

**ORAL HISTORY INTERVIEW  
PEGGY HUGHES**



**NEWLANDS PROJECT ORAL HISTORY PROJECT**



November 4, 1994  
Fallon, Nevada



**STATUS OF INTERVIEW:  
OPEN FOR RESEARCH**



Interviews Conducted by:  
Donald B. Seney  
Bureau of Reclamation



Oral History Program  
Bureau of Reclamation

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## INTRODUCTION

In 1988 Reclamation hired a historian to create a history program and work in the cultural resources management program of the agency. Though 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); and 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.

Most of Reclamation's oral history interviews have focussed on current and former Reclamation employees. However, one part of the oral history program has been implementation of a research design to obtain an all-around look at one Reclamation Project -- the Newlands Project. Focus on the Newlands Project, one of Reclamation's oldest projects, was suggested to the senior historian in consultations with Roger Patterson, the Regional Director in the Mid-Pacific Region, in which the Newlands Project is located. The Newlands Project was selected for several reasons: its relatively small size makes it manageable for this project; and the issues on the Project are complex and varied thereby providing a good mix of current issues faced by Reclamation in the arid West. This interview is part of a research design to develop a comprehensive look at the entire constellation of interests and participants affected by the Newlands Project in western Nevada.

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: PEGGY HUGHES

[Transcriptionist's note: The introduction and first three minutes of this interview was inadvertently lost at the time the interview was recorded.]

My name is Donald Seney, and today is November 4, 1994. I'm talking to Mrs. Peggy Hughes in the Agricultural Services Center, Fallon, Nevada.

### FAMILY, EARLY LIFE AND EDUCATION

[Peggy Ann Foster was born on February 13, 1950 in Reno, Nevada. She was raised in Carson City, Nevada and educated in the elementary and secondary school system in Carson City. She married George Hughes on June 24, 1972. They have two children, Geoffrey Lee and Jennifer Lynn Hughes.]<sup>1</sup>

Hughes: . . . from about the time I was in fifth, sixth grade, and I had a real good seventh-grade science teacher that really encouraged me to go into it. From a career standpoint, when I was in high school, I was looking at oceanography. I was really kind of interested in that, but because of financial restrictions, there was just no way I could go to a school outside the state. So I started in the College of Arts and Science in biology, stayed there for two years and got a fairly good background in biology, zoology, chemistry, those kind of things. At ~~a point there~~ [this]<sup>2</sup>, I hadn't taken any of my language credits, and I really couldn't see a real need for it, so I began looking at the College of Ag which didn't require any foreign language credits and I transferred over there into the Department of . . . . Well, it's now Renewable Natural Resources, but at the point in time I went there, it was the Department of

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0. Information provided by Peggy Hughes and inserted by editor.
  0. Clarification provided by Mrs. Hughes



Wildlife and Forestry, and then changed my major to wildlife management, and that's what I ended up with.

Seney: Did you find you really like it? (Hughes: Yes.) It wasn't just the foreign language requirement?

Hughes: No, I really liked it, and I'm glad I made that change. It was at a point in time the University had financial problems and when I made the change I found that I was up against probably going an extra year because of the way they offered their classes.

Seney: If you'd stayed, you mean, in the other major?

Hughes: Yeah. And so I got into the College and I found myself oftentimes taking the prerequisite along with the advanced class because of the way they offered courses. And it was a challenge. At that point in time there were very few women in the natural resources area, and I think up until about my senior year, I was usually the only woman in the class, which was interesting in itself, because I felt that I had to prove myself worthy of being in there. So I've always said I've had to apply myself 120 percent to prove I was capable of being in there.

Seney: Was there some skepticism on the part of your classmates, even professors? Sexism is what I'm saying.

Hughes: No, I never really ran into that, but I may have been naive enough that I didn't notice it. I tend to do that. I basically became "one of the guys" in a sense, because I didn't become offended by some of their maybe off-color jokes at that point in time, or whatever, and it was readily accepted. And I think it was because I proved myself worthy, that I was in there trying to make a grade and contributed to the class. So like I said, I graduated in 1972.

Seney: It just seems like an odd thing for a city girl from a gift shop background to be doing.

Hughes: Yeah, I'm really not sure. At one point in time, my senior year, I had started to look maybe at going back to the University and getting a teaching certificate.

Seney: You were probably more concerned about employment, though, at that point.

Hughes: A little bit, because I wasn't really sure where I was going with the degree. I didn't think that would be a problem, I'd find some kind of work. At the University at that point in time they were looking at training people in the natural resources, and trying to bring those curriculums into the school districts, and they were looking at possibly having some kind of person with that background travel around the state and do that. But I had met my husband at that point in time and we decided to get married.

#### GETTING MARRIED

Seney: What year did you get married?

Hughes: In 1972, after graduating from college.

Seney: He was a fellow student?

Hughes: For a point in time there, yeah. He was raised in Hawthorne and had worked off and on at the naval ammunition depot at that point in time. It's now an Army depot. It was a point in time that Vietnam was really hot and heavy, and trying to avoid a little bit of the draft and stuff, he decided to go to school, and I happened to meet him. He had been a boyfriend of one of my friends at the University and they broke up, and then along the way we just happened to meet at a party and things just clicked.

Seney: And his name is?

