as anyone from the West has, a sort of intuitive interest in water resource development and I was somewhat familiar with the need there in

Amarillo and surrounding cities, and, as it happened, the Canadian River Project–Canadian River was just north of Amarillo–50 miles.[1] That project had been authorized and was just beginning construction. And so, with the demise of our home building company, I was able to go down to the Bureau of Reclamation and talk to them about me maybe coming on with them, and they did hire me, and I came on as a junior engineer. I started with them in the surveying and construction inspection activity around Amarillo, and since then, have had a long, and, I think, a happy relationship with the Bureau of Reclamation.

Storey: When was that that you graduated, and then when did you come to Reclamation?

Hall: I graduated from college in 1957. With my years out in the private sector, then, it was 1961 when I came with the Bureau of Reclamation.

Storey: Really. Okay, what else did you do in Amarillo while you were there?

Hall: I was . . . the construction business was my strength, as far as my business opportunity. As far my private life, I was at that time still had

1. The Canadian River Project is in the Texas panhandle, providing municipal and industrial water for 11 cities and towns throughout the High Plains area. Primary purpose of the project is to supply water to the Texas cities of Borger, Pampa, Amarillo, Plainview, Lubbock, Slaton, Tahoka, O`Donnell, Lamesa Levelland, and Brownfield. Principal storage structure is Sanford Dam on the Canadian River about 37 miles northeast of Amarillo. Additional features include 323 miles of pipelines, 10 pumping plants, and 3 regulating reservoirs.

time to play golf, I was a member of civic clubs, the Optimist Club included, and the church activity, was in JayCees, and organizations such as that. I was an active, civic minded individual, I think. And the Bureau of Reclamation provided a good niche for me because it let me put some of my engineering talents to good use and, because I had had some experience in the business community, I think it always gave me a different perspective about the business community, the non-federal sector, that I would have never had had I just come directly from college.

Storey: Did you only do the one job as a junior engineer in Amarillo?

Canadian River Project

Hall: No, well, it was progressive after that. After I started with the surveying in Amarillo, that was in Amarillo proper, then the dam, which is called Sanford Dam, was being constructed about 50 miles north on the Canadian River. And I went to the project manager, whose name was Spike Crane, and asked Mr. Crane if it would be possible for me to go up and get some experience on the dam, because although I had had experience in the home building business in light construction, I'd never been around dam construction. Unlike many of my colleagues, who kind of grew up on a dam, I did not. And so Mr. Crane agreed, and as any rookie engineer might get assigned, I was assigned to go up and work the graveyard shift from midnight until eight in the morning, starting with the inspection

of the outlet works, which meant that I was inspecting the outlet works—the tunnel.

My shift was, as I say, the graveyard one and the graveyard shift, at that time, was all Hispanic, or more specifically, Mexican, and I say that because they were from Mexico. They worked for the H-B Zachary Co., the general contractor, and they listed their address as Zapata, Texas. And if you look where Zapata is, it's right on the Rio Grande River [*sic*]. And almost all of them were from across the border, non-union, even the foreman was a Hispanic gentleman. And I used to carry on this dialogue with them because they preferred to speak Spanish in the tunnel, and I used to give them a good-natured bad time and tell them that this was an American tunnel, and I expected them to speak English during the construction–and they'd all laugh and we'd go on about our business.

It was fun . . . their lunch hour was like four in the morning–we'd start at midnight. And they lived in what we might call today almost a commune relationship. They all lived in this one big house there in Rich, Texas, the nearest town, and they would bring these big sacks. And in the sacks they would typically have tortillas, tostadas, and they would be filled with all sorts of things. They could be filled with green beans, but more likely they were filled with something hot, and they loved, since I was the only gringo, they loved to get me biting into something hot and watch the tears flow down my cheek. And we had our dinner, they always

built a fire, always you know, it's about four in the morning, always had a fire going, always heated their lunch. And I was always welcome to join them, me and my sandwiches and they and their tortillas, and they would pass me something. And I was quite cautious, usually, but sometimes I'd get a little bit too risk-taking and would bite heavily into something, and it turned out to be something that'd just wipe you out–which they took enormous glee when they saw me choking and crying around the campfire.

But we had a very good relationship, good inspection, and the tunnel was completed successfully. While I was up there at the dam, I was able to involve myself in a number of other construction activities including the embankment, both the excavation and the placement of the earthfill, the control of that I was able to put some little time in the laboratory where I was able to see how we maintained quality control. I did some concrete placement inspection, and I think [I did] just about every aspect of that mostly earthfill dam plus concrete appurtenances. But I think I was able to get in on the inspection of just about every aspect of that dam while I was up there. It was great experience for me. From that . . .

Storey: Excuse me, who was your supervisor?

Hall: Spike Crane was the overall supervisor. The resident engineer I'll have to search for his name. Bill something . . .

Storey: Okay, go ahead, I'm sorry.

Working as an Inspector

Hall: That's quite all right. I remember the next supervisor's name very well, from there, because, well, you know, I was starting my career. I had done my sort of junior assignments and that was '61, probably in about 1963, then, I was selected to be the chief inspector at Plainview, Texas.

Now, this project, Canadian River Project, was primarily for the municipal use of 11 member cities, Amarillo and Lubbock being the larger of the cities, and then a lot of smaller ones. And a lot of the construction of this project was the pipelines–huge pipelines, ranging up to 96 inches, that went all over that part of west Texas. Sort of the central part of that pipeline system was headquartered out of Plainview, Texas. Both our pipelaying crew and pipe manufacturing was done there, and I was selected as chief inspector, and got to supervise the installation of the pipe and the manufacture of the pipe from our location in Plainview.

My supervisor's name there was Lavern Lincoln, and [he] not surprisingly went by the name of Abe. So Abe Lincoln and I were heavily involved in getting that project built and under way. And did it–the contractors involved did that in what, was then, record time with new, innovative pipelaying procedures, including developing cradling machines that would carve out the curvature of the earth and even the machinery for making the bell where the pipe fit together. And probably what's since

become commonplace in pipelaying was pretty innovative at that particular time, back in '63, '64.

I was engaged in that part of it until 1967, the early part of 1967, and then I decided–and I don't know for my career, I determined that I needed to do different things fairly early in my career, as opposed to sticking in this case with construction. That it would be better for me in the long run if I did some different things, and just as I wanted to get some different types of construction experience, then I went back to Mr. Crane and he, in turn, had me go visit with the then regional director, whose name was Leon Hill, in Amarillo.[2] And my pitch with him was that I would like to be considered for some other type of position other than just construction–I loved construction, but I felt that in the long run it'd be important to my development and hopefully–ultimately, to the Bureau of Reclamation.

Kansas State Water Plan

I guess that was '66 when I first visited with Mr. Hill about this. Well then, either late in '66 or early in '67, then, Mr. Hill came to me with an opportunity and that opportunity was this . . . that the state of Kansas was very interested in developing a State Water Plan in which they would go in and assess all of the development that had taken place, thus far. What the developmental opportunities were, and then to

2. Leon W. Hill was regional director of the Southwest Region (Region 5) from 1959 to 1972.

assess if they needed to move water from one part of the state to the other, and how that might take place. And so they needed a person . . . we did not have an office in Topeka, nor in the state of Kansas, save just a few operational people out at the dams themselves. We didn't have any people in the planning arena, so Mr. Hill asked me if I'd be interested in going up there and being, in effect, "Our Man in Kansas"–work with the state of Kansas, develop that State Water Plan in a cooperative way, and shepherd it, from the Bureau of Reclamation's perspective.

I accepted the assignment. Because the state of Kansas was divided into two regions, I worked with two regional directors: Mr. Hill, from Amarillo, and Mr. Jim Ingles, who was then the regional director in Denver, Colorado,[3] and their staffs in different places–for example, Oklahoma City and McCook, Nebraska. I worked with both of those offices closely in putting together a State Water Plan with the state.

[I] was there about 4 years, and interestingly enough, since I was the only fed in the State office building, I became the receptacle for all sorts of federal complaints. And these big people would come to me–state agency heads and state employees would come to me with concerns about the then Federal Water Pollution Control Administration and what the Internal Revenue Service was doing, or whatever. I was

3. James M. Ingles was regional director of the Lower Missouri Region (Region 7) from 1968 to 1975.

a very handy sounding board for all sorts of federal problems, which was kind of interesting because I got a different perspective in dealing, for example, with the health agencies of the state of Kansas, and just what some of the concerns were from their perspective.

So it was another good, broadening experience for me, and one that I enjoyed, and I still enjoy some of the relationships that I had back there, and actually officing with the Kansas water resources board. Some of those relationships exist even to today.

Oklahoma City Planning Office

Having developed that State Plan, I was then given the opportunity to take over our Oklahoma City Office. At that point in time, Oklahoma City was a planning office with some 40 employees that were involved in the planning activities in the southern part of Kansas, Oklahoma, and the northern part of Texas, and I was fortunate to be selected for that position. Went down to Oklahoma City, spent some four and a half [4½] years, and at that point in time, the states were heavily into state water plans.

We were, of course, in a transition in the water resource business that most of us didn't understand yet–we still thought that we were in a lull and going to start building any day now. I'd like to look back and say I was so wise that I could see all that–I don't think any of us were. I think it took awhile for [us] to realize that we were coming to the end of an era, as far as

building large dams and large water projects. But because most of us in the water business didn't realize that, we were at that point–maybe we did in a way, maybe it was this way: that we knew we weren't going to be building as many dams and reservoirs.

Therefore, what was in vogue was the notion that you would transfer water from one location to the other, and that was sort of the notion in Kansas and in Oklahoma–huge, massive pipelines recommended in a proposal in Oklahoma, where it made a lot of sense. You had the water in the southeastern part of the state, where the rainfall was in the 40-inch-per-year, even up to 50, and in the northwest to the northwestern part of the state, where the annual rainfall was about 12 inches a year. And so you just looked at that, and you said, "Well, the thing to do is to move it from where you have it to where you need it," which made some sense. The economy of that, the environmental consequences, and all that, we were yet to be able to realize.

And so a good deal of my time there [Oklahoma City Office] was spent in developing a State Water Plan with *them*, although we did have some particular projects authorized, such as McGee Creek, during my tenure down

there–that's since been built.[4]

And there, I guess McGee Creek is a good example of where I first started to learn about other people's interest, and I learned this from other individuals that when we proposed the McGee Creek Reservoir, which is in the south central part of Oklahoma, a lot of environmental concerns. We didn't know exactly how to handle them, but we knew that just intuitively that there was a necessity to talk about those things.

Environmental Concerns

And so, in concert with the local people, what we did was to arrange an overnight trip that went into Bugaboo Canyon–that was the big issue. Well, Bugaboo Canyon is a preserved area, and should be maintained in its pristine condition. Well, it sort of worked all sorts of ways in that those of us from the development stage were able to see that it does have a certain beauty, and certain things should be preserved. And those from the environmental community were able to see that the way it was was just a huge thicket–that there was no way to even get into it with four-wheel drive vehicles. It was not there really for the enjoyment of anybody, and so some of the results of that were that the

4. The McGee Creek Project in south central Oklahoma supplies municipal and industrial water to the McGee Creek Authority, as well as downstream flood protection, water-based recreation, fish and wildlife enhancement, and environmental quality purposes. For more information, see Jedediah S. Rogers, "McGee Creek Project," Denver: Bureau of Reclamation History Program, 2013, www.usbr.gov/history/projhist.html.

combinations were made for certain portions of the reservoir to not be used by motorized craft, and it would provide access by water to certain areas within the canyon. And, in short, there were accommodations made and not, I think, maybe compromise is the wrong word–but arrangements were made where some of the environment that exists, to large measure, could be maintained, but yet access to it could be provided in a way that was environmentally sensitive. And just sort of the notion of taking people–I'm not naive enough to believe that every time you take people out on an overnight, and sit around the campfire and talk about those things, that the solutions always fall out. But I think it's a significant part of it if you can get people to really be engaged in something like that, where they can express their interest, and not just their position, that's been expressed by some group, be it development or environmental group–just learn to state your interest, what you'd really like to see done. It was sort of amazing to see that that sort of came together, and that the project did indeed proceed with certain environmental placards and considerations.

Storey: That would have been about the time NEPA [National Environmental Protection Act] was being passed?

Coming to Grips with Environmental Regulations

Hall: Yes, about that time we started passing laws that I would characterize a lot of us in the water community thought were sort of liberal, a little

bit off-the-mark laws such as NEPA–that we almost viewed it as a passing thing; that there's certain groups out there that are having these environmental laws passed, and probably, these will go away in time.

It took some maturing for those of us who were active in the water community to realize this was not some small segment of the American population, but was representative of what's turned out to be a real and abiding concern for the environment. The American people are *very* concerned with the environment in the United States. But, we didn't take NEPA, when it was passed, in what '69 I think, and immediately embrace it and say, "Yes, this represents the will of the American people." It was considered as sort of a fluke, but in time, of course, we've all learned it's not a fluke–it's a very real expression of the American people's concern for the environment. But to those of us with a more traditional background in Reclamation, it took us awhile to really realize that–for many of us.

Storey: You think they're still having problems with that? A lot of the folks, especially the older folks?

Hall: I think some do. I go to meetings such as National Water Resources Association and many of the state associations and power organizations, such as American Public Power, and National Rural Electric Cooperative Association, and there is still a segment of people who view that as not mainstream, sort of

liberal, not representing the views of the American public. I believe they are in an *increasing* minority, I think that most–and it's partly a function of age, but there are some old thinkers in young people, and young thinkers in old people. So it doesn't necessarily go along chronological lines, but I think it's fair to say that you're more likely to find that view in the older people that say, "Yes, this too shall pass, and we'll go back to like we were."

I think most in the water community, and I think the public power community, have realized that concern for the environment is *real*. I think that many still feel that it is out of balance, that the environment always wins, and even when they try to accommodate the environmental considerations, that if it comes to shove, that the more traditional users lose every time. But, partly because of that, there's more and more emphasis on reaching solutions to activities that fall under NEPA, or the Endangered Species Act, or the Water Quality Act.

You'll see more and more water districts that are employing consultants, attorneys–not aimed at just fighting the issue, but first seeing if there is a solution, seeing if there is an accommodation. And I think that's a healthful thing, because that's not just the Bureau of Reclamation's role to find that–that is, in fact, up to the users of the water and power to try and find some of those solutions.

Storey: Yes, well, we were talking about your

Oklahoma City office and McGee Creek, I guess before we–I, sidetracked you.

Becoming Regional Director in Denver

Hall: Okay, then I–from Oklahoma City, I was then given the opportunity to go be regional director in Denver, Colorado, when we had a regional office in Denver. It was really a matter, as the then Commissioner Gil Stamm[5] said to me, I did not have the opportunity to stay there [Oklahoma City]. That I would take a promotion, and I would either go to Washington, D.C., or Denver, Colorado, which is sort of the way you did things back in those days. It was–if you had been identified, and you were given the opportunity, then you were expected to move, and move onto other things. And that was fine, my family was sort of reaching the age . . . one in junior high, one in high school, where the move became more difficult. But that was fine, we moved to Denver, and I took over what was called the Lower Missouri Region–had several hundred employees scattered throughout the Region, and operating projects, as well as the Regional

5. Gil Stamm was the commissioner of the Bureau of Reclamation under the administration of President Gerald Ford, 1973 to 1977.

Office.[6]

And the regional director, I *still believe* that the regional director's–it's a kind of a tossup as to what's the best job in the Bureau of Reclamation. It's either project manager, of a fun project to run, or regional director. I'm sure it's not assistant commissioner, and *I know* it's not deputy commissioner, and I'm *absolutely* convinced it's not commissioner. The better jobs of the Bureau of Reclamation, if a person–man or woman–could make their choice, I think would be project manager or regional director. And the reason is that all the factors come to play at that position, all of the . . . You must match the environmental considerations against the developmental ones. You must consider what your employees would like you to do. Or the number of employees you have versus the financial constraints that you have, and employment ceilings, and that sort of thing. It's the places within the organization that all those factors come into focus, and you sit at a place that's high enough where you're able to see the impact of all those decisions, and low enough to where you can tell the difference in what you do, and you can see your progress day by day.

You get the position such as assistant

6. The Lower Missouri Region (Region 7) was one of the original regions created in 1946. Headquartered in Denver, Colorado, the Region focused on coordinating the Colorado-Big Thompson, Kendrick, Shoshone, and North Platte projects with the Pick-Sloan Missouri Basin Program. In 1985, regional alignment absorbed the Lower Missouri Region into the Upper Missouri Region in Billings Montana.

commissioner, this is my view, or deputy commissioner, and so much of what you do is administration, and trying to keep the show on the road, that you kind of lose focus. It's easier to lose focus of what you're about, and that's the reason I say, if a person could really choose, you'd choose project manager, or regional director. So I guess being regional director was one of the real highlights of my career, I enjoyed it a great deal.

Storey: And when did you go to Denver? Come to Denver?

Hall: I came here in 1975.

Storey: And how long were you here?

Hall: Okay, I was here until 1980. And then some things happened in the Bureau, and some shifts being made, and it was my time to move again. This time to Sacramento to be regional director, and I accepted that. However, it was not in the interest of my family to accept that move, and so we had, you know, a daughter that was a teenager then, and really, for some specific reasons, needed to stay here.

Western Area Power Administration

So I opted, rather than to take that move to Sacramento, to move to go to work for Western Area Power Administration [WAPA], and I was with them for about seven years, where I was still involved with the water community, but also the public power community, which gave

me an even additional insight into our business, I think, and I served in three principal capacities over there.

First, I was Conservation Officer, and then as Assistant Administrator for Engineering, and then as Assistant Administrator for Power Marketing and Operation and Maintenance. Terrific titles–they paid me a little, too. But it was a fun experience and one that I learned a great deal more about the power aspect of our business that in my view, meaning Reclamation, sort of treat the power aspect as a bit of a stepchild when, in fact, it's a *major, principal* ingredient in water and power out West and, in fact, furnishes the checkbook for a great deal of the water operations throughout the West. A great experience.

Coming Back to Study Reclamation's Future

I came back to Reclamation when then Secretary [of the Interior Donald Paul] Hodel and Assistant Secretary [James W.] Zigler asked me if, because of my background, would I be willing to head a team to take a look at the Bureau of Reclamation, and what I saw as the future of it. I did not go into that with any anticipation, or expectation, that I would return to the Bureau of Reclamation. I headed the study called *Assessment '87*, used as a team all career Bureau of Reclamation employees. We went through the *Assessment '87* and came out with some recommendations that we might well

talk about later in this interview.[7]

But, what it led me to believe [was] that there was a place for the Bureau of Reclamation in the future, it was even more important, and an even harder job, than it was back when we were building a lot of water resource activities. And about that time, Secretary Hodel asked me if I would consider coming back as deputy commissioner, and I agreed to do that and have been back with Reclamation then since 1987.

Storey: Well, when we got to your stint as regional director in Denver, obviously you enjoyed that, but I didn't hear much about what happened while you were there–as I did in Oklahoma and so on.

Regional Responsibilities

Hall: Yeah, that was part of the transitional period, we were still finishing up projects. Some were still under construction–we had a number of older projects that we were operating. All of those were faced with the same situation, though, and that is changing conditions–with NEPA, with overall reduction in the flow in many areas brought on by soil conservation practices and

7. *Assessment '87* proposed utilizing Reclamation's engineering and technical resources in a new manner to better operate existing facilities. In addition, proposed new projects would be smaller in scale nad rely more on funding from "non-Federal finances." Reclamation would work closely with other federal, state, and local agencies on water resource problems, especially those concerning environmental protection and water conservation. For more information, see the Department of the Interior, Bureau of Reclamation, *Assessment '87 ... A New Direction for the Bureau of Reclamation*, 1987.

others, including just less rainfall, in some cases. It started to bring about more emphasis to water management, and we probably were one of the leading regions in taking the initiative to work with the districts to find new conservation measures, so that we were able to divert less water to grow the same crops. We were the leading region, I believe, in putting in soil moisture probes, where we could actually figure out what the demand was for the particular crop and to measure that. And then we found that we, in fact, used less water, and it was even economically rewarding to the farmers, because they leached less of the nutrients from the root zone. We were able to grow the same crops with less water, and at less expense.

So I would say that that was the era, when I was regional director, when we were starting to get a handle and starting to get a glimpse of the future–that it was going to be more of a water management and less of a water development activity. Seemingly every time before that that we needed some additional water, the answer was to go build an additional water resource facility. Now the answer started coming about that we would get that additional water through some conservation activity, or water management activity, where we'd actually demand less to do the same thing. That was sort of our belief, and you have to kind of get ahead and look back in the rear-view mirror to see that sometimes. But I believe that was in my tenure as regional director, where we really started that approach to water management, as opposed to water development at the Bureau of

Reclamation.

Storey: Well, things like the soil program and so on. Was Reclamation doing that, or were we doing any cooperation with A-S-C-S [Agricultural Stabilization and Conservation Service] and S-C-S [Soil Conservation Service], or how does that work?

Hall: Yeah, Reclamation was the real leader in that arena. Now in many cases, we would have somebody like at McCook, Nebraska, who would come up with the right . . . would have that interest, and they may end up working with the head of the Nebraska University Extension Service. They were cooperative efforts all the way along, but as far as I could tell, the real initiation for that–in figuring out and using less water, and using better management practices, although not *exclusively* the Bureau of Reclamation, were initiated by the Bureau of Reclamation.

Now keep in mind, that these were on our projects, and so it made some sense. There may have been other initiations not on our project, that I'm not familiar with. But those were Reclamation people, and they were even Reclamation people, as opposed to the district people, and surely as opposed to the farmers. Most of the farmers, frankly, thought it was a bunch of bunk. They said they'd been farming for years, and their fathers had farmed before them, in many cases, and they knew how much water was required to grow the crops. And so the notion that you could put a moisture probe in

the ground, and advise them better as to how to do it and when to do it, was foreign, and they felt as intrusive and a bunch of college punks out trying to tell them what to do.

But then, as it developed, and they began to see that not only did it make some sense that they, in fact, could use less water, but in fact, use less fertilizer because they didn't wash it all from the root zones. Then they began to kind of get interested, and once the irrigators themselves began to get interested, well then of course, the whole thing began to turn and they began to take some initiative.

Storey: What kind of construction was going on–any, while you were regional director?

Regional Construction Projects

Hall: Well, we were finishing up a lot of the activities in the Pick-Sloan Missouri Basin Project, and an awful lot in the Fryingpan-Arkansas Project,[8] the project that was heavily . . . it was actively under construction during my tenure.

It's a project that diverts water from the west slope, to the east slope, for a number of uses

8. The Fryingpan-Arkansas Project is a multipurpose transmountain, transbasin water diversion and delivery project in Colorado. It makes possible an average annual diversion of 69,200 acre-feet of surplus water from the Fryingpan River and other tributaries of the Roaring Fork River, on the western slope of the Rocky Mountains, to the Arkansas River basin on the eastern slope. For more information, see Jedediah S. Rogers, "Fryingpan-Arkansas Project," Denver: Bureau of Reclamation History Program, 2006, www.usbr.gov/history/projhist.html.

here in the east [eastern Colorado]. And, with the passage of NEPA, then there was considerable opposition to the diversion of that water from the west slope–albeit, it had been authorized for a number of years. The opposition was strong–a lot of the diversions were from the area of Aspen, Colorado. John Denver . . . I just mention John Denver because he lived over there, he even went to Congress and sang to the committees about the evil of that diversion.

I had many many meetings, still believing that the best way to try to resolve those issues was for people understanding each others' interests, and making accommodations where we could, and hopefully, the other parties' making suitable accommodations, as well. But the project proceeded with–in that environment, with a great deal of opposition and on the other side, a great deal of support for it. The project did proceed, was completed, and now is in place, and works very well.

All of that sort of marked . . . it's really interesting to get to a stage of my career, as I am, near the end and to look back and, as I said before, it would be nice to say, "I knew all that at the time." But I don't think you did. I don't think I did–I don't think I knew exactly what stage we were in. I think you look back and say "Yep, that was part of the evolution, that was part of the transition to the real environmental bent of this nation–a real shift to water management" . . . seeing if we could figure out a better way to manage the projects, rather than

just develop more to where we have evolved to today. Which may not be the end of the evolution, I don't know, but clearly we're in an era where it's *extremely* difficult to go out and build something new. So the thrust is most assuredly along the way that the Bureau of Reclamation is headed, and that is one of water management. [Background noise is swinging of metal handles on the table at which interview took place.]

Storey: You moved from basically a construction project, to a planning study in Kansas, to a project office in Oklahoma City?

Hall: It was called a Planning Office at that time, it was ...

Storey: And then on to the Regional Office?

Hall: Yes, regional director.

Storey: How did the nature of your contacts and things change, for instance, with the water districts? How did political concerns begin to change as you moved through that system of Reclamation offices?

Political Considerations

Hall: Yeah, in each of those positions, I think I was going up in both grade and then stature, I think, and in the need to know and understand different perspectives, including the political perspectives.

By the way, along the way, I would try to make up for certain weaknesses. For example, I had a difficult time speaking before groups, and would rather avoid it, and went through Toastmasters. And did that purposefully, because I knew it was a shortcoming, and then got to where lo and behold, I liked to do that–and it's a real joy for me to be able to present to different groups.

But I think that you realize–I think I realized more and more, it was less and less data, and the knowledge of information that causes one to be successful. That's true in some technical arenas. It's always true in some technical arenas, but in a broader perspective, I think, both personally and professionally the increasing awareness that there are different perspectives, and gaining the ability to work with people who do not agree with you, is ever important as one goes through his career. And by professionally, I mean, when we try to accomplish something in the Bureau of Reclamation, I just think it's essential that you understand the political structure with both a capital "p" and a small "p", and understand how systems are represented, how different groups function and are represented, and increasingly learn to work with them.

The reason I said what I did earlier about project manager and the regional director, you're still at a level then that allows you to work with enough of those groups personally where you feel like you can accomplish something. What you have accomplished, you can see. Once you get to assistant commissioner or deputy

commissioner level, it's my belief that you sort of lose touch with that, because you're dealing with such broad aspects of administration of an agency, that you sort of lose touch with the individual constituencies–both those that are for you, and those that are against you.

Storey: Yeah, like the regional director's job. Do you get a lot of outside pressure, for instance, from Congress, from Washington, D.C., from other agencies?

Pressures on a Regional Director

Hall: Oh yeah, you get an awful lot of pressure for regional directors. I think we've been blessed through the years with some really outstanding regional directors in the Bureau of Reclamation, but because it is such a focal point for management, you get tremendous pressure.

Now, there is another aspect of pressure in that it's been my experience that people will go as high in the organization as you will let them go. They will come to me, if they think they can get away with that, rather than the regional director, or go to the commissioner, rather than me, if they think they can get away with that. It's our responsibility . . . one of the sort of Management 101, at least in the upper echelon of management, is to try to put people in the right court. If it's a regional issue, and they have not yet discussed that with the regional director, then that's where we need to send them, is to talk with the regional director. Very essential, because people will go to the highest level

possible.

But assuming we do a good job, then, of getting people in the right court, then the regional director, or in some cases, the project managers sit where those things come into focus, and that's where the regional director, he or she, can then attempt to balance those environmental concerns against economic/developmental concerns, and so on.

Storey: There are a lot of people who, I think, perceive that Reclamation is a vehicle for water users groups. How do you respond to that sort of an attitude?

Hall: I think . . .

END TAPE 1, SIDE 1. JUNE 11, 1993.
BEGIN TAPE 1, SIDE 2. JUNE 11, 1993.

Reclamation's Relationship with Water Users

Hall: I think that it's been true, that we have been an advocate for the traditional water users for a number of years. Now, that came about with some validity, in that these traditional water users were the ones who bellied up to the bar, who signed contracts, who said that "I will pay for this water or power," in the case of power users.

Consequently, when challenges came to the right to use that water or power, or to charge them more, or to take some away for environmental purposes, or whatever, I believe

that they were our ally, and I believe that we naturally defended them, said "wait a minute, these people have contracts." I think that it's less prevalent today, and I think it's still changing, in that it's not that we don't still like our traditional water users, or power users, it's that we see it in a different light.

We see that so often, there is an opportunity to solve the problem, for example, in Endangered Species Act. You know, I think a few years ago, we might have said, "Well, we did not build this project for the humpback chub. We did not build this project for that purpose. Therefore, that's not our problem, nor is it the water users." Now, then, I think the first approach would be to say okay, what is the requirement for maintaining this humpback chub? It could go into the necessary biological studies to determine that, and then to figure out, is there a way we can do this? Is there a way that we can satisfy the traditional project needs and, at the same time, provide the water necessary for the humpback chubs?

So I think in that sense, we have become less of an advocate for the traditional water users. Not opposed to the traditional users, but more of the mode of trying to figure out if there's a solution to the problem. In some cases, that pits us against the traditional water users, because we may be in agreement, let's say, with the [U.S.] Fish and Wildlife Service, that there is a way to accommodate that need. And some of the traditional users might be saying, "We don't care, that's our water and we don't want to

give any of it up for that purpose," and in that case, we would be opposed to it.

But I think the notion that we have strongly represented the water users is a true one, and I still think it's true to a certain extent. I just think that we represent them in a different way now. We don't blindly represent them–"This is okay, if they don't want to give up the water, if the water's theirs, they shouldn't give it up." We'd rather represent their interest, along with other interests, to see if there's a solution to the problem.

Storey: Well, I know that Karen said you wanted to spend about an hour, and it's been almost an hour now. So I would like to ask you if it's all right to use this material, and release it to researchers, and that sort of thing.

Hall: You have my permission to do that.

Storey: Great. Thank you. And we can proceed with the interview some other time. I appreciate it.

Hall: Okay. Thank you, Brit.

END TAPE 1, SIDE 2. JUNE 11, 1993.
BEGIN TAPE 1, SIDE 1. JUNE 28, 1993.

Storey: This is Brit Storey, in the office of Joe D. Hall, deputy commissioner of the Bureau of Reclamation. It is July 28, 1993, at 2 o'clock in the afternoon.

Storey: Let's see, when we talked last week, you talked

about leaving Reclamation to go to WAPA, Western Area Power Administration, or Western, I guess, as they prefer to call it. Could I get you to talk some more about what was going on in terms of responsibilities being split away from Reclamation, and going over there, and your perspective on what was happening, and then what you did at Western?

Hall: Okay, and *I* prefer to call it WAPA.

Storey: Oh. Okay.

Working at WAPA

Hall: I guess we can call it whatever. And they–some of them feel like they like to call it Western, and some of them like to call it WAPA. The original administrator of Western Area Power was named Bob McPhail[9] and, originally, they all called him the "WAPA Papa," so it kinda stuck. What happened back in those days, a lot of emphasis was put on the energy in the United States following the oil embargo of '73, and it resulted in the Energy Organization Act being passed in 1978, where the attempt of the nation, in addition to other things, was to consolidate all of the energy-related activities into one department, namely the Department of Energy. That's when it was created. There was a part of the Bureau of Reclamation that went over to Western Area Power, and that was the transmission and the marketing of the electric

9. Before becoming the administrator for Western Area Power Administration, Robert L. McPhail was regional director for the Bureau of Reclamation's Great Plains Region, 1973-1978.

power. Some of us in the Bureau of Reclamation felt like that was not the thing to do, but we were advised at that time by the upper echelons of the Department of Interior not to fight that issue, and not to do anything over on the Hill that would keep that from happening. It did have the blessings of the then [Carter] administration, and we were advised to just let it go, and whatever passed, passed. And so we were . . . at least I was not actively involved in the legislation, one way or the other.

But the legislation did come about, established the Western Area Power, and as such, withdrew a part of the Bureau of Reclamation. As I say, the transmission and the marketing of the electric power to be handled by them. A number of the Bureau people went over to work in that endeavor, and I know that originally, almost all of their hierarchy, including the administrator Bob McPhail . . . Bob McPhail was a regional director in Billings, Montana, for the Bureau, and he went from there to be the administrator of WAPA. Tom Weaver was a key player with the Bureau, and he went over to be an executive and so on–almost all of their top staff, at that time, came from the Bureau of Reclamation.

Well then, as things happened, about 1980, it was my time to move, and to go be regional director at the Sacramento Office. Rather than take that reassignment, for personal reasons, I decided to stay here in Denver, and Bob McPhail offered me a job over there with WAPA.

And I took that, and I went over there at that time as Conservation Officer, and, subsequent to that, I became Assistant Administrator for Engineering, and then, after that, Assistant Administrator for Power Management *and* Operation and Maintenance. So I was there during some of those formative years of Western Area Power. It was, *at that time*, a fun place to work, because it was a growing organization, and getting their feet on the ground, and establishing themselves with the public power customers. So I enjoyed my assignment over there with the Western Area Power.

Storey: Were there a lot of tensions between Western and Reclamation because of the–basically, most of Western came out of Reclamation, didn't it? Or did it? Maybe I'm . . .

Tensions between Reclamation and Western Area Power

Hall: Oh, yes, yes, they did, all of Western came from what was a part of Reclamation. And I would have to say yes to your question, I think there was some inherent tensions that existed, because it was kind of like this new kid on the block had taken away part of our playground and had gone over–although it was none of *their* doing. It was done legislatively, and the decision was made in the Congress to create this entity, and to do the power marketing. And the split was to go in, and them do the transmission and power marketing, and us still do the generation. Now there still had to be a Memorandum of

Understanding between the two agencies as to how that would take place, and that was done with key officials of both organizations. I know it was headed by Cliff Barrett[10] from the Bureau of Reclamation, and I don't remember for sure who headed the Western Area Power side, maybe Bill Claggett. Bill Claggett was the deputy at WAPA, and is now the administrator, and it may have been Bill Claggett who did the negotiating for the Western Area Power.

But at any rate, the agreements were made project by project as to what we in the Bureau of Reclamation would continue to operate, and through a certain bus bar, or a certain activity, and Western would pick it up at that bus bar or outside the generating plant, or whatever. Those decisions were made as to the specific project and specific location, and I *think* with a good business sense–that is to say, it didn't fall into one category of saying okay at a certain bus bar or station outside the generating plant on every project. Here's where the transition occurs, because in some places, it just would not have made any sense from an operation and maintenance standpoint.

Let's say that in some cases, WAPA would have had people there, and we would have just

10. Clifford I. Barrett was assistant commissioner, Planning and Operations (1977-1981) and regional director of the Upper Colorado Region from 1981-1989. Mr. Barrett also participated in Reclamation's oral history program. See, Clifford (Cliff) I. Barrett**,** *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, in 1996, in Salt Lake City, Utah, edited by Brit Allan Storey, 2009, www.usbr.gov/history/oralhist.html.

had to keep a force there just to keep up a Memorandum of Understanding agreement. It might make sense for Western to take over all the operations maintenance in that case, and vice versa. Sometimes it worked the other way. So the actual position of where the split would occur was determined project by project, and I hope with a business sense, and in the public interest.

But I think tension did remain in that time–I think it lessened over the years, but I think it's still there to a certain extent. There's a kind of natural competition, I guess, that the Congress set up between the Department of Energy and the Department of the Interior, because there's turf that exists, and there's legitimate operation and maintenance questions. There's legitimate repayment questions, and all those get into who's going to do it, but my experience has been that we just face those one at a time, and get over them, and usually people at the top are able to . . . Fortunately, we have never had people at the top management tier, let me call it, at the executive management of either organizations that have allowed themselves to get drawn into those real serious turfy issues. Most of them have been at levels lower than the top management, and therefore, we've always been able to get over them by just sitting down at top management and saying, "Okay, we've got some conflicts here and let's settle them this way." And so the question's a good one–the tensions did exist, perhaps more pronounced and more intense in those early years, but to a certain extent still exist.

Storey: Well, it was assistant administrator for engineering, right?

Assistant Administrator for Engineering

Hall: Yes.

Storey: What were you in charge of in that position?

Hall: I was responsible for all of the construction of transmission lines, and substations, and electric ties throughout the grid system of the thousands of miles that are operated by WAPA. Maintaining the integrity of the system, the design of the system, it was a job probably most comparable to our Assistant Commissioner for Engineering and Research, because you ended up handling all the design, construction, research . . . We entered into operating agreements with Electric Power Research Institute, and others, to be sure that we were right at the front of technology, as far as transmission is concerned.

I was only at that for about a year, and then I was asked by the administrator to take over as assistant administrator for Power Management and Operation and Maintenance–it's a long title. That was where the hot spot was, the power marketing is where all the contracts are administered from, where all the rates are established and, consequently, that's where the interface is with most of the power customers, not unlike here. A lot of people don't have a really intense interest in what we're doing from a design and construction standpoint, but they

have a great deal of interest in matters like contracts and length of repayment, and the amount that they have to pay, and that's the way it is with WAPA. But the power customers, every change brought about a great deal of public interest and scrutiny and a number of public meetings, and I was at the head of that part of the operation for the latter years in WAPA.

Storey: Before we get away from the engineering part, I'm sort of interested. Did WAPA find Reclamation's system that was turned over to them to be acceptable, sort of up-to-the-minute in engineering, or were they spending a lot of time making corrections?

Hall: The former, I'd say that . . . of course, keep in mind that the people who went over there to run WAPA were the same people who were with Reclamation, doing that in large measure. In other words, people who were involved in the design and construction of transmission lines were largely the ones, and mainly the ones, who went over to Western to do that type of activity. They were people who were involved in design and construction for the Bureau of Reclamation and so, I think, they would be naturally less critical than someone who came in from the outside. These are people who had a part in putting it together, and then they just transferred to another agency, so it was more of a continuation of what they'd been doing. And I think, as such, they were much more likely to accept the way it was.

I think over the years, there has been a great deal of improvement in the transmission system, however, I believe that–I just think technology has changed a lot, and they have all sorts of activities and equipment now that they didn't even have when I was over there. They have direct current, you know, where they can go with converters from alternating current to direct current and back to alternating current, and whichever combination works the best to lower the resistance in the lines, so that they can transmit it across the country with less loss of power and an increase in efficiency. So I really think WAPA has done a very good job of keeping up with technology and accommodating the change, but I have to say that I think most of those took place generally across the industry after WAPA came into existence. So I think the answer to your question is that they were pretty pleased with the system that they inherited, they just got one that they knew in many cases was 40 years old. They knew that transmission poles, themselves, were just deteriorating, and so they had to set up a very active program of replacement and maintenance, and then couple that with the increasing improvements in technology. They've had a very active construction and maintenance program for the years that they've been in existence.

Storey: I guess one of the things I'm sort of interested in exploring is whether this separation of WAPA from Reclamation was just a political reorganizational type of thing, or whether there was some underlying issue within Reclamation that the Congress was trying to address. At the

same time, they created B-P-A [Bonneville Power Administration], didn't they?

Hall: No, B-P-A was already in existence.

Storey: Okay.

Reasons Congress Created WAPA

Hall: And they had handled the power marketing function up there for some time. I think that probably Bonneville may have provided a model for the way it could have been working, because they'd been handling the marketing of Corps and Bureau power for some time up there. And I don't believe it was so much an internal difficulty or strife that was existing, as much as it just got kind of caught up in the notion of the country and the Congress that "let's just get all the power facilities over into one entity." Now, one could have gone a step further in that the Bureau of Reclamation could have lost if it was a win-lose proposition–they could have lost the power generation, also. But I think the Congress was wise in not doing that, because to try to separate out the generation, the actual operation of turbines there at the dam that are so closely intertwined with the release of the water and the other functions of running a dam. That would have been almost insurmountable, because you would have had Western Area Power people there operating the turbines, you would have had Bureau of Reclamation people there operating the gates, and making the releases for other purposes, and the coordination would have gotten to be very difficult. So

probably, since they were trying to just consolidate these energy functions, they probably made the right call: separate it outside the generation, do it from the transmission on, and then let them take care of the power marketing.

Western and the Bureau, over the years, have done a great deal in bringing their organizations back together. And you'll see places like at Loveland, Colorado, where they have a joint dispatch and area control center operated with Bureau people, and Western Area Power people, physically sitting there side by side doing their functions, because it just works out better that way. And there are similar activities in California, and I think Arizona, where they've just moved to the place where *in the control* of the way the water and the power flow, they've found it advantageous to get the people where they're in the same proximity. So I think there's been improvements in that arena, and that even goes further to tear down whatever turf issues might have existed.

Storey: When you were assistant administrator for Power Management and O&M, Western covers a pretty large area of the West. You just mentioned California, for instance, Arizona with major population centers, I think, in Western's area of responsibility. How did you find . . . I presume you were marketing to the major power companies and so on?

Working with Power Customers

Hall: The power is marketed by law to what's called preference customers. They get the first option for the power, which is basically public-owned utilities, as opposed to investor-owned utilities, where people are involved for profit and put up the money and get a return on their investment. The public-owned utilities take the form of irrigation districts, public utility districts, municipalities, and the like, that do it in a public way, and by law, this power is marketed to them first and secondly, it is offered on a cost basis, it is a not-for-profit operation. There's been much discussion and debate whether that is the right decision or not, but that is by act of Congress, the language goes something like, "shall be marketed to preference customers at the lowest practicable cost available to them."

So it's not a matter that either we, or WAPA, could decide that, "Well this would be a good thing to simply to increase the power rates to bring in more revenues." It's by law the lowest cost. Now, that may come face to face with some of the revenue enhancement proposals of this administration [Clinton Administration], and, in fact, there may be attempts to change the law. There are decisions that you can make administratively, you know, as to whether it's the lowest practicable cost. You can go about and make other decisions in regard to which are–you know, you have different interest rates. Which ones you require them to pay off first, and that sort of thing, that can affect the amount of money returning to the Treasury. But to go in and try to simply say, "Okay, we're going to charge more for this product," you may come

face to face with the law and may, in fact, require a change in the law.

Storey: Did you also deal with the privately held utilities in marketing when you had surpluses?

Hall: Yes, yes, and that's exactly the criteria. In some areas, there might not be a need or a desire on the part of the public power consumers to purchase all of the power, and then the surplus was available with the consumer-owned utilities.

Storey: What kind of differences did you see working with municipally owned utilities or public utilities as opposed to investor-owned utilities?

Public Utilities and Private Utilities

Hall: Not very much. Not very much. They all are sort of faced with the same changes, that is to say, how will they provide for the future power needs of their given area? And they're all faced with rising costs, and they're trying to provide the power to the end consumer in the most reliable way that they can, and at the lowest cost that they can. So they're kind of faced with the same thing, and because they happen to work for Pacific Power & Electric out of San Francisco, does not make them much different in approach to Platte River Power Authority up here in Fort Collins, Colorado. They got the same general concerns, the only way–and here they're similar, too. The big organizations tend to take on bureaucratic layering, that's whether they're in or out of government. Pacific Gas & Electric has

bureaucratic layering, and legal constraints, and seemed to get in the way of themselves–and they have two left feet, just like the federal government or other big public power organizations. They're very, very similar, except by law, one is entitled to the first choice of taking this preference power.

Storey: The fact that you had to sell to public utilities first, did that mean Western's power tended to concentrate in smaller urban areas, in rural areas, as opposed to large urban areas?

Hall: Both, I think. There is a lot of rural area public power provided, because that's sort of the nature of the beast. That is to say, it's in the 17 western states to begin with, and there's an awful lot of that public power available in rural areas, whatever big power developments down in the Missouri River, the Missouri River system, that is, then power's available in Nebraska and South Dakota, in North Dakota, and those places, that is sort of by description mostly rural area. On the other hand, we have some power that's available from Hoover Dam, which Los Angeles is one of the customers, so it's some of both. Because we operate in the West, a lot of it just tends to be rural in nature.

Storey: When you say that WAPA was to provide the power basically at cost, I have visions of an accounting structure similar to Reclamation's structure for recovering costs for Reclamation projects. Is that the case, is it a very complicated system where you've got things that aren't charged to the cost, and things that are,

and so on?

Setting WAPA Power Rates

Hall: Yes, yes, you have and they actually start–since WAPA is setting the power rates at the lowest practicable cost available to the customer, some of those power rates that they are recovering are those–let me call them Reclamation's cost, starting with the irrigation cost. As you may know, by law, the irrigators are only responsible for paying that portion of the irrigation bill, that they have the capability to repay as determined by a preset set of rules and guidelines to determine what the payment capacity is. The remaining portion of that irrigation tab is paid for by the power users, so Western Area Power, in addition to their rate that they would send out a bill to collect for, their expenses–let me call them–has a portion of what are actually Reclamation's expenses. So there is a very involved set of determinations beginning with cost allocations, how the costs are actually allocated, flood control for a project is nonreimbursable, municipal water is all reimbursable at the current interest rate at the time it was authorized, Fish and Wildlife activities are usually a mixed bag: some of that is nonreimbursable and some of it reimbursable. We have recreation the same way, but that all boils down to it's a very complex, sometimes difficult determination process, as to what actually does constitute the cost that's to be paid back by these power customers.

Storey: I imagine, once again, there are tensions

between Reclamation and WAPA about how that's determined, and so on.

Hall: Yes, yes, and some of them are longstanding issues, like the Fryinpan-Arkansas Project–the way those costs are allocated have been an issue for five or more years. I know that we've been struggling with that issue to get that straightened out, and how the costs are allocated on the Garrison Project, and other things. And *then* even the amount that we're spending, the cost of our operation and maintenance, *or theirs* might be challenged by either party, and we have sometimes long sessions to get through that and see if we're charging the costs right, and all that sort of thing.

Storey: Now don't I remember, from the other day, that you had a third position at WAPA, rather than just two?

Hall: Yeah. Well, I started as conservation officer when I first went over there, and then I went to assistant administrator for Engineering, and then assistant administrator for Power Management and O&M.

Storey: Conservation Officer is conserving electricity, I take it?

Western's Conservation Officer

Hall: That's right. When I first went over there, Bob McPhail asked me to be what was Reclamation's [WAPA's] first Conservation Officer and the reason was this: that he had determined that we

would have an active conservation program, and that the entities to which they sell the public power this power from federal facilities would, in fact, participate in a conservation program. And here's the kicker OR . . . or they would not get their full allotment of federal power. Generally, this federal power is cheaper than other sources of energy. Now, maybe that's an oversimplification, but generally that's true–both capacity and energy. It is cheaper to get the power from the federal facility, such as Hoover, as it is to go out and purchase power from an all-fire generation, or something like that. So generally, people want their allocation of federal power, it's done by an allocation process dependent upon the applicants and all that.

But Bob McPhail's notion was that in order to maintain this cost-based power, then surely they should be doing a good job of conserving that energy that they get. And so, he asked me to come over and establish this conservation program, including the requirement that they have an active conservation program, that it be approved by WAPA, and if they do not, then they were subject to losing a portion of that federal power allocation. Now, 13 years later, that is a well accepted premise for the public power customers–that they have to have an active conservation program or they will lose a portion of their federal power allocation. But then, it was *very* controversial, *very* hostile at times. The public meetings were quite exciting, which I was called several things besides a conservation officer (laughing). I was called a lot of names! But in the end, it was something

that most of the public power community could see the rationale in doing. That is to say, it was like many stages in our history, one of changing conditions, one in which the whole ethic of the country was changing to one of conservation, and to argue that it didn't make sense to argue that these entities that were described by law as getting the benefit of this federal power and getting it cheaper, could afford to be in any position with even the perception that they were wasting this federal power.

And so the notion that they have a conservation program–and we didn't even tell them what the conservation program had to consist of, they had a whole laundry list, a whole myriad of activities that they could be doing. A lot of them you see now, a lot of them you see, you know, going in and having people come out and look at your home and looking at taking ultraviolet pictures and determining where the energy might be escaping from your home, and all those sorts of programs. Some of them came about by virtue of things just like this, a requirement they have a conservation program. But it was up to them, they would go back and develop their own program, then they would come in to us and say here's what we intend to do, and we would look at it and see if it made sense.

And obviously, we didn't have a cookie cutter approach to this, because we would clearly expect the city of Los Angeles to do more and to have a more sophisticated approach than we would to consider the city of North

Platte, Nebraska. It's just, you know, their capabilities, the level of their people, with expertise to get in and get things done. So we would look with a more stringent eye to those that had the capability of carrying out a real conservation program.

Storey: I understand, for instance, nowadays they're looking at these kinds of energy conservation measures as a means of avoiding capital outlays, in terms of new plant construction, and that sort of thing.

Hall: Absolutely, absolutely, it went from being a rather bad thing to do to a *very good* thing to do. In many instances it was the cheapest form of energy is to go in and conserve the energy. Of course you have to remember that it was kind of at the end of the era where people . . . if you remember that years ago, you tried to get people to use more electricity so you could sell them more. Well now then, with the changing conditions in the country, it just doesn't make as much sense, I mean power companies don't even want to build . . . Every time they go in and build a new powerplant now, it is absolutely, of course, their most expensive segment of energy, the most recent that they have added, plus most public utility commissions will not let them include in the rate base all of the those new costs, much less the risks that they are taking with that new construction. So there's very few utilities around the country that are anxious to get in and create some new generation for themselves and so they find that if they can be involved in conservation measures, that actually

is the cheapest and best energy element that they can develop right now.

Storey: As a practical matter, did any of the power companies actually not get their full allotment [because they didn't meet energy conservation requirements of WAPA]?

Conservation Programs

Hall: My recollection on that is a little vague, but I do recall some that fell within the first year of . . . I think the way the system worked, my recollection is the way it worked is that if they did not meet the criteria, they were given a year–you were notified officially, and then they were given a year to correct whatever deficiencies they may have had. There were several who got those notices that they had an inadequate conservation program, or maybe they just blew it off and decided we're just not going to send it in. I know there were several who got notices, and I believe my recollection is that some of those then lost a percentage of their federal power the following year. And basically, I'll tell you what it was, those that were trying, we always gave the benefit of the doubt. If they were doing the best they can, and they were from Podunk, and they just didn't couldn't quite get it together, but they were trying, then we would go the second and third mile.

On the other hand, those entities that were for whatever reason . . . their manager or boards of directors had simply decided, "Well, this is

silly, we don't want to participate in this," then they kind of told us to stick it in our ear. Then we kind of told them, "Okay, then you lose the portion of your federal power." So when you boiled it all down to, you know, if they were trying to set up a conservation program, that we'd be in there helping them–and it wasn't a "gotcha" kind of program. In fact, it was just the opposite–we were trying not to have a "gotcha" program, but to help them establish a meaningful conservation program. And those that were trying, even if they didn't meet every letter of the law, and they didn't dot every "i", and cross every "t", they generally came out all right. But those that were just set in their ways, and would not do anything, I believe my recollection is some of them did lose power and, of course, that's since changed.

Now, I doubt very seriously if WAPA has any customers now that don't meet their conservation requirements, and meet them in a timely way. But it's like anything else in transition, it sounds like a bad, heinous thing for them to do. It's like saying well, you've got new requirements under the Endangered Species Act, and people rebel at that, or Clean Water Act, or anything else. And these were conservation requirements that some of them just didn't like, and were bound and determined they just weren't going to do.

Storey: When you were in charge of engineering at WAPA, and O&M also, how had . . . well, the environmental laws were still continuing to function, and by then, they were gaining more

and more momentum. And you know, you talked the other day about your experience with the environmental laws at the beginning of their existence. What are your perceptions about the way it was while you were at WAPA, and the way things had changed?

Environmental Considerations at WAPA

Hall: Yeah, I think that the realization had set in with the leadership at Western Area Power *and* the Bureau of Reclamation. But with a great number of the power customers, that realization had not yet set in. I believe that they still thought that this environmental movement would go away, somehow it was going to be . . . it was a short-term deal. The next election, you know, things were going to be all right but that the . . . you know, but I think that it really was changing in there. I think it really started changing because, let's see, when was [President Ronald] Reagan first elected, 1980?

Storey: '80, he became President in '81.

Hall: Okay, so I went over there in 1980, and I believe . . . let's see, a number of the power customers who tended to be Democrats–by the way, most of them, for some reason, seemed like to me most of them were Democrats. But they still felt like that this Jimmy Carter machine was kind of a strange situation environmentally, but when Reagan was elected, then this would go back to a more normal business-like approach. But then, I think the evolution occurred by seeing that "Hey, guess what," under Republicans or

Democrats, that the thrust of the nation is still largely toward environmental concerns. And it's *not* towards building any more, and it's more towards doing things in an environmentally acceptable way including, the generation of power, and the way the power is handled, and conservation, and all those measures. So I would describe it as a rapidly evolving mentality towards environmental considerations just based on reality. The reason I was recalling with you the politics and who was in office I really thought–they always think it's going to be better and they saw you know Democrats getting in with the . . . they were going to have their way, and then they saw that well, what they viewed then as a bunch of environmental kooks, and then they thought well now that we have a Republican elected, things are going to go back to the way they were. But *the thread existed*, the environmental thread existed you know in both parties, and I think that realization started to really set in with the power customers, and I would guess with the water people, along about that same time. I think the '80's was a time when the realization that this is not just some crazy, wild-eyed scheme of a few people in the United States, but it is a thread that is permeating the country and continuing and is something we're going to have to live with and adjust to whether we like it or not.

Storey: You mentioned the Carter administration a moment ago, and that transition. During the Carter administration, of course, they renamed Reclamation. And, as I recall, your transition from Western over to Reclamation was because

of your reassessment of Reclamation's role–your participation in that reassessment. Was the renaming of . . . let's see, it was W-P-R-S, wasn't it?

Hall: Water and Power Resources Service.

Water and Power Resources Service

Storey: . . . Service. Under Carter, wasn't it? Was that a manifestation of attempts to realign do you think, or what was that, do you think?

Hall: I don't know. I guess my best answer is, I don't know what prompted that. I–it may have been, you know, some people within the administration or over on the Hill that just got the notion that the Bureau of Reclamation doesn't mean anything any more. You know, originally it meant to reclaim the arid West through the use of water. Well, you know, it kind of had been reclaimed a number of years ago–there's not much to reclaim out here. And it may have been a straight-up deal to say well, let's put something in there that represents then what we think they do, and they're a water and power resources service. And then the Republicans and [Secretary of the Interior] Jim Watt[11] came along and just decided "no," the Bureau of Reclamation does mean something to the people out West, and we want it called that, and let's change it back. So I guess I don't know what brought about the change to Water and Power Resources Service. It's like everything

11. James G. Watt was the Secretary of the Interior under the administration of President Ronald Reagan, 1981-1983.

else–there's probably a great deal more under the surface than either of us understand, and I'm just not in a position of knowing what was under the surface at that time. I still don't know.

Storey: Of course, Carter was not very supportive of Western water projects.

Hall: Oh, that's right, not at all.

Storey: Would you mind talking about your perception of Carter, and the Carter administration, and that era in terms of Reclamation's history?

The Carter Administration

Hall: Yeah, that was my first realization that not everything was handled along corporate lines. That is to say, I assumed that what happened was, the president went to the secretary of a particular department, and then down to bureau heads, and it was kind of handled in a traditional way.

END TAPE 1, SIDE 1. JUNE 28, 1993.
BEGIN TAPE 1, SIDE 2. JUNE 28, 1993.

Hall: That was my first realization that, in some issues, things are handled directly from the White House. And I'm convinced that the

directions of the original "Hit List"[12] that went in and attacked certain bureau projects, and put them on the list where they were not to be any longer considered for construction, I believe came directly from the White House. I believe that that's where the decisions were made. I don't say that to in any way, in *any* way, belittle Secretary Andrus,[13] who was a very competent, capable man, and is still at this time governor of Idaho. I admire him greatly, but I just believe that the decisions were made in large measure at the White House, with Kathy Fletcher and other people on the Carter team. And that was just a stark realization for me. I was operating out of naivete up to that point, and realized how powerful, in fact, the people surrounding the president can be.

Storey: You mentioned, a few minutes ago, public utilities commissions. While you were over at W-P-R-S, did you have a lot of interaction with public utilities commissions, or were you sort of insulated away from them by virtue of the fact

12. Jimmy Carter served as President of the United States from 1977 until 1981 after his election in 1976. Within a few weeks of the beginning of the administration, an internal discussion document accidently fell into the hands of a reporter. The document proposed cancellation of a number of water projects considered environmentally or economically unsound. This proposal came to be known as Jimmy Carter's "hit list." This happened while Commissioner Daniel P. Beard worked in the Carter Administration, and he discussed his perspective on the issue in his Reclamation oral history interviews and in "The Passage of the Central Valley Project Improvement Act, 1991-1992: The Role of George Miller," an Oral History interview by Malca Chall, 1996 for the Regional Oral History Office, Bancroft Library, University of California.

13. Cecil D. Andrus was Secretary of the Interior under the administration of President Jimmy Carter, 1977-1981.

that you weren't directly dealing with the publics in the various states?

Hall: Yeah, while I was at WAPA?

Storey: At WAPA, yes, excuse me. I'm sorry.

Hall: While I was at WAPA, yeah. Generally speaking, the utilities themselves are the ones that deal with public utilities commissions, but so–I was sort of insulated from them. I dealt directly with all of our utilities that purchase power from us, and then with a number of their customers that use power from them. But I didn't do much work with the public utility commissions. The public utility commissions, the relevance of that is that they have to approve all the power rates that these entities set, and they will *not* allow all of the costs now that it costs to build a new powerplant, including the risks that you have to take, and that sort of thing. So it makes it very *undesirable* to build new plants to go into new production; whereas, at one time, it was very desirable. That was the name of the game is to get your ready kilowatt going, and sell more kilowatts, so that you could get out, and even build more generation, and provide more electricity to these people. That's just not the name of the game now, but I didn't deal so much with public utility commissions.

Storey: Well, when you were assistant administrator for Power Management and O&M, you were picked to head a team to look at Reclamation, is that correct?

Hall: That's right, I had . . . to go back just a little ways, Secretary Don Hodel was the Secretary of Energy. And he had asked me to come back and spend some time with him in Washington, D.C., to work with the Congress in trying to develop a reasonable program of what was happening, particularly as it relates to conservation and renewable energy. What was happening was that the Republican administration would send over a very meager budget, as it relates to conservation and renewable energy, and the Congress then would go about increasing it exponentially, and besides that, being specific as to where they wanted it spent. Secretary Hodel said, "This doesn't make any sense–we're losing both ways. Number one, they're increasing the budget by an awful lot, and then besides that, if we're going to have the money in there, they're not putting it where it should be spent for conservation and renewable energy and for research. So there's *got to* be a better way."

So he asked me to come back, and to head that effort, and to work with the Congress, and to develop such a program that, at least, we established a process that made some sense. Okay, because of that then, because of that experience with Secretary Hodel, when he moved back to Interior, he asked me if I would help in taking a look at the Bureau of Reclamation. And I agreed to do that, that was in 1987, and I established a team of all-Reclamation employees that over the period of several months, went in and looked at the

Bureau of Reclamation, and made our recommendations as to what we thought should take place. And that's where a lot of the descriptions of the "new Bureau" stem from. I guess that was the first document where we people said . . . we just went ahead and said that Reclamation must move from its traditional role, as a builder of water supplies, to one of a resource manager. And that's what people have been saying since, and people are saying it more, and even the current commissioner, Dan Beard,[14] is saying, "Boy, what we need to do is to move to being a resource manager," and that's what we said in 1987.

Storey: Who were the people on the team that you remember?

Hall: Terry Lynott was on the team, Jerry Wright who's now down in Oklahoma City, Ken Maxie who is now an assistant administrator at Western Area Power. And there were a couple more that I can tell you names later. I can look in the *Assessment '87* and get their names out of there.

Storey: How did you . . . did you select them, or did you go to Reclamation and, say, select them for me or . . .?

14. Daniel P. Beard was commissioner of the Bureau of Reclamation under the administration of President Bill Clinton, 1993-1995. Mr. Beard also participated in Reclamation's oral history program. See, Daniel P. Beard, *Oral History Interview*, Transcript of tape recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Story, senior historian, Bureau of Reclamation, from 1993 to 1995, in Washington, D. C., edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

Hall: It was a combination–I went to the then leadership of Reclamation and said, "Okay, who are the people that can give us the broadest diversity, that know what's going on"? So we picked a combination of people, you know–Terry Lynott[15] was then assistant commissioner back in Washington, Ken Maxie was down in the Assistant Secretary's Office for Water and Science, Jerry Wright was a project leader. We got a fellow from Glen Canyon, and we just basically sought to get a cross section of project managers, the regional director's office, the Washington Office, and Denver take a look at the Bureau.

Storey: And of course the result was the little booklet *Assessment '87* was it?

Hall: *Assessment '87*, yes.

Storey: Well, I guess the next question is, how do you think Reclamation is doing in refocusing itself?

Reclamation's Transition

Hall: I think that it has been a tough, somewhat long, and difficult journey that we're still in, and one that we're not finished with yet. But it's one that is most assuredly taking place, one that says to

15. Terry P. Lynott the Bureau of Reclamation's assistant commissioner, Resource Management, 1986-1988. Mr. Lynott also participated in Reclamation's oral history program. See Terry P. Lynott, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, during 1993 and 1994, in Lakewood, Colorado, edited by Brit Allan Storey, 2012, www.usbr.gov/history/oralhist.html.

me every day that, basically we were right. We were right in the assumptions that we made, and we were right in the direction in which we headed. We weren't right in all off the decisions that we made about how to bring it about, and all the implementing decisions. You can look back and see some of those that you might not have done just that way, if you had it to do over again. But we were right with the thrust, and by the way, the entire then called Permanent Management Committee was involved in those decisions. We operated at a very high team level, the people who were on the *Assessment '87* team got in and dug around and uncovered . . . I don't mean that in an investigative sort of way, but uncovered what they thought was the basic premise of the direction that we ought to head in. And then the Permanent Management Committee picked it up and decided "yes, this is the way that we should go, and that's what we've got to do for the future of Reclamation." That was not a matter of just the commissioner of Reclamation deciding that yes, this is what we're going to do in the future, but the entire Permanent Management Committee.

And I think that, you know, I think that we have done . . . I would give us about a 7 on a scale of 10. I would give us a passing grade, but just barely. We could have done much better, I believe, but when you have to go about changing the mentality of people, that first change is going to have to take place. And then you start really doing the changing, and then coupled with that, there are more changes coming along all the time you're trying to

change. It's very, very difficult it's . . . you know, if it were easy, somebody would have already done it!

So I'd give us a passing grade, but not exemplary marks. I think as far as a federal agency recognizing themselves, that they need to change, pegging the direction right, I would give us an A. As far as going about and making all the right decisions to get it implemented, carrying through on those decisions, I would give us no higher than a C. I think we're much better at determining where we're going in vision than we are the practical side of carrying it out.

Storey: One of the things that happens in this kind of a transition is that people are so close to it, very often that they can't see what's happening. You know, that was what 5, 6 years ago? So you've had that much time go by, as this has been implemented, and as changes begin to take place. Could you outline the kinds of changes that you see that have taken place since *Assessment '87* came out?

Changes in Reclamation

Hall: Yes, almost a total change in mentality, no. 1. Those times, that's hard to realize, but just 6 years ago, we still viewed ourselves as the best construction agency in the world, and a lot of people in Reclamation said that that's coming back. And now then, that transition has occurred to where the mentality of the organization is no longer that we are basically a

construction agency, but rather we are a water management agency. Now that presents some very real problems for us, because we still have a lot of people actively engaged in construction, *and will have, and will have*, there's *always* going to be construction to do. If we just simply maintain what we have, we're going to have a lot of construction to do, and you have opportunity to physically combine canals, or reservoirs, or operate them in a different way. But that's going to involve some construction, so we'll always be doing *that*. But as far as being an entity that's out there building a lot of new dams and a lot of new facilities, that's principally a thing of the past. And just that change of mentality is something that's taken place, and I've seen that take place within these past 6 years.

Another shift, I think, is getting ourselves the right balance of organization, that's always a difficult one. We had the notion, when we started out, that Denver would be the center of activity, and provide the leadership–in fact, we even proposed that the Commissioner of Reclamation move to Denver, Colorado. That was beat down in the Congress, and the commissioner remained in Washington, D.C., and then the balance shifted, depending upon who was commissioner, with more or less resources in Washington, D.C. There's never any *question* about who runs the Bureau of Reclamation–the commissioner runs the Bureau of Reclamation, and the headquarters is wherever the head is quartered! That's where . . . and the commissioner heads in Washington, so that's where the headquarters is. That's never

been an issue. But we were, in fact, the Chief Operating Office, and did a great deal in the transformation of the Bureau. But that balance we're still seeking to attain in the right organizational structure to bring about these changes. I think the mentality is there now, I believe that it will take place, but I see still a lot of pain in bringing that into fruition.

Storey: About that time, the assistant commissioner for Resources Management, I guess, was created. It was a new office. Was that part of the new direction, or was that coincidental or . . .?

New Positions

Hall: It was–no, it was part of the new direction. We figured that that part of the organization . . . that was Terry Lynott at that time, and it was an Assistant Commissioner's Office in Washington, D.C.–it was called the Assistant Commissioner. I'll have to look that up, it was like for Planning and Operation or something like that. But we figured that that part of the organization, that part that did the planning, that did the strategic emphasis for the Bureau of Reclamation, that dealt with the water districts, and the changes that they were facing, would be at the very heart of the Bureau of Reclamation, the resources management.

Since we were moving from a basically a construction-based organization to one of resources management, we figured the Assistant Commissioner for Resources Management [ACRM] would be at the very heart of that

change, and we still think that. And it's a very difficult and challenging position, and everyone who sat in that position since Terry Lynott was there, and Bill Martin[16], and now Bill McDonald[17], all find it to be the most challenging job that they've ever had in their careers.

Storey: Those of us within ACRM seem to see a lot of tension with the regional directors about who has which authorities to do what, you know, and the memos that originally came out are being constantly revised, and so on. One person has described it as an organization that was intended to look after Reclamation's O&M responsibilities. Do you see it that way also?

Hall: Well, that's one of the aspects *from a policy perspective*. You see, the vision was never that the Assistant Commissioner for Resources Management, and the people therein, would be "hands-on" type–you know, running the operation and maintenance. *But* to set the policies of how that operation and maintenance was going to take place, where the regional

16. Bill E. Martin had a distinguished career with the Bureau of Reclamation, becoming Mid-Pacific regional director (1974-1981), Lower Missouri regional director (1981-1985), Great Plains regional director (1985-1988), and assistant commissioner for Resource Management (1988-1990). Mr. Martin also participated in Reclamation's oral history program. See Billy E. Martin, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Story, senior historian, Bureau of Reclamation, from1994 to 1996, in Sacramento, California, edited by Brit Allan Storey, 2010, www.usbr.gov/history/oralhist.html.

17. J. William McDonald was the Bureau of Reclamation's assistant commissioner for Resource Management (1990-1994) and Pacific Northwest regional director (1998-2010).

offices and the district offices and so forth were actually out there conducting operation and maintenance, somebody has to be in a position of setting policy for that O&M, and especially in a changing time. And that was the vision that we had for the organization of Resources Management that they would be in a policy–they'd be twofold: one aspect is setting policy of how to go about it, and the second then is needed expertise to provide services for regions and district offices. And that comes about this way, that particularly in a declining program, not *every* office is able to maintain expertise in every given field. Every office cannot have their own archeologist, every office cannot have their own historian, every office cannot have their own hydrologist, or geologist, or whatever.

So, one aspect is to set the policy of how it's going to be done and then, secondly, to provide the service for doing that. Now, we mentioned the issues between the Region and the Assistant Commissioner for Resources Management [ACRM]. They didn't start until about 30 minutes after this decision was made, and they continue to this day (laughing). *But,* I have to say that, although there have been ups and downs, that, overall, people have cooperated and have gotten past those difficult times and have made the adjustments. And I think the regions have been very accommodative, and they even sent people in here in that consolidation. It was not so much a centralization as it was a consolidation of resources for the reason that I said: it's just every office just cannot afford to

keep all of those areas of expertise.

But the roles and responsibilities of the ACRM organization vis-a-vis the regional offices is one that has been worked on, described, written up, torn up, rewritten, and probably will be several other times, but *moving closer* all the time to the balance that we need. It's a balance . . . if it were clear black and white, then we could settle it today and be done with it. But it is a, one it's a gray area, and secondly a shifting area, but I think we're getting closer to that balance all the time.

Storey: Were there other changes that occurred like the creation of ACRM? Were there other organizational changes that occurred?

Closing Regional Offices

Hall: The other principal one, with the creation of ACRM, was a certain shift in people from both Washington and the regional offices, and the other principal organization change was the closing of the Amarillo Regional Office. We had a Region that was headquartered in Amarillo that, at that time, it just did not appear that the program would justify keeping that level of operation there with the inherent overhead that's encumbered with the regional office. And so the recommendation was that we would close the Regional Office in Amarillo, and that was eventually done.

Storey: I've known a number of people who were in Amarillo at the time, and for them, it was a very

wrenching experience emotionally in terms of some of them lost positions, some of them had long ties to the, you know, to Amarillo and to the Regional Office, and I've forgotten the name of the man who was sent down as regional director basically to close up I guess but . . .

Hall: Gene Hines.

Storey: Yeah, he was seen as a hatchet man and all of that kind of thing. Sitting from your seat, could you give me a perspective on the kinds of things Reclamation did to deal with that closing and the people who were involved and so on?

Hall: Yeah, I think any time you have any organizational entity close, it's going to bring about some rather wrenching experiences for many. I think it's true of, you know, they're dealing with certain military bases and certain aspects of military closing now, and I think it's always that way, and I don't think we were any exception to that. I think that in hindsight, we would not have done it much differently than the way we went about it. Whether we would have closed it or not I don't know, knowing what we know now, because we have more opportunities down in that part of the world than we did before I think. But knowing what we did then, having made the decision, the way we went about it, I think, was pretty good in that we got with the congressional delegation–and by the way the Congressman then from Amarillo, I have to give him credit. I can't remember his name, but he was a Republican congressman and he said, "Well, I don't like it that you're

closing this installation in my district, but I have *always* fought for efficiency in government and if what you're telling me is right and we can't afford to have a Regional Office in Amarillo, then I am for you, and I will support it." That's very unusual for a congressman to take that position with an installation in his or her district, but he did, and he said he would support it on the basis of efficiency.

And then for the employees, we were first, open and honest with them about what we saw, why we were proposing that it be closed. I know I went to several meetings down there as did other . . . the commissioner and other key members of the management team. We established, we employed professional people to go in and help our employees deal with the change that was upcoming, and not just from an emotional standpoint, but from a practical standpoint of helping them prepare résumés–well, providing opportunities that were available. We negotiated with other government entities to see what opportunities were available in Amarillo or surrounding area, made those job descriptions available, helped them apply for them, let them know in Reclamation where they could shift to-for those that desired to move, and for those who did not desire to move, or did not have the opportunity to move, then we had this professional help that would go in and help them know and understand what opportunities were available in the community, how to prepare a résumés, how to go through interviews.

In short, although it does *not* keep the Region from closing, I think that we did a pretty good job, for a bunch of engineers, in helping people from a human resource standpoint deal with it and prepare them for seeking employment in other places. I know I got a lot of positive feedback from I know some you know just didn't end up with a job, and ended up with early retirement, and a lot of things like that. But, you know, I think there's probably a lot more that we never hear from that really came out pretty good. And maybe they got their early out pay and then went over and worked for somebody else, and were able to find other positions. So I think many of them adjusted to the change very well, but I don't say that *in any way* to refute the notion that it was a gut-wrenching, difficult situation for many. I think any time you close an installation, that's going to be the case, and we were no exception to that.

Storey: Along a slightly different line, from your seat again, when you're looking at people for promotion, for moving them into new jobs, that sort of thing, what are you looking for in federal employees? Your perspective is different from the people who are doing the work downstairs, say. What kinds of things is it that are of interest to you in terms of training and the way people react to situations and all of that complex of things that go into judgment?

Leadership Positions

Hall: Yeah. I probably look more to people who are future leaders of the organization *in the*

positions that I get to be a part of. That is to say, at certain levels down in the organization, I never really see them, I never see the selection I should say. I might deal with the person, but I don't have a direct part in their hiring or their promotions. But then when you start to get up in the organization a little bit, and start to get to a branch level or the division level and so forth, then I begin to be involved in the process and I am consulted with and I look to a person's vision, their flexibility, their willingness to be solution-oriented–somewhere in there falls their experience and their technical ability to accomplish the job. That used to be at the top of the list with the Bureau of Reclamation, but, as you can tell, it falls down the list somewhere, the technical skills become . . . it's not that we want a bunch of incompetents in there. We assume that they're going to be able to do the job technically, and we will look at that, but that's not at the top of the list. It's more that they're able to understand where the organization is going, they're able to capture the vision, they're able to see how they can make themselves and their organizational entity fit in with that for the overall success of the organization. And then you deal with, you know, the other things, the fairness of the selection, the cultural diversity that you're trying to bring about in the organization, and those other things. But I think that as opposed to a narrow, highly skilled individual in a particular arena, as they move up in the organization it's more important that they have the vision and that they have the understanding of human resources to bring about what the organization wants to

accomplish, and then lastly to put their organizational unit . . . to see it in that perspective.

Storey: You really started out managing, I guess, in the Oklahoma City Office, and then you moved to the Denver Regional Office ...

Hall: Yeah. I was regional director in Denver, uh huh.

Storey: And of course that's been over a period of, what, maybe 20 years or so?

Hall: Yeah, right.

Storey: How have you seen your concerns about these kinds of issues changing?

Changing Perspectives Over Time

Hall: Well, I've seen me changing, the same way that I now view people for selection. That is to say, at one time I was probably a much more tech . . . *I know that I was* a much more technically qualified individual than I am now. You know, back when I was running a chief inspector down in Plainview, Texas, I knew just about everything there was to know about the technical aspects of that construction. And the world was a lot simpler, because it was either a good job or it wasn't a good job, and the people, the inspectors, that worked under me were either on time or not on time, and they either did an adequate job of the inspection or they didn't, and so forth.

The world is much more complex now and the Bureau of Reclamation's role is much more complex than I was able to see then. And of course I operate from a different level now. But I just see me changing over those 20 or 25 years a lot like the Bureau of Reclamation is changing, and I think the leaders of the Bureau of Reclamation of the future . . . and I believe there will be a Bureau of Reclamation. And I believe there will be leaders in the future, and I believe that our future is *different*, but bright. I don't believe it's a doom-and-gloom situation, there are rises and falls, and there are commissioners with different interests and different abilities. But I think that the Bureau of Reclamation will get through this difficult era that we are now in, and I believe that we will come out and be the type of organization that we'd like to see. I believe we'll be successful.

Storey: Over the years you've known quite a number of both chief engineers and commissioners, two very key folks in the Reclamation organization. Would you mind commenting on some of them as your perceptions of them or . . .?

Reclamation Commissioners and Chief Engineers

Hall: They all . . . all that I have known, there is a reason why they were in their jobs. And I'm glad to say that I haven't known any who were incompetents, so I don't need to worry about stepping on toes. And the first commissioner I ever knew was Gil Stamm and the last commissioner I guess to come out of career ranks into that position, following Gil was Keith

Higginson.[18] And then Keith was politically appointed, and then every commissioner since then has been politically appointed. They seem to come into–of course Gil was technically qualified, he had the background for the job. Keith Higginson was a head of the State Water Resources in Idaho so he came in with a great deal of experience, too, but then we've had commissioners who've come in from different walks of life. From drug[store] business and accounting and they've all brought their own talent to head the job. And so I think that what happens with heading an organization like this, you get in and they've obviously been effective in their party relationship or something that led the president and the secretary to believe that they could head Reclamation, and in every case they've been right. They've all brought their own degree of talent to the commissioner's job.

The chief engineer is a little different in that that's a very specialized line of engineers and scientists and one of the toughest arenas now. It's gone from run[ning] a bunch of people who are responsible for design and construction of massive engineering marvels to one where we don't have any real engineering [design and construction of] large dams that we anticipate building in the near future. So it's gone from

18. R. Keith Higginson was commissioner of the Bureau of Reclamation under the administration of President Jimmy Carter, 1977-1981. Mr. Higginson also participated in Reclamation's oral history program. See, R. Keith Higginson, *Oral History Interviews*, Transcript of tape recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Story, senior historian, Bureau of Reclamation, March 22, 1995, and April 19, 1995 in Boise, Idaho, edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

one of managing from a scientific technical arena to managing people in a changing arena. And I have known several individuals throughout the years, and they have brought, although a different type of talent, a real talent to that seat.

Teton Dam Failure

I was on the . . . you know, we used to think we couldn't have a dam fail. And I happened to be the regional director who was in his office that day, on Saturday, when Teton Dam failed, and that was a challenging time.[19] I know as I sat there and was on call with people from the site, and the only other senior manager was Don Gampoli, from the assistant commissioner in Washington, and we just could not envision that that dam was actually failing. It was very, very difficult for us–I mean, the top engineering organization in the world. And it was not until they reported that they lost a D-9 cat[erpillar] in the hole . . . went down the hole and down the river! . . . that we knew that the dam was failing. We could hardly mentally accept that dam was failing, and then we took the proper . . . then we started notifying authorities, and so forth, to prepare for a dam failure. That difficulty to see the . . . something has changed . . . has been similar in Reclamation in general, I think, to

19. Teton Dam was planned as the major feature of the Teton Basin Project in eastern Idaho. On June 5, 1976, shortly after construction was completed, the dam suffered a catastrophic failure, causing over billion dollars worth of property damage and 11 casualties. For more information, see Andrew H. Gahan and William D. Rowley, *The Bureau of Reclamation: From Developing to Managing Water, 1945-2000*, Volume 2 (Denver: Bureau of Reclamation, United States Department of the Interior, 2012), 820-832.

see–not similar in the sense of a dam failure at all, but similar in the sense of, you just can't envision the change right away. You just can't do it! I don't say that to fault us, I think it's been very hard. I was, like I say, I've been in management for 20 years in the Bureau of Reclamation and there's a lot of things that I could not see that are coming. And a lot of things after they happen, environmental laws and the like, it just takes you awhile to adjust to those changes. I think Reclamation has now not only seen the changes but the mentality is adjusted where we're now prepared to take a leadership role in the future of water resources in this country as we have in the past.

Storey: There are a lot of rumors for instance that Reclamation is going to be combined with the Corps. What do you think of that? What kind of a scenario?

Merging Reclamation with the Corps of Engineers

Hall: It's kind of been an off-and-on situation for many years. The notion has been advanced and then withdrawn as being too difficult. You know I take the position that it's never wrong to look at that, it's never wrong to look at *any* organizational proposal and see if the time has come, it makes sense for some combinations to occur. If indeed the Corps is not building anything in their civil works, that basically is their civilian works, and the Bureau is not building anything, and we're down to resource management, and we're both about management, I don't think it's heresy to take a look at

something to see if there's some way that some efforts can be combined for a more efficient operation of the water resources. I don't know that that will be done, and I'm not advocating that, but I think it would not be proper to be unwilling to take a look at that option.

Storey: Well, I think we're almost at the end of the time. Is it all right if Reclamation uses the material in this interview and makes it available to researchers?

Hall: You have my permission to use anything in here except the things I said that were real stupid.

Storey: (Laughing.) I don't think there were any of those. Thank you.

END TAPE 1, SIDE 2. JUNE 28, 1993.
BEGIN SIDE 1, TAPE 1. FEBRUARY 21, 1996.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Joe D. Hall, on February 21, 1996, in Building 67 on the Denver Federal Center. This is tape one.

Well, as I was telling you, a couple of years have passed since we did the last interviews, and I'd like to go back over what we talked about before and explore some of the topics further, if it's all right.

Hall: That's fine.

Storey: First thing is, why did you decide to become an engineer? What moved you in that direction

rather than some other direction?

Becoming an Engineer

Hall: When I got out of high school, I worked for a couple of years before I went to college, and trying to save the money. Some things happened in our family where we had to use the money I was saving. My dad was out of work for a little while, and so I ended up without any money to go to college, even after being out a couple of years. So I had a cousin who had made some money, and I went to him and borrowed the money to go to college. He was an engineer and had gone to Texas A&M and had done very well as an engineer. So I guess the turning point was going to James Allen Puckett [phonetic], asking him for a loan to go to college. I'd kind of had some engineering tendencies anyway, but I think that my cousin James, who was probably twenty-five years my elder, convinced me that that was the line that I should follow.

Storey: That's interesting. Very few people trace it to a specific person.

Hall: Is that right?

Storey: I believe you're a civil engineer.

Hall: That's correct.

Storey: Why did you choose civil engineering?

Hall: Well, building was kind of what I liked, and

building is mostly civil engineering. My recollection is that at one time there was just military engineering and civilian engineering, and all the civilian engineering was the construction and all the other activities associated with construction. And then as time passed by, there became other engineering specialties: electrical, mechanical, all the others that we have today. But civil seemed to fit my desires better.

Storey: Of course, your construction bent was shown in your home construction business, but then you came to Reclamation and went to Sanford Dam, where you were an inspector. In the first interview, you talked about being an inspector in the tunneling process for the spillway, was it, the outlet works?

Hall: The outlet works, yes.

Storey: What were you inspecting? What was going on?

Reclamation Construction Inspectors

Hall: As we discussed some in our first interview, I had actually asked for an assignment in construction. I was doing surveying when I first came to Reclamation, and I asked the then project manager, Spike Crane, for an assignment to the dam so I could get some experience. And being a green engineer, they gave me probably the most chicken assignment they could find, and that was not only in the outlet works and inspecting the tunnel, but the graveyard shift of

the tunnel. I went to work about midnight and got off about eight in the morning.

The tunneling was done in a traditional sort of way. That is, it was, I'm going to say, a twenty-foot-in-diameter tunnel, and the crew would go in and drill holes in the face that was a combination of rock and earth. They would then place dynamite in the holes. Of course, everybody got out. Then they would shoot the dynamite, and that would leave the rubble, and then they would go in and muck out the–they had some machinery. They had a mucking machine that would go in and just kind of clean up all the debris that was left, load it into vehicles, and transport it out.

Then they would go about the same cycle all over again: drill, blast, muck, drill, black, muck, over and over and over. My assignment as inspector was to see that things went well, to be aware of, of course, the quality of construction. For example, if the blast took out more than it should have and it went up into the–bigger than the diameter of the tunnel, then we had procedures that had to be followed to fill back in where it created a void.

Of course, we were forever aware of safety. Anytime you're dealing with dynamite and anytime you get dynamite into a confined space like a tunnel, then you have to have some pretty careful procedures. Some of the contractors and some of the crews tend not to be very safety-minded, and so you needed to just constantly be aware of the safety of the process.

Storey: How many inspectors were on that shift with you?

Hall: Not other inspectors. I was the only inspector on the shift.

Storey: In the tunnel?

Hall: In the tunnel. Now, on the graveyard shift, it would vary. They did less work, as you might imagine, on the earth embankment. They did some work all hours of the day, but they did less work on the earth embankment during the night hours, just because every place you worked you had to have lights and all the hauling equipment. If you worked at night, you had to have the right lighting and so forth for the trucks and the Euclids to run. But I would say there may have been twenty-five inspectors at various locations during the day and probably eight at night.

Storey: Did you ever run into safety problems? What kind of safety problems are we talking about here?

Safety Issues

Hall: Yes. For example, in dynamite, when you're dealing with it, you have to have–and it may be even different now. There are probably more stringent safety requirements now than there was then. But even then, they had to have it stored in a certain place. They had to have the caps, the detonating caps, in a different place, and they would store the dynamite. They would have to haul it a certain way. So I would quite

often even go with the crew that was going to pick up the dynamite. I'd just get in the pickup and say, "I'm going to go with you." And I'd go see how they were transporting it. And sure enough, some of them tended to be very haphazard, and I just had to continually remind them that, "For crying out loud, you can blow us all to bits here. And I'm not going to do that." [Laughter]

And then the monitoring of the air quality in the air tunnel is kind of–anytime you're in with a confined space, you have compressors that blow air, that bring air in and take air back out, but you still monitor it. I regularly took samples of the air. Then it was just physically hard work. Those guys would handle those heavy drills with long bits. They tend to get real haphazard if you did not continually remind them that that was part of their job.

The physical blasting was perhaps the most–everyone was aware that whenever you were going to blow, whenever you were going to detonate, that was the time everybody got out of the tunnel. They sounded the appropriate warnings and all of that. That was down pretty pat. Nobody wanted to be around when they were actually blasting. Nobody was that foolish. It was getting ready for it, the work leading up to it, the mucking, just the physical work that tended to be the most hazardous for people, as well as handling the dynamite.

Storey: Mining is ranked, I think, the most dangerous profession in the country. Were there any

injuries or fatalities?

Hall: There were no fatalities when I was up there. Now, I don't know. The injuries that we had were of the very minor variety, where somebody would be working and the drill bit would slip, and they would skin their hand or something, and they would go up to the medical provisions that they had at that time and, you know, get a Band-aid or a bandage or whatever, and come back to work. So we did not have any serious injuries when I was up there.

Storey: Tell me, as construction inspector, you had to relate to the contractor's people. How did that interrelationship take place?

Working with the Contractor

Hall: It was really interesting, because the better you put your finger on something, the relationship that you had with them made a lot of difference in the quality of the work. By that I mean, you know, I was pretty young. I had the right heart. I was trying to do a good job. But, still, a lot of inspection is not only knowing the technical side of what they're doing, but have such a relationship with them that they come to you and they talk about different processes, and they're thinking about doing something different here. And you try to figure out a better way to do things and do it in a safe and competent way.

So the relationships generally got better for me. After I was there for a while and after I got past the, "Oh, here's another rookie out to tell us

what to do," and we started to establish a relationship and they knew that I was there, that I was primarily concerned with the quality of the work. I was also concerned with their safety and mine, and that I was open to doing things in a better way if we could find a better way to do them. Well, that generally improved. You established a relationship with the superintendent and with the foreman and even with a lot of the individual crew members. In a situation like a crew of a tunnel, you sort of live with those people everyday. You're in the tunnel. You go outside the tunnel to have your lunch with them. You ride with them in the pickup to go get the dynamite. You get to know them pretty well. So the relationships are very important.

On the other side of the coin, there were inspectors that the relationship deteriorated with the activity that they were overseeing, and for whatever reason, be it the inspector's fault or the foreman's fault, they didn't get along. When that happened, we found the contractor hiding things from the inspector and not sharing with them what was going on. Then that causes a vicious cycle where then the inspector tried to be more harsher, tried to be harsher, and more punishing, perhaps, in his relationship with the contractor. And in those cases, you'd usually find the chief inspector or the resident engineer moving the inspector to some other locale. It just didn't work. Once the relationship really deteriorated, it even affected the quality of the work. So the relationships are extremely important.

Storey: I think last time you mentioned it was the Zapata Company . . .

Hall: H-B Zachary.

Storey: Zachary. From Zapata, Texas, was that it?

Hall: H-B Zachary was from San Antonio, but the crew that they hired was–they listed their address as Zapata, Texas. They were all from across the border. They were not American citizens. Many of them did not speak English. But it was a non-union company, H-B Zachary, and they hired Mexican laborers. Many of them were very good, very hard workers, but most of them were not American citizens.

Storey: Did that cause a communications problem?

Hall: In a way. It was a good-natured communication difficulty. The foreman always spoke English. Always had a foreman who would speak English, and he was Hispanic, could, of course, could speak–he was bilingual. So my communication with the foreman was always very good. Many of the workers ranged from very good to nonexistent, if they just spoke no English, and the Spanish that I spoke was very limited. We did not communicate much. Of course, in a pure world, you communicate through their hierarchy, through the superintendent and foreman anyway, but the world is never pure, and there were times when I simply had to tell workers to stop what they were doing for safety reasons or that they were doing the wrong thing that would lead to a poor-

quality product, just tell them "Stop" in whatever best way you can communicate that until the foreman gets there and you can have communication with him.

Storey: Were you there when they lined the tunnel? Did they line the tunnel?

Hall: Yes. It was concrete-lined. I was there for part of it. But then I had gotten into other areas of inspection. I moved, you know. By request, I asked to be moved to different assignments, and so I did a stint in this outlet works, I did some concrete placement, did an awful lot of earth-moving. It was primarily an earthen dam where we moved the earth from borrow areas onto the dam, spread it, watered it, and compacted it to meet certain specifications.

Storey: Tell me what it was like to be an inspector on the earth-moving part. What was the day like for you? What were you doing?

Inspecting Earth-Moving Process

Hall: It was not unlike flying. It was hours and hours of boredom occasionally interspersed with panic when something went–when a tire would blow on a piece of earth-moving equipment and you could see them nearly going off the top of the dam.

They did place some earth at night, and one of the occasions at night, when they were hauling dirt up onto the dam, we had these lights and they had a spotter, and the spotter would tell

the earth-moving equipment operator where to dump his load. He would sort of tell him the line to go down and then he would signal to him when he was to dump his load. The night–it seemed like I always got the night shifts. The guy that worked at night was a black man by the name of Blue, called Blue. Well, in this particular excavation, apparently what had happened is that they had dug down into a den of rattlesnakes, and so when they dumped the load, there was a whole bevy of rattlesnakes that dumped onto the dam, some of them cut in half, some of them whole, but they were all very active, and you could just see the rattlesnakes boiling around. And Blue, I recall [Laughter] I saw the rattlesnakes and I started to back away, and I turned to look at Blue, and I saw Blue just running as hard as he could off the back side of the dam. He just turned and ran. And I could just see him–the snakes were in the light, and I could just see Blue as he just went out of the light and over the back side of the dam. [Laughter] He was more frightened than I was.

Storey: A lot of rattlers isn't any fun.

Hall: When you cut into a den of rattlers like that, it was wintertime and they were holed up, and you just cut into them and they just–it cut some of them in half and the others were whole. They just dumped them, just like earth. You just carried them out onto the dam and then you dumped them onto the dam. Rattlesnakes in the middle of winter don't like to be disturbed anyway. They were angry. So we had quite a snake-killing time up on the top of the dam.

Storey: Geez.

Hall: Material is placed on an earth-filled dam in what they call zones, and the more impervious cores of dam are located a certain place, and then as you get closer to the outside, they have different criteria for the quality of the material being placed, and then eventually the riprap is placed on top of that. And all of these are sought out, and engineers and scientists determine where best they are–geologists–to establish the borrow pits for certain quality of material.

That was all pretty well done and that was continually checked as we excavated into those borrow areas. But the equipment, some were Caterpillars and some were Euclids, but whatever was being used to haul at that particular time would go and deposit their material on the dam. You were aware to keep looking, to be sure the material continued to look like what it was supposed to look like from that particular borrow area. Then it was spread with equipment and then watered with the right watering equipment. The compaction equipment, generally sheep's-foot rollers, were used to compact it. So the day was spent being sure that the right material was placed at the right place, at the right depth, was compacted to the right specificity.

Then to ensure that that was taking place, you worked with the laboratory to coordinate tests. The people from the laboratory would come out, and that was coordinated with inspection, to actually take the test, and then the

test, they would take it back to the lab and see if it had the right density and had the right moisture and we were getting the right compaction on the earth fill.

Storey: Did you participate in any of that laboratory work?

Laboratory Work

Hall: Yes, I did. I also requested to spend some time at the lab so I would kind of know what was going on there and what they did when they took those samples back.

Storey: What did they do?

Hall: Well, you know, all the tests for earth are pretty longstanding, and the way that they would take the tests back, and it was an immediate sort of thing, where they would take a certain sample and, for moisture, would dry it out and they'd do it by weight and determine how much moisture it had, it had a certain percentage it should have, and a certain density. It should weigh so much. They ran the appropriate test and used known Blaney-Criddle and other tests to actually take the earth and roll it out and see if it rolled to a particular length before it spread apart. Most of them were old longstanding earth tests to determine if it's the right density and has the right moisture.

But that is a continual, very important aspect of building a dam, is quality control. Concrete control is the same way. You place it under

certain conditions, you have the quality control where it's mixed, but also, in the final analysis, you take samples. Those samples–concrete are a little different, because they're allowed to cure for a certain amount of time and they are tested and actually broken, compression, to see if they've reached the right strength.

But placing it under controlled conditions are one vital aspect, and that the inspection takes care of. The next is to see if you've got what you think you've got. In some cases we didn't. In some cases the tests did not bear out, for whatever reason, maybe the water truck missed a whole section, or whatever happened. The test would show that it was very dry, we did not get the test results, and that was physically taken out. If it just didn't meet it to the standards, we had to remove that section or rework it. Let's say that it was a level that we identified that did not have the right density or did not have the right moisture for compaction. It's possible you didn't have to remove it, but you simply went back in and scarified it up again and put water on it again and rerolled it and retested it.

Storey: But you knew that right away?

Hall: Yes.

Storey: So there's no question of in ten days you come back and you have to go back down twenty layers.

Hall: That's right. That's correct. That would be unfortunate and unfair to the contractor to do

that, so it was right away. "You failed the test. This is not adequate. What are we going to do about it?"

Storey: How was inspection done? Was it done on a regularly scheduled basis, or was it when the field inspector said, "Hey, I don't like the look of this stuff. Come out here?" Or was it a combination or what?

Quality Control

Hall: The inspection was generally, for the most part, in those continuing operations, the inspector was out there all the time. Then as far as the laboratory tests, we had some criteria. I don't remember exactly what it was, but you'd do a test every layer or two tests a layer or whatever the criteria was. So it was kind of set up ahead of time as to what you were going to do. Then if you started having trouble, the chances are we went to more tests, because if it was real spotty. But if things were going well, then we just stayed with our criteria. But generally the inspector was assigned to a crew and an earth-placement activity and just stayed there with them.

Now, activities like getting the earth from the pit was not a continual operation. That is, the earth inspector would occasionally get in his vehicle and go over to the pit operation and see how it was going, see what the earth looked like, but that wasn't something that we felt the need of somebody being over there all the time. Concrete placement, for example. There was

always an inspector there when the concrete was being placed. There was always someone there. But there was not a need to have somebody there when they were tying steel reinforcement, getting ready for it, because that's something that an inspector can go by after the job is finished. They can tell the inspector, "We've got this steel reinforcement tied. We're going to have a placement tomorrow." The inspector could go by and take a look and see if the steel was properly placed and if it was properly tied and all that sort of thing.

So it was kind of a–I guess that the management, they called them at that time, there was a resident engineer and then there was a chief engineer. There was a resident engineer and there was a chief inspector for earth, and there was a chief inspector for concrete. I guess that the–and we called them the management-made decisions on where to have inspectors. And they made them on the conservative side. That is, if there was a question whether they needed an inspector there, they would have one there. But they did not have one there for all the activities like tying up reinforcing steel. It was clear that they would be of no value just sitting there watching people tie up steel.

Storey: Did the chiefs of inspection work under the field engineer?

Hall: Yes.

Storey: Was that the arrangement at that project?

Hall: Right. They called them resident engineers at that time, the resident engineer at the dam. And then the project manager was in Amarillo, and he oversaw all of the–not only the dam, but all of the aqueduct inspection and pumping plants and everything else that took place from a project perspective.

Storey: Am I recalling correctly that Sanford Dam was part of the Canadian River Project?

Hall: That's right.

Storey: Tell me, if you would, about concrete placement inspection.

Concrete Placement

Hall: Concrete placement inspection is one of, as I indicated, when you're tying up the steel, some preparatory work, you didn't need to be out there. So you might be doing other things. Maybe at that time you're overlooking at the batch plant where they actually mix the concrete, and looking at the quality of the aggregate. They'll have a bigger gravel and small gravel and sand, and the cement that meets certain specifications. They water it and they batch all that up. You might be doing something of that nature and checking out the contractor's operation to see if the mixing is appropriate and see if the quality of the aggregate is good.

By the way, you have tests for everything. You have tests for everything. Of course, we're

getting to where we build less and less in the Bureau of Reclamation, but back when building was going on, they even had tests–here in Denver they performed an awful lot of tests, the more sophisticated tests, on the quality and the hardness of the aggregate and the sand, and they test everything.

But the one I got the biggest kick out of back there was one of the tests on the aggregate was a bounce test. They actually dropped the gravel, the rock–some of them got to be quite big rocks–they'd drop them from a certain height onto this steel plate that was at an angle, and they'd see how far it bounced. And that was one measure of the hardness of the rock. I thought that was a rather simple test, but I guess it showed good results.

So the concrete inspection is partly seeing that and checking to be sure that those tests had been run, that the aggregate that you were getting in did appear to meet those standards that had been set and was, in fact, consistent with–see, these are big concrete chunks.

END SIDE 1, TAPE 1. FEBRUARY 21, 1996.
BEGIN SIDE 2, TAPE 1. FEBRUARY 21, 1996.

Storey: You were talking about the fact that these were big concrete jobs that went on and on and on.

Problems in Inspection

Hall: Yes. And that's part of the problem in inspection. Because they go on and on and on,

one tends to get a little bored and you think it's going to be the same today as it was yesterday, but it is a matter of continually checking. Let's say, the quality of the aggregate to be sure that the gravel sort of takes on the same appearance or that continually checking with the contractor to see if they've moved to another borrow pit and getting gravel that needs to be retested. To be sure that the quality of the batching of the concrete mixing appears to stay stable, to continually test the slump, a measure of the consistency and moisture of the concrete when it arrives for placement, to be sure that it's placed property. You know, for example, not dropped thirty feet, where the aggregate has a tendency to then go to the bottom when it hits, but to be sure that the placement processes are correct. And that the vibration is done, that the vibration is done adequately, and that there's penetration and bonding into the previous level.

The problem with inspection is that it is an over-and-over-and-over-again situation and one where you tend to get bored, and you tend to think, "We did this yesterday and we're going to do it tomorrow, and if I go to my pickup and take a nap, it really doesn't matter here." But it does matter, because you are the quality control. There are some contractors who will recognize that something is not correct themselves and will do something about it. In fact, there's a large number of them, but there are some who will not. There are some who, for whatever reason, will know something is wrong and simply let it go.

That one placement, that one level of improperly bonded concrete or improperly vibrated to get the right strength in the concrete can, in fact, be the level that causes that particular structure to fail. Maybe it's not a dam failure, but maybe it is an outlet works or a spillway or whatever that causes that particular activity to fail later on. So, inspection is one of staying attentive and staying interested in what you're doing day after day. So I have a lot of respect for our people who, for all those years, served as inspectors.

For me it was a step in going someplace else, and I intended to, if my career was allowed to advance, to go someplace else. But some of those individuals, that is what they do day after day, they inspect construction. And I respect those individuals.

Storey: You sound as if you had a career plan of some sort or another.

Career Goals

Hall: I did have a career plan. I guess my career–I guess I always thought that being regional director would be a very good place to end up. I didn't know if I would ever reach that level or not, but I sought to do that. It just seemed to me that the more diverse activities that one could have, the better chances you would have of advancing, and should you advance to a relatively high-level position, the better being able to do a better job at that level. So my career plan was not to stay in any activity for a

long, long time and advance through that particular technical level, but to diversify myself in different arenas that the Bureau of involved in, insofar as I could, to form the basis for a career later on.

Storey: Back on your inspection work. You went to school. You learned the theory of engineering. Now you were implementing the practical side of engineering. What kind of training were you given by Reclamation in the field so that you could effectively inspect these various types of work that were going on at Sanford Dam?

Reclamation Engineering Training

Hall: The Bureau did a very good job in preparing its people for inspection, in my judgment. For example, I mentioned both the earth inspection and concrete inspection. At that time they had Earth Inspection School and Concrete Inspection School. These were approximately three weeks each and were held in Denver. We came into town, and my recollection is that one of the schools–I can't remember which one–let's say Concrete School, they housed us at the same place, the old Adams Hotel down in Denver. And every day a bus would pick us up and bring us out to school, and we would go through all of the–we would have instructors from the lab, who would come and talk to us about different aspects of what went on, and then we would have different activities that we would go through here in Denver of teaching us the principles beyond aggregate inspection and what makes it hard. And the geologists would come

talk to us.

My first trip, that was very, very early in my career, and I found out that the bicycles at that point in time, they had yellow bicycles in Building 56, that at that time were issued kind of on the basis of hierarchy. If you had a bicycle assigned to you, it was really kind of a big deal, and they'd get on a bicycle and ride to the other end of the lab or wherever. Well, I think my first day here, me and another young engineer decided we would ride the bicycles to lunch, which was still on the Federal Center. Then we rode them back and put them back exactly where we'd found them. But that afternoon we all received a huge lecture about riding bicycles that we weren't authorized to ride. [Laughter] So I got in trouble about my first day here for unauthorized use of a bicycle.

The other one, the Earth School, the other one, they gave us a per diem. Rather than arranging–as I recall it, the Concrete School was sort of a contract for our housing. They gave us a per diem, and I think it was sixteen dollars a day, total, and this would have been in the early sixties. And that's amazing how things have changed in price, because sixteen dollars was for your food and lodging. So as you would do, the first day of a course, you know, you meet a few people or maybe you know a couple. At any rate, one of these individuals had a car that he had brought to Denver, and so we decided to go over on Colfax and look for a place to stay, and it would be neat because he had a car and the four of us could ride back and forth to the

Federal Center every day.

We kept going to places and we kept getting cheaper and cheaper. Keep in mind it was the sixteen dollars you had, and whatever else you would want to do with your money, you'd do that. You'd use it for food or buying beer or whatever it is you chose to do with it. And so these individuals, particularly two of them, they were just not satisfied with any of them because it cost too much, in their judgment, even though they were getting very cheap. And finally the place they ended up with was a place that–the best way I can characterize it is, it had laundry out on a clothesline in the front of the hotel. It was really a cheapie, a cheap place. So I decided that I couldn't stay there, so I went back downtown and stayed at the–I think I stayed at the Adams Hotel again and rode the bus back and forth, because that was really–the place that they ended up, that I wasn't comfortable in staying. So as it turns out, a number of us stayed down there again. But it was interesting that some of them had come with the intent that they were going to get the cheapie cheapest place that they could, and then they were going to do whatever it is they were going to do with their money beyond that.

But the schools were very good. They were designed where you put in full days of lectures, combined with practical application, be that actual work in the lab or paper work that you had to do. You had manuals. You had notebooks. When you finished this–and my recollection is, three weeks, maybe it was four,

but three or four weeks, you had a very complete knowledge, if you had taken advantage of the opportunity, a very complete knowledge of not only the practical aspects of earth inspection, but then why it's necessary to have a certain moisture in the earth or in concrete, why it's necessary to have steel in a certain place and what that does. It was a very well-done course that the *Earth Manual* and the *Concrete Manual*s are very popular, or were at that time, very popular with people other than Bureau of Reclamation employees. It was a very good course. So, in my judgment, in answer to your question about what the Bureau did, the Bureau did a very good job of preparing its people to do those tasks, and at that time budget restraints did not seem to be what they are now, and the time spent in training to do a job was viewed as a positive, and the Bureau was willing to spend the time and effort to prepare its people before they sent them out there.

So when I went up to the dam, the Stanford Dam, it wasn't like I didn't know anything about what I was doing. In addition to other practical experience in construction, I had the Bureau training that was extremely helpful in going out and working with a contractor.

Storey: So they sent you to the training before you went to Sanford?

Hall: Yes.

Storey: Was there training also for the tunneling?

Hall: Not as such. Not as such. It's a combination. You do some drilling, some of the training involved drilling and concrete placement, that the concrete was placed eventually in the outlet works, but there was no tunneling course per se.

Storey: So they sent you to these courses in preparation for going to Sanford.

Hall: Right. Right. In preparation for wherever I might be inspecting. My recollection is that you applied for these courses. They were offered maybe twice a year, and people around the Bureau would apply to go to them. You know, maybe there was fifty people in a class, and you applied. Then they selected it on some basis, but I'm sure one of the criteria was that there was a good likelihood that at some point in this person's career they'd be going out and doing inspection and needing this type of background. Both of them I applied for, I was selected and got that training.

Storey: Do you remember who the chief concrete inspector was? Or the chief earth inspector?

Chief Inspector

Hall: I remember the chief earth inspector was named "Jeep" Hendrix, H-E-N-D-R-I—you know, I'm going to say X. It sounds like–I believe his name was Hendrix with an X. His first name was Jeep, and I don't know where that came from. Seemed like an older fellow, to me, not nearly as old as I am now, I'm sure, but I was quite young and he seemed old and pretty wise

and pretty good at sitting down with me and sort of telling me what he thinks I should look out for. And maybe we would have weekly discussions where I'd tell him what I thought had been happening, and he'd give me his counsel and guidance. So, you know, I'd have to say he was a pretty sensitive and capable supervisor in his own sort of laid-back way. He was able to get the input from me as to how it was going, and then give me counsel as to the way I should be doing things, and suggest changes in what I thought was a non-offensive way, and always a helpful way, that I was encouraged to go do what he suggested, rather than turning me off. So I thought he was pretty good.

I don't recall the name of the chief inspector for concrete.

Storey: Do you remember how it came about that you left to become the chief construction inspector in Plainview?

Hall: It was a promotion for me to go from inspection to chief inspector, and I don't remember whether I was encouraged to apply. I'm inclined to think I was encouraged to apply, but I'm not 100 percent sure about that. At any rate, I applied for the job because it was a promotion, and lo and behold, I was selected. Advised my wife that I had been selected and that we were moving from Amarillo to Plainview, Texas, which had mixed reviews. [Laughter]

Going to Plainview, it was like a lot of

construction, and like a lot of construction people face every move. Plainview was a town of maybe 20,000 people and a fairly large construction crew came into there, not only the Bureau people establishing the office there, but the plant where the pipe was manufactured was there–the Senviro [phonetic] Corporation, it was called. The contractor that was laying the pipe established an office there and crew. So what you have, and this is fairly typical of the construction industry, is you have a relatively small town, you have a pretty good influx of people, therefore housing becomes a little short. If you choose to buy a house, it goes up. It's a higher price. If you choose to rent a house, the rent goes up. So typically the construction people have to pay more. And also very typically, when they leave, it's just the reverse. By then they've probably caught up on building houses and then you have all the people leaving, so the houses go down. So it's very typical for construction people to not make money on housing like people–like many of us who've been able to stay in a place for fifteen years or so typically maybe make some money. But you go in, housing is short. Buy a house, stay there three or four years. The market is no longer good. It's a buyer's market then. So you typically do not make money on housing if you're in the construction business. You just make the best arrangements you can, and that's not one of the perks, is making money on houses by moving around, following construction.

Storey: What did the job of chief inspector entail?

Chief Inspector's Duties

Hall: The primary activity of that office was the manufacture and laying of large-diameter pipe for miles and miles and miles. Canadian River Project was one where the water was impounded at Sanford Dam. It was then pumped out of that valley through a series of pumping plants, and then transported, a lot of it with gravity, by gravity, through a system of large-diameter pipe up to 96-inch pipe, to Amarillo, Lubbock, and nine other smaller cities. So beginning with the manufacture of the plant that was located in Plainview, Senviro Corporation got the bid and they built the plant, and they built the pipe in what was at the time a rather new procedure, where it was a spun pipe, where they actually–the concrete would come into the pipe and be blown into this cylinder and would set up as it was spinning. It was a different type of operation, not without difficulties.

We had inspectors around the clock out at this pipe-making operation, and their role was just like any other concrete operation: it's there, they're checking the aggregate, they're checking the placement, they're having the tests run to be sure the pipe is going to be strong enough to withstand the pressures. So one of my jobs was being sure that the pipe was manufactured correctly. I had inspectors out there. Another one was to–I had inspectors out with the pipe-laying operation. This was a huge–if you can imagine 96- or 78-inch pipe, depending on where you were in the line, huge excavation. You start with being sure that it's surveyed and

staked properly, and where you want it to go. Then in front of the pipe-laying operation, you have to do all the tunnels. You tunnel under every highway, under major intersections in town. So all that has to be done in front of the pipe-laying operation, to be sure that that's taken care of.

Placing Pipe for the Canadian River Project

Then the pipe-laying itself, huge excavating equipment, hauling the–just hauling the pipe out to the site is sort of an around-the-clock thing. They haul pipe out there every day, every day, stay in front of the laying, and then excavating it. The way they did it, they excavated the trench and then they had a machine that excavated a cradle in that earth. Let's say they were twenty feet below the ground at this place, but then they'd go down another half-diameter of pipe, let's say, in a cradle, so that the pipe had a place to lay when they set it right in there. They set it. Then they had some procedures of keeping it maybe two inches above the cradle. Go in, lay the pipe, prop it up a little bit, and then pour grout underneath that pipe, so it really had a firm place upon which to sit.

But we had inspectors out at the tunneling operations and at the excavation and getting the pipe actually placed. At every joint of pipe, at every joint of pipe where those pipe came together, they had these rubber gaskets that had to fit properly in the place. And they checked every one. Then, of course, when we filled the pipe later with water, where they had not had

those rubber seals properly seated, guess what? There was a leak there. [Chuckles] So, however many joints there were, thousands and thousands, the inspector was there to check every one of them. And, of course, they're human, some things got by them. And they showed up, because they filled it with water under pressure, and the water comes out. But relatively few.

When you got down to–one element of inspection is the pipe is all laid, you're getting to fill the line with water. You have someone–at least I never let anybody go alone, because that would be maybe several miles they'd have to walk through a dark pipeline to check it out for whatever might have happened. You might have–oh, someone might have left a manhole cover open and it could have been filled with mud, or there could be, whatever, a dead animal in there. Different things happen. At any rate, before we filled it with water, we had someone go through the pipe. That's pretty easy whenever you're dealing with 96-inch pipe or 78-inch pipe, but you get down to 60-inch pipe or less, and then you start dealing with someone walking for miles and miles, stooped over. So I borrowed my son's–at that time, my son's small bicycle. I think it had like 20-inch wheels or something. And then one of the other people had a bicycle, and so we went through on bicycles. And it worked out very well, because it's not like you need to stop every joint and check the seal or something like that, unless you see something that looked wrong, that looks like water's been seeping in from the outside of this

joint, and you stop and check that. You're basically just going through it to be sure the line is clear and nothing's a problem.

Using Bicycles to Inspect Pipe

Interestingly enough, we discovered that first day that you ride through several miles of pipe, actually, in just a very few days you would completely wear out the tires of those little bicycles, because with that circular pipe, there's no way to stay exactly in the bottom of the pipe, and every time you get up on the side with that heavy granular siding of that sprayed-on concrete, it takes on a really rough substance and you just wear out those little tires. [Laughter] I remember answering the question of why we had to buy new tires for my son's bicycle. You know, that appear to be some type of–but we actually bought six or eight of them. Had we bought our own bicycle, then there would never have been a question, but because it was a borrowed bicycle, the people who count such things wanted to know why we were buying tires for someone else's bicycle. But the bicycles turned out to be really good. We would mount lights on them and go through.

We had a few exciting times where inspectors got down to the bottom of a huge valley in the pipe, and for whatever reason it had filled with water. Keep in mind that these guys–it's pitch dark in there, and they get to going pretty fast, going down this hill, and lo and behold, they run into water. [Laughter] And then the other one runs into the back of the

other one and there they are in the water, trying to worm their way out. So they had a few exciting times going through on a bicycle, but it proved to be a very efficient thing to do, because we're talking hundreds of miles to eventually check out a pipeline. So the little bicycles worked out great.

Storey: What did you do, mostly, as chief inspector? I take it you weren't actually out inspecting.

Being Chief Inspector

Hall: I was out a good bit of the time. Every day I was out some, and I tried to follow my mentor's, Jeep Hendrix, what I thought was very sound nurturing, in that he would check with me enough to know. He would come by many, many days to see me, and I would try to go by to actually see how the operations were going, to visit with the inspectors who were out there, to modify the procedures. By the time–see, you have a number of operations going in addition to the pipe-laying. I mentioned some, like the pipe manufacture. But we were also building a regulating reservoir in Lubbock. We had inspectors down doing–they call it a holding basin that had to be built under specifications, so I had inspectors as far down as Lubbock and as far north as Amarillo.

By the time you do that and you get by–I said I went by every location every day. That's an exaggeration. I tried to get by most of our operations, as many as I could, and I visited probably every operation during the course of a

week. Then what happens as chief inspector, when things are going well, then the inspector has a good relationship, things appear to be going well, the tests are going fine, the contractor seems to be on schedule. Then you say, "Thank you very much," and move on. What happens, the chief inspector gets involved when things are not going well, when the quality of the work is going down, the pipe is–when they're failing a lot of tests and they're having to remake some of the pipe, and you're ending up with half the yard of rejected pipe, or out in the field the laying of the pipe is marginal, or the quality of the attentiveness to detail of the contractor, or relationships are getting bad, then there's forever meetings . . .

END SIDE 2, TAPE 1. FEBRUARY 21, 1996.
BEGIN SIDE 1, TAPE 2. FEBRUARY 21, 1996.

Storey: This is tape two of an interview by Brit Storey with Joe D. Hall, on February 21, 1996.

You were saying that there were forever meetings with the hierarchy of the construction organization.

Forever Meetings

Hall: Yes. And they're quite often interested in these meetings as well. I mean, if they've got what I called a yard full of rejected pipe, they're losing money. They're interested in doing something about that. They may be representing that that quality of that pipe is okay, and it's simply the inspector that is being harsher than he should be,

or the relationships with a particular inspector are not good and they want to talk to you about that. Sometimes it's prompted by the chief inspector and sometimes it is the contractor that wants to meet. But there are forever meetings, and the meetings are generally when things jump the track. If things are going well, you kind of stay out of it, let the inspector handle it.

There are also budget–finance meeting with the contractor, many, many meetings. These are big-dollar activities. They make a lot of money. There's a lot of money every month. There are procedures set up where they actually bill the Bureau, and those bills come in depending upon the work they've done and in accordance with the schedule that they bid, but, still, the amount of work that's actually done falls under the purview of the chief inspector to say, yes, it did happen or it didn't. Seldom do you agree 100 percent for whatever on the number of yards of concrete placed or even feet of pipe laid or whatever it is, and then one considers that some things you're not paying them for because the quality of that work is not up and is going to have to be replaced, so you withhold a certain percentage of their payment. So you have meetings with the contractors regarding the amount of payment that they eventually get paid every year. These are big-ticket items and it's a big deal to them, and many of them are not blessed with having great sums of money in reserve, and so they need their check every month. So those are important meetings.

Making Modifications

One also, as chief inspector, ends up with making those modifications that need to be made, of course in concert with even your bosses, with project manager and others, as to changes of alignment or things that need to be modified in the field. I mean, there are all kinds of things that happen out there. I remember one time when we were going through a farmer's front yard, and it's not unusual to have people complain about that. We're used to that. We provide ways–we'll provide them with a temporary bridge across the ditch and other things. But I remember one time that there was–where we were going through would have taken out the trees in this front yard, and they had just–just the week before–buried their young son, and the trees were special to them. So I made the decision to go around behind that house. They were emotional about it, but that was not the concern. I mean, it was not the concern that they would be mad at us. The concern was that it just seemed to be the right thing to do. So we added probably a few hundred feet to go around behind the house rather than to go through at that particular time with that particular family.

But those types of things one gets involved with as chief inspector. And sometimes the inspector has to make those decisions, by the way. He may be out there all alone, it's maybe a change condition, and he just has to decide. But more often than not, you know those things in time where they'll call the chief inspector and I would take a run out there and say, "Yes, we'd better change this one."

It's a fun job. The chief inspector's a fun job, especially if you like construction, being around it, because you start to get some brush with supervising, management. You get to deal with some contractors. You get to deal with things that are going wrong as well as things that are going right. So, chief inspector is a good job in a career path.

Storey: And for whom does the chief inspector work?

Project Hierarchy

Hall: Typically a resident engineer. Now, I think that may be a thing of the past. I think maybe you might go from project manager right to chief inspector today if you were to be doing it again. But on a big project like the Canadian River Project, they had a project manager who was located in Amarillo, and then a chief inspector for the dam, and then a chief inspector for the–I'm sorry. A resident engineer for the dam and a resident engineer for the pipeline and appurtenance works. The resident engineer, then, at the dam had chief inspectors reporting to him, and in like manner, the resident engineer in Plainview had a chief inspector. I was the only chief inspector reporting to him. But, you know, nowadays you might structure it a little differently and you might go right from project manager to a chief inspector and not have a resident engineer.

Storey: Who was the resident engineer in Plainview?

Hall: Abe Lincoln.

Storey: Oh, yes, you mentioned Abe Lincoln.

Hall: Abe had years of experience, all, as I recall, in the construction side of Reclamation, was a very technically qualified individual, was a very kind man, but was not very communicative, and so some of the activities I kind of had to discover for myself. I don't mean to–Abe was a very nice individual, but he would err on the side of not telling you something rather than telling you something, particularly if it wasn't desirable for you to hear. So a lot of the things I had to seek out with Abe. But I think we made a good team, because I would tend to talk some. I'd end up getting to do most of the negotiation with the contractors, because I liked it better than Abe did.

Abe may have been a little bit quieter, too, because at that time he had a personal tragedy. He had a son who was working for the contractor, that came in contact with an electric line. They were moving a crane, and he was physically on the top of the crane during that moving of it, and came in contact with a high-voltage line, and not only the electrical shock, but the fall damaged him and injured his brain. I don't know to this day what–the last communication that I had with the family a number of years ago, the young man had still not recovered. So Abe may have been quieter during our time together than he would be normally.

Storey: What was the division of responsibility between the resident engineer and the chief inspector?

Project Responsibility Divisions

Hall: Well, the resident engineer was charged with the overall operation of that part of the world, of getting the pipeline laid, getting the reservoir built, had a number of activities, and he was the overall manager. And the responsibility was, I would be responsible then for the quality of the construction. So it was just a higher level of management.

Now, from a practical standpoint, in that type of an operation, Abe and I ended up as sort of a team, where we each would do what our–where our strength laid the most. Abe had the experience. He knew more about construction than I did. And at times he would probably be closer to the chief inspector than I would, and at times dealing with the contractors and other things, I would probably come closer to a resident engineer than he would. So we worked as a team, and I think we worked very well with our talents. But the resident engineer had responsibility for the overall success of the operation, where the chief inspector was specifically assigned to the quality of the construction.

Storey: And you were there for about four years, at Plainview, I think.

Hall: Yes. Yes, I think that's about right, about four years.

Storey: Why did you decide to move, and what was the process that occurred that permitted you to

move?

Moving to a New Position

Hall: The process was–I'll go back just a little bit. It was at Plainview that I started going to Toastmasters, and that was a personal thing. I had difficulty making presentations, and it made me nervous when I had to do it, and I was getting to a place where increasingly I had to go to Amarillo to what I considered really high-level people, give presentations about where the construction was and all that sort of thing, or maybe I'd have to go to a safety meeting, and maybe there would be only, who knows, six or eight or ten or twelve people there, but I still had to give presentations. I found it hard to do, for me, so I started to go to Toastmasters in Plainview.

So, combined with my technical side of my career, I was trying to improve in the ability, not so I'd become a great orator, but so I could do it more comfortably, you know, communicate better. And I think I was getting better at communication. As I would go increasingly to Amarillo and meet with the project manager and other top-level staff there, and then, on occasion, over to the Regional Office, which was also in Amarillo, a different office, but would make presentations to them, then I got to know the project manager and, to a certain extent, got to know the regional director, whose name was Leon [W.] Hill.

I could see that the end was coming for the

construction of the Canadian River Project, and I could see that sometime down the road I would have to make a decision whether I was going to seek another construction opportunity and move on up in the construction field, maybe to try for a job as resident engineer or even project manager of a construction operation, or move to something else. I determined that it was the time to move to something else, that I would rather go into some other activity that the Bureau of Reclamation was involved in.

I went to talk to the project manager about that and told him that I would like to go and be involved with something else. He asked me what that was, and I told him that, frankly, no arena of what I called administration really interested me, that it was not–reviewing contracts or being involved in some administrative field was probably not my bag, but I would probably enjoy planning, what I called planning, the most, trying to see how you bring these projects about. Keep in mind that at that time we still thought we were going to bring about a lot more projects. We thought that we were just on the verge of building a whole lot more. And the way that would come about was through planning. I went to talk to Mr. Crane, who was the project manager, and then he had me talk with Mr. Hill, a very gruff but capable gentleman, who was more of an intimidating style with a young engineer, but I liked him and I think he liked me.

Moving to Topeka

The upshot of that was, they offered me an opportunity to go to Topeka, Kansas. They were developing–or the Bureau had just agreed, with the state of Kansas, to put together a state water plan. Kansas, not unlike many states, has a lot of water in one part of the state and a lot of need in another part of the state. So the thought was, "Let's put together a state water plan to figure out how that can best be taken care of." Because Kansas was divided in regions, there was the then Region 7 headquarters in Denver, that had roughly, we called it, the northern half of the state, and the old Region 5 in Amarillo had the southern half of the state. There was not really an office that they wanted to put all this activity in, so they had a planning office in Oklahoma City that was going to be involved in this activity. They had a project office in McCook, Nebraska, that was going to be involved in this. But the decision was made that we need our person there in the state, and this person would not only coordinate with the state, but would coordinate the Bureau activities as well. Not boss the Bureau activities. All these people in Oklahoma City and McCook had their own boss, but to coordinate the activities, be sure that they were taking place.

For whatever reason, maybe they didn't have anybody else who wanted to go to Topeka, but I was selected to go up to Topeka, so we moved our family up there in 1967. That was the year after a huge tornado had hit Topeka, and it was still very much scarred and very much vacant areas where that tornado had gone through, a very devastating tornado. We moved up there. I

was officed in the State Office Building with the Kansas Water Resources Board. The employees of the Resources Board were very accommodating and helpful. Keep in mind I had no experience in planning. None. [Laughter] And here was this guy that they were sending up to help them put together the state water plan.

Great Learning Experience

But, you know, I was attentive and learned pretty quickly and was involved with that state entity and with the two offices for about four years, and we put together many activities. The massive parts were never carried out as far as water transfer, but many of the activities, as it relates to specific projects, were eventually picked up by the state and were incorporated into their state water plan and were, in fact, carried out.

So the activity in Topeka was a good step for me, good experience, and I think we talked last time that it actually exposed me to a great many activities, because I was the only fed. I would become involved with discussions with the State Department of Health regarding Federal Water Pollution Control Administration's activities, where then I'd pick up the phone and call somebody with that agency and tell them what the concern was.

I learned a great deal about a great many activities that were going on with the state and federal relationships. It didn't deal directly with

my job. But I became one–I was very close to the people at the Kansas Water Resources Board. We were like fellow workers. It was a very high level of cooperation with the state, and even they'd take me with them to testify before state legislative committees as it relates to what they were doing and their relationships with the Bureau. So it was a good, healthy relationship we had for four years there.

Storey: So you were there from '67 to about '71?

Hall: Right.

Storey: What kinds of issues came up? Or was this all a rose garden with no thorns?

Issues that Arose Preparing the State Water Plan

Hall: No. [Laughter] No, there are no rose gardens in the water business, at least in my experience. They all have thorns. The issues ranged from the traditional ones, the traditional ones let me describe as building a reservoir and then transporting the water to where you want it, if you have water in a certain place, and the traditional ones tend to be that people don't want a reservoir built at a particular place for a lot of reasons, beginning with the land owners and the home owners, that they just don't want the reservoir there. That means they're going to have to move, and that's understandable, but a lot of those people just simply do not want reservoirs built.

The notion of cost, huge cost in moving

water around, it was a very big issue in the state of Kansas, whether or not they should provide water for those–at that cost. The issue of continued or increased irrigation. Does this country–facing this in the sixties, is this country going to continue to irrigate, and, if so, should we provide water for them? And then coupled with that was a huge issue in Kansas of the depletion of the groundwater aquifer. The Ogalalla formation was being mined, and that whole segment of economy that's based on the use of that water. If it's overdrafted to the extent it's no longer usable, would that go away? So how do you intertwine that groundwater use with the potential of new surface supplies?

And you dealt with the whole myriad of turf issues. The state has turf issues, just as the federal government has and other people have, the different agencies who like to be involved and who think that one is stepping on other's toes, and trying to work your way through that. The public meetings that we conducted to get people's input and all of that different views that were expressed regarding water in the state of Kansas. So water became–well, it always has been in the Western states, but was perhaps enhanced. The focus on it was perhaps enhanced during that time, and there were a number of controversial discussions about how to go about the future water development for the state of Kansas.

Storey: Do you remember any of the specific issues that came up and how Reclamation might have related to them?

Hall: Yes, some of them dealt with the "haves" and "have nots." There were people who had projects. Reclamation had already built maybe seven reservoirs in the state of Kansas, and we were in the process of building another one, and there was a number of potentials for other reservoirs and other water developments. So those that had them were kind of the "haves." They had their projects. And there were others who viewed themselves as waiting in line, and it was their time now to develop their projects.

This was at a time where the environmental interest in the country was being piqued, and hard for many of us traditional water users and developers to recognize that that was a real and lasting change that was taking place in the country. But the issue then became one of those who had not yet been able to have their project built, seeing it as their effort being put aside because of some quirky environmental movement in the country. So that was very difficult for the people who really felt like it was their time to have their project built, couldn't go forward now until certain environmental hoops were jumped through and certain criteria were met. So the whole environmental thrust was taking effect and was causing problems for the people in Kansas.

Storey: Were there any specific Reclamation projects?

Reclamation Projects in Kansas

Hall: Yes. They built a number of projects up there already–Almena Project, Kirwin, Webster,

Cedar Bluff, Kansas Bostwick and Loveland [Lovewell Dam?]. The [U.S. Army] Corps of Engineers had also built a number of projects–Tunnel Creek and Milburn and others.

And there seemed to be a line there between the Corps and the Bureau that sort of had an impact in Kansas. The Corps of Engineers traditionally, in my judgment, if the project was primarily for flood control or navigation, then it would fall under their purview. If it were primarily for irrigation or water supply in the West, it would fall under the purview of the Bureau of Reclamation. Well, for some of those it got to be a pretty fine line as to what the principal purpose of this reservoir was, because they're all multi-purpose projects. Even back then, the projects were multi-purpose and viewed that way. So there was some interesting discussions about these potential projects, about who should actually build them. Was it the Bureau of Reclamation or the Corps of Engineers?

Storey: Were there any new projects proposed for Reclamation, though, that became problems while you were there?

Hall: Yes. Cheney Reservoir was in the formative stages and was eventually built down in the neighborhood of Wichita, Kansas, and it was a problem. It was not a problem for the Corps of Engineers; it was a water supply project all the way, primarily municipal water supply. It did have some flood control benefits, as I recall, but there were "aginners" to that project, as there

have been in the past.

Storey: People who were opposed to it.

Encountering Opposition

Hall: Yes. People who were opposed to it, many of them being in the categories of NIMBYs–Not in My Back Yard–what we call NIMBYs. They just didn't want it there. Then the environmental concerns of whether or not this was the right thing to do. And whether or not this future water supply was really needed.

We were beginning to be questioned on these projects. We'd never been questioned like that, but we decided that there was a need for the project, there was somebody willing to pay for it, they signed the contracts, and we went about and got the authorization, got it built. Now then even though you could go through all those things, there were a lot of people who really questioned whether or not–they started to say things like, "Well, what if we conserve water in the city of Wichita? Can we not do that, rather than build a new reservoir?" Very legitimate questions, but questions we had not historically had to handle. So there was opposition to that project, but eventually they were overcome and it was built.

Storey: When you were in Kansas, who were you working for?

Reporting to Two Regional Directors

Hall: I actually reported to two regional directors, to Leon Hill in Amarillo and Jim [James M.] Ingles in Denver, and I reported to two offices from that place. I reported to the Oklahoma City office and to the McCook office. In Oklahoma City was the area manager, as he was called, Norman Flagg, F-L-A-G-G, and in McCook the head was Kenny Kaufman [phonetic]. My pay came out of the Amarillo office and was dispersed from Oklahoma City, so I always had maybe a little bias towards Oklahoma City, because that's where my paycheck came from. But it was a job of coordination, including all the state entities and people we had to deal with up there, but within the Bureau of Reclamation having two regions working an active program like developing a state water plan was one of coordination. But I have to say it was mostly a healthy, positive relationship, where it was just a matter of being sure that it stayed that way and did not get to be a turf–"We want to do this," or, "We don't want you doing this."

Most of the work, technical work, was done by one of those two offices. I had no staff in Topeka. Did a lot of the work myself.

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Storey: You were saying that you didn't have any staff, and the technical work had to be done out of the project offices of Bureau or the state.

Hall: Right. Either in McCook or in Oklahoma City.

But the state water plan was a big deal, and we would have people from Amarillo and Denver come to Topeka. I mean, regional directors would occasionally come or the chiefs of planning from the two regional offices would come into there. And it got to be quite a big deal, and I got to where I was called on a lot to speak in various places in the state and say what was going on. So it was another fun job for me in the progression of my career.

Storey: You were sort of the contact point between Reclamation and this water plan.

Hall: Exactly.

Storey: Or looked at from another point of view, you were the friction point.

Hall: Yes, right. Right.

Storey: What kind of turf was Reclamation concerned about and putting pressure on you to protect, as it were?

Balancing Regional Expectations

Hall: Well, okay. Keep in mind the time where our physical work was going down and the number of future projects was beginning to diminish. Therefore, there was a natural desire on the part of each Region to keep its people busy, and so each of them would be active in trying to have their planners and technical people involved in this state water plan, and so that was a bit of a balancing act to accommodate that. But I have

to say, there was never, in my recollection, a hostile shoot-out or free-for-all to determine who was going to get the work. It was usually always negotiated and usually in a friendly way. We just had some good people involved in the activities that kind of knew what was going on. So the turf issues were played out with their bias, that they would rather be doing the work than the other region, but usually it was an accommodative sort of split-the-work-type resolution to the issues.

Storey: Tell me more about Jim Ingles, if you would. What was he like?

Regional Director James Ingles

Hall: Jim was–whereas Leon Hill was the tall, sort of gruff cowboy, Ingles was more the outgoing, friendly, pat-on-the-back-type individual, tended to be very good in public settings, was a knockout at cocktail hours, and was just a very social, gracious individual, that did not strike me as having the technical background and knowledge that a Leon Hill possessed. But, on the other side, his strength was more in the negotiating, getting people to do what he needed for them to do, very strong in the human side of things. So it was both Jim and Leon Hill who decided that I would be right. Both regions ended up hiring me.

Jim Ingles was politically very active, as well. I remember one time when I met him in Great Bend, Kansas, for a water meeting. Mr. Ingles had flown the Bureau plane in with a

congressman from Colorado, whose name was Evans, Bob Evans, as I recall. The weather turned really sour there, and they could not fly their plane back out of there, and the congressman had to get somewhere. So they borrowed my government car. I was down from Topeka. I had a government Ford that never had any markings on it. It was really strange. It never did say "U.S. Government" or anything. But the only way they had a chance of getting back was to take my car and drive back somewhere in Colorado. The roads were more passable than the air. They couldn't take off. And then I managed to get back to Topeka with some state employee or some way to get home, and later on we made the transition to get my car back. But then that experience, also involved with that, in that same car was Tommy Thompson. There was the congressman, Jim Ingles, and Tommy Thompson, who was at that time the manager of the Southeastern Water Conservancy District.

Storey: In Kansas?

Hall: In Colorado. It was the Fryingpan-Arkansas Project. It was the entity that eventually took over the Fryingpan-Arkansas Project after the Bureau built it. Well, then, as it turns out, when a selection was to be made for the–Mr. Flagg eventually left from the Oklahoma City office, retired. The assistant area manager, a man by the name of Marley Burger [phonetic], did not desire to ascend to the area manager's job, for personal reasons. He did not mind being the assistant, but he did not want the top job there.

So it was available.

I think that some of my strongest supporters for me going down there into that higher-level job turned out to be Jim Ingles and, I think, Tommy Thompson. At least Tommy always told me that he got me that job. [Laughter] Tommy told me he campaigned heavily with the commissioner to get me that job.

Storey: Really.

Hall: So I went from then Topeka to the area manager's job.

Storey: In '71.

Hall: Yes.

Storey: Was that a job you had sought? How did that work for you?

Becoming the Area Manager in Oklahoma City

Hall: Not especially. It was in the career path and it was in a direction that I would like to go, as far as career. It was a Planning Office. They were responsible for planning for that part of the world, for that region. At that time it had thirty-five employees or so, it handled Oklahoma and a part of Kansas and a part of Texas. It was a good job, was probably a higher-level job than I would have planned for. I would have planned for going to like an assistant area manager or something.

In terms of grade, I was probably a GS-12. I probably went from 11 to 12 when I was in Topeka, and I would have thought that I would have gone to a 13 position, but I moved to that–what was a GS-14 position at that time, and I'm sure I went through a 13 grade level to get there, but was actually selected for the position that was a GS-14. So it was a good career move for me, and responsible for a broader range of activities than I'd been before.

Storey: Tell me more about Norman Flagg. What was he like as a project manager?

Norman Flagg

Hall: He was technically very competent, and that was the norm back in those days. Usually men–and I say that advisedly–more of the managers by far were men in the top-level positions. These men were usually selected on the basis of their technical background and knowledge, and so when I say that that was their strength, I in no way meant to criticize their human resource ability. I mean, that's just the way it was. They were selected on the basis of their technical ability, and so that was usually their strength.

Mr. Ingles was probably the exception, in that he seemed to be, from everything I could observe, his strength was on the human side and not on the technical side, and Mr. Flagg was, I would say, extremely strong in the technical side. As such, he would be more inclined to have a map or a set of specifications on his desk if you went to see him, than he would have an

employee and talking about how they could better do their job. I mean, that's just where his strength was, was on the technical side. Extremely competent, but also a very nice person.

I liked him, liked to deal with him. He seemed to use Mr. Burger in a good deal of running the shop as far as the human relationships with the employees. Marley Burger seemed to take care of an awful lot of that then, and Mr. Flagg probably paid more attention to the technical side.

Storey: A couple more questions and I think we'll be done for the day.

Hall: Okay.

Storey: Kenny Kaufman at McCook. What was he like?

Kenny Kaufman

Hall: Kenny was technically competent, but did have good human relations skills and public skills. I think at that time most of the people in the Bureau that had those kind of skills were either kind of born with them or developed them on their own. I thought Kenny was a very–and keep in mind Jim Ingles was his boss, and Jim Ingles was a very personable, human-relations-type individual. Kenny seemed to be a pretty good blend of each, I thought. Kenny was a pretty good role model, I thought, in that he seemed to combine some technical background, technical skills, and being able to manage

people. I always admired him. Still do. He's still alive, lives in Denver.

Storey: Kenny Kaufman?

Hall: Yes.

Storey: Good. You mentioned a few moments ago your grade changes as you went through Topeka and Oklahoma City. Could you tell me what your grade structure was before that? What did you come to Reclamation at and so on?

Grade Advances

Hall: My recollection is that I came in as a GS-5, stayed in that, went to a 7 as an inspector, to a Grade 9 while I was inspecting. I went to a Grade 11 when I went to chief inspector. I believe that I moved to Topeka as a GS-11 too. I believe that the move to Topeka was one I requested and was not a promotion, but that I was promoted to a GS-12 while I was in Topeka. Then the opportunity at Oklahoma City, which was a 14, became available, and I was selected for that. I honestly don't remember whether they readvertised it as a 13-14 to make me eligible, or how all that took place. I just know that I was selected for a position that was two grades above where I was, and eventually moved there.

Storey: It seems to me as if the chief inspector's job is a job with a lot of responsibility, yet you were a GS-11.

Hall: Yes.

Storey: Was there a tendency in those days for people to be lower graded?

Hall: The construction business is–now, it could have probably gone either way. That could have probably been an 11, 12, maybe even a 13, but I was fairly young in my career. I'd not been around for a long time, and there was a certain–I'm sure there was a certain feeling that, "Well, this guy's got to serve his time." And also I would guess that Spike Crane, the project manager, was probably a GS-14, and the resident engineers were GS-13s. That's my recollection. So in the total scheme of things, in the construction field, probably 12 was the highest I could have gone to as chief inspector.

Of course, I could see that in the overall construction field as the grades were pretty low, and my own personal desires were to broaden myself, but also that wasn't my desire to stay where the ultimate goal was to be a project construction engineer at GS-14. That's a worthy goal, but it wasn't mine.

Storey: You chose to leave construction.

Hall: Right. And as I remember, I left at a lateral to go to Topeka.

Storey: One last question. I'm on four now. I'm sorry. Spike Crane. Could you tell me about him?

Hall: Yes.

Storey: Some more about him.

Spike Crane

Hall: I was frightened to death of Spike Crane whenever I–Spike Crane was one of the really high-level mucky-mucks that I could see was way up there beyond me. He was a white-haired, very straightforward individual, and was not beyond chewing somebody out at the drop of a hat. And I don't mean by that he was an evil person; it's just the way he was. He'd been around construction. He was very straightforward. Maybe in his mind he wasn't even chewing anybody out, he was just being straightforward and telling you what to do. So I was somewhat intimidated by Spike in the beginning, but as I grew and as I got more confidence and as I learned to be straightforward with Spike, that is, to tell him what was going on, I don't mean being insubordinate to him, but, rather, telling him when he usually wanted to know what the situation was. And when he'd suggest something, if it wouldn't work, he'd usually want you to say, "I don't think that will work so well," and not tell him why. So we had a very good relationship.

But he was of the old school, came up through the construction ranks, and, because of that, a lot of these men were tough men. They'd been around construction all their life. They were tough guys. And he was a tough guy. Even though he was white-headed, he was still tough and he talked tough. So you needed to learn to deal with that as a young engineer and

come to expect that Mr. Crane was going to tell you however Mr. Crane wanted to tell you. [Laughter] He might not say, "Would you mind going and getting that map out of the car?" He might say, "Hall, get that map and get it in here now." And that was it. And you went to get the map. So he was a straightforward, tough-talking and relatively tough individual.

Storey: Okay. Well, I appreciate your coming in and talking to me today, and I'd like to ask you whether or not you're willing for the information contained on these tapes and resulting transcripts to be used by researchers.

Hall: Yes, I am.

Storey: Good. Thank you.

END SIDE 2, TAPE 2. FEBRUARY 21, 1996.
BEGIN SIDE 1, TAPE 1. MARCH 4, 1996.

Storey: This is tape one of an interview by Brit Allan Storey, senior historian of the Bureau of Reclamation, with Joe D. Hall, former deputy commissioner of the Bureau of Reclamation, on March 4, 1996, at about 9:30 in the morning, in Building 67 on the Denver Federal Center. This is tape one.

Last time, I think we had gotten you to the point of being transferred to Oklahoma City. Did you tell me how that transfer came about?

Transferred to Oklahoma City

Hall: Perhaps I did, but I'll just recap it. Norman Flagg, who was called area manager at the Oklahoma City Development Office at that time, announced his retirement. The logical choice to replace Mr. Flagg would have been the assistant area manager, whose name was Marley Berger, B-E-R-G-E-R. But Marley didn't want to be top person at the office, for whatever reasons, for personal reasons, I would suppose. He did not choose to even apply for the job. So they some way opened it up to my level, so I was able to apply. As I recall, I was a GS-12 at the time, up in Kansas, and that was a GS-14 position, and I applied and was selected to take over that position.

Storey: This would have been about, what, twelve years after you came to Reclamation? Ten years?

Hall: Well, it was 1971, so I guess it would have been ten years after I came to Reclamation. That's correct.

Storey: Isn't that a fairly fast rise in the organization?

Hall: I guess it is. I guess it is. I did have some experience before I came to Reclamation. I didn't come right out of college. I had experience with Magnolia Petroleum Company, and then in the homebuilding business, so that gave me another four or five years' experience. But I have to say that things went well for me, and I came up fairly fast to the position of area manager.

Storey: That usually happens, though, because there are

some characteristics that bring folks to the attention of managers, and I'm wondering what you think those might have been.

Leadership Skills

Hall: I think that you're right. Before I say what they might have been, let me comment on, that I think some individuals have leadership characteristics, but they don't have the right exposure. Management just doesn't see them. And I think that to have the right exposure, you have to be somewhat lucky. You have to be in the right place at the right time. Now, if you're at the right place at the right time, and you don't have any leadership characteristics, I suppose that shows, too. But if you are at the right place at the right time, then it certainly helps. I feel for people who have the ability to go on up in the organization and for some reason, the timing's just not right. Either there's not a vacancy or they don't have the right exposure, and it's a very, very difficult balance, because if one tries to create the exposure for themselves, and is always looking for opportunities to be in front of the commissioner or something else, then that becomes very transparent, and it appears that you're being overly aggressive in your career.

I think that the leadership characteristics that might have been seen in me on the part of management, I think, ability to make decisions. I believe that–I still believe, even in a federal agency, there is a great desirability in having someone who can make decisions. It's very

common to have people who try to put them off, but I think somebody who will go in and bite the bullet, make the decisions that are necessary, at his or her level, of course, is seen as a positive trait. I think the ability to communicate. We've already discussed some that I've worked at the ability to communicate. It's not something that comes naturally to everyone, and a lot of aspects of it didn't come naturally to me. You know, public presentations were very, very hard for me and I had to work at it, through Toastmasters and other activities. But I think the ability to communicate helped. And thirdly, I believe the attitude of trying to work out solutions, trying to be a part of the solutions rather than a part of the problem. I would say those three characteristics are–if I were guessing what management might have seen in me. I don't think it was beauty. (laughter)

Storey: (laughter) But I think there is a characteristic of people in an organization like Reclamation. They tend to picked out a little early. I don't mean prematurely. I mean that they come to the agency, and within a few years they have been identified, and they begin to move up through the ranks. Do you agree with that?

Identifying Leadership Qualities in Reclamation

Hall: I do agree. And this will sound a little "genderish," I understand, but we used to refer to "fair-haired boys" as those individuals that for some reason someone had selected, that had been identified as having the potential of going on up in leadership ranks. It is not as glorious

as it might sound, because once you are identified, man or woman, if you're identified as having leadership characteristics, then you do have the exposure of top management, and you have the eye of top management. And because you have the eye of top management, you have the opportunity to succeed, but you also have to opportunity to fail.

I would recall that one individual, who I shall not name for obvious reasons, but was identified as having a great potential, and we sent him back to Washington for some experience at the Washington level, and he spent a great deal of his time trying to sleep with women in the Office of the Commissioner and the Assistant Secretary's Office, including the commissioner's own secretary. Now, I just use that to say that we had our eye on this guy, and he blew it. He blew it. It was inappropriate. It was not the thing he needed to do, and it kind of showed to the then commissioner that this was not an individual that we wanted to advance, and he pretty much sat there the rest of his career. So to be identified as having positive leadership characteristics is, in the main, a good thing to do, but there is a down side to it, in that, one, management is able to observe that person, warts and all, and they have the opportunity to fail as well as succeed.

Storey: When did you become aware that management might be watching you, or did you?

Hall: You know, I don't really think that I was aware until I was selected to go to Oklahoma City. I

was greatly surprised when I was selected to take that position. As we recalled, I did ask for broadening experiences as I came up, in not only different construction experiences, but then asked to go to Topeka. Not specifically Topeka. I asked for a planning opportunity, and the then regional director, Leon Hill, selected me to go to Topeka to help in that statewide water planning effort. But that was fine. That was in response to my request.

And then I know Mr. Flagg in Oklahoma City thought highly of me, and I thought that Leon Hill did. Even though he was gruff in his demeanor, I think he liked me. I think Jim Ingles, the regional director at Denver at that time, liked me. And Ken Kaufman [phonetic], who was at McCook, Nebraska. But when the opportunity came up, I was surprised that Marley did not take the job, and then they opened it up some way to make it available for me to apply for it. I applied with no expectations, and I was probably the most surprised person in the Bureau of Reclamation when I was selected to take that position. Then I looked at it and thought, "Well, somebody likes me." But I was never aware–if I had been identified before that as having leadership opportunities, and falling into the category of a "fair-haired boy," I did not know it. I was not aware of it.

Storey: By that point had you decided you didn't want to go back to construction? How were you thinking about construction as a career at that point?

Did Not Want to Return to Construction

Hall: To the best of my recollection, I probably was beginning to realize that the era of a lot of construction for the Bureau of Reclamation was coming to a close. I probably did not envision going back to construction. The reason I'm pretty sure of that, when I was in Topeka, I pondered going to law school, going back to school, and getting a law degree. They had a very fine institution, Washburn University, there. And I thought how good it would be, not only from a career standpoint, but also just the knowledge and ability to deal with things, if one could combine my engineering degree and background with a law degree, because I think I could see, coming down the pike, that the Bureau of Reclamation was going to take on a different role than it had historically. The only reason I didn't go to law school was finances, and young children. I had a family to support, and we had chosen, my family and I had opted for my wife to stay home. That was a joint decision, including her, as long as we could make it, that she would stay at home and try to raise the kids. Financially, it would just be very difficult for us to carve out the–either me withdraw from my occupation to go to law school or to do enough night courses and so forth would have been such a drag on the family, to be gone all the time, that we decided not to go to law school. But I say all that to answer the question. I think I had pretty well decided that going back into construction was not the field that I would choose to follow.

Storey: What were the challenges that you had in Oklahoma then?

Challenges in Oklahoma

Hall: Oklahoma was–keep in mind the era. To answer the question, you have to understand that in 1971, we still thought we were going to be building things. We still thought we were going to be moving water around. We didn't think that would be our prime–we thought maybe the Hoover Dams and Glen Canyon Dams of the world, the construction of that type of facilities were over, but we were still faced with that we had water in some places and a lack of water in other places, even within a given state.

Similar to Kansas, Oklahoma had a very similar situation. They had average rainfall, as I remember, ranging from something like twelve inches up in the panhandle of Oklahoma, down to thirty-eight inches, or maybe forty inches in the southeastern part of the state. Had a lot of water in some parts of the state, a real lack of water in other parts of the state. The Bureau had a number of activities, a number of projects, already in Oklahoma, so part of the charge was to administer those projects already there. But another very real part of it was to try to see if we could, in cooperation with others–the state, the Corps of Engineers, other entities operating in Oklahoma–could bring about a movement of that water from the water surplus area to the water short area of the state.

A real both champion and opponent was, at

that time, Senator Henry Bellmon. Senator Bellmon came into my office not long after I took over the job, and here he is, a U.S. Senator who did not call me to his office, but he came to my office, as I remember, either unannounced, or his office called and said, "He's on the way over." He was relatively unannounced. (laughter) And wanted to know what we were doing and why we were dragging our feet, and why we couldn't get this water transfer scheme done. Senator Bellmon turned out to be a very enthusiastic and capable ally of the Bureau of Reclamation and of mine. My first meeting with him, he was even gruffer than Leon Hill, and told me that I needed to get busy and get this transfer done, that he had parts of the state that were short of water, and we needed to get busy on that. And so Senator Bellmon was a real advocate for the transfer.

Storey: Was there a name for the project, or was it a group of projects, or what was going on?

An Oklahoma State Water Plan

Hall: It was called something like the State Water Plan or State Water Transfer Effort. It had a state connotation, whatever it was called, probably State Water Plan. And it was a big deal. The state legislature would debate it, and we would have public hearings all over the state. I think in one quarter of one year, we had like twenty public hearings all over the state, to try to get this done. There was acceptance of the idea. There was even acceptance in the area where the water would be transferred out of, but

it was a terribly expensive proposition, and when one boils it all down, what you're basically doing is transferring water for agriculture, and agriculture is, as usual, not able to pay its own way. So that means somebody else then has to pay for it. That means, in that particular project, it would have been an energy shortage activity. That is, it would have required a great deal more energy to pump the water up to the water-short part of the state, than we would have been able to generate energy down where we had the water. We would not have had power revenues to help offset the agricultural shortfall.

So that means that either the state legislature or the federal government would have had to come up with the money, and it just wasn't doable. It just was not doable. Oklahoma was short of money, as most states historically have been and continue to be, and they just could not see their way clear to do that. So the decision was basically made on a financial basis.

Storey: What was Senator Bellmon thinking?

Hall: Senator Bellmon, I think, was finally convinced, as were the rest of us, that it was just too expensive. It just cost too much to move the water, and there was just no way, no cheap way, to do it. You take water from one–if you get to go downhill, that's one thing, but if you're pumping the water uphill, then you're not only talking about capital construction cost, but you're talking about year after year after year, how much it costs to pump that water up there, it just, in the total scheme of things, was not and

is not doable.

Storey: But at the same time, it's tough talking to the state legislature, and the senators, in such a way that they remain friends, right?

Hall: Yes.

Storey: I mean, friends of Reclamation.

Keeping Good Relations with State Representatives

Hall: Yes. Yes, we had many heated discussions, like with the state representatives, and they might have initially fallen on either side of the argument. You might have people that, from the inception of the idea, felt that it was a bad idea because they didn't want water moved from one part of the state to the other, let's say, or they felt like it might have environmental consequences. Or you might have some that felt like it should be done, no matter, that the western part of the state needed more water. But I have to say, most of them wanted to know the answers. They wanted us to get to the answer. They wanted to know how much it was going to cost, and they wanted to know what the environmental consequences were, and they wanted to know, if you transported water out of one part of the state, would it work to their detriment.

So although there were some who had a preconceived notion, you know, they already had the answer and they knew how they were going to vote, probably the majority was really

looking for the answers, and that was the reason for encouraging the Bureau to expedite the study, and for Senator Bellmon beating on me and telling me to hurry up. I think when the answers became available, I think when it got far enough along that we were able to see the cost, see what the operating expenses would be, see what the impacts would be, I believe most were still friends of Reclamation. It was not a notion of, "Well, let's kill the messenger," but the Bureau of Reclamation had done a good job of evaluating this and leading this effort, but the answer is no, but we were still friends.

Storey: What kinds of–well, let's see, maybe I ought to phrase this differently. This is the first time, I guess, where you really begin to see political pressure being brought to bear and that kind of thing. What sort of principles do you use to deal with those kinds of things, or am I making an incorrect assumption?

Dealing with Political Pressure

Hall: No, it's pretty correct. I got some glimpse of it at Topeka. I sat in a sort of unique position for a GS-12, in that–I may have even been an 11 when I moved up there, and then I was promoted to a 12. I think that's the case. Because I was "our man" in Topeka, I got to associate with, of course, the agency heads, like Keith Crowsey [phonetic] of the Kansas Water Resources Board, and I got to even testify at state hearings on their potential state water plan, and deal with a lot of other federal agencies, and pressures were being brought to bear upon the

state.

So I started getting a glimpse of it in Kansas, so maybe that was helping me to prepare for it. But surely in Oklahoma, a state faced with the transition, that is, the transition of truly becoming water short in some areas, where they in fact might not be able to continue some elements of agriculture, a lot of pressures, a lot of issues from the "haves" and "have nots." A lot of pressures from those with financial, heavy fiscal interest, concerned with the cost, the environmental interest starting to come to bear, and many of their views were, "Well, why should we worry? If we stop irrigating, we have plenty of food. Let's don't worry about that."

So in answer to your question about how you deal with those competing interests, is, you know, I always thought one thing was to really listen, really listen to what they're saying. Historically, the Bureau of Reclamation, we maybe listened and maybe didn't to opponents. We were strong enough, back in our glory years, where it didn't really matter. We listened to some people, but a lot of them, you know, we sort of shrugged it off and went on. That was not the era we were in. If we were to bring about any type of additional development, it would not be with unanimous agreement, but surely with some type of consensus of the main parties involved–how was the best way to do that? So you had to begin with really listening to people, and really doing all you could to accommodate their views. And we did all sorts of things, I remember. Even though we didn't

build that particular–this statewide water plan, other things spawned from those discussions. I can remember going–Brit, I don't remember if we've talked about this or not. We may have. Taking environmental interest, the development interest, newspaper reporters and others on an overnight trip.

Storey: To Bugaboo Canyon?

Hall: Bugaboo Canyon. Have we've talked about that?

Storey: You mentioned it, but tell me more about it.

Bugaboo Canyon

Hall: Well, it was really an idea that came about primarily from the local people. Now, local people thought, you know, there was great–this was in relation to building, the potential of building, McGee Creek Reservoir, that was eventually built and is operating today. But in its formative stages, there were an awful lot of environmental concerns, that we were going to inundate an pristine area, and how devastating that could be. A lot of the local people said, "You know, a lot of these people are from Tulsa and Oklahoma City and people that have never seen the area, and we should go look at it." Because it's not all that–I don't know how pristine it is, but you can't even get around down there. We don't even have access to it. It's like a thicket. And so we did.

Those of us in leadership positions were able

to put together a trip, and we got a whole bunch of four-wheel-drive vehicles, and met at some little town down in southern Oklahoma, the coffee shop or somewhere, and headed out one morning, and got down in there and toured the area as best we could. And in fact, you could hardly get around. The roads down in there, they were almost grown over. And so we'd get out and we'd walk. Then in the evening, we had fish. We had a fish fry, with accompanying refreshments, and it was a nice evening. It was literally sitting around the campfire with those who would propose to build the project and those who would be concerned with it, from an environmental perspective or whatever. A number of the ideas that came out from that were incorporated in the project. I mean, it was clear that those of the environmental interest said, "Well, you know, a lake here might not be that bad, if it were done well, and if we had some elements of the lake where it was protected. Maybe we could have nonmotorized craft in some arms of the lake, and other activities to help the access and get out there, and at the same time, enjoy some of the area."

But it was, I think, more than anything, a vehicle that just got people together that were so on opposite sides of that issue, and many of them didn't even understand the concerns of the other. And once that dialogue was begun, then I really believe that was the turning point in that whole project. I believe that when the project was finally authorized, built, that it was done so with the concurrence and consensus of nearly all the principal interests in that project. It was

probably a textbook turning point, and I would like to take credit for the idea of the trip to Bugaboo Canyon, but, in truth, it was not my idea. It was the local people. It was the people down at the domino parlor, or something, said, "Why don't we just bring people down here, get them together and let them see the area."

Storey: What was the name of the project, do you remember?

Hall: McGee Creek.

Storey: Oh, this is McGee Creek?

Hall: That's McGee Creek, yeah.

Storey: Which has subsequently been built.

Hall: Yes, it has. Yeah. I understand it's a fine operating project, and it is one of the principal water supplies for the city of Oklahoma City, and Oklahoma City has either paid it off early or is in the process of negotiating that payoff. I honestly don't know what, but it's one of those that is probably appropriate for an early payout by the supporting entity, and, I believe, Oklahoma City. And they may have already done so, may have already worked out the contract to pay it off.

Storey: Do you remember any other specific projects?

Proposed Projects in Oklahoma

Hall: I remember some that didn't go. (laughter)

Storey: Tell me about them.

Hall: There were some over at–I remember the Wilburton Project, W-I-L-B-U-R-T-O-N, over in a little bit more eastern area of the state than we usually deal in. The Corps of Engineers typically operated in the eastern part of the state. That was not so much geographical as it was the nature of the projects. Because they had a lot of water, the projects over in the eastern part were either flood control or navigation oriented, or maybe they were both, so that fell into the Corps of Engineers' bailiwick.

Wilburton—there were several smaller cities around there that were interested in a more stable water supply, so they asked the Bureau of Reclamation to be involved in some evaluations.

END SIDE 1, TAPE 1. MARCH 4, 1996.
BEGIN SIDE 2, TAPE 1. MARCH 4, 1996.

Storey: You were talking about Wilburton, I think, and the nature of the project.

Hall: Yes. Because the people down in that area were interested in a more stable water supply, even though they had a lot of water in the rivers, they didn't have storage for that water. And even when you have an abundance of water, if you don't have some storage, you can run into problems. They worked with us and we did an evaluation, and there was a proposed project down there that got to the place of proposal, but in the final analysis, there was, again, it would have been a number of smaller cities, smaller

towns, that would have had to pay off the bulk of the project, and the cost of the water was just too expensive for them, so it did not go. There were environmental concerns and issues with that one as well, but I think the turning point was on the cost of the water.

Other projects along the way. I remember one of them that was called the Otoe Project, O-T-O-E. It was called that because it was sort of in the middle of the Otoe Tribe's lands. I remember a public meeting. Have we talked about this?

Storey: No, we have not.

The Otoe Project

Hall: Okay. I don't know how many public meetings and hearings I've been to in my life, but more than enough, I think. But this one, we went, and the then U.S. Senator Henry Bellmon, and I were traveling together, doing–I think we had a couple more public meetings that day in different places, and Senator Bellmon and I arrived at a town in Oklahoma, maybe Guthrie. Maybe it was Guthrie. We had a meeting scheduled for the courthouse, in early evening, maybe 6:30 or 7:00 o'clock. When we got to the courthouse, we were late. Senator Bellmon was a U.S. Senator and he was a busy man, and quite often was late, and I was with him, so we arrived late. Well, when we got there, the room was filled and the staircase was filled, and the people were flowing out to the courthouse steps, literally out on the steps.

Well, some quick arrangements were made, and we moved to a large building on the fairgrounds. I think it was called the Women's Building or something like that, at the fairgrounds. Chairs were set up, and all these people were waiting all this time to get suitable accommodations. Well, there were a lot of the people there, but an awful lot of the people there were from the Otoe Nation. Senator Bellmon made a brief introductory remark, and then turned it over to the federal representative, Joe Hall. So from that point in the evening on, I was the target of just about everything, all sorts. (laughter)

So Mr. Hall became the federal government, for all practical purposes. The Indians, the Otoes, had as their spokesman, he had an Indian name, but he was also an attorney, by the name of Kenneth Black, and Mr. Black went about tracing the history of the Otoe Nation. I may not recall this exactly right. In fact, I know I won't, but the thought is the same. He told of how they were first in North Dakota, and then some things happened with land grants and the like, and they moved the tribe, the federal government moved them to Nebraska. And then there were some other changes, where they finally moved them to Oklahoma, where they had found a home. And then he changed the tone of his voice, and raised his voice and raised his hands over his head, and I guess that was the signal for all the other Indians to stand up. And he would say, "Mr. Hall, you chased us out of North Dakota," and the Indians would kind of chant. They'd go, "Ho, ho, ho, ho." "Mr. Hall, you chased us out

of Nebraska. Mr. Hall, you have found us again," to which there was this huge cheer of Indians, and they broke into this chant, and sort of a war–I could just envision them putting paint on their faces, because they were chanting and almost dancing, and by then I had become the object of all the opposition. But they finally settled down and we went on with the hearing, and finally adjourned the hearing.

The project was probably not feasible, but the Indian opposition to it on Indian lands would have likely been the death knell to that project anyway. It likely would not have gone with that type of opposition–although, although, at that meeting, although it was never discussed objectively, there was too much opposition, too much emotion, there would have been financial benefits for the Indian nation, and even some potential developments around the lake, and some things like that, concessions that could have been structured. The Otoe Nation, at that time, primarily the leadership had come out opposed to it before even finding out what it might do for them, so it never really got that far. But I thought Mr. Black's performance was a jewel, and he stirred up the crowd very well. I remember thinking, when I got out of there that night, "I'm kind of glad I got out of there alive." (laughter)

Storey: Well, I'm sure you've dealt with other Indian groups, and you know that it's a much different experience.

Dealing with Indian Tribes

Hall: It is, it is. And it depends a great deal on the leadership of them. Indians, like a lot of other elements of our society, no longer look exclusively to their organized leadership to make the decisions. My experience is now that you have some younger individuals in the tribes that sometimes want these things aired, and want to be heard, and want to have a voice in the decision-making, when even back that–no further back than that, that was some time in the time frame from 1971 to 1975, what, twenty, twenty-five years ago at the most, the bulk of the tribe would simply go along with whatever the leadership said, and the leadership said, "This potential reservoir is a bad deal." So they were all there, all opposed. It was not a matter of, "Well, let's discuss this. Let's hear this out. Let's see what's in it for us." It was, "The leadership says it's a bad deal, so it's a bad deal."

Times have changed in the Indian–or my observation is that they've changed. A lot of dealings with the Indians haven't changed. They work on a different time schedule. The meetings start when they start, and they get over when they're over. We might schedule a meeting with them as this session, from 9:30 to 11:30. It might start at 9:30 and it might start at 11:30. It might run for a half hour or it might run for six hours. They work on a different time schedule.

Storey: Yes, they do. Remember any other projects while you were in Oklahoma?

Hall: No. An awful lot of the dealings were with

existing projects, trying to get the most we could. Oklahoma probably, at that time, had a half or dozen or more good operating projects throughout the state, for both agricultural and municipal purposes. Reclamation had a good reputation in Oklahoma. They've done a good job of developing these projects, had good people at them, operating them. But in my role, I was involved in the operation of the projects as well, and a lot of them were day-to-day problems of trying to get the most we could out of those existing projects.

Storey: So the Oklahoma City office had maybe how many people working for it?

Oklahoma City Office

Hall: Maybe thirty-five. Decisions were made, though, probably in about 1974, that we would substantially reduce those offices. Albeit we had some contact with the operating projects, that didn't require a lot of people. I mean, you had people down there actually turning the gates and all that, so our primary role was one of planning, as it was in the Texas Development Office. They've got a lot of people down there, probably more than in Oklahoma City. Fairly big offices from a planning standpoint.

The decision was made in the Bureau to consolidate a lot of that planning expertise in the regional offices. What was known then as development offices would go down to more liaison activities. So we would go, over the course of a year or so, from some thirty-five

people down to three people. That's when the decision was made about me, that I needed to be thinking of where I was to go, that although it would be nice, and they understood that I liked Oklahoma, my family liked it, I had junior high and senior high children, that the commissioner suggested to me that he would not be comfortable with me staying there, that he would want me to go to some other position, and he would want me to be on the lookout for that, and hopefully one that I could move up, but he would recognize that the Oklahoma City Office was going down in size, and that his desire would be that I would move to some other location.

Storey: This would be Gil Stamm or Ellis Armstrong?[20]

Hall: That's Gil Stamm, yeah. So in 1975, the opportunity–there were actually two opportunities available. Commissioner Stamm said that the regional director's job was open in Denver. Mr. Ingles had retired. And there was an assistant commissioner in Washington, D.C. He basically gave me the option, which one would I like. Well, I thought about that about thirty seconds, and said I would prefer to be regional director. I always did think that regional director was the best job in the Bureau with perhaps project manager, depending upon what project it is, as equal to it, but I thought regional director was probably my career goal, where I had wanted to go. So I went to the–are

20. Ellis L. Armstrong was commissioner of the Bureau of Reclamation under the administration of President Richard Nixon, 1969-1973.

we ready to talk about the move to Denver?

Storey: I do have a few more questions around Oklahoma City.

Hall: Okay, that's fine.

Storey: But you did go ahead and move?

Moving from Oklahoma City

Hall: Yes, yes, much to the chagrin of my family. They really liked Oklahoma. As I say, I had a seventh grader and an eleventh grader. They were well entrenched with their friends, they liked Oklahoma. We'd been there long enough where it was just a difficult move. When we loaded up the car to finally move the cars, I think there was considerable bargaining going on if anybody was going to ride with me or not. (laughter) I was not the most popular person for moving my family from Oklahoma to Denver. Of course, that's not unusual in anyone's career, at least it was not back then, to reach a position where one simply had to move. I suppose, you know, I could have simply said, "No, I'm not moving," and stayed, and I would guess that eventually that position was downgraded, since it was no longer a big office and finally became a liaison-type activity. I don't know, if I stayed and if necessary, be downgraded, but at that time, I was not prepared to do that, and so it was a matter of where was I going to move to.

Storey: How long did it take your family to adjust?

Hall: We moved in August of 1975. Within a month, probably, you know, children adjust pretty readily, and when we moved here, immediately our children had some association in our church, and they established a few friends. And then, of course, the first day of school, they start getting other acquaintances, that some of them become friends. So that was not a long, drawn-out proposition, but the actual thought of moving and the move is quite painful.

But the era in which I–I want to say "grew up"–early in my career, that was what one expected to do. One expected to move. That's what you did. And when opportunities–and we had sort of a traditional family, in the sense that I worked, I was the breadwinner for the family. My wife, by mutual consent, stayed home. Later in life, later, when the kids were gone, she did other things as well. But at that point in our lives, she stayed home. And you expected to move. You expected to go. If you had an opportunity, you basically went and did it. And it was an opportunity to either go to Denver, or to go to D.C., and I opted for Denver. But the family adjusted okay. It was not that tragic.

Storey: Tell me about when you met Stamm and what your relationship was to him, and what he was like as a manager.

Gil Stamm

Hall: Gil Stamm. Exposure is a funny thing. I probably became–I don't know where Gil Stamm first became aware of me. It probably,

you know, unlike a lot of other people early in their career, they probably–they may or may not know who the commissioner is. I'm not sure I knew who the commissioner was when I was beating around out on construction. I don't think I was stupid, but it just was not in my sphere of environment. I don't even know if we had the commissioner's picture on the wall, like we do now, around all the Bureau offices.

My sphere of involvement was the project. I thought the project manager, Spike Crane was the end of the world, and then I finally got to know there was a regional director by the name of Leon Hill, and maybe I heard the name of the commissioner, but it was not even in my realm of thinking as to who the commissioner was, or whether he was aware of me or not. As you go on up in different positions, I'm sure at some point I became aware who the commissioner was, but I don't really know when the commissioner became aware of me, except that one of the–I think maybe the first what was called O-D courses, Organizational Development. Do you know if they still have those? I don't know if they still do or not.

Storey: I don't know.

Hall: They used to bring in people. They used to select people to go to these activities, and it was a leadership training opportunity, where you were formed into different teams, and you tried to do different things, and it was designed to measure not only what you could accomplish, but how you got along with the group, and how

you worked with other people, and all that sort of thing. And I'm sure that the first ones that–I think I was in the first course. Also in that group were a number of people from the Commissioner's Office. I said that like a lot; there were maybe three people from the Commissioner's Office. I believe that those people were favorably impressed with me, and I believe that they communicated some of that to Commissioner Stamm. That may have been the first time he was really aware of Joe Hall.

It turned out to be kind of in a leadership role in that organizational development. It was a live-in-type thing where you were there for two weeks, or whatever it was, but you'd strike up some pretty good friendships. And I got some feedback later from him that he'd gotten some reports from his people who were there, about me, and some of the potential that they thought I might have. So somewhere along the line, I became familiar with Commissioner Stamm, and then as we were involved in that activity in Oklahoma, I was involved, then I was in a sort of leadership position and Commissioner Stamm and I would visit about different things. The opportunity to transfer water was intriguing to him. The commissioner would call and wonder how things were getting along, and so our association became closer.

He was an individual that you always felt like everything you told him, he already knew. He was a very knowledgeable career employee, the last commissioner to come out of career ranks. He knew the Bureau of Reclamation

upside down and crossways. He was fair on the Hill. He was not a real glad-hander, but he was pretty good at keeping people informed, and had his pulse on the organization. He felt like that this opportunity in Oklahoma was one that really we should pursue, and maybe it would turn out, so we communicated on it regularly. And then as things came about, by the time it was time for me to move, it was clear that it was not going to happen, at least in the near future. So he was ready for me to move on to something else.

Storey: The Organizational Development course was while you were still at Topeka, or maybe in Texas?

Hall: No, it was either in Topeka or the early stages of Oklahoma. I'm going to guess Topeka. Probably I was still in Topeka at that time.

Storey: What was he like personally? All I know about him is that I've seen pictures of him, and he always looks like he's doing this to the pictures.

Hall: Looking down?

Storey: Yes.

Hall: He was, to many, a somewhat standoffish or distant individual. He was not a warm, outgoing personality. When you went to his office, he didn't give you a hug. He might step around the desk and shake hands with you. But that was, I think, just his nature. I think he was just a very intense, knowledgeable individual whose

interests and inclinations were not in the human sensitivity side.

Organizational Development

You know, I guess the Organizational Development activity was when the Bureau started paying attention to the human side. I'm sure there was some interest in it before, but it was pretty much a technical organization, and the people who rose to the top were pretty much the people who knew the most about what we did. I think in that era, some twenty-five years ago, the Bureau started recognizing that there was a balance here, and started recognizing the one-nine or nine-one type individuals, that we do take on different characteristics, and that it does take, for today's manager, some balance of those characteristics. It's not just a matter of what you accomplish and how you get it done, but what about the people, and how do you relate to them.

Now, Gil could be a very delightful person to go have dinner with, and he had some natural talents as far as being a nice guy, but he was pretty much a task-oriented individual. And in fairness to Gil Stamm or Leon Hill and other people I talk about, one has to recognize the time frame in which they lived and operated. That was not the basis of their success or failure; it was what they got done. And it was not whether they patted somebody on the back and said, "You're doing a nice job," or not. What they did in that arena was simply because of their own talents. It had nothing to do with

training. To my knowledge, there was no training in the human arena, and I believe the O-D seminars were our first crack at that. I remember some feedback that I gave some people back from the O-D seminar, the first O-D seminar, and some of the leadership, they just shrugged their shoulders. "That's nice. Went down there to a real touchy-feely thing. Okay, what's that got to do with production? Let's get back to work." (laughter)

Storey: You mentioned a topic that I'm particularly interested in. You mentioned, I think in '74 that they began to move the planning function from the project offices to the regional offices.

Moving Reclamation's Planning Functions from Project Offices to Regional Offices

Hall: Yes.

Storey: I had a person say to me in an oral history interview recently that Reclamation killed its planning function, and, to them, this move from the project to the region and then ultimately to Denver in '88 was symptomatic of that. What do you think about that?

Hall: I think the individual may be right from a practical standpoint, because when one was out there, close to the scene, one could see what was needed. One visited with the state regularly. One visited the people at Bugaboo Canyon, and you knew that there was a real difference in water supply in one part of the state to the other, and you kind of knew the people in the state

legislature, and you kind of work at it all the time. I don't believe the intent at consolidation or centralization was–I think it was a practical one, a realization that we're not developing many projects, we can't afford to have all these planners out here at all these places, let's consolidate them and let's work on it from a regional office standpoint. I think the practical side was, once you got into the regional office, you were removed from those day-to-day activities, plus, at a regional office, then you got involved in more bureaucracy and more hierarchy and more structured activity and less freedom to go out and do things.

So the individual may have been right from a practical standpoint. I don't believe that it was a conscious decision that we're not going to do any more planning. I think it was a practical one of saying, "We just can't afford to have planners out there all the time. We can't afford to have thirty-five people at Oklahoma City and fifty at Austin, and however many were at New Mexico. Let's bring them in. We can do it with a third of the people." But from the practical standpoint, I believe it was the beginning of the end, as far as planning for future projects.

Storey: Tell me about your regional directorship then.

Becoming Regional Director

Hall: Okay. Fun time. Fun time in my life. I moved to the regional directorship in 1975. I was viewed as very young. I think I was forty-two, and at that time, that was pretty young for a

regional director.

Moved my family to Denver. My wife did a wonderful job in looking for a house here. She just literally took a compass and drew a circle around the Federal Center, and told the realtors that she was working with, "Here's the deal. He's going to be real busy, and he just doesn't need to drive a long way in traffic every day." They'd bring her all these houses outside, or Littleton, or wherever it might be, and she'd say, "There's something you don't understand about this. What is it you don't understand about this?" (laughter)

END SIDE 2, TAPE 1. MARCH 4, 1996.
BEGIN SIDE 1, TAPE 2. MARCH 4, 1996.

Storey: This is tape two of an interview by Brit Storey, with Joe D. Hall, on March 4, 1996.

Your wife had drawn this circle, and the realtors kept going outside it.

Hall: Yeah, they'd find these things, these real opportunities, and she would say, "No, we're not going to do that. If we can find a house that we can afford, we're going to locate near the Federal Center." And so we found a house that we could afford, which was a struggle, because we came to a much higher market than Oklahoma City, much higher. In the total scheme of things, I took a pay cut, because I went from a GS-14 to a 15 to take the regional director's job, but there was no income tax in Oklahoma, and what I considered to be a high income tax here.

At any rate, by the time I got the raise in pay, I've got less money to move into a much higher real estate market, and my wife did a good job of finding us a house that we could scrimp by and make house payments on, located just a couple of miles from the Federal Center, if that far. No, it's within a mile, I'm sure.

So moved to Denver, took over the job as regional director. Was accepted. You know, one moves in as regional director. As we've talked about, I came up fairly quickly in my career, and moved into a very desirable position of being regional director. A lot of one's success in anything depends on the people that he has working with him, and the key people in the Region, both at the project offices and in the regional headquarters, were very accepting of me, and that's critical, I think. I just can't imagine a person having any success that comes in and for whatever reason–I don't mean that they necessarily–I think most of them liked me, but I'm not talking about liking me. I'm talking about accepting me and working with me. I think that they had respect for what I was trying to do, and I had respect for them, and we had a good staff. A lot of them had been here for a long time, and so it would have been very easy for them not to have really accepted a new regional director, but have gone about doing their own things.

But my experience as regional director was delightful. It was one of the best positions I ever had. Enjoyed it. We continued to operate a number of projects within this Region, and then,

of course, by moving to regional director, I moved into the top echelon of management and became familiar and worked with all the other regional directors, assistant commissioners, as well as the commissioner.

Storey: Was there an increase in political pressure, or a decrease? How did that work out?

Increase in Political Pressure becoming Regional Director

Hall: I think that there was an increase, from this standpoint. I actually think that there may be less day-to-day contact with state legislators, congressmen, senators, than there is out at what we called an area manager's level, because that was a daily activity. We were trying to bring some things about.

So I think that probably there was a buffer then for me as regional director, in that many of the state representatives, many of the congresspersons, would go first to an area manager at Grand Island or a project manager at Casper, Wyoming, first, and then those individuals would report to me that senator so-and-so is on the warpath about such and such. So I don't think it's from the volume of contacts that you get the pressure. More is filtered through staff and project offices, but I think the increased pressure is this, that you then get them when something has gone wrong, when whatever, something is not happening, the Bureau is not conducting itself properly in this particular congressman's eyes, and the project is

not being developed, or is being developed and shouldn't be, or whatever has gone wrong. And then you are exposed to governors' offices, congresspersons' offices, occasionally state legislative people, but not so much. Usually, they're on the federal level when you get to be regional director. And, of course, you have more states involved. Just the numbers of states that you're dealing with is increased. So I think it's, if anything, less day-to-day contact with those political individuals, but whenever they get to you, it's more severe. So I think it's more intense. I think something is wrong, is the reason they're coming to you. If they'd been able to work out whatever the issue might be with the project manager, they would do that.

Now, I was always–and I know we've talked about this a little bit–I was always, I thought, pretty good at working hard at putting people in the right court. And that is, people will call the commissioner of Reclamation directly, if the commissioner lets them get away with it. Usually, the first question I ask people, like the constituency, let's just say that the president of an irrigation district in Kansas called me. I would do the normal formalities, and then they would start talking about the issue. The first question I usually would ask them is, "Have you talked to the project manager about this issue?" Now, that particular call, it might not have made a difference, and I might have said, "Well, I will follow up with the project manager and see what he has to say about this." But a few times, they learn what you're going to ask them. They know not to call me until they've talked to the project

manager. If they call and then I ask them that question, they say, "Yes, I've talked to him and he's told me, no, that he doesn't think we should do this activity," or whatever, that was fine. They've gone through what they should do.

But people knew my inclination to ask them that question, and so they eventually learned that they're not going to be able to jump over the project manager's head and come directly to me, because that was the first call I was going to make, is to ask the project manager, and I would tell them so. And they eventually, you know, they learned that. So I always felt that was very critical, and I always encouraged the commissioners that I work for to do the same thing, simply ask them, "Have you talked to your regional director out there about this issue?" It's sort of Management 101, but is one that some people never learn.

Storey: Yes. They let themselves be part of the problem.

Hall: Well, they do, and it is human nature. One is going to go as high in the organization as you'll let them go. I mean, if you want to talk about the historical program, and you could go directly

to Austin Burke[21] or to Eluid Martinez[22], that's where people are going to go. And if they really want to talk about this, they should talk first to Brit Storey, and say, "What's going on?" and if they have a problem with it, discuss it with Brit Storey, and that's the way business ought to work, but sometimes it gets out of kilter. I worked hard at that.

Storey: Do you remember any specific examples where politicians would come to you and need to deal with something?

Congresswoman Virginia Smith

Hall: Oh, yes. One of my champion congresspersons was a congresswoman from Nebraska, by the name of Virginia Smith. Virginia Smith has since retired; to my knowledge, is still alive. But she ran for and was elected to Congress in–she was not a young woman. She may have

21. J. Austin Burke was the Bureau of Reclamation's assistant commissioner for Program, Budget and Liaison (1991-1994) and named director of Program Analysis in 1995. Mr. Burke also participated in Reclamation's oral history program. See, J. Austin Burke, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Story, senior historian, Bureau of Reclamation, from1993 to 1997, in Denver, Colorado, edited by Brit Allan Storey, 2008, www.usbr.gov/history/oralhist.html.

22. Eluid L. Martinez was commissioner of the Bureau of Reclamation under the administration of President Bill Clinton, 1995-2001. Mr. Martinez also participated in Reclamation's oral history program. See Eluid L. Martinez, *Oral History Interview*, Transcript of tape recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, during 1996-2001, in Washington, D.C. and Santa Fe, New Mexico, edited by Brit Allan Storey, 2008, www.usbr.gov/history/oralhist.html.

been fifty-five or so when she was first elected to Congress, and served for some twenty years. I always admired Mrs. Smith and I admired her husband. Her husband, just overnight, became the accompanying spouse, when he had always been the breadwinner of the family and had had a sort of traditional family, with Mrs. Smith basically being a home person. But they got along, and this time, about the time when Mr. Smith was starting to back away from farming and other things that he was doing, and Mrs. Smith ran for office, and lo and behold, was elected.

Well, here is Mr. Smith going to Washington with her, and other places, as the accompanying spouse, and I always thought he handled that so graciously, and I admired him as well. Keeping in mind that when she was elected, there's been a lot of changes in these past thirty years or so since she was first elected, that for a man to change overnight from being the "head of the family" to the "accompanying spouse" was maybe a difficult transition, but he handled it so well, and he was gracious and he would, whatever, at a cocktail reception, he would not try to take the limelight but would, you know, but to fill the role that he had.

Mrs. Smith was one of the most powerful, powerful, from an influencing standpoint, individuals I've ever seen. Mrs. Smith would call me and she had done her homework. She always had. She had talked with the people at the office in Grand Island. She knew what the situation was. Let's say that she was trying to

get increased funding for the construction of the Farwell Project in Nebraska.[23] I don't know if I mentioned, she was from the state of Nebraska.

Storey: Yes, you did.

Hall: She had already talked to the Grand Island Office. She already knew that the amount in the budget had been reduced significantly, and maybe the construction funds were only twelve million, whenever there was to have been thirty million in there. And Mrs. Smith was so influential. Never, I don't recall her ever really raising her voice, but she was penetrating and persevering. She would simply stay on an issue so long as she thought there was anything she could do about that, and then she would talk to me, and then she would call the Chairman of the Appropriations Committee, and then she would ask me to come back, and we would together go see the commissioner of Reclamation. "I'd like to have you with me when I go over and talk to him." And she would end up getting the appropriations generally put back in, that she thought she should have. (laughter) She seldom lost.

And she was a very kindly–and I don't mean this in any derogatory sense. If one saw her, you would think, "Well, that is a nice, soft-spoken, a

23. The Farwell Unit of the Pick-Sloan Missouri Basin Program lies between the North and Middle Loup Rivers in central Nebraska. The Unit furnishes irrigation water to 52,530 acres, along with flood control and recreational benefits. For more information on the Farwell Unit, see Wm. Joe Simonds, "Farwell Unit, Middle Loop Division: Pick-Sloan Missouri Basin Program," Denver: Bureau of Reclamation History Program, 2013, www.usbr.gov/history/projhist.html.

little older lady." But she was tough as nails in her own way, and she simply would not give up. She would give up when it was not a battle she could win. She was not a stupid woman. She was a very smart woman. But we had many, many conversations and many meetings, and Mrs. Smith was always one of my favorite congresspersons, because she would continue to fight for what she thought was right, and she ended up having great influence with her colleagues back there on the Hill. She knew and understood the system. She would work the committees. She would get her people lined up. She even understood the bargaining and compromises and holding somebody else's bill up as hostage 'til she got their vote on committee. She was just tough as nails. I guess I learned from her, you did not have to be loud and outspoken and use foul language. You simply stayed ahead, and knew how the system worked. So I remember Mrs. Smith as being one of my favorites, a real jewel to work with.

Storey: Do you remember any of the projects that were being constructed at that time, besides Farwell, I guess?

Regional Projects under Construction

Hall: Yeah, that North Loop Project[24] was under construction. Hainesworth [phonetic]. We were completing some projects down in Kansas. A lot of the projects–the Fryingpan-Arkansas Project was a principal one that was under construction when I was regional director. That was a project that took water from the western slope of the Rockies, transported primarily through the mountains, to the Pueblo area for both irrigation and municipal works. That project continued to have opposition. All this time, the environmental movement was growing, and even though projects were under construction, opposition was growing, so that continuing attempts to stop a project were made. A lot of attempts to stop the Fryingpan-Arkansas Project. People from Aspen, and you know, a lot of the show-business individuals, John Denver included, opposed the Fryingpan-Arkansas Project, so we had to make continuing efforts to get that project completed.

Storey: You just had to keep working at it?

Hall: Yes. It was not a deal of once you start a project, it was under way and therefore you could kind of forget about it. Every year was the same, and every year was, you know, not the least of which was appropriations, trying to get the appropriations knocked out so that the

24. The North Loup Division of the Pick-Sloan Missouri Basin Program is located within the Loup River drainage basin in central Nebraska. Diversion facilities are on the Calamus and North Loup Rivers. The plan provides direct surface water service to 53,000 acres of land. For more information, see Kevin E. Rucker, "North Loop Division: Pick-Sloan Missouri Basin Program," Denver: Bureau of Reclamation History Program, www.usbr.gov/history/projhist.html.

project could not continue. But it was, and is, a successful operating project this day.

Storey: Do you remember your construction manager down there?

Hall: Yeah. The project manager was named George Kregger, I think K-R-E-G-G-E-R. I understand George has passed away. But he was our principal guy. He went there shortly after I came in. The project manager, when I came in, was an individual that I believe is still alive, by the name of Jim Ogilvie [phonetic]. Mr. Ogilvie was the project manager for the first, I want to say, two years that I was regional director, and then he retired, and Mr. Kregger took his place.

The project manager, interestingly enough, he moved from being project manager to the, I'm going to call it executive director, of the Denver Water Board. He had quite an influential position after he left the Bureau of Reclamation, and served in that capacity for a number of years.

So I worked with Jim while he was project manager, and then as he moved into the head of the Denver Water Board, I had occasion to work with him from time to time in another capacity. Mr. Kregger took over, operated the construction, oversaw the construction of the project down there. His assistant was an individual by the name of Joe Marcotte. Joe Marcotte eventually became regional director up in Billings, up until the time he left the Bureau. I don't remember, he may have had other

positions after he was regional director, but at any rate, he was regional director in Billings, and then went on to manage an irrigation or water district in California. Joe is still beating around.

Storey: Oh, he is? In the Sacramento area, by chance?

Hall: It is not Sacramento, but I think it is in the northern part of California. We can find him. Joe will be easy to find, if you want to talk to him.

Storey: I'd like to. I'm going to be doing Paul Capener.

Hall: Are you?

Storey: In about three weeks. I'm going to be spending some time in Redding, and if it's convenient to get to Mr. Marcotte, that might be a good opportunity.

Hall: I'm sure that the Regional Office out there can put you–I will also look at my cards at home, and see if I–I don't have him listed in my book.

Storey: Do you remember any other specific projects that were going on while you were regional director?

Seeing the End of the Construction Era

Hall: The primary thrust of our–there was some key construction activity going on, and by then, even the slower of us were beginning to realize that we were kind of coming to the end of an era, as

far as construction of projects. So I think that brought about, then, how can we get more out of these projects? Is there a way to do them better? And the projects like the North Platte Project,[25] that had been operating forever, a lot of issues were beginning to arise, as far as how those projects were operated, how the releases were made from one project to the other, downstream. What about when the water got to Nebraska, in the Platte River? What's the impact on the sandhill crane? Is there a way we can operate those differently so as not to adversely affect the crane? All the new things one had to look at.

In retrospect, I think I was regional director at a very pivotal time, and we had some very capable regional directors and some very capable leadership in the Bureau, but I think we were all slow to recognize that the way we knew the Bureau of Reclamation has changed and will never be the same. I really think down deep a lot of us, for a long time, a long time, kidded ourselves into thinking, "Well, this is a minor setback, and we're going to come back and we're going to build these projects, and we're going to be the king of the hill once again." But even those of us who were slower began to realize

25. One of the Bureau of Reclamation's first projects, when construction began in 1905, the North Platte Project extends 111 miles along the North Platte River Valley from Guernsey, Wyoming to Bridgeport, Nebraska. The project provides full service irrigation for about 226,000 acres divided into four irrigation districts. Supplemental irrigation service is furnished to eight water-user associations serving a combined area of about 109,000 acres. For more information, see Robert Autobee, "North Platte Project," Denver: Bureau of Reclamation History Program, 1996, www.usbr.gov/history/projhist.html.

now that's really likely not going to happen. We're not going to be building these projects. The projects that we do build are going to be smaller, probably different in configuration. They probably are going to be paid for almost entirely by the receiving entity. And that means that there's probably not going to be irrigation projects in our future, the way we have known them, where they're heavily subsidized or paid for by other activities, that there's going to be, if there's going to be construction, probably even money put up front by others to get the construction done.

So it did mean a whole new look at a broader range of entities and a broader range of individuals and their interests, in a whole new era of listening to what these concerns were, and, in fact, can we operate these projects differently to bring about more of a reconciliation with other people's interests, and I think a lot of that was taking place in the time I was regional director from '75 to '80.

Storey: Well, that leads naturally into what we could probably make the last question of the day, and that is, how did the nature of the way you did business and the nature of your contacts change as you moved through, and the way you spent your time and allotted your time? How did that change as you went from Topeka, a fairly local office, to Oklahoma City, which is a little bit less local, to the regional office? And since we're doing this, let's talk about the deputy director's position, too.

Changing Nature of Business Over Time

Hall: A couple of ways. One is travel. As one went up in position, or at least in my case, as I went to higher positions, either I was getting to be a better speaker, or there was just more demand because of the position, and it was perhaps a combination of the two. I think I continued to work on the ability to communicate and the ability to give public speeches.

I think when one gets to be regional director, there is a natural desire to have the regional director come and speak to a water group, or if it's the Nebraska Natural Resources Association, or whatever it is. But I think as regional director, if one has a boring, canned, noncontroversial–basically, you have nothing to say, and besides that, you don't say it very well, then I don't think you get invited back to all their annual meetings. I got invited a lot, and as I went up and as I got to be regional director, with the number of states involved, I had opportunity, it seems like, to be on the road all the time.

I set for myself, and I would have my secretary keep up with it, how many days I was out of the office, and my goal was not to be out of the office more than–my goal was at 40 percent to be gone. In other words, one could say we averaged it out over a quarter. I'd keep a running total, and have my secretary tell me how many days I was gone, and if I was gone more than, on the average, two days out of a five-day week, I reasoned that I really couldn't be doing a very good job of running the Region. I either

had to turn it over to somebody else to run, or it wasn't being run. But if I was out of the office some 40 percent of the time, I reasoned that I could do a fair job.

So whether that's the right figure or the wrong figure, I don't know, but that was the figure I set and, you know, obviously, if one then over the last quarter gets up to where you're over 50 percent, you're doing too much, in my judgment. I was not able to keep up with the activities, do all the internal activities, do the communications with the congressional staff, participate in employee activities, do personnel evaluations, all the other things that come with being regional director, I simply was not able to do that if I was gone all the time. And so my secretary helped me keep up with that, and I tried to then judiciously decide.

Then, within that travel, I had some other criteria that I can't give you the percentages of, simply because I don't remember them, but what I'm trying to say is, if all of that time was going to give speeches, and I had not visited any project office, then I felt like I was making a mistake as well. So let's say that maybe half of that time was spent with offices under my jurisdiction, and the other half were out with the public, doing that sort of thing. So that's one very real change that one has as you go up in positions, is you just have considerable pressure to go out and do public speeches and meet with the publics.

Storey: How about when you became deputy

commissioner?

Becoming Deputy Commissioner

Hall: Yes, even more pronounced in that regard, because when I came to be deputy commissioner, I was what was called Deputy Commissioner and Chief Operating Officer of the Bureau, and, as such, I was the senior career person in the Bureau. Now, anybody in their right mind would like to have the commissioner come to meet with them, as opposed to the deputy commissioner. That wasn't always doable, and sometimes not even desirable. Sometimes they would rather have me, because it maybe was an issue or an entity that I dealt with, or for some other reason. But between the commissioner and I, we had an awful lot of people to meet with and to speak to. So that was a real balancing act, because at that time, we were involved in trying to turn the direction of the Bureau of Reclamation to this one of resource manager as opposed to one of a construction agency.

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Storey: You were saying you sort of continued the same criteria.

Hall: Yeah, not as stringent. I don't think I had my secretary give me a rolling average of how much time I was gone, but I would simply sit down at the end of every month and look back over the last three months, and just kind of, or maybe my

secretary and I would do it together, but we would kind of look to see how many days I was gone and kind of keep that in balance.

But I may have softened a little bit. I may have gone up to the 50 percent level by then, and said, "Okay, if I'm gone more than half the time, that's too much." But for me, I never felt capable enough to run a Region and then to run the Bureau, from a chief operating officer's perspective, if I was gone all the time, and I say that advisedly. I think there are people who can do that. I think probably there are people who are smart enough and quick enough and whatever, and operate with portable equipment and all that now, with the technology we have, who may be there only 10 percent of the time and do an admirable job. I was never able to do that. I just was not able to do that, and so I simply set some limits for myself and tried hard to stick with them.

Storey: Speaking of the regional responsibilities, who was responsible for the construction budgets in the Region, getting them, justifying them, supporting them, retrieving them when they disappeared?

Regional Budget

Hall: Our principal budget guy in the Region was an individual named Gordon Wendler. Gordon was ultra conservative and was the hatchet man of the Region. His notion was always to see how much we could cut down, and I admired him then, although he was a pain, and I really

admire him now. I feel like if we had more individuals like Gordon Wendler, who questioned dollars being spent, the federal government or any organization would be much better, who actually would try to measure the bang for the buck, and would challenge area managers, or regional directors, on why something was in there, and why it had to be so high. Gordon, like many individuals of that bent, would tend to get isolated on very minute issues sometimes, and then those would, in turn, turn people off, when he questioned why you bought three wastebaskets or something else that didn't matter in the total scheme of things. But his mentality was right for that job. His was one of seeing why it had to be in the budget. But then once it was in the budget, and once we knew that it was there and should be there, he became the principal defender of keeping it there.

Long way to answer your question. Well, Gordon Wendler ended up being both the hatchet man for getting the budget cut down, and the defender, because what happens in the Bureau of Reclamation, what happened then, that you had a whole program side of the office that figured out administratively how much it was going to be and things, and usually it was not a matter of–sometimes it was, but usually it was not a matter of the Congress saying, "Okay, I want you to cut six million dollars out of the North Loop Project." It was rather, through the department, and then the department saying, "Okay, I want you to come with $150 million reduction in the construction program. Where's

that going to come from?"

So then it became a matter of internal decisions. Well, the people who were the best prepared and who had the best story, and had the better defense of their budget usually came out on top. There was some politics involved, with a little "p." There were some, you know, whoever. Maybe some regional director was able to talk to the commissioner and convince him that, "Yes, let's keep all that one in there," but generally it was done at the budget level. And Gordon Wendler was a terrific defender of our budgets, probably because he was so tough at getting them in there in the first place. So Gordon was a very distinct individual, was well known in the Bureau, lives here in Denver.

Storey: And this is W-E-N-D-L-E-R, is it?

Hall: Yes, right. He is retired. I think he tends to the family farm, probably by contract, in Nebraska, and does almost full-time church work. I think he, you know, physically keeps up with the maintenance of their church building and that sort of thing. Gordon would probably be an individual well worth visiting with. Unique individual.

Storey: I see our time's almost up for today, so I'd like to ask again whether or not you're willing for the information contained in these cassettes and the resulting transcripts to be used by researchers.

Hall: Yes, I am.

Storey: Thank you.

END SIDE 3, TAPE 2. MARCH 4, 1996.
END OF INTERVIEWS.