

**ORAL HISTORY INTERVIEW  
C. DALE DUVALL  
FORMER COMMISSIONER  
BUREAU OF RECLAMATION**

**January 26, 1993  
Department of Veterans Affairs  
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Washington, D.C.**



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Oral History Program  
Bureau of Reclamation

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## INTRODUCTION

In 1988 Reclamation hired a senior historian to create a history program and work in the cultural resources management program of the agency. While headquartered in Denver, the history program was developed as a bureau-wide program. Since 1994 the senior historian has been on the staff of the Commissioner, Bureau of Reclamation, in the Program Analysis Office in Denver.

Over the years, the history program has developed and enlarged, and 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. It is also hoped that the oral history activity may result in at least one publication sometime after 2000.

The senior historian of the Bureau of Reclamation developed and directs the oral history activity, and questions, comments, and suggestions may be addressed to the senior historian.

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## ORAL HISTORY INTERVIEW C. DALE DUVALL<sup>1</sup>

This is Brit Storey with former Commissioner Dale Duvall, of the Bureau of Reclamation. I'm in Mr. Duvall's office at [the Department of] Veterans Affairs on 810 Vermont Street, Washington, D.C., it is January 26, 1993.

### LIFE BEFORE COMING TO THE BUREAU OF RECLAMATION

Storey: I was wondering, Mr. Duvall, if you could give me some idea of your educational background and political background as it led up to your coming to be Commissioner of the Bureau.

### POLITICAL BACKGROUND

Duvall: My political background, the position that I assumed as Commissioner of the Bureau of Reclamation was perhaps a bit different than any Commissioner before that, because I was the first Commissioner that came in through the blatantly political gates, because it was a presidential appointment with Senate confirmation which it had never been before. The political background covers having been an active supporter of the Reagan-Bush administration for their election.

### RAISED IN WASHINGTON STATE NEAR GRAND COULEE DAM

Born and raised in the State of Washington, practically in the shadow of the Grand Coulee Dam and Columbia Basin Project, so Bureau of Reclamation was an important thing to me from the time that I was 3 years old, and we used

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1. This oral history interview has been extensively edited to improve clarity and provide supplementary information. Textual copies which show changes made to the original text and identify whether the editor or interviewee made the change may be obtained from the record copy in the National Archives and Records Administration in College Park, Maryland.

to spend our Sundays down at the edge of the lake watching the lake gradually fill after they had plugged the dam and started filling Lake Roosevelt behind Grand Coulee Dam.

That was my roots in agriculture; when I got out of the farm and away from that, got educated in, largely in night school classes, because my father was crippled and I couldn't get away from the farm when I got out of high school, in order to go to college right away.

And when I did start an education I already had a family, so my education came from Washington State University; Eastern Washington College of Education they called it then, it's now Eastern Washington University; Gonzaga University; and Kinman Business University.

I became a CPA after going through that program. So, I went from agriculture to accounting, and specializing in accounting and construction engineering-type client services. Worked for about 10 years as I recall as a controller and secretary-treasurer of a general contracting concern in Spokane.

#### COMES TO THE BUREAU OF RECLAMATION

So when I came into government — well, being Commissioner was not the first position that I had here — the thing that attracted me to the Department of the Interior was, Number 1, I was very comfortable with the Bureau of Reclamation and knew its history and its heritage. I had seen the significant role it had played in building the West. I felt comfortable with working with things that have affected Westerners. I felt comfortable with my skill as a manager and with my familiarity in the construction industry.



As it turned out, perhaps not being an engineer was the right person at the right time at the Bureau of Reclamation at that time. The Bureau has the finest hydrologists and water engineering organization in the world. They didn't need an engineer to manage it. They needed someone to help bridge them into a different kind of a Bureau, a different future than they had in the past.

#### CHANGES THAT RECLAMATION NEEDS

Storey: Well, that's one of the things I want to talk about, in particular, is the evolution of Reclamation and would you like to pursue that further? What do you see that we were as opposed to what we need to become for instance?

Duvall: Well, I think Commissioner Floyd Dominy I believe his name was, I think he had the heyday of the Bureau of Reclamation. Then the Bureau could do no wrong. The Secretary of the Interior didn't have as much influence on the hill as he had. If he felt that a state or a river had a potential agricultural development project or a water storage hydroelectric potential, he had the ability to go to the hill at that time and get the money to build projects.

Storey: Oh, are we talking about Dominy?

Duvall: Dominy, yeah.

Storey: OK (laughing).

Duvall: I think any historian that ever talks about the Bureau of Reclamation should give credit to Dominy for having actually brought into reality all of the projects. I shouldn't say all of them, but he's the one that really put the Bureau on the map in virtually every State in the West. During those days, the Nation did not have the concerns and the resistance to that kind of a project. They may have had concerns but resistance was not organized as it is in the 70's and 80's and 90's.

So in those days Reclamation just flat went out and built projects for the development of the West with very little concern for environmental impacts.

At the time I became Commissioner, the environmental situation had changed . . . the power of the agricultural lobby in Congress had waned considerably and the . . . zeal for building more projects was behind us. The competition for construction dollars just didn't make authorizing new projects even something that we were working with. We were spending our time fighting to complete projects where we had, in some cases, hundreds of millions of dollars already invested in those projects.

#### AUBURN DAM

Auburn Dam in California is an excellent example. Reclamation had the coffer dam and the engineering and the sitework already done there to the build Auburn dam. We had gone through *beaucoup* studies to justify and to convince a concerned public that the dam could be built safely. And, that the geology was reliable enough so that they didn't have to be concerned about building a dam in that location from the standpoint of earthquakes. Each time one of those studies was done, then there would be a hiatus before the dam could get back to enter construction stage again. And, by the time it appeared that the environment might be right for California to look at developing another major water storage facility, there would be even more stringent requirements for environmental studies or for even heightened concern over the geology, and Reclamation would be driven back to planning it again. The Government seemed to have lots of money to do studies, but very little money to build things with at that time, and I think the appetite for actually moving into construction had gone away.

The likelihood of this country ever again financing a big project is probably going to stay very, very low unless a situation, like the drought that we see in California today, were to come and stay for a long period of time. If the West suffered through another 10-year drought and all of California's reservoirs were empty, and if both the municipalities and the agriculturists are deprived of the water, then maybe some day the thirst for water will build back up again. That's what it would take for public support to go ahead and build Auburn Dam or the American River Water Storage Project. No reason why there should not be one up there because the site is right. The terrain above that, if you've been out there is really kind of rocky, wasteland . . . .

Storey: I have actually visited that site?

Duvall: It's a rocky wasteland and there's nothing to hold that water when they get heavy downpours like they had the last couple-three weeks out there. That water goes right straight to Sacramento. The damage from those kind of floods in that area, over a period of years, will exceed the cost of building the Auburn Dam. And then, the area will lose the benefit of the hydroelectric power generating capacity, the flood protection, and the water storage and orderly use of it that a dam would provide.

So there are projects around that in my estimation ought to be built yet, but I think that the nation has to get a lot hungrier for power or multiple-use water storage resources than they are today in order to bolt us out of the . . . .

Storey: Well, of course, the political climate has changed a lot in terms of environmental issues. All sorts of things . . . .

Duvall: Yeah, that's definite, I mean that project resistance is a political problem. The risk of earthquake at Auburn Dam is the example that I'm using. The risk of earthquake is no greater now than it was when the first study was made, or when the coffer dam was originally initiated there. The study of the geology and the understanding of that geology is still the same. The change has been in the political perceptions of acceptable risk. That change has been used in order to prevent the construction.

Storey: And is it your perception that those political views are what is causing Reclamation to change, or try to change, so much, that's what fueling this evolution in the agency?

Duvall: I wouldn't want to say that it's fully the political perceptions; because that might lead one to believe that I don't believe that there's any reality to the environmental issues. I think that a lot of the things that the Bureau of Reclamation did down through the years, looking at it in today's sense of values -- values that the Nation shares, a lot of those things were wrong. They were reaching, and they were stretching. And, there was a lot of unforeseen environmental damage that could have been avoided had Reclamation had the technology, and the knowledge, and the will to address problems at the time that they engineered the developmental projects. To say that they couldn't have both co-existed, I would debate with that issue. To say that there should never have been any water projects built in the West would be to say that the West should have remained a largely uninhabitable, barren wasteland without development. The land had water available to it at some parts of the year that would raise crops without water development in some seasons or in some years, but the land was

also subject to flooding and drought. And so, you either had feast or famine all the time. The regulation of water supply that occurred with the construction of the projects allowed people to live on the riverbanks and to have the comfort that their croplands and their homes and businesses could co-exist with the rivers.

Storey: You and I are both native Westerners, and the importance of water to the West is sort of ingrained in us, and a lot of other sections of the country I think don't realize how important that is to us. I think the last statistics show that we provide some amount of water to about 30 percent of the population of the West, but most of it is of course agricultural. Was your agricultural background irrigation agriculture or dry land . . .

#### AREA WHERE I GREW UP

Duvall: No. Dry land. (Storey: There at Grand Coulee.) Wheat and cattle. We were actually upstream. I was raised in Lincoln County. Lincoln County's northwest boundary goes down and reaches the corner of Grand Coulee Dam. There's about five counties adjoining at or near the Grand Coulee damsite.

Storey: That's next to the Colville Reservation?

Duvall: Right, right. I was raised on the south side of the reservoir, so the area like the Peach Orchards and the Old China Bar where I used to go swimming down on the river were flooded. China Bar was a sand bar that the Chinese that built the Canadian Pacific and the Great Northern Railroads mined for gold after the railroads were completed. They, the Chinese workmen, either went into the logging and timber business or they went into gold dredging and gold mining. And China Bar was named after the Chinese that mined gold down at the confluence of Hawk Creek and the Columbia River. That China Bar was a

popular swimming hole when I was a just a little tot. That was 20 miles or so above the dam.

Storey: Were there any other projects like -- Well let me ask you first, when did you come to Reclamation, and when did you leave there?

#### COMES TO THE BUREAU OF RECLAMATION

Duvall: I think I arrived at Reclamation something like December 1, 1984 or 5 . . . .

Storey: So that would have been under Watt, James Watt?

Duvall: No, it was Hodel. Shortly after Hodel came back as Secretary of the Interior. It was probably '85.

Storey: And he was from the Bonneville Power Administration, as I recall. Did you know him previously?

#### POLITICAL ACTIVITIES IN SUPPORT OF RONALD REAGAN FOR PRESIDENT

Duvall: I had known him from the campaign days. Don Hodel and Don Pearlman who, at Interior was his counselor or something like that. They were both in Oregon and I knew them from the campaigns in '76 and again in '80.

I was a regional and political director in the Western States in '76 and one of the organizers of what we call the Western States Caucus which was really the 14 Western States' political organization for Ronald Reagan in '76. The Reagan campaigners largely had burned political bridges in 1976, with the normal party organization all stacked in favor of President Ford. Those who went with Reagan in '76 really didn't have a political home. So we formed the Western States Caucus as an alternative voice for those Reagan supporters in '76 and that organization practically to a man continued to be the political organization that carried those same States for Ronald Reagan in 1980. It wasn't even our

intention when we formed that, but we felt we ought to have a political voice to speak from since most of us had burned our bridges with our local state Party Chairman, and that sort of thing, by supporting Reagan. We were mavericks (laughter).

Storey: And then you left in July of '89, did you say?

Duvall: July 7th of '89 I think

#### ACREAGE LIMITATION AND RECLAMATION REFORM ACT

Storey: So you would have arrived about the time the acreage limitation controversy was beginning to heat up, I guess.

Duvall: Yeah, I was there when that was getting started. I was there during the period of time when the Reclamation Reform Act rules and regulations were put into effect. Those rules were never satisfactory to Congressman Miller or to Senator Bradley. They felt that we should have read things into that law, that the Congressmen couldn't get into the statutory language. They wanted us to mandate by regulation things they could not get out of their own conference committee. They were never happy with those regulations and I think there were a series of legislative actions and limitations that resulted from the fact that they, Miller and Bradley, didn't get everything that they wanted in the Reclamation Reform Act regs.

#### RECLAMATION RELATIONSHIP TO WATER USERS

Storey: That brings up the issue of relations between Reclamation and the water users. There are those, of course, who feel we're in bed with them, and then there are others on the other side of the perspective who feel that we aren't nice enough to them because they, after all, are why, for a large measure, our projects were built.

We have the recent legislation which requires that flows in the rivers out of the Central Valley in California, be maintained for wildlife purposes and so on, and I was wondering about your perspectives on Reclamation's relationships with groups like the Central Valley water users, maybe the Central Arizona Project water users, Central Utah Project water users, and so on.

Duvall: Well, I think . . . even though . . . the whole principle of Government development of water projects has the smack of socialistic development associated with it. In my mind, the Bureau of Reclamation provided, in the words of Abraham Lincoln, things for the taxpayers that individually they couldn't do for themselves. Socialistic or not, the projects nevertheless, were good and beneficial to the overall population as a whole. I think that Reclamation really served an important role in the development of the West. I think Reclamation served well and it stood out popularly, particularly in the agricultural community, where its visibility was so much higher. There was no question to a farmer as to where his source of water was coming from. The farmers knew that it was Bureau of Reclamation water. The people in San Diego County and in Orange County and in Los Angeles County, they don't know where their water's coming from. They pay their water bill to the Metropolitan Water District. They may be totally oblivious to even the existence of the Bureau of Reclamation. They may not know that the water was stored and captured and available to them at the time that they have a thirst only because of the foresight of a Bureau of Reclamation project.

The agricultural community . . . has a dependence on the sustained water source because the cropping that they do, the land that they crop would be arid



and incapable of raising the crops that are necessary for them to make an economic farming unit . . . were it not for the presence of the water. So once you create the project, then you've created a dependence on the water, the cropping patterns that develop from that, whether you're talking about the Columbia Basin or anywhere else that receives the water, the whole agricultural environment changes and becomes permanently dependent upon sustained availability of the water.

Getting back to your — I didn't really answer your question, I forget now what it was. The relationship between the people — I do recall now. The federally funded and constructed project to me makes sense because that was the only way that it could be put together, and it's the only way you could get water basin development. The river basins frequently cross state lines and sometimes optimum basin development meant water for agricultural projects in canals that cross state lines. The thing that kept it from being the big, all-powerful Federal hand reaching in and telling the people how to run their farms and that sort of thing, was the autonomy of the local water districts. And I think that wherever they got started with using the Central Valley Project boards and the Columbia Basin boards and that sort of thing, was when Reclamation allowed the people who were the beneficiaries of the water to form their own associations and to be the contractor with the Government and to assume, collectively, the responsibility for repaying the Federal Government's investment. That was a fortuitous decision for them to make because it gave them control and from my perspective as Commissioner of Reclamation, those were my customers and they were also the debtors to the taxpayers who had to be allowed the use of that

project in order to sustain their capability to meet their obligations to repay the taxpayers' investment in their project.

So I think that the program worked good, from my own personal experience, I had experiences where it didn't make any difference which side you were on, you were going to be damned by all sides. The municipal water holders saw no reason why they should go on water rationing before the last drop of water was taken away from the agricultural people. It shouldn't interfere with their watering their lawns as long as there was water for subsidized farming practices. There's some validity to that until you get back in and looked at the way the water was allocated between municipal sources and agricultural sources in the first place. And you find out that when you go to the origin of the initial distribution of the developed water and find out that the Central Valley Project for example, there was a portion that was dedicated for agriculture, there was a portion that was dedicated for municipal development.

What happened between the time that that allocation was made and the time that I was Commissioner, is that the municipal allocation, which when it was originally made, had lots of room for any kind of conceivable growth that might occur in the populations of the California cities. The same thing was true with the agricultural allocations. The agricultural allocations said there's going to be "x" number of acres available to put water on and we will have a reserve in addition to that, so that if we get into particularly bad drought years and that sort of thing, that we can still have water storage that we can carry over from one year to the next. Well, what happened as the cities grew, the number of acres in agricultural irrigation diminished so that agricultural use and demand for water

was going down, while municipal demand for water was going up. So the cities used up all their reserve. The agricultural people still had water in reserve. The agricultural community was still entitled to use their allotment each year, in a given crop year, and they would reserve unused amounts in storage and carry it over to the next year. So when you got into a drought, they had saved water, like money, from the prior year, and what do they say, save your money for a rainy day, they saved their water for a dry day. There was agricultural water reserved in this reservoir that they paid extra storage on to carry it over from one year to the next. And so when there'd come a dry year, they could draw that water that they had paid to store over the extra year, and use it to sustain their crops. The municipal water users, at the same time, were regularly using more water than allotted to them. Thus, when droughts came, municipalities would immediately be forced to impose restrictions on people that live in the city irrigating their lawns. At the same time farmers were receiving full allotments. The public out there didn't recognize why one gets water and another does not. The general public does not appreciate the fact that they had to go on water restrictions when the farmers still received full allocations.

The press didn't help that situation very much because there's a lot more people in the city buying newspapers than there are farmers out in the fields, and the farmers out in the fields have the appearance of being wealthy because they buy harvesting machines that cost \$180,000 and that sort of thing. The appearance is that these people are really wealthy whether they are or not. And the people in the city look like they're the ones that are having to be deprived. There is an unfortunate lack of understanding. When I was Commissioner, I was

railed against by the environmentalists for not taking the water away from the agricultural community. Certainly, there was lots of controversy about making water available at what was perceived to be subsidized rates. In my mind, the water was never subsidized to farmers. The water wasn't subsidized because the farmers were not paying for the water. Rather, they were repaying the costs of the Federal water development. If there were subsidies, they came from the fact that some farmers used their water to raise crops the production of which was subsidized by other Government programs, mainly the Department of Agriculture. Those were legitimate arguments, the environmentalists weren't really concerned about that, they were concerned about the fact that they really wanted to take water permanently and completely away from agricultural purposes and convert it to other type of uses. So the environmentalists would rail at me on the one hand, on the other hand, the agricultural community would rail at me. I sat at a hearing in the San Joaquin Valley and had a young farmer with tears dripping off of his cheeks testify before a hearing panel on the Reclamation Reform Act regs. He said that my only concern was my interest in building a power base where I would have all the agricultural community in California by the throat, because I would like to be powerful enough to be "king of the San Joaquin." He said that these proposed rules would make me king of the San Joaquin because I had every farmer in California completely at my control.

The only problem that he could see in that is all the farmers would starve to death or be forced into the cities working for the industrial plants. He said that I would reign over the San Joaquin but no one would any longer live there. So

there's no question about the Commissioner's relationships with the public. You got it from both sides. There was no center.

Storey: So the argument was that, I think this is mostly acreage limitation, that he was concerned about . . . .

Duvall: No, that was the new pricing structures . . .

Storey: Oh, the new pricing structures.

Duvall: . . . . moving from the 160-acre limitations to the 960; and then limiting the use of partnerships and that sort of thing in order to, I don't want to use the term manipulate, but in order to maximize the amount of benefits to the single farmer.

Storey: So the farmers were arguing that 960 acres was inadequate for an economic unit?

Duvall: Well, what they had done in the past, as whenever you get anything as dramatic as that new law, the RRA . . . their farming practices had evolved under the old 160-acre limitation with unlimited ability to lease land. There were farmers who were leasing all kinds of land, and there were cases where every member of an entire family owned 160 acres of land. That was all farmed as a single unit under lease arrangements. So there were very, very strange and odd combinations of ownerships i.e., owners and operators. There were also . . . I don't know whether it would be appropriate to call them tax shelter partnership arrangements, but there were lots of dentists and people who lived in remote areas who really had no direct background or connection to farming at all, but that had come to realize that agricultural land made a good stable investment. So there were investment partnerships that were put together in order to buy large blocks of land -- 50 dentists, for example, might put up the money to buy 160 acres apiece and put it all into one farming unit. Such a package would make a tremendously

economic farming unit and cost of operating such a very large organization was very favorable. And a big organization like that, if they ever got to the point where they could sell out and cash in the whole thing, they made a good investment return. So there were a lot of absentee owners with agricultural interests and equities that really were not farmers.

And this new law Reclamation Reform Act came along and addressed a lot of those things and it's traumatic, you're talking about families. Up to that time it was possible that a grandad had five sons and four daughters and each of them and grandma and grandpa might own 160 acres of land. Their children might have married and had children and acquired land either by purchase, gift, or inheritance. All these family-owned units could be put together in a large network and then farmed as a single operating entity. In cases like that, you're talking about people that were original first generation Americans that came from the old country that had a lot of heritage and a lot of roots in that soil. The only thing that those families knew was that soil. They coveted it, and they protected it as though they owned it even though ownership was spread throughout complex family groupings. They may have operated a lot of it through farming partnerships. Regardless, the land was everything that their family had ever had and as a farm boy myself, nothing is as sacred to a farmer as his land, whether it's dry land, scab rock, or whether it's irrigated soil. You take care of it, and you mother it, and you nurture it. And then the Government comes along and passes a law that says we don't care about this funny ownership and equity arrangement that you had in order to farm 4,500 acres as you've done in the past. Under this new law you've got to change everything around, you've got to break up your

units. You and your three brothers can no longer farm as a partnership and operate all this land together. You break it up into four different farms. And the single set of buildings and machine shed that you own, you've got to do something about those kind of things because you've got to avoid all appearances of being a single-farm unit. Those things, coming down on traditional, law-abiding family units from a bureaucratic Federal agency, are dramatic. And I don't blame the agricultural community for being up in arms.

Storey: And you were right in the middle of everybody, or Reclamation was.

Duvall: Yeah, well, the law was in the middle of it, and as Commissioner, it was my responsibility to interpret and write the regulations to enforce the law.

Storey: It's tough, you know. River valleys, naturally are the focus of human activity, they're where the water is in the West, so . . . .

Duvall: It's controllable human activity largely because of the fact that the Bureau of Reclamation built projects. It would be the site of human activity, but people wouldn't live in the river bottoms if it weren't for the Bureau of Reclamation. They might grow crops there and hope that they would get the crop out before a flood would come, or they might get poor crops with no flood, and then they'd lose their crop the next year because of the flood. And they wouldn't live, they would not have been living and the river bottoms wouldn't have been as wide because you couldn't have lifted the water out to the foothills and that sort of thing, as the Bureau of Reclamation has, by building a dam, and providing water to a higher elevation or pumping to higher mesas on the side terraces of the river.

Storey: Which of the projects do you remember the most? I take it, much of this RRA activity was in the Central Valley Project for instance . . . CAP would have been a major project at that time.

#### CENTRAL ARIZONA PROJECT

Duvall: CAP was a project where agricultural water deliveries and the water to Phoenix was just becoming a reality at the time I was at Reclamation. The CAP Cliff Dam<sup>2</sup> . . . secondary developments on rivers that flow into Phoenix. All of that was a big controversy while I was there.

Indian treaty settlements in Arizona were hot, and of course the construction of the Tucson Aqueduct was a place that we were putting a major portion of our construction monies. We were committed to have water in Tucson by the end of 1992, as I recall. That was probably a project that took as much time as any of the other projects because it still had its realization out in the future.

And the State of Arizona was going through tremendous changes in perception of how the benefits of the project should be distributed. That was of great concern to the Indian Tribes who had entitlements in areas of great concern to the breakdown of the allocation distribution between agricultural uses and municipal uses. It was probably the most fun part of being Commissioner because we were building something. There was a feeling that we're going to realize the completion of the project, and there was a tremendous support base

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2.. Cliff Dam has been cancelled as part of the Central Arizona Project.



from the Congressional delegation in Arizona. They walked -- whether they were Democrats or Republicans, they walked lockstep -- and arm saying nothing's going to deter the completion of this project. Compare that to projects like — what was the one in North Dakota?

#### GARRISON DIVERSION PROJECT

Storey: Garrison Diversion?

Duvall: Garrison had been stumbling and fumbling around for years and years and years and the people in North Dakota had not seen any benefits. The Congressional representation in North Dakota, even the people in the Garrison Project . . . citizens who were for it up there, they didn't always get along very well amongst themselves. They had problems, intramural battles among themselves. Disputes slopped over into the Congressional delegation and the Congressional delegations get involved in some of those. They didn't seek to regionalize the expectations and benefits from the project. So the people downriver in South Dakota and across in Minnesota, and that sort of thing, had no commitment to help see through the realization and culmination of the project. The project just seemed like you were always reconforming it, "bandaiding" it back together. Everything was a matter of "bandaiding" it back together. CAP on the other hand, it was a matter of keeping it together, and keeping the momentum, and keeping the commitment to have water to Tucson, just the difference between feeling like you're working with a winning football team as opposed to working for a team when the owners . . .

Storey: Then why do you suppose that was, was it because there was some large urban pressure behind CAP as opposed to a bunch of individualistic farmers, or what?

Duvall: I think it was more than that, I think the people in Arizona, even though, in my own experience, they were not native Arizonans, the people in Arizona know that they live in the desert, and they know what water does to that desert, whether it's for their drinking purposes or they know that they survive there only because of the presence of water. The people in North Dakota, I think they also worried about cold winters, and they worried about wheat prices, and they worried about the pheasant hatch, and they worried about a whole lot of other things, but the abiding passion in Arizona was that we got to finish our work to develop the water resources for our coming generations. They were committed to make water available for their cities and to preserve their property values for coming generations.

In North Dakota, I didn't find that. There, they felt that the Garrison Diversion Project was something that was owed to them from 50 or 60 years ago when they built the dams on the Missouri River. When the Missouri River dams took their bottom land, they were promised that the government would develop this project. The people who lost their land on the Missouri were entirely different except for the Native American Indian Tribes, from the ones who were expecting benefit from the Garrison Diversion Project. The designed beneficiaries already had an economic agricultural infrastructure and were looking only to improve it. Compare the Garrison Project to the Central Arizona Project. One was seeking incremental improvements at an affordable cost. The other was entirely dependent upon the water's availability. There is an important message in that distinction. It truly reflects Reclamation's only future prospect for new projects.

Storey: Yeah, we get former Governor Babbitt who seems to think that Reclamation should be disbanded, everything given away, do you have any relationships with him?

Duvall: Yeah, I've seen a couple of his quotes. Bruce Babbitt introduced me one time to a group of people in Arizona and . . . knowing his particular brand of feeling of self-importance, I had considerable misgivings as he was making this introduction, because he introduced me as perhaps the second most important person in the United States of America to Arizona. And I thought where's this man coming from (laughter) and he went on and said "Next to the President of the United States, the Commissioner of the Bureau of Reclamation has more influence on the lives of Arizonans than any other person in America."

#### BRUCE BABBITT AS SECRETARY OF THE INTERIOR

And so, Bruce, I think when he gets into the saddle and is supervising Reclamation, will come much closer to my philosophy as Commissioner than he will come to some of the quotes that we've seen since he's been a candidate for President and as an appointment of the new administration. I think Bruce will settle back into coexisting with the existing projects, I don't think he's going to come out and say we have to reconfigure Cliff Dam. I do not expect him to build that dam despite the Cliff Dam rock rose or whatever endangered plant they said they thought was up there somewhere on the hillside. I don't think he's going to come out as a crusader for new projects, but I think he will come back and say there is still much to be done with our existing projects to make them more environmentally balanced with their neighborhoods. And there is.

The Colorado River — Arizona has a big stake in the Colorado River, and there's no question but what there are lots of things that can be done to improve the environmental impact that demands on the Colorado River have on downstream.

Storey: Why don't we take the opportunity to . . . .

END OF SIDE 1, TAPE 1.

BEGINNING OF SIDE 2, TAPE 1. JANUARY 26, 1993.

#### ROOSEVELT DAM SAFETY OF DAM PROJECT

Storey: How about, for instance, the safety of dam project at Roosevelt Dam on the Salt River Project? Roosevelt's always been recognized as sort of one of Reclamation's premiere dams, you know it was one of the very first ones.

Duvall: Like the mother of all dams.

Storey: Well, in some ways, of course Hoover is sort of the mother of mothers, but . . . .

Duvall: Hoover is the symbol, I think, but Roosevelt argues with the Derby Dam over outside of Reno over which was developed first.

Storey: I guess I'm not familiar with that one.

Duvall: Is that Derby or Derby Project, I think it's Derby Dam,<sup>3</sup> one of those was Specification No. 1, and I think the other was Specification No. 2. I believe Derby was Specification No. 2 but Derby's a very small dam and it started diverting water and was putting water on agricultural land a long time before Roosevelt was completed, so they're like the initial Reclamation forays.

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3.. Derby Dam diverts water from the Truckee River for the Newlands Project in the area of Fallon, Nevada.

As to the safety of dams project, and it wasn't just safety of dams because the Roosevelt rehabbing goes way, way beyond safety of dams, because it also creates a tremendously larger storage capacity for the reservoir behind Roosevelt. Yeah, it had to be strengthened, but it also had to be strengthened in order to raise it and to put additional storage capacity in there, so it's really an enhancement of an existing project. That project was authorized while I was Commissioner.

Storey: And it was quite a problem because of the historic nature of the dam also, I think.

Duvall: Well, Roosevelt is a unique dam in that it's a placed stone rather than a poured-in-place concrete dam as we would think of today. Roosevelt is arguable the oldest large dam in the system. Yet, when it came time to design and drill those new water by-pass tunnels and that sort of thing, it's also got some of the most modern engineering in that new project that's ever been attempted on the face of the earth.

Story: What about dam safety, did you have a lot of involvement with that kind of activity in Reclamation?

#### DAM SAFETY, UPGRADED GENERATION, INCREASED CAPACITY/YIELD, AND ENVIRONMENTAL ISSUES AS MAJOR INITIATIVES

Duvall: Most of the initiatives that I was pushing, in fact the primary initiatives that were available to me to push, were dam safety, make what we've already got safe, increase the capacity of Hoover Dam, upgrading of the generating capacity was underway while I was there. Those were the kinds of things that made a lot of sense, increase the yield that you're getting out of existing projects, improve or reduce the detrimental impacts. If you've got a dam that can have some retrofitting done on it in order to reduce whatever they call it, superoxygenation

or whatever that adversely affected the salmon and other migratory fish populations, those were the kind of things that a modern Reclamation could and should do. We put in fish screening projects on the Sacramento River and reduced or eliminated the ability of the smolt coming downstream from getting diverted into irrigation ditches.

Those are the kind of things that we were doing a lot of safety of dams issues. We set up the dam safety committee for the entire Department of Interior and we started addressing the safety of dams project for both the Bureau of Indian Affairs and for the Park Service. They both had dams that were much more neglected than any the Bureau of Reclamation had.

Storey: So I guess Jackson Lake probably would've started under your administration.

Duvall: It was.

Storey: That was a safety of dam issue. What about . . . .

#### BUFFALO BILL AND COOLIDGE DAMS

Duvall: . . . Buffalo Bill. We were raising that one and doing a dam safety project on that one. The one that comes to my mind that we worked on extensively and didn't make much headway on was Coolidge, as I recall, which is a Bureau of Indian Affairs dam that stored water for the San Carlos Project in Arizona. That dam was really in perilous condition and we just couldn't get all of the elements together so that we could do the full fix. They wanted to fix the substation and they wanted to fix the powerplant and the generating capacity and that sort of thing, but they didn't want to do anything to make sure that the dam stayed there if we had a flash flood come down the valley.

Storey: What kind of elements that you couldn't get together are you talking about?

- Duvall: It was Bureau of Indian Affairs dam.
- Storey: Yeah, but what was preventing the work from being done, was it money or politics?
- Duvall: Money. Money, money, money. Congress really was not all that convinced that they wanted to appropriate the big bucks that it took to make the dam safe, the structure of the dam safe. And, they really didn't want to put that much money into a project that was, for the most part, not reimbursable. As a Bureau of Reclamation project, it would be reimbursable, an Indian project they didn't feel like they could hold the San Carlos tribe or whatever the tribe was there to repay such a large amount.

#### FONTANELLE DAM

We had the same kind of problems with the Flathead Tribe up in the Kalispell area with the Flathead Project — we had several dams up there that were perilous. The Bureau of Reclamation had the Fontanelle Dam on the Green River in Wyoming. We nearly lost Fontanelle during a flood. We considered breaching it, in fact we tried to get the Wyoming delegation to let us breach it because the benefits of the water storage and the revenue that we were generating from that facility didn't make it cost beneficial to ever fix it. We couldn't get permission to breach it, so we just drew it down and left it down low until we could get money to start fixing it but when we did get money to start fixing it, there was no one there to stand up and say "We will increase our repayment contribution to the Bureau enough to cover this cost." And so the State of

Wyoming came up with the cash, the matching funds in order to get Fontanelle Dam fixed.

#### RECLAMATION'S RELATIONS WITH CONGRESS

Storey: How were Reclamation's relations with Congress? You know it's very difficult when you have an emergency to go through the process to get the money to fix the problem. How does that work from your point of view?

Duvall: Well, back in the Golden Days of the Bureau of Reclamation, whatever they wanted and whatever they needed, they just got, because the resistance wasn't there. That changed. When the environmental concerns emerged. The environmental community was not necessarily always limited to environmental mitigation. Some of them were pressing for restoration. Some wanted every dam in the West to be dismantled and would let the rivers flow back to their natural stages. When I was Commissioner, those groups were very powerful. They walked in and out of George Miller's office like it was their headquarters. I'll give you an example. We had the Garrison Project that was aggressively opposed by the Sierra Club and two or three other groups. They watched every move that was made on that project. When our project manager came to Washington, D.C. we would have meetings on The Hill to advise them that the farmers and environmental groups in South Dakota have agreed to do certain things if we will do such and such in North Dakota. We'd bring the project manager in to brief Congress and the national level environmental groups. At one point in time, we called the Sierra Club or the National Wildlife Federation, one of the interested groups, and said "We're in town briefing all these other people but we'd like to come by and brief you."



"Well, the two people that are interested in that are on two weeks' leave because it's Christmas holiday season,"

"Well, so what do you suggest we do,"

"Well, you just won't have to brief us,"

"But we don't want to be criticized for not having included you in the information that we're dispensing to other people around town."

"Well, I could call and have them come in because they're just at home. Maybe they'd want to come in. Where are you going be after lunch?"

"At one o'clock, we're going to brief Congressman George Miller and his staff on the hill,"

"Oh, if you're briefing George Miller, you don't have to brief us . . . because they'll tell us everything we want to know."

I am serious. Some of those environmental groups virtually operated their activities out of George Miller's office.

And so, the Reclamation relationships with both the House and the Senate committees were very confrontational. The committees were committed to making sure that there were not any new water development projects anywhere in the United States. And, if there was any way they could do it, they were going to take the benefits as they did on Garrison; strip the benefits for agriculture out of the projects and leave the projects nothing more than water development and wetlands enhancement projects. That's basically what Garrison's going to turn out to be -- a wetlands enhancement project -- a four or five hundred million dollar enhancement project that the ducks will love. Speaking from my recollection at that time, we were going to get agricultural

water on the Oakes Test Site. That was something like maybe 2,000 acres. And, there was another spot or two that we thought we were going to get to put some agricultural water on. Other than that, the only other places that Congressman Miller and Senator Bradley would even allow us to talk about putting water on the ground, was in settlement of the legitimate claims of the three Indian tribes up there. The Indian communities lost hunting and fishing grounds when the dams were built on the Missouri River, these are Corps of Engineers dams. If we could have provided water as part of a negotiated settlement with those three Indian tribes, we probably could have packaged some additional water development. That would have been economically very good for the tribes because they were very poor and there was extremely high unemployment among the tribes in the area. Giving the tribes some agricultural stability would have been very helpful to them even then, but only minuscule parts of the vision of the original Garrison Project will ever be achieved. And, the economics traditionally expected from Reclamation projects was decimated. There is not way Dakota farmers will recover from the loss of their river bottom lands and no way any group will ever repay the Federal investment in the Garrison Project. And that fault, or black eye, should never be placed on Reclamation. They did the right thing. Others destroyed it!

#### INCREASED IMPORTANCE OF OPERATION AND MAINTENANCE TO THE BUREAU OF RECLAMATION

Storey: Well, as Reclamation is evolving, this reorganization that occurred in 1988, where did that come from? If you look at Reclamation's history, you sort of see an evolution of power away from the Chief Engineer's office and the Denver Office out into the Regional Offices, and I'm just wondering if that seems to be

another step in that evolution. What are your perspectives on what the reorganization is about?

Duvall: I think your perception is right. There is, maybe not an evolution but a migration. And, what it's reflective of is the fact that we're not building new projects. We don't have the prospect of building new projects in the future, so operation and maintenance of existing projects becomes a larger part of what the Bureau of Reclamation does. And operation and maintenance is more the product of the regional offices than of the Chief Engineer in Denver.

The need for putting best and your brightest people is not so much in Denver anymore. Denver is not where Reclamation needs their sharpest minds. What would they do? Just sit there for 40 years and wish they could design, engineer, and build a large hydroelectric facility. Better Reclamation should put those people out where they are working on operations and maintenance and on mitigating and reducing detrimental environmental impacts, figuring out ways to make the existing project more compatible with the community it serves.

Storey: Yet, the reorganization in 1987-1988 if I'm understanding it correctly, moved people from Washington to Denver and from the regions to Denver, arguing that Denver was going to be the technical center. Now, maybe I'm misunderstanding that.

Duvall: But the migration was to strengthen the operation and maintenance part of the Bureau. It didn't enhance Darrell Webber's engineering and research facilities. It didn't change the role of the laboratories and research labs there. Those forces probably are smaller today than they were when I was there. I may be wrong, (Storey: I think you may be right.) but I would assume that Jordanelle Dam is

completed now, and I would assume that the Reclamation work force dedicated to the Central Arizona Project has been cut; the Central Utah Project, which we haven't even really talked about -- I think that's been turned over to the water users for completion. What else was there? There was the project in Nebraska, which should be either completed or nearing completion.

Storey: So, the creation of the Assistant Commissioner for Resources Management was a way of strengthening operations and maintenance, is that what I'm hearing?

Duvall: That was moving project operations and maintenance toward the future. The operation and maintenance funding was something that I focused on very heavily because we were not getting the O&M funds. It was too easy for Congress to scrimp and to cut slices out of nondescriptive parts of our budget. And O&M was nondescriptive! No Congressman wanted to say to Congressman Virginia Smith, "We don't want you to have the money to build the next canal leg of this Project on the Platte River. We don't want to continue the money for the next canal construction there." That Project was appropriated as project-specific construction money. When they wanted to cut Reclamation's budget back, they'd say, "Oh, you have 200 million dollars in there for operation and maintenance of all these projects. We'll just take 100 million out of that." The operation and maintenance money included things like salaries for powerhouse operators and a whole lot of things that were costs critical directly to the operation of the facility. Grand Coulee Dam doesn't operate without powerhouse operators in there operating it. Obviously Grand Coulee generates tremendous amounts of revenue and is critical to the economy in the West. So, a certain amount of the budget paid for operations and what was left was used for maintenance. The

only thing that was realistically interruptible was maintenance. So, as Congress was trying to meet Gramm-Rudman-Hollings deficit targets and that sort of thing, they would not take out construction money and say, "Well, let's not build, let's not complete the Tucson Aqueduct." Rather, they would say, "Let's cut the Bureau 50 million dollars somewhere where we won't have to fight the Arizona delegation, or Mrs. Smith. Let's take 50 million dollars out of operation and maintenance." What would then happen is that the "m" was no longer a large "M." It was a small "m." It should have been on the endangered list. Maintenance was in danger of being "not in existence." We had to convince the committees that you can't scrimp on maintenance. We had to take care of these facilities. The cost of repairing them after they've become unsafe or lost revenues and economic benefits from no longer being able to operate the hydroelectric generating facility, water storage, or diversion features are going to be counter-productive. We had to convince Congress that the replacement value of the Bureau of Reclamation's facilities was not the ten or eleven billion dollars the projects originally cost to build. Rather, it was that 90 or 100 or 150 billion dollars that it would cost to replace those projects or economic equivalents today.

The power that is being generated from a place like Grand Coulee Dam, if you were to go out and buy that power from some other new generating source today, it's going to cost you, the proportional cost of today's values. We had to convince Congress that Reclamation has to have an uninterrupted, orderly maintenance program that will allow these projects to work. So, part of the reason for creating an Assistant Commissioner for Resources Management and

for focusing on operations and maintenance, part of that was in order to convince Congress that the operations and maintenance program is going to be the primary function of the Bureau, at least in the foreseeable future. As we go away from building new projects, God help us if we don't at least take care of that which we've already built. We've got to keep it working. And, we've got to keep upgrading the generating capacities by rewinding generators to get more capacity out of the same amount of water. Rebuilding the turbines and that sort of thing, makes good economic sense. It made sense then and I'll bet it still makes sense today. The cheapest power you can get is by improving the performance and lengthening the life of the facilities that we've already got.

Storey: Now, why was the title made Assistant Commissioner - Resources Management?

Duvall: I don't remember that.

Storey: Oh, okay.

Duvall: I mean at that time all the Regional Directors and the Assistant Commissioners were doing the initial reorganization planning. In fact I wasn't even really on the committee. Jim Zeigler took it over. He was trying to achieve some of his political objectives, and he wanted to drive that reorganization pretty much himself.

Storey: I'm sorry Jim Zeigler is . . . .

Duvall: Jim Zeigler was the Assistant Secretary for Water and Science. He had some special agendas of his own. He was the guy who brought Joe Hall into the Bureau of Reclamation. He brought him in to replace me, but he didn't have the political muscle to get rid of me. He wanted to make Joe Hall the Commissioner. Both he and Joe had agendas as to what they were going to do, and a lot of the

reorganization came out of that. So I really do not know how they arrived at a specific title of Resources Management.

Storey: When I came to Reclamation in '88, the reorganization was just a few months into occurring, and what I was told was that the Commissioner's office in Washington was going to serve as liaison to the Congress to fulfill the political functions of the agency, and that the Denver Office was going to run the day-to-day operations of the Bureau of Reclamation. Was that also your perspective on what was going on?

Duvall: To a large degree, yes. I think probably people in Denver hoped or assumed that they would not have to deal with the whole D.C. scene, including the Commissioner as their superior, which is probably a, may be a careerist's dream. It was probably an idealistic thought that the Commissioner and his cadre of political appointees could be isolated in some office where the career forces didn't ever have to pay any attention to them. Obviously neither Congress nor the Administrative Branch would allow that. And, without the support from those two, the Bureau of Reclamation would not survive. So, the differing interpretations of how Reclamation would function was probably just a matter of degrees of difference. The Bureau of Reclamation needs to have a presence in Washington, D.C., and in my mind the Commissioner could be in Denver and still have a presence here.

I wouldn't have objected to moving the Commissioner's office to Denver in order to be perceived as being a single organization working with a single head. Bonneville Power Administration gets by just fine that way, Western Area Power operates that way, Southern Power operates that way, TVA operates that

way, TVA has got an office in Washington, but their president is not in Washington.

Storey: Is that at Norris?

Duvall: Yes.

Storey: Well, of course Underwood — the evolution has gone very differently. Denver sort of feels like a stepchild in some cases.

Duvall: I gather that he has moved quite a few technical people back into Washington. We had it down to about 40 people, I think, and we were operating with the intent that the D.C. office would be a support organization to the people in the field. The Commissioner was going to continue to have a staff here and a staff and an office in Denver as well. I couldn't comment on how that's developed since I left there. I do know that when I've gone back for things like Christmas parties, there's a lot of people in D.C. that were field-based. Some of those were the more experienced people out in the field that have been moved to D.C..

Storey: What do you think the major issues for America and the West are as far as water is concerned, especially from a Reclamation point of view?

Duvall: I think the thing that has to be addressed and I think the political leadership, the communications media, the state and municipal governmental leadership, the agricultural organizations, and probably the Indian tribal leaderships, need to recognize the irreplaceable value of the existing Reclamation system. What they need to develop amongst themselves is a program that improves performance while mitigating environmental problems so that all the parties in interest participate in a program of coexistence. They need to learn to use these projects for enhancing economic and social value and enhancing project functions as



good neighbors. The Bureau of Reclamation is the best neighbor that anybody has in the West. Even with the resistance that I encountered over the proposed rules and regulations for the RRA, there was nobody there saying, "Well the heck with you then, I just won't buy water any more." Everybody recognizes that the Bureau of Reclamation is their neighbor, they're not the Corps of Engineers that comes in, builds a flood control project and then leaves town. When the Bureau comes in and builds a project, the Bureau becomes a member of that community, and they're like any of the other utilities, the water company, the electric utility company, the gas company. The Bureau is there. Their maintenance people live in town. They become a part of the community. Their kids grow up with children of the farms and the businesses that they provide water to. So I think coexistence, and by having them coexist I think the best things will result from it. There are things that can be changed with the existing projects. For example, I think there should be an effort to transfer even more control over the projects, at least to the river basin commissions that are affected by them.

I hesitate to say that you should go out to Wyoming on the Casper Project to, say, give them total control over their project because they really don't get along very well with the people farther down on the Platte River drainage in Nebraska. When you deal with river basins across State lines, maybe the river basin commission is as far as you can give them more control. But I think you could give more control over the project and let them develop it to its maximum utility. Let them address the economics of project enhancement and the ever-present issues of re-allocation of saved water, cost recoveries, and mitigation of environmental issues.

## RECREATION ON RECLAMATION PROJECTS

One of the things I was interested in when I was there, is that I wanted to erase the inconsistency that existed in the definition of recreation. The Bureau of Reclamation, when I went there, had a definition of recreation, hell, it was in the law, in any project that we built the law said that we could spend, I think it was a hundred thousand dollars, to develop public access sites.

Some projects cost over a billion dollars and we could spend a hundred thousand dollars for the development of a recreation site. The Corps of Engineers along the banks of the Columbia River from the confluence of the Snake River to all the way down to Astoria, built something like 25 different recreation areas; they never built any of them for a hundred thousand dollars. They all cost more than that, the road coming from the highway down into the area cost over a hundred thousand dollars, and they're extremely popular and extremely well-used areas. Overnight camping facilities with sewage flushing pits and freshwater systems with power hookups; they've got rangers out there charging fees for overnight camping, that sort of thing, they've got some wonderful facilities that the public loves in there.

Bureau of Reclamation, by their organizing statutes, didn't have the ability to do those kinds of things, and, furthermore, they had a mentality that said nobody sets foot anywhere around one of our projects that might be jeopardizing or in any way detrimental to the purposes of the project. And when you delved into that a little bit, to find out, "what does that mean?", it meant that we have a responsibility to the taxpayers to build and to operate and to maintain this project for the purposes for which it was authorized. And so most of our

projects were authorized to create hydroelectric energy and to store and release water for downstream uses.

With the storage and release of water for downstream uses, we would encourage people downstream to do developments and that sort of thing. We would sell the water to improve the lifestyle of people downstream. The prime example I could give you -- we could take water that we stored in Lake Mead and Lake Powell and release it down to Lake Havasu where we would put it into a pump and pump it to Phoenix and sell it to Del Webb at Sun City, so that he could irrigate his golf courses and fill water fountains to enhance the lifestyles of residents in the retirement community at Sun City. That's perfectly fine, we're really proud of that — Bureau of Reclamation chests would pump way out. To sustain economic deliveries to Sun City and others, we went right outside of Sun City about 10 miles, and put in the New Waddell Dam as a pumped storage reservoir. New Waddell allowed us to use interruptible power for pumping the CAP water out of Lake Havasu, enhancing the efficiency of the operation of the CAP. Instead of having to pump from Lake Havasu all the time every day in order to maintain the water sources to Sun City and to the City of Phoenix, we could store water at New Waddell with low-cost power and release it whenever it was needed. New Waddell Dam was going to be a new much enlarged dam and a much enlarged Arizona lake in a wonderful valley up there with all kinds of little arms and necks. I asked, "Well now, when we build New Waddell Dam, what are our recreational uses going to be?"

"Well, we're going to have a public access site and maybe some picnic tables -- \$100,000,"

"And that's all. Well, how about the community, does the community that we're serving here have any say-so as to what we're going to do?"

"What do you mean?"

"Well, you're going to have 150 miles of lake front that's looking out over a lake which is not a very common thing to have in Arizona. Are we giving the community the opportunity to develop their future Sun Cities, up here where they've got a beautiful lake?" I asked if this lake had been here when Del Webb first came to the valley, is there any doubt he would want to build his retirement area here? Would he have built it where Sun City is now or would he have built it right up here? Would he have put his golf courses over here in these rolling hills with the necks of water that would form natural water hazards or would he have built it down there in the desert where it is with artificial ones?"

"Oh, we don't want any development up here above the dam. That's why we buy the land up to 24 feet above the high-level area, or back 300 feet from the edge of the high-water level, we buy all that land."

"What for?"

"Well, to keep people off of it."

"Why?"

"Well, because if you allow people up there and they own the land too close to the side of the place, pretty soon they're building cabins practically in the water's edge and they're putting boat docks out into the project water. The public could interfere with the project. Those boat docks could come loose and get in your spillways, they could foul up the project, there's all kinds of potential problems. . . we don't want anybody around any of our projects."

"Well, but we took this land away from these people in order to build this project." I used to use the Dolores Project down on, I guess it's the Dolores River north of Cortez. In that area, I talked to people who used to live in the town of Dolores. The town of Dolores was about 180 people. It was one of these towns like the little town I grew up in. It had a highway that went through town, it had a railroad on one side the highway and the other side was the riverbank, and the highway was far enough from the riverbank so they could build homes between the highway and the water's edge. They could fish in their backyards and they could sit in their breakfast room and watch the deer come down on either side of the river, sometimes walk across their lawn to drink out of the river.

And then the Bureau came in and told those people we're from the Federal Government and we're here to give you guys job stability and a sure source of water. We're going to build this wonderful fishing lake for you and we're going to improve the quality of your life. We're going to do all these things. The only thing is, you've got to move! And so we the Bureau took the town of Dolores and moved it, moved it over on the other side of the hill. There's not a single household in the town of Dolores that even can see water. They used to live on the waterbank, on the riverbank, now in the relocated town of Dolores they can't even see the reservoir. There are a couple of enterprising families that built their own houses way up on hills that are on private land and they have water use, but there was nobody within 300 yards of the reservoir, because we wouldn't let them built a road anywhere near the reservoir. We gave them a public boat launching ramp. I went out to the grand opening, the dedication of

the public boat launching facility. And, it was nice. They had one of the nicer ones. It even has a fish scaling place. So when local citizens come back from fishing they can clean, scale, and gut their fish and flush the waste into the Bureau of Reclamation's sewer right there. It was a nice facility but those people are now living on the other side of the hill away from the water, and all they had was a place to park their boat trailer when they towed their boat to the lake.

I don't think that's very good. I think there's a better way to develop the resource. The recreational resource would add value, in fact in my estimation, when you get to places like New Waddell, if the Bureau had allowed the local people to form a public development corporation with the State of Arizona and said "You people can develop everything in this valley, come to us with a master plan that must be acceptable to us as to how you would propose to handle sewage treatment, and how you're going to get your water supplies out of the lake, and how you would regulate docks from encroaching on the project, and all those sort of things -- come to us with a master plan and we'll make land that we own anyway, available for waterfront development. The Bureau will let you plan, zone, and develop recreational industry, residential, and mixed use areas. The Development Corporation can make this into a really nice lake." I propose that Reclamation rethink the benefits, political and economic, of changing the existing policy that restricted land use above projects. There was a great deal of resistance from within the bureau, and it hasn't changed a great lot yet. But it is changing and I think the public will eventually cause it to change.

Storey: Reclamation always touts its recreation use and all that kind of stuff . . . .

Duvall: But Reclamation never even considered it as an enhancement to the project . . .

Storey: And we also tend to let other agencies manage the recreation facilities.

Duvall: Terribly so. Where I was raised on Lake Roosevelt, there are people whose land was condemned and flooded. Some of those same families built homes, cabins, and other facilities above the waterline, on their private land. Those who drilled water wells were charged with diverting groundwater fed by the project. They couldn't use either lake or well water to water their lawns. I think Reclamation owns sixteen feet above the high water line. Where there is a nice sand flat with a gradual slope beach, that sixteen feet might be back a long way. People that have planted grass on their property or blazed a path down to the water's edge have been in trouble with the U. S. Park Service. Park Service goes in there and tries to force them to tear out the developments and move them out. They want to leave it the way it was in its natural stage. We do not want people having homes and retirement-type facilities anywhere near Lake Roosevelt.

If planned properly, those kind of facilities, in my mind, could help pay for the projects. I always used to use Lake Barcroft down here in northern Virginia as an example. It's a manmade lake and the homes within either side of the street surrounding Lake Barcroft are worth, the ones I've been in, from \$450,000 to 3 million dollars. You go a half a block further away, and the same quality home will drop in value anywhere from \$200,000 to a million dollars in value because it's not on the water.

It is not a widely known fact, but the Bureau of Reclamation controls more water's edge than the coastline of the continental United States. And

neither the Congress nor the Bureau recognize the waters' edge value as a resource that could help sustain, not only help sustain the repayment capability of their projects, but it would improve and enhance the quality of life of the people that are Reclamation's neighbors. Now, I'm not advocating opening the entire reservoir up and letting people build shanty shacks and drag trailer houses down to any little bay and inlet that they want. Rather, I'm speaking of planned development that makes sense.

Storey: Yes, well, there are some places where that's happening. I know Lake Granby, for instance, on the Colorado Big Thompson Project.

Duvall: We had a project in Oklahoma that the Murchison's or somebody out of Texas came in and looked at that project, I can't remember the name of the project now, but it was a new dam that we were building and they came and they said "We would like to buy 50,000 acres out here and we'll turn this area into a retirement area like the Land of Lakes in Arkansas. We'll engineer and build, design a first-class type of planned community. And, we'll have zoning restrictions and construction requirements and that sort of thing, so that we'll have \$150,000, \$200,000 homes built on this whole area out here. We'd like to have a yacht club facility, we'd like to have a golf course at the river's edge."

People in Oklahoma fought it. They did not want rich people moving in there. Today, that project sits there and the only revenue that it generates is as a backup reserve water storage facility for Oklahoma City. There's no jobs been created by it. The community and the state of Oklahoma, in my opinion, missed an opportunity to turn an economic corner on a large area that still remains deprived of jobs that can hold their young people in the area.



END OF SIDE 2, TAPE 1. JANUARY 26, 1993.  
BEGINNING OF SIDE 1, TAPE 2. JANUARY 26, 1993.

Duvall: There was a similar example at Elephant Butte that was at the proposal stage when I left there, I have no idea whatever happened to that, but there were people I believe from Albuquerque or San Antonio, that wanted to come in and do some development and the Bureau of Reclamation needed to give some rights-of-way to some shoreline development. In return Reclamation was to receive some property that the Bureau was trespassing on -- because as silt has come down the river, the upper lake has changed its configuration so that the Bureau actually has flooded a lot of land it does not own. There's a lot of wetlands and tules and that sort of thing at the upper end where the silt has dropped. The river has spread out. It was proposed to do some trading around so that we Reclamation had a protected shoreline again and the Federal Government would also gain title to some ancient historic bat guano caves in that same area. A large ranching corporation owned the caves and the trespass land. The Park Service has always wanted to own those bat caves. Land swaps were proposed in order to get the needed lands into public hands in exchange for the public accesses necessary to enhance Elephant Butte as a site for a really nice retirement community.

Storey: And that one was in process when you left?

Duvall: The negotiations to get it approved were in process, I don't know whether it happened or fell through — maybe when the recession came along, maybe the appetite for development of planned retirement communities in the Sunbelt may have waned somewhat. Nevertheless, with all the water front Reclamation controls, those opportunities are out there.

Storey: You mentioned this one in Oklahoma, was it the local water users?

Duvall: The local community is a very poor community.

Storey: Do you see, changing topics, do you see water conservation as a major issue for the Bureau of Reclamation?

Duvall: I think water conservation has always been major. The Bureau of Reclamation is a water conservator. I don't think that's a change. The basic principle of storing water and controlling its release, to me, is synonymous with conservation.

Storey: I guess I'm using the wrong term. Do you see more efficient use and distribution of water as a major Reclamation concern, in other words, evaporation prevention, lining of canals, you know, and all that?

Duvall: Oh yes. Yeah, those are project enhancements. We were experimenting down by Palm Springs with the All American Canal. We were experimenting with lining canals in-place when I left the Bureau. It wasn't looking like a very promising experiment but those kind of things are where the Bureau has a role.

These projects are too big and too important to just build them and forget them forever. They don't take care of themselves, and they can increase their yield. The population of this country is not going down. Its appetite for food is not going down. If we want to preserve any kind of an agricultural base in this country at all, to sustain capability to feed our own population, we have to figure out how to grow more crops or to get the water to go further at a time when there are conflicting uses for it. And water conservation whether by canal lining or on-farm practices is an excellent example of how we can meet the Nation's needs with shrinking resources.

That doesn't just touch water conservation but water quality as well. I think conservation and quality are synonymous with good project operation, and

that touches a lot of things. Wetlands restoration, we need to have wetlands restoration in some of our areas. Reclamation is doing things to eliminate the deciduous trees that have grown along the Colorado River. Those trees are heavy water consumers. Reclamation is tearing those trees out, diking and replacing trees with low-water drinking grasses for bank stabilization. To me those are examples of Reclamation's wise stewardship of water. Such measures are expensive at the time of your initial investment. But think of a tree that consumes its own weight every week in water, and think in terms of that tree being 100 years old and maybe having a 500-year life cycle. How much water was that tree going to drink if left undisturbed rather than replacing it with an erosion control, low water-consuming, bank stabilization plant? That's water conservation, and it improves quality, too.

Storey: And it seems there're so many people who want our water in the West. What do you see as the issues and so on of transferring water from agricultural to city use?

#### ISSUES IN REDISTRIBUTION OF WATER IN THE WEST

Duvall: Well, you're talking about redistribution rather than conservation now.

Storey: Yeah, we changed topics, I'm sorry.

Duvall: Redistribution of water is something that the Bureau, at the time I was there, took a kind of a "hands off" standpoint in all respects except where Indian treaty settlements were concerned. There are unfulfilled water obligations or debts to Indian tribes out there. Whether you agree with their real need for water or whether you disagree, those treaties are there and they represent obligations of the Federal Government. The Bureau of Reclamation as a provider should be actively engaged in seeing that those obligations are fulfilled. Whether the

Indians use the water or whether they convert it to cash or trust funds or any of the other tools and mechanisms that are being used to bring about the gradual resolution of those debt obligations, those things need to be done and it's a Federal responsibility.

When you get beyond that, distribution between agriculture and municipal and industrial uses and that sort of thing, is largely a State's rights issue. Most of the river basins in this country have established their multi-state compacts that determine which State gets how much water from the Colorado River, which State gets how much from the Platte River, which State gets how much from the Columbia River, and so on -- the Columbia's not quite as sensitive. The Missouri River certainly is. Most of those compacts are in place and most of them are driven and governed by State law. So from the standpoint of the Bureau of Reclamation, there's really not a lot of input that they have, other than to be a facilitator. As a facilitator and as an operator and maintainer of Reclamation facilities that are part of a river basin, yeah, the Bureau of Reclamation belongs at that table. The states, however, make the decision about water is allocated. The Bureau comes into it in dealing with redistribution that may result from enhancement of projects that result in water from improved conservation and storage practices.

If we can — the Lahontan Project<sup>4</sup> — Derby Dam is part of the Lahontan Project, some of these names are coming back to me a little bit, the Lahontan Project outside of Reno and Sparks, that project is woefully short of the amount

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4.. This is a confusing area. Derby Dam is part of the Newlands Project which was supervised by the Lahontan Basin Projects Office, now known as the Lahontan Basin Area Office.

of water that is needed there. There's a couple of Indian tribes with entitlements, there are two or three different lakes, Lahontan Lake being one of them. There are fish problems, something called the Lahontan Cutthroat Trout, I think, and some kind of a carp cui-ui that are on the endangered species list. Due to cyclical droughts, water demand is up, and the lake's level has dropped precipitously. The farmers haven't been getting the water that they've got an absolute granddaddy riparian water rights to. The military takes some water from the system . . . what are the other drainage lakes out there — huge, huge, very critical and very sensitive flyway and nesting grounds for cranes and migratory waterfowl.<sup>5</sup> Also, a large, very, very large Indian burial ground that's under water. As the water is retained in the upper lakes to help the endangered fish and as farmers improve their conservation of the water right entitlement, the water overflowing into the drainage basin is reduced. Thus this big flat lake drops down. And when it does they have problems with people coming out there and rummaging through the sacred Indian burial grounds seeking skeletons and Indian artifacts. The Bureau has for years been seeking some effective resolution to those unsolvable and conflicting issues.

Storey: Now is that Stillwater Marsh area?

Duvall: Yes, that's the name of the drainage basin, Stillwater Marsh. That's an area where water conservation makes a lot of sense, and redistribution makes a lot of sense. But the redistribution is not the Bureau of Reclamation's responsibility. The Bureau has been involved in that for years trying to identify ways to

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5.. This reference is to the Stillwater National Wildlife Refuge east of Fallon, Nevada, and the Carson Sink northeast of Fallon.

conserve water -- so that the water that's needed will reach farther. That's very difficult to do. The drain water is what feeds Stillwater Marsh. That's the end use because evaporation is what drops the water level in the marsh down. The inflow into the marsh is dropped if you make the farmers practice better water conservation. Conservation reduces the water collected in their drainage ditches and over the end of their canal. Thus, less water goes out their drainage ditches into Stillwater Marsh. At the lake<sup>6</sup> where the Truckee River would flow if it wasn't diverted at Derby Dam, the people are saying "We've got these two endangered species of fish that need more water in this area," and then the people that manage the Stillwater Reservoir say "We've got eagle nesting and endangered grasses and things like that over here." They both want the water and the farmers, for whom the project was actually built, sits in the middle. And if the farmers practice good conservation practices, they won't need so much water. That means they can let more water into the lake, not have to divert it in the first place, but it also means that you're taking critical overflow drainage away from Stillwater. That is one of the places where the State needs to belly up to the bar and take a more active role. What that active role is going to be is changing farming practices in the area, or buying up and cancelling a lot of the existing water rights.

Storey: Well, I appreciate your agreeing to talk to me, but my 2 hours are up and I don't want to run over because I know you're very busy.

SELENIUM POISONING AND KESTERSON RESERVOIR

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6.. Pyramid Lake.

Duvall: Well, we may need to talk again. From my standpoint, one of the things that we haven't touched on would be an oversight if you didn't have it in the records. That is the San Joaquin problems with selenium. That was a major issue during the time that I was Commissioner. It was just boiling up when I became Commissioner and I can assure you it lived with me every day during the time I was Commissioner. And I'm not sure how much of it's been resolved as of this date, but we really wrote the book on selenium poisoning. Selenium poisoning was totally and virtually unheard of, wasn't ever even considered to be a problem anywhere in the world until it started deforming unborn ducks in the Kesterson Reservoir.

Storey: It started showing up at, of course, Kesterson is a major part of the flyway, I believe.

Duvall: Well, of the total Western Flyway, Kesterson is really not that major to it. But being a drainage facility from the Westland Water District made it a big target and a big story. Environmental groups used that story to fill their cash register. They turned well-meaning but concerned city residents, to believe that Kesterson was their chance, that, "Boy this is our chance to get those guys and we'll get them out of the subsidized agricultural business right away."

Storey: Did you get those guys Westlands or Reclamation, or both?

Duvall: Westlands Water District and Reclamation bore the brunt of the attacks, paid for all the mitigation research and corrective actions. The environmental groups benefitted by increased memberships, contributions, and public concern about the California Water Use Plan.

Storey: Well, I appreciate your taking the time. I want to ask you if it's alright for us to quote this, permit researchers to use this material, and so on.

Duvall: Sure.

Storey: And if it's alright with you, if we transfer title to the archivist of the United States.

Duvall: No problem.

Storey: Actually, I'm doing this on his behalf anyway.

Duvall: Well, I think it's very important that the story and the richness that is the Bureau of Reclamation be preserved somewhere for posterity because there is too little credit given Reclamation, in fact, Reclamation made much of the West liveable. Water development is how the Western half of this nation was developed and Reclamation made it possible — the schoolbooks would tell us that it was the railroads. The railroads in my mind, would have brought food east to the developed areas and it would have taken things across the Great Plains and across the mountains to the California seacoast, but much of the California seacoast was **also** uninhabitable until they had fresh water supplies. The history of how Los Angeles got their water is documented. As is the way they stole it from the people who rightfully owned it. Those stories need to be taught. That is the water lore that caused the West to be shaped and developed the way it is. The Los Angeles water story is an excellent example. That stuff really needs to be documented. There's lots of it and maybe I lived just one little chapter. And, some of the things that happened while I was there, 200 years from now may seem a lot more important than we realize today.



Storey: You did indeed live part of it and as Mr. Babbitt pointed out the Commissioner of Reclamation is extremely important to a lot of Western States. Thank you.

Duvall: You bet.

END OF TAPE 2, JANUARY 26, 1993.

## **ORAL HISTORY PROGRAM GUIDELINES: BUREAU OF RECLAMATION**

Effective Date:       October 13, 1994

### **COOPERATIVE PROGRAM WITH THE NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)**

The Bureau of Reclamation conducts its oral history program cooperatively with NARA because Reclamation wishes to permanently protect the data obtained through implementation of its oral history program, facilitate research in Reclamation's history, and assure permanent access of Reclamation and researchers to the data resulting from implementation of its oral history program. This cooperative program permits Reclamation to: use and distribute unrestricted oral history materials; use and distribute restricted oral history materials after the restrictions end; and, close interviews to public access and researcher access through restrictions contained in a donor's deed of gift accepted by the Archivist of the United States. The program is governed by a Memorandum of Understanding between the Bureau of Reclamation and the National Archives and Records Administration. These Oral History Program Guidelines of the Bureau of Reclamation fulfill one condition of that agreement and are required to be followed.

### **OBJECTIVES OF THE ORAL HISTORY PROGRAM**

The ideal sought in Bureau of Reclamation oral history transcripts is to retain information understood today which may not be clearly understood, or will be lost entirely, in the future; yet, still retain facts and opinions, speech patterns, inflections, characteristics, and flavor of speech. This shall be done through preservation of oral history interviews: on cassette tapes and in printed transcriptions.

### **ORAL HISTORY INTERVIEWS DONE OUTSIDE THE DENVER OFFICE**

Oral history interviews done outside the Denver Office should conform to the guidance in this document to assure that the resulting tapes and transcripts will be accepted by the National Archives and Records Administration for permanent storage and retention. Even if that is not done, copies of tapes and transcripts should be provided to the Oral History program in the Denver Office.

### **CONDUCT OF INTERVIEWS**

#### **Preparation for Interviews**

Effective interviews are dependent upon proper preparation in advance. A brief telephone conversation with the prospective interviewee should provide basic background

about where the interviewee worked at Reclamation and types of responsibility. Using that information, basic research into the offices involved and relevant projects may be conducted.

It is always a good idea to have a list of questions ready in advance of the interview. These should contain both general and specific questions about Reclamation and the interviewee's special areas of expertise and responsibility.

### **Obtaining Deed of Gift**

Signature of the interviewee on the approved deed of gift should be obtained before the interview--with the understanding that clauses limiting access to all or part of the interview may be added after the interview if the interviewee deems it necessary.

The interviewer will also sign the deed of gift as a simple acknowledgement of conduct of the interview.

### **Objective of the Interview**

ALWAYS REMEMBER THAT, WHILE WE ALSO WANT GENERAL BACKGROUND ABOUT THE PERSON BEING INTERVIEWED, THE OBJECTIVE(S) OF THE INTERVIEW IS:

TO PRESERVE INFORMATION ABOUT THE BUREAU OF RECLAMATION, ITS PROJECTS, THE COMMUNITIES ON ITS PROJECTS, AND PERCEPTIONS OF BOTH INSIDERS AND OUTSIDERS ABOUT THE BUREAU OF RECLAMATION.

### **Conduct of the Interview (Including Opening and Closing Statements on Tape)**

#### **Introducing the Interview Before Taping Begins**

Before beginning the interview discuss:

the general nature of what is going to happen,

the deed of gift and request signature of it,

point out that the interviewee may at any time state that they don't wish to discuss the topic proposed,

state that in addition to information strictly about the Bureau of Reclamation you want general family, education, biographical outline and other information about the interviewee,

Explain that the interview will be transcribed and then transmitted to the interviewee for review for accuracy and correct spellings. The interviewee will then be asked to initial each page of the interview.

### **Beginning the Interview on Tape**

Open the interview with a statement which includes the following information:

Names of interviewer and interviewee.

Any pertinent information such as: farmer on \_\_\_\_\_ Project, or, electrician at Hoover Dam, or, operator at Minidoka Dam, or, watermaster of the Northern Colorado Water Conservancy District, etc..

Location

Date

Time

Point out to the interviewee that the conversation is being recorded and ask permission to record the conversation.

### **Conduct of the Interview on Tape**

Try to avoid questions which can be answered with yes and no. Instead ask for descriptions, explanations of events or working conditions or relationships with the community, etc.

Responses that include hand motions need supplemental work by the interviewer. When a person says "Oh, it was about this high" [and holds a hand about 2½ feet above the floor] -- we have no record of the meaning of what was said. The interviewer must integrate words into the tape to provide the necessary meaning, e.g., "Oh, about 2½ feet high, then?"

### **Just Before Ending the Interview**

Before closing an interview, ask the interviewee whether (s)he wishes to add anything, recount an interesting story, or express any perspectives on Reclamation that were not already covered.

### **Ending the Interview**

In spite of the signed deed of gift, each interview should end with a question such as this:

May we quote from and otherwise use the information in this interview for purposes of research and quotation? And may we also provide it to researchers interested in Reclamation and its history for purposes of research and quotation?

The end of the interview should be a brief restatement, ON TAPE, as to the identity of interviewer and interviewee, time, date, and location.

## PREPARATION OF TRANSCRIPTS<sup>7</sup>

### Use of Computers

For editorial and other reasons it is necessary to use an IBM compatible computer using WordPerfect 5.1 or a later version for transcription of Bureau of Reclamation oral history interviews.

### Objectives

Transcription and editing of oral history interviews by the Bureau of Reclamation shall be carried out in accordance with this guidance.

Transcription shall be done only with very limited editing. The basic objective is a verbatim transcript of the interview.

### The Parts of the Final Transcript

The following will normally be the outline of a completed transcript, and when transmitted to the interviewee for review the transcript will be as nearly complete as possible:

- ◆ Title Page with suggested bibliographic citation form on the back of the page near the bottom. The title page should include the information and be laid out as shown in Appendix 1.
- ◆ Table of Contents -- use the table of contents function of WordPerfect to do this.
- ◆ An "Introduction" to the transcript with background material on the interviewee and interview, and including:
  - Discussion of the time, location, date, and circumstances of the interview.
  - Listing of each Bureau of Reclamation employee or contractor involved in the interviewing, transcribing, editing, and indexing of the interview.
- ◆ Copy of the signed and dated "Statement of Donation" for the interview.
- ◆ The transcript of the interview.
- ◆ Appendices, including:
  - A copy of the Bureau of Reclamation's "oral history program guidelines".

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7.. Much of this material is developed from Shirley E. Stephenson, *Editing and Indexing: Guidelines for Oral History* (Fullerton: California State University, 1978 (Second Printing with revisions - 1983).

- A list of donated photographs (including copies made at Reclamation expense which were only loaned) and/or documents -- if any provided by the interviewee/donor.
  - Copies of any photographs and/or documents.
- ◆ Index to the transcript -- use the indexing function of WordPerfect to do this.

### **Page Layout of Transcripts**

Begin the first page of the transcript with the heading "Oral History Interview of \_\_\_\_\_."

Single space the heading on the first page. Double space the transcript itself.

Insert a centered footer which will include the page number to begin after the first page of the transcript in this format (8 pt. Times Roman font):

Name of Interviewee  
Bureau of Reclamation Oral History Program  
Date of Interview  
Page Ctrl-B

The transcript, if it falls naturally into distinct segments may have headings for each segment inserted in the transcript.

To indicate the speaker use the last name of the person followed by a colon on the left margin of the page, e.g.:

Wilson:           Would you tell me about your educational experience?

Smythesville: I was educated, first, at a one- room school house in Wittsendburg, . . .

After the name of the speaker indent as needed to line up the left edge of the text for all speakers. For instance do not do the following:

Babb:    Would you tell me about your educational experience?

Smythesville: I was educated, first, at a one- room school house in Wittsendburg, . . .

Instead, indent twice after Babb and once after Smythesville for this effect:

Babb:            Would you tell me about your educational experience?

Smythesville: I was educated, first, at a one- room school house in Wittsendburg, . . .

Indicating paragraphs in transcripts should follow the following rules:

Immediately after the name of the speaker do not tab at the beginning of the paragraph. For all subsequent paragraphs tab the beginning of the paragraph and do not insert extra spaces. For instance:

Watson:           Would you tell me about your education?

Witt:             Well, I went to grade school at South Wittburg, junior high school at West Wittburg, and High School at South Inglewood.

On the other hand, my older sister went to grade school at South Wittburg, and then attended West Wittburg Junior High School before going off to finishing school in Basel, Switzerland.

Then I went to college at . . .

### **Indicating the Beginning and end of Tapes**

Indicate the beginning and end of each side of tapes in the transcript. Place this notation on the left margin lined up with names. Do not indicate the beginning of the first tape -- simply begin the transcript. For instance (note single spacing):

END OF SIDE 1, TAPE 1.  
BEGINNING OF SIDE 2, TAPE 1.

Smith: There was no indication that we . . .

If interviews/sessions on more than one date occurred then use the following format:

END OF SIDE 2, TAPE 2. SEPTEMBER 15, 1993.  
BEGINNING OF SIDE 1, TAPE 1. OCTOBER 22, 1993.

Smith: There was no indication that we . . .

In such cases, place that date at the end of all indications of tape changes in order to help quickly orient readers/researchers:

END OF SIDE 2, TAPE 1. SEPTEMBER 15, 1993.  
BEGINNING OF SIDE 1, TAPE 2. SEPTEMBER 15, 1993.

Smith: There was no indication that we . . .

## Editorial Conventions

Transcription shall be done only with very limited editing -- punctuation designed to clarify meaning must be provided; only false starts and redundant oral sounds shall be edited out of the transcript with no indication they have been removed; interruptions to the interview or situations when the conversation wanders from the topic may be indicated in brackets and not included; to the extent possible full identification of individuals and geographic place names shall be provided.

## Punctuation Conventions

Punctuation is the best tool for the transcriber and editor to provide clarity, understandability, and readability. Do not rearrange sentences or words to do this. Punctuation must simply reflect the original meaning and the original arrangement of thoughts.

### Quotation marks.

Do not use quotes around the words of the interviewee as spoken to the interviewer. Use quotes around words which are presented by the interviewee as quotes of another person, e.g., -- then he said to me "Well, if you want it that way you can go ahead and do it."

Place commas and periods inside quotation marks -- regardless of whether the punctuation belongs to the quotation or the sentence as a whole.

Place colons and semicolons outside quotation marks.

Question marks and exclamation marks are placed inside or outside the quotation marks dependent upon whether or not they belong to the quotation or to the sentence as a whole.

PARENTHESES ARE USED TO INDICATE THINGS WHICH ARE ON THE TAPE.

When laughter or other expressive sounds occur indicate them in parentheses =( ). Indicate only what is on the tape with parentheses =( ).

ALSO USE PARENTHESES to include brief interjections in a discussion. For instance:

Smith: At that time we were assigned to special duty as concrete inspectors for the construction of the dam. We found that the quantity of ice mixed with the concrete was insufficient to reduce the temperature properly, (Jones: Yes.) and we had to work that issue out with the contractor. That only took a day, but it was rather tense because the contractor had to shut down the [concrete] batch plant while we worked it out. (Jones: Um-hmm.). The contractor was particularly concerned that she wouldn't fall behind schedule, and . . .



BRACKETS ARE USED TO INDICATE SUPPLEMENTAL EDITORIAL INFORMATION SUCH AS INTERPOLATIONS, EXPLANATIONS, AND CORRECTIONS PROVIDED BY THE EDITOR WHICH WAS NOT ON THE ORIGINAL TAPE -- place it in brackets =[ ]

#### FOOTNOTES:

May be used to provide supplemental editorial information. This would generally be done for researched information added to clarify and supplement the interview while brackets would provide brief information intended to clarify what was said.

Footnotes must be attributed to indicate who added the material. If the editor made the addition, the footnote should be followed by: (Ed.) If the addition was made by the interviewee, the footnote should be followed by the initials of the interviewee in parentheses.

Footnotes should be printed at the bottom of the page on which they appear in the final transcript rather than at the end of the entire transcript or of a section of it. The following conventions should be used (using WordPerfect set these conventions in the options to footnotes at the beginning of the transcript):

The footnote number in the text shall be superscript.

The footnote(s) shall be separated from the text on the page with a line from margin to margin of the page.

The footnote number in the footnote shall be on the left margin with the beginning of text one tab in from the note.

The footnote number in the note shall be full-size and shall sit on the same line as the text, i.e., it will not be superscript.

Ellipses are used to indicate pauses in the conversation.

For pauses in the middle of sentences always type them as three dots separated by spaces from one another and the preceding word -- thus . . .

For pauses which become the end of sentences or even incomplete thoughts, always type them as four dots separated by spaces from one another and the preceding word - - thus . . . .

Use of dashes.

Double dashes (--)<sup>8</sup> are used to show an abrupt change of thought in a sentence. For purposes of Reclamation's transcripts each double dash will be preceded and followed by a space. For example:

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8.. Technically double dashes (--) are known as "em" dashes and single dashes (-) are known as "en" dashes.

Our house at the dam had a living room, dining room, kitchen, and three bedrooms -- now it's been moved over on "N" Street here in town.

Single dashes (-) are used in inclusive or continuing series of numbers or dates (e.g., 23-26 or 1945-1948; to indicate words spelled out by the interviewee (e.g., L-A-N-I-D-O); for compound words (e.g., twenty-one).

#### Use of italics:

Use the italics font on the computer to indicate italics.<sup>9</sup>

Italics are used:

For titles: books, plays, newspapers<sup>10</sup>, periodicals, journals, long poems, musical productions, paintings, films; the names of ships, trains, and aircraft.

For foreign words not yet anglicized.<sup>11</sup>

#### Abbreviations:

Under normal circumstances abbreviations should not be used since one does not speak in abbreviations and the objective is a verbatim transcript. The following abbreviations are generally acceptable: Mr., Messrs., Mrs., Ms., Dr., Jr., Sr., Ph.D., M.A., B.C., A.D., a.m., and p.m..

Do not use U. S. Postal Service abbreviations for names of states. Spell them out.

#### Acronyms:

Acronyms are capitalized without periods inserted after each letter, e.g., BR, NASA, NPS.

Normally the first use of an acronym should be followed by the words for which that acronym stands in brackets, e.g., BR [Bureau of Reclamation]; SOP [standard operating procedure].

If an interviewee uses the acronym B-O-R for Reclamation, type it BoR [BOR is the acronym for the Bureau of Outdoor Recreation, a now defunct Federal agency].

#### Hyphens:

9.. If a typewriter is being used for some reason, a single underline of the word indicates it is italicized.

10.. The official title of the newspaper that appears on the masthead is what should be italicized. Consult *Ayer's Directory of Newspapers and Periodicals* for the official title.

11.. Dictionaries are useful here. A useful reference is Marjorie E. Skillin, Robert M. Gay, et. al., *Words Into Type* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1974).

Do not use hyphens except in compound words. Turn the hyphenation default in the computer program off.

Margins:

Set the margins in the computer at one inch -- top, bottom, and sides.

Justification:

Set the justification at left justify only. Do not use the "full" justification setting.

### **Grammatical Conventions**

Use contractions in the transcript when they appear on the tape, e.g., they's, it's, etc..

Do not correct the interviewee's grammar.

For consistent colloquial pronunciations of words use the proper spelling instead of a phonetic spelling, e.g., them and not "em." But, equally, do not change the words, e.g., "yeah" is a word and should not be changed to "yes."

Numbers:

Generally exact numbers of two or fewer digits should be spelled out and numbers with more than two digits should be expressed in numerals.

Dates and parts of a book are expressed in numerals.

Do abbreviate dates when the century was not included in the taped discussion (e.g., '41 and not 1941)

When referring to dates you may use numerals and an "s" -- type 1940s instead of Nineteen Forties, or type '40s for the term forties. Do not use an apostrophe unless the term is possessive [as in -- The 50's autos often had huge tail fins]..

### **Spelling Conventions**

Use the first (preferred) spelling in a standard dictionary when transcribing. American English conventions are preferred over British English conventions in most instances (.e.g, interviewing a Briton might result in use of British English spellings).

### **Table of Contents**

Interviews on different dates and major sections of the manuscript shall be marked with the table of contents function of the WordPerfect 5.1 program. Interviews of different dates shall be labelled at Level 1. Major sections within each interview shall be labelled at Level 2.

## **Indexing**

All proper names, project names, feature names, locations, and major topics of discussion shall be indexed using the WordPerfect 5.1 indexing function. Items in the text will be cross-indexed as necessary to assure ease of finding them.

### **Review of Transcript by Interviewee**

After transcription and initial editing, the transcript will be forwarded to the interviewee for review, comment if necessary, correction of names and place names, etc. The interviewee will be asked to initial each page of the interview if it is acceptable as is.

If the interviewee requests changes, additions, or deletions to the transcript, each request will be considered on its merits. The transcript will then be corrected as necessary and returned for final review and initialing by the interviewee.

### **Changes to Transcripts at the Request of Interviewees**

Additions to transcripts requested by interviewees will be made in footnotes at the appropriate location in the text with the initials of the interviewee in parentheses at the end of the addition.

Deletions to transcripts at the request of interviewees should be made with care and only after consultation with and approval by the Senior Historian of the Bureau of Reclamation.

Editorial changes to transcripts for the purposes of making the text more formal and grammatical, e.g., more like a formal written style rather than spoken style, shall be discussed with and approved by the Senior Historian of the Bureau of Reclamation. It is the policy of Reclamation, where possible and appropriate, to retain the flavor and style of the spoken interview.

### **Preparation of Record Copy of Transcript and Other Materials for Transmittal to NARA**

The record copy of the transcript prepared for transmittal to the National Archives and Records Administration will be on quality, non-acid paper with a high cotton content, preferably 100 percent cotton. The record copy will be unbound, but Reclamation's copies will generally be bound in a standardized hard cover format.

Transcripts of 100 pages, or fewer, will be printed on one side of the paper. Transcripts of more than 100 pages will be printed on both sides of the paper.

The record copy of the transcript and other copies shall normally be printed in Times Roman font at the 12 point size.

## SUGGESTED INTERVIEW CITATION FORM FOR RESEARCHERS

A suggested bibliographic citation should be placed near the bottom of the page on the back of the title page of each oral history interview. The following is the format and punctuation for the citation:

### Suggested Bibliographic Citation:

Last name, First and middle name or initial (of interviewee). ORAL HISTORY INTERVIEW. Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by \_\_\_(name of interviewer)\_\_\_, \_\_\_(relationship of interviewer to Reclamation)\_\_\_, \_\_\_(date of interview - be precise)\_\_\_, at \_\_\_(location of interview). Transcription by \_\_\_(name of transcriber or transcription service)\_\_\_ Edited by \_\_\_(name of editor[s])\_\_\_. Repository for the record copy of the interview transcript is the National Archives and Records Administration in College Park, Maryland.

**THIS SET OF GUIDELINES SHALL BE PLACED AT THE END OR BEGINNING OF EACH INTERVIEW TO PROVIDE INFORMATION ON THE PRINCIPLES USED IN DEVELOPMENT OF THE TRANSCRIPT.**

**ORAL HISTORY INTERVIEW**  
Name of Interviewee  
Name of Reclamation Project  
(if limited to only one - otherwise blank)

Date of Interview  
Location of Interview

◆◆◆◆◆◆◆◆

Interview Conducted by:  
Name  
Title  
Organizational Unit

◆◆◆◆◆◆◆◆

Oral History Program  
Bureau of Reclamation