#### A SUMMER JOB WITH THE BUREAU OF LAND MANAGEMENT

Hughes: George. So we were married in June of 1972. It was kind of interesting: I had an opportunity to go to work for BLM [Bureau of Land Management]<sup>1</sup> when I graduated, for a summer job, which I saw as the door opening to kind of getting into the resource area. We got married, and then we lived apart for about two-and-a-half months while I worked in Carson City and he was in Hawthorne.

Seney: Hawthorne is where?

Hughes: It's about seventy-five miles south of here, on the road to Las Vegas. It kind of just sits out in the middle of the desert at the south end of Walker Lake. So instead of postponing the wedding, we got married and then I commuted back and forth on the weekends and was able to kind of get that experience, which was kind of interesting. It was a point in time that BLM was becoming very unpopular with the range users, and I often found myself in a situation where I was questioned where I was on private ground or public land when I was out doing range transects. It was interesting.

Seney: What's a range transect?

Hughes: You go out and you measure off a certain distance and then you go through and it depends on what you're doing, if you're measuring plant growth, those kind of things, documenting what plants occur along this line.

Seney: So you draw a line . . . .

Hughes: Yeah, you had a line, you taped it, and then you went through and depending on what you were doing, you would gather that plant information, number of plants, plant census or yield census, depending on what you need.

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0. Unless otherwise noted, material in brackets was inserted by editor.

Seney: What's a yield census?

Hughes: Well, you would go through and clip the vegetation and then weigh it for the dry matter, and that can be converted to AUMs through . . . .

Seney: "AUM" is?

Hughes: Animal Unit Month, for grazing purposes.

Seney: I see, okay. Whenever you mention something that outsiders won't know about, I'm going to ask you to explain what it means.

Hughes: Yeah, we're real good at using acronyms!

Seney: Because when someone reads this they'll say, "Why didn't he ask about that? What does this mean?" Anyway, I will do that.

Did you find that interesting?

Hughes: Yeah, I did, and it was interesting from the standpoint of being out there by myself -- well, I wasn't totally by myself. I had -- they used to call it Youth Conservation Corps -- students that worked for BLM during the summer, and they went out as help for the more professional individual, and I usually had one of them along with me. They rotated through with the staff and went out with us, just to learn things. It was interesting.

#### WORKING AT THE HAWTHORNE AMMUNITION DEPOT AND LOOKING FOR ANOTHER JOB

The summer ended and I moved back to Hawthorne and went to work for the Department of Defense down there at the ammunition depot as a supply clerk. And what I found is, in applying to be put on the Federal Register for various positions in the natural resources, I came out with a fairly high rating, but it was a point in time when a lot of the Vietnam vets had come back and had finished up their [tours].

Seney: High rating based on what.

Hughes: It was based on your education and experience, so you would be rated at a certain level for a position. And the Federal government, when they hire, they usually hire off a register at the entrance level, so they looked at that point score. Well, most of the people I was competing [with] had veterans' preference which put them at 100 points or better, so I was at a disadvantage because the vets were being picked up for most of the resource jobs. So I went to work as a supply clerk there and became involved at a resource committee there on the station that looked after the resources and projects. They had quite an extensive area in the mountains where they had deer and bighorn sheep and they allowed some hunting in there, so we worked on the resource issues there on the station, so it kept me in touch with what was going on.

Seney: What sort of resource issues were there on the station?

Hughes: Hunting, limiting the hunting.

Seney: Trying to limit the hunting.

Hughes: Trying to limit the hunting. Well, most of the access was limited. You had to have permission to get onto the station.

Seney: So if I wanted to hunt, I would not only need a state license, I would have to come see the commander or his designated person to get permission.

Hughes: Right, get permission on there. We did bird counts for sage hen to determine if the hunting area could be opened for limited hunting.

Seney: How do you do a sage hen bird count?

Hughes: Well, you just kind of go out and drive around and attempt to count the number of birds in a specific area. I was unfortunate the one time I did that -- we had the sheriff's office come looking for my husband and I. He had gone up with me to do it, and my husband's father had been involved in a traffic accident, and we had left

real early that morning, and then they came up and found us, so I never really got to get through that process much, but that's what it involves, is going out and counting the number of birds.

Seney: And this was a base committee made up of various volunteer individuals?

Hughes: Yeah, it was voluntary.

Seney: "Let's get environmentally sensitive." The commandant says.

Hughes: Right, and at that point, the Department of Defense really wasn't into the resources. You know, they were managing their munitions and all of those kind of things, but they weren't really mandated as they are now to become environmentally sensitive to what they did in the past. And they used to have training exercises up on the hill, and I think there was oftentimes indiscriminate shooting of the wildlife. You know, you could never prove that, but there'd be birds there and then the next time you went up there weren't any birds.

Seney: To try to raise the sensitivity level and that sort of thing?

Hughes: Yeah. And we worked on water issues. They had some holding reservoirs for their domestic water, and they would plant fish in there and allow fishing by the military, for the most part, in there. Some civilians could go in, but it was fairly limited. But just those kind of things.

#### GOING TO WORK FOR THE NATURAL RESOURCES CONSERVATION SERVICE

About the time I came to work for SCS [Soil Conservation Service]<sup>1</sup>-- Natural Resources Conservation Service -- (chuckles) I got to get used to that -- the base was

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0. On October 20, 1994 the Soil Conservation Service became the Natural Resources Conservation Service (Ed.).

going through a reduction in force. My husband had had his job changed and they were talking about laying more people off and moving them to other [places].

Seney: What did he do, by the way?

Hughes: He worked in what they called stowage, which is the Ammunition Stowage Department. He loaded munitions, missiles, those kinds of things, into boxcars and trucks.

Seney: They have all varieties?

Hughes: Oh, lots of variety of things.

Seney: Small arms?

Hughes: Small arms, medium sized, missiles, all kinds of things. So he was involved in that and we were looking at the potential for him having to transfer out of there with his job, and we didn't really want to leave Nevada, so I started making contacts with the Federal agencies, and contacted Natural Resources Conservation Service in Reno and went in for an interview and was offered the job here in Fallon as a soil conservationist trainee.

Seney: Has this been your first and only posting? This is it?!

Hughes: Yeah, which is very unusual.

Seney: I would think it would be, isn't it? (Hughes: Yeah.) Shouldn't you be all over the place in the first years?

Hughes: Yeah. When I first came on board, that was kind of a stipulation with the job, that I would probably after a year be asked to move to gain the experience.

Seney: Just around Nevada? Or might you be in South Dakota?

- Hughes: No, around Nevada. Usually when you hired on within a state, you stayed there until you applied to go elsewhere, unless, for instance your job was being changed, it was being done away with -- then they would maybe try and find you another location.
- Seney: But I take it for you this is home, you're not searching the announcements for the next position. (Hughes: A little bit.) Are you maybe? (Hughes: Yeah, I am a little bit.) Is this new?
- Hughes: No, I've been considering it. Like when you first came on board, what they tried to do is leave you in a place, become acquainted with it, get the experience, then they move you so you had other experience with various types of planning, or engineering application of conservation practices. And it was kind of ironic: I got this job, and then my husband couldn't get transferred over here to the naval air station, so he kept trying and trying. So we had our home in Hawthorne, and I stayed here during the week again -- kind of back to the same type of scenario when we were first married.
- Seney: What year did you come here?
- Hughes: In 1974.
- Seney: So two years after you're out of college, you're here. (Hughes: Uh-huh.) And you'd be about twenty-four, may I ask? Because I do want to know your birth date.
- Hughes: Yeah, I would have been about twenty-four.
- Seney: Tell me what your birth date is.
- Hughes: February 13, 1950. So it was kind of ironic: my husband finally got a job here at the base and I took off some leave and went home to help move.
- Seney: How long did that take, by the way?
- Hughes: Ten months, not too bad. And seventy-five miles is nothing compared to a lot of the travel over the hill in California, for people.



When I came back to work the next week, the District Conservationist who was here said that the state office had sent notification that I would be transferring (chuckles) to the Reno Field Office.

Seney: Oh no!

Hughes: And at that point in time, my husband and I had a great deal of discussion about it, and I said, "I can commute back and forth or whatever," and he just wouldn't have any part of that. So I was able to work out with my boss and the people in administration in the state office to stay here. I had to take a change in job title, back to soil conservation technician.

Seney: So you had to take a demotion to do it?

Hughes: Yeah, it was in a sense a demotion. And then I had to work part-time, which was something like seventy-two hours a pay period. And then it worked back into a full-time position as a soil con tech.

Seney: Did they really have to do that? Or was there a message there?

Hughes: (chuckles) I'm not so sure there was a message. Again, maybe being naive, there probably was a message. You know, you think about it, and you go back, and you think, "Well, I kind of had to 'pay my dues.'" (chuckles) And we had another individual in the state that had kind of a similar situation happen. But it was something that was really good for me with the Service.

Seney: How so?

Hughes: It got me more into the engineering function of Natural Resources Conservation Service. The soil conservationists are mainly the planners: they do the conservation farm plans for the farmers and did a little bit of engineering on the side. But as a technician I really got more into the engineering and I felt like I was doing a little bit

more for the individual. The planning here is very basic from farm to farm to farm. You don't have a lot of change in operations -- maybe in the length of their rotation from hay to grain or whatever -- but the planning part becomes very boring after a while.

#### SERVICES PROVIDED TO FARMERS ON THE NEWLANDS PROJECT

Seney: Let me get to that, because I want to get a sense of what you're doing here. Let's say I'm a farmer here on the Newlands Project, and I come in and I say, "Listen, I need your services here." How do we work this out, what do we do?

Hughes: Well first of all, most of our service is provided basically through the conservation districts that are located here.

Seney: So that's a state entity?

Hughes: Yes. They're formed under state law, and really, that's how the Natural Resources Conservation Service becomes involved in a community or a farming location.

Seney: So would I first have gone to the local soil conservation district?

Hughes: Yeah, in a sense. They're usually co-located with us.

Seney: Are they here in this building?

Hughes: Uh-huh, they're here.

Seney: We're in what's called the Agricultural Services Center.

Hughes: Well, technically, they're not really recognized as being part of the Services Center. We kind of pick up their function. If you were to come in and they didn't have a secretary, then we would normally sign you up as a conservation district member, depending on what conservation district you were in. At one point in time we had three in Churchill County. And most of those districts were formed in the 50s. Some of them combined and a name change took place.

- Seney: What was the impetus to forming them in the 50s?
- Hughes: To provide farming assistance to the individuals. I really kind of have to go back and look at really how they were established under the statute.
- Seney: At this point, I take it most of the farms probably had not been leveled, and graded the way they are now.
- Hughes: No. Most of the farming that had gone on had been done with teams of horses and pull equipment behind the horses, or old antiquated tractors, those kind of things. About the 50s I think the technology began to improve. The Natural Resources Conservation Service really kind of started to come into its own, and they started doing soil surveys to help the individuals, and it was about, I think it was 1958 that what we called a Fallon Soil Survey for the Fallon-Fernley area was started here.
- Seney: When was this office established?
- Hughes: (sigh) It might have been pre-'58, I really couldn't tell you. I know the soil surveys started in '58 and we probably came in in 1952, 1953.
- Seney: Why the state soil conservation districts? Why can't I just come straight to you? (Hughes: Well, I mean, you can.) Why these state conservation districts?
- Hughes: I think it was intended to provide an incentive for individuals to do farm planning, to improve their work. It was just kind of the basic structure that was set up as part of the revised statutes for the districts. And it was an agreement somehow that was worked out a long time ago. We never came into an area without the conservation districts being there and asking our support. We basically became their technical arm.
- Seney: Does this have anything to do with all the great percentage of Federal land in this state? (Hughes: I don't think so, no.) Sensitivities maybe that developed?

Hughes: No, because the conservation districts, if you look at conservation districts nationwide, you look at the Great Plains area or the East, and in a lot of those states, there used to be an Natural Resources Conservation Service Office in every county. You might have had an Natural Resources Conservation Service Office in one county, and another Natural Resources Conservation Service Office in the next county, and they're only five miles away. And I think a lot of the politics got involved in that. Natural Resources Conservation Service was basically formed out of the Dust Bowl era of the 1930s.

Seney: And I expect they may have wanted some state political commitment, before they came in, like maybe a buffer, who knows?

Hughes: Right, could have been. I'd have to go back through the history of the Natural Resources Conservation Service to give you a little bit more background on that.

Seney: So in other words I could come either to the local soil conservation district in which my farm was located, or I could come straight to you (Hughes: Right.) for these services. So if I come to the district, they sign me up as a member of the district, and then I come to you. (Hughes: Uh-huh, for the technical assistance.) Now what do we do?

Hughes: Well, we would sit down with you and ask you what your resource problem was.

Seney: Well, the water's puddling on my fields, and I'm not getting good penetration.

Hughes: Okay, so what we would do is, we would look at the soils. You know, early on, the soils information wasn't available, so soil scientists would have had to go out and look at your farm and do the soils at that particular location, or the entire farm. And then that information would come back to the office and then the planners would work with you on that. We would look at the texture to see why it was ponding.

You would go out and do some surveying to see if the grade on the field was such that you had a kind of a pocket and the water got in there and just couldn't get out and go down the rest of the field. People became more aware of the need to become efficient in their water use. So we'd start leveling land.

Seney: As a novice, as a really non-farm person, puddling was just maybe a good guess on my part, as what my problem might be. What might be some of the other problems that would come through the door that farmers would need help with.

Hughes: Well, if you had, say, an earth ditch that you weren't able to hold the water in it as you irrigated -- the texture might be such that it was fairly sandy and if you put too much water into that ditch, and didn't have enough of your outlet gates open into your field, you could overtop the ditch or blow a side of the ditch out. Then we would go out and look at that and redesign the ditch to make sure that you had the proper cross-section and depth for the amount of water that you were being delivered.

Seney: "Cross-section" means?

Hughes: It would be the cross-sectional area of the ditch itself, what we would call the wetted perimeter of the ditch. As technology advanced, we started to put in concrete ditch linings here.

Seney: Would you maybe tell me, "Listen, we're not going to be able to do anything about this, the soil is wrong, you've got to line this one"?

#### FINANCIAL AND TECHNICAL AID TO FARMERS

Hughes: Yeah, we would normally do that. There are cost-share programs available through USDA [United States Department of Agriculture].

Seney: So you might pick up part of the cost, or USDA might?

Hughes: The Natural Resources Conservation Service wouldn't pick up the cost, but Agricultural Stabilization Conservation Service, which is a sister agency, had a cost-share program where they would pick up half of the cost, up to a maximum cost in that particular year. So we would recommend that you go talk to them and sign up and then there's a lot of exchange of paper between both agencies, and then you would be approved or not approved if they had funding, and we would provide you with all the design information.

Seney: You mean you'd design my ditches?

Hughes: We would design the ditch, we would design the land levelling, the structures.

Seney: What's that going to cost me?

Hughes: Nothing. There is no fee for our service -- other than your tax dollars! (laughs)

Seney: Right, exactly. The thought being that what you're doing is you're improving the general viability and productivity of agriculture, and supporting the individual farmers in the farm community.

Hughes: Yeah. And really, you know, watching out for the resources as a whole.

Seney: And protecting the soil.

Hughes: And protecting the soil. Really, that's the whole basis of our programs, is the soil -- whether it's water quality or wildlife management, irrigation water management -- the soil is kind of the center or the basis for all of our work.

Seney: You're going to come out and say, "Our first priority is making sure that soil remains productive."

Hughes: Uh-huh. Well, yeah, you want it to remain productive, but you want it to remain . . . . (sigh) What's the best way to do that? You want to basically keep it where it should be.

Seney: Right, so you want to eliminate erosion to the extent you can.

Hughes: Right, erosion and loss of water, those kind of things.

Seney: When you're talking about this exchange of paper between yourself and the Agricultural Stabilization people, when you're recommending a ditch be lined on my property, I take it you'd be discussing these kind of issues.

Hughes: Right, we go through a process where we evaluate an individual's irrigation water management.

Seney: Tell me about that. Be as detailed as you can, because believe it or not, we really want to know, in a detailed fashion, what's involved in it.

#### THE EFFICIENCY OF WATER MANAGEMENT ON THE FARMS

Hughes: We have what we call a Nevada Irrigation Guide, and in the Guide there is information that allows us to calculate the efficiency of your water management. And that involves knowing how much water you're applying to a particular field, and how much water that particular soil should have in it, and computing the efficiency based on that. What we would do is, okay you have so many acres of ground, say ten acres, and the soil had a water-holding capacity of five inches. What we recommend, when you have depleted fifty percent of that water, then it's time for you to irrigate. So if you had five inches of available water, then we'd want you to replace two-and-a-half. So you'd want to replace what we call twenty-five acre-inches, and we would find out how much water you were irrigating with. Let's see if I can get the example right. So you maybe irrigated for ten hours with five cfs [cubic feet per second], so you would have been applying fifty acre-inches. So you needed twenty-five and you applied fifty, so you were irrigating at fifty percent efficiency. You really were applying a little too much water.

Seney: And that water's just going to soak through and do no good.

Hughes: Right. And the irrigation guide tells us that there's a range for a particular soil, where the efficiency should be.

END OF SIDE 1, TAPE 1.

BEGINNING OF SIDE 2, TAPE 1.

Seney: You said there are five inches of water. Does that mean you've measured down and you can tell that that soil will hold, productively, five inches of water?

Hughes: Yeah, they run analysis. Soil survey work is somewhat fairly complicated, as far as I'm concerned. I couldn't tell you how they do that. That's not my field. That's why we have soil scientists that work for us. A lot of the soil is sent out, and there's a laboratory analysis done as to the available water-holding capacity of that particular soil. But if you came out with fifty percent efficiency, then I would be recommending, okay, we need to do some work. We maybe need to level the ground. If we find some real bad irregularities, it's just taking a lot of time to push the water over ~~the end of the field~~ and get<sup>t</sup> to the end. Then you're having to apply more to get over all the stuff. Or if you have a fairly sandy-textured ditch, a lot of that water is going down, through, and out the ditch and not being applied to the ground. So that's why we would do lining. If you had a fairly tight soil, say, for clay or clay loam, the loss through that ditch profile is not very much, so we really wouldn't recommend a concrete ditch lining. There's other problems in engineering properties there: clays ~~and stuff~~ and<sup>2</sup> subject to frost-heave and shrink-swell.

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0. Clarification provided by Mrs. Hughes.

0. Clarification provided by Mrs. Hughes.



Seney: What does that mean?

Hughes: Frost-heave means that if you have moisture in the profile. (Seney: "Moisture in the profile" meaning?) In the soil profile itself.

Seney: You're gesturing with your hands. How deep would a profile go?

Hughes: In a concrete ditch here, we're talking anywhere between two and three feet. So if you had moisture in that profile, and it froze, what it does is form ice crystals in ~~the soil, expands with the ice crystals in there~~ [the soils, and the soil expands with the ice]<sup>1</sup>. So if you put concrete lining into a soil that could do that, there's a potential for that lining to be displaced. Cracked or kind of popped out of the ground. So those kind of things we tend to look for.

Shrink-swell: Certain clays will, as you add water, they'll swell; as they dry out, they crack. And some soils will crack very, very deep, and it's difficult to farm. It's hard on the plants. What it'll do lots of times with the young plants is tear the rooting structure. It's hard on equipment. We have some of those soils here, especially out in the Stillwater area, where you talk to the farmers and they say they get beat to death farming those particular fields, with those particular soils. It's just real hard, you know. When they dry out, taking their equipment over it, it's just real tough on them.

Seney: Do you ever tell people, "Listen, this is not worth your time and trouble"?

Hughes: (laughs) No, not really, because they seem to be able to weather that part of farming and they do manage to get fairly good yields on that. I think we have fairly good managers in the Project, especially on the larger farms that have done real well.

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0. Clarification provided by Mrs. Hughes.

Seney: So there isn't any of this soil here where you've said, "Geez, you ought to buy some other, or take this out"?

Hughes: (laughs) Well, sometimes we do, you know, if it's fairly poor quality. Nowadays we really tend to look at that probably more than we did when we first started working here. But in the 50s the valley was really beginning to develop more and more over time. There's more ground being put into production, individuals are buying more water rights and being able to apply it to the land. Now with all the water issues and things like that that are going on, in a lot of cases we may be looking at telling an individual that this fairly poor soil, you don't have a real good yield here, you might consider transferring your water to another portion, or possibly considering selling that water to the wildlife people for the wetlands.

Seney: Are you in any way involved in encouraging that kind of sale? You're smiling and chuckling a little when I say this. Has there been talk amongst you all in sort of the Federal enterprise here, that "Gee, Peggy, if you run across some stuff that looks like it ought to be sold, don't be shy in telling me that"?

Hughes: No, I really haven't encouraged that, Don. I've been very actively involved in the water issues here, probably more so than maybe . . . .

#### OWNING WATER RIGHTS

Seney: Well, you're a water user yourself.

Hughes: Yeah, I'm a water user myself.

Seney: Tell me about that.

Hughes: I'm very in tune to all the problems that go along with that.

Seney: Is that helpful, do you think, to be a water user on the Project? Does that help to inform your decisions, to give you a sensitivity? Or does it get in the way maybe sometimes?

Hughes: Sometimes. It helps the sensitivity and it does get in the way. It's very frustrating, I live in what we call an irrigation subdivision. The subdivision I'm in was once one single property. The way TCID [Truckee-Carson Irrigation District] brings water in, they come to the original headgate of that original property and then the landowners basically are served off a common ditch, and we irrigate all at the same time. I think in those situations oftentimes you have personality conflicts between the individuals.

Seney: So is that kind of hard to arrange the deliveries?

Hughes: No, in our subdivision it hasn't been, because normally my husband or one other individual who owns larger acreage, have been what they call the subdivision watermaster. And we switched off from year-to-year as to who was responsible for calling for water. And that's the way the irrigation district set that up. You have a watermaster and an alternate, and only those people can call for water. It did away with a lot of the bickering and each individual trying to call for water. It made them more efficient. It's frustrating, because oftentimes those individuals that buy those parcels of land have no farming experience, have no idea of the concept of water and the power that exists behind water. And I've seen it first-hand in our subdivision, to come home and have had somebody not call me and say the irrigation water was there, I needed to come take my turn in irrigating. And what they've done is, they closed the checkgate and all the water has come over their borders and gone down my driveway. Or they've gone in and sent the water down to the bottom of the ditch

and forgot to call or something. Or they turn off their stuff and they never go back out and look what's going on in the rest of the ditch. They think you go out and it's just like turning off the water tap in your house. When they're done, they don't care, they just leave it up to somebody else. And I think that's probably been the most frustrating part for me, working with it every day and knowing how it should work, and not to see it work. Fortunately, in our subdivision, the personalities don't get in the way too often. My husband often tells them, "If you don't like it, you don't have to take your water." (laughter) He can be pretty forceful at times. But there's other subdivisions in the Project where they've had to actually go and padlock the gates, make the individuals resolve their conflicts. We've had individuals, in fights, the Sheriff's Office is called, people have been thrown into the ditch. And then when that happens, they end up coming to see us and we try to come up with solutions to improve their irrigation.

Seney: "Us" as in the Natural Resources Conservation Service?

Hughes: The Natural Resources Conservation Service, right. And it's frustrating.

Seney: You're using the term "subdivision," and a lot of people have a very distinct picture of what a subdivision looks like: that's one house after another in a tract, but you don't mean that? How large is your holding?

Hughes: We have five acres.

Seney: And what are you doing on that five acres with that water?

Hughes: It's pasture. We utilize pasture. Originally, the whole tract of land that was subdivided into -- I think there's four- or five-acre parcels, several two-and-a-halves, and then a one-acre parcel. And then there's some ground on the other side of the street that's actually in our irrigation subdivision but weren't a part of that original

land holding, but they were in a separate one, but because we're served off the same ditch, we all irrigate at the same time, they have to irrigated at the same time as we do.

#### BEING INVOLVED IN THE BENCH/BOTTOM LAND CONTROVERSY

Seney: What's the duty on your land?

Hughes: Four-and-a-half.

Seney: So you've got benchland then?

Hughes: Well, up until probably this week (laughs) I had benchland.

Seney: Oh, you're involved in the bench/bottom controversy?

Hughes: I'm involved in bench/bottom too. Very frustrating. And Natural Resources Conservation Service will probably be right in the middle of helping those individuals ~~appeal to the Federal Watermaster~~ [apply for final determination by the Federal Watermaster].<sup>1</sup>

Seney: How does it look to you as a ~~Soil Conservation~~ [Natural Resources]<sup>2</sup> person? Are they right on this? Or should you be, as far as you're concerned, should you remain benchlands?

Hughes: Well, (sigh), the way I can best answer that is, we have looked at the Bureau's criteria, their method for determining water allocations is not the same as ours in the Natural Resources Conservation Service. When we work with individuals on their water needs, we look at the soils which the Bureau has, and the water-holding capacity.

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0. Clarification provided by Mrs. Hughes.

0. Clairification provided by Mrs. Hughes.

Seney: You assisted them, did you not?

Hughes: Not the Bureau, no. The Bureau used the soil survey for the Fallon-Fernley area; the Soil Conservation's survey. Bench/bottom has often been construed as being a soil survey classification. The Natural Resources Conservation Service does not have bench/bottom soils, bench/bottom is solely a Bureau of Reclamation term. That's one of those things that we really have to watch when the Bureau is using the soil survey that they've interpreted the material correctly.

Seney: Do you find yourself in the community sometimes, bearing a little of the blame for this? when people don't understand that this is not your doing?

Hughes: I haven't seen it. Now maybe with bench/bottom it will, because there's a direct link to our soil survey stuff. I haven't seen it as of yet, because most individuals that are involved in bench/bottom aren't aware that they were in bench/bottom situation. The larger farmers that were told several years ago that they would be decreased, are aware that we helped some of the individuals do some appeals, provided them with technical information to take to the Federal Watermaster. When it got there, it was put on hold because I believe it was remanded back to court for a decision on whether the criteria was acceptable or not. But we are going to be pulled into it. We've agreed to work with the irrigation district, probably the Newlands Water Protective Association -- I know they've been involved a little bit with bench/bottom, and I haven't had a chance to talk to them since it hit the street Monday morning.

Seney: This last Monday morning?

Hughes: Yeah, this last Monday they released 175 letters.

Seney: The Bureau did?

Hughes: No, TCID. The Bureau requires TCID to notify the water users.

Seney: So you got your letter?

Hughes: No, I haven't received mine, but I know I'm on the list. I receive the lists as they're updated, and TCID is sending them out. So I know who might be calling for our help. At this point in time with bench/bottom we're not doing anything because we're waiting for the criteria for appeal to be developed, and then we can go and help the individuals.

Seney: And that will be through the Watermaster, he will be looking at that.

Hughes: Yeah, the Watermaster, the way I interpret it, will have the authority to make that decision, other than some of the stuff I've seen lately might, if the Bureau or the Department of Justice doesn't agree, then it may have to go back through court. So I'm not sure. All that kind of stuff has to be worked out, and we're going to hopefully participate in those discussions as to how we can help.

#### THE CRITERIA FOR DETERMINING BENCH/BOTTOM LANDS

But getting back to the Bureau's criteria for bench/bottom: they look at depth of water table and the effect that that water table has on yield.

Seney: Give me a sense of what that means. How far below your property, for example, when you drill down, how far down do you have to go before you hit water?

Hughes: About five feet.

Seney: Is that pretty high?

Hughes: Well, not really. If you look at the soil survey, there's a number of soils there that have what they call a seasonal high water table, between one and three feet below the surface. Most soils here are between three and five feet. And what that means is that over time -- and we've found in some of the evaluations we've done on water tables, where we've monitored a number of wells -- the water table at the first of the

season is fairly low, it's five feet or less. And over time, as you add water to the profile through the irrigation season, it tends to build. It'll actually come up and go down, because that's what you expect with soils anyway -- when you add water, the profile is saturated, and then it drains out.

Seney: Now these are actually fields that you're irrigating?

Hughes: Right. And then as you go through the season on some of them, then they tend to build the water table, and then about mid-season, July-August, the table tends to go up and stay up a little bit. Then as you go further into the fall, then the water table will start to go down. So I'm not sure how we're going to work with that, because that's something we don't look at. When we work with an individual on irrigation water management, we look at the soil's holding capacity and then look at the actual crop needs for water, the consumptive use, the amount of water it takes that plant to grow on that particular soil, on that particular field, we look at that water need. And a lot of our calculations show that we are a water-short area. NRCS, [has] done evaluations on a number of farms, if you look at the crop needs here, the crop actually needs more water than bottomland duty would allow.

Seney: I see. Now, when you talk about the height of the water table, under the Bureau's new classification, where would that be if my land were going to be bottomland? Where would that water table be.

Hughes: Between three and five feet.

Seney: If it's going to be bench, where would it be?

Hughes: Below five feet.

Seney: Below five feet to be bench. So in other words, if they come into an area and they say, "Oops, that's 3 1/2 feet, that's bottomland."



Hughes: That is the criteria that they've set.

Seney: And that's the primary criteria? (Hughes: Uh-huh.) The only real criteria, is it?

Hughes: Well, they're looking at available water-holding capacity in the first five feet, which is considered the rooting zone for alfalfa. Bench/bottom is basically set up using alfalfa as the main crop.

Seney: And the roots go five feet in alfalfa? Three to five?

Hughes: Well, (sigh) it depends on the soil. In most crops, a lot of your rooting structure is in the first two or three feet. Pasture is usually in the first eighteen inches to two feet. Alfalfa is not really considered a shallow-rooting crop, but as the roots go down, you get less and less of that rooting structure, so you can oftentimes find roots that'll follow, get fairly deep -- but there's not a lot of them. What really hurts here on alfalfa is the fluctuating water table. As the water comes up, and if it sits in that root zone too long, then the roots die back, and as the table goes down, the roots will begin to regenerate themselves and follow that water table down again.

Seney: But damage has been done by then.

Hughes: The damage has been done, but there's lots of new varieties of alfalfa on the market today that are shallower-rooted, and are not affected by that. The Bureau, I think in some of their work, is often looking at the water table being static, and saying that alfalfa is taking a lot of its consumptive use from that static water table. Ours isn't a static water table, it's a fluctuating water table, so I'm not sure how that applies. That's something we're looking at as we work with them on this bench/bottom criteria.

- Seney: So thinking of your own property now, the water table being five feet, roughly, if we went down. (Hughes: Uh-huh.) Now I know their criteria says this is measured on the basis of three to four normal years -- I can't remember.
- Hughes: Yeah, three years I think is what has been proposed for looking at it from the appeal process.
- Seney: Lord knows we may be dead and gone before three normal years show up again!
- Hughes: Right, that's something we're up against. It's been the irrigation district's contention that the Bureau, with all the changes in the operation of the system, the levels that have to be maintained in Lahontan Reservoir, water coming in off the Truckee, that we will probably be in an artificial drought situation every year. And if that's the case, then the individuals are going to have a hard time proving [their case].
- Seney: And the burden of proof isn't on them, it's on you. (Hughes: On the individual.) When you get your letter, it's on you.
- Hughes: Right, it's on the individual. And I think the sad thing about the whole process is that the Bureau has made that decision using the soil survey information, which is general over the Project, it's not necessarily site specific.
- Seney: You don't want to get involved, you'd rather they didn't use your data?
- Hughes: Well, I think it's probably good our data has been used. I wish that we could have had an opportunity to defend that data more and to have provided technical information to say, "Hey, this is not how we work with individuals on irrigation water management." And I think it's going to be a challenge. I've asked our State Conservationist for help to work on this, he knew this was going to come up -- a little sooner than I had hoped. (laughs) But you know, in my own mind, are we going to be in conflict with the Bureau because we do irrigation water management

one way, and they look at irrigation water management in a different manner? And, you know, is there a question of validity of what we do? And what we're doing is done nationwide. So I'm going to be asking those questions of our experts, "Okay, now how do I deal with this?" because we've been out here for thirty years or more, assisting and using this tool, and have we been correct?

#### WHAT IS THE PURPOSE OF THE BENCH/BOTTOM CLASSIFICATION

Seney: Right. Well, I think there might be some who would say that the Bureau is not so interested in the soil, as they are in the amount of water that can be diverted away from the Project. You get a big smile on your face when I say that.

Hughes: (laughs) And I feel that way too, Don. I've seen, when they started doing bench/bottom, they came out and they set the water table criteria at four feet. Well, I don't think it gave them the amount of water that they wanted to take away from the Project.

Seney: So they had to lower it?

Hughes: They lowered the water table to five. And every year their criteria changed until they got [what they wanted].

Seney: So you think they had a number in mind?

Hughes: I think they did -- me, personally -- this is not the agency talking. I personally believe that it's kind of like a lot of research that's done: you have the answer and you work that backwards until you get the technical support to prove it.

#### THE IMPACT OF RECLASSIFYING LAND FROM BENCH TO BOTTOM LAND

Seney: Let me ask you again -- I don't think you answered me -- when I asked you if you thought the reclassification of your own property as bottom as opposed to bench, lowering your duty from 4 1/2 to 3 1/2 feet -- would you go along with that?

Hughes: No.

Seney: You don't think that's technically correct?

Hughes: No.

Seney: Alright. Let me ask you another question: Can you, with 3 1/2 acre-feet per year, get enough [water]. I'm not sure what you're pasturing there. What sort of animals are you pasturing?

Hughes: Cows, and a horse.

Seney: Can you get enough, you think, out of 3 1/2 feet to meet your needs?

Hughes: I don't think so. And it's going to be more critical in the non-hundred percent allocation years. It's going to be difficult to reestablish fields for a lot of individuals, including ourselves, without that extra foot, I believe.

Seney: You've got alfalfa there?

Hughes: No, we have pasture. And that's one of the problem areas I see with bench/bottom, because it's set up with alfalfa being the main crop. And they assume that pasture uses less water than alfalfa, and pasture doesn't. Consumptive-use-wise, pasture actually uses more water.

Seney: Can you explain why that is so to me?

Hughes: I think it's probably because of the rooting structure.

Seney: What are you growing there for them to eat?

Hughes: Alta fescue, or fescue.

Seney: It's not an alfalfa, is it?

Hughes: No, it's a straight pasture grass.

Seney: I'm not sure quite how to ask this question. It's obviously not more like wheat, it's a grass.

Hughes: It's a grass, yeah.

Seney: I mean, it isn't what we put on our lawns? It must grow taller and have different nutritional balance in it.

Hughes: Yeah, coarser-bladed. I actually have a fescue lawn, and it's kind of interesting. It's really coarse-bladed, we don't water it very often because it responds very good to watering, and we've found that we have to mow it twice as often as we do the rest of the lawn. So it responds real good to the application of water. But again, most of the extraction of the water in a pasture situation is going to be in the upper couple feet, with soil temperature and transpiration of the crop.

Seney: That's how much evaporates.

Hughes: Yeah, a lot of it's evaporating out. That's come off of the top couple feet of the soil profile. So in pasture situations you actually have to come back on with your irrigation a little more frequently than you would hay, because the hay is extracting water from more of the soil profile.

Seney: Further down.

Hughes: Further down.

Seney: So how frequently do you irrigate?

Hughes: Well, we used to irrigate about every two weeks when we had a hundred percent water. And that interval would change. Early spring we might go three, four weeks, depending on the weather; two weeks during the summer; and then extend that interval farther out in the fall.

Seney: When it says your duty is 4 1/2 acre-feet per acre, is that 4 1/2 acre-feet per irrigation season?

Hughes: Yeah.

Seney: So that's the total you'll get.

Hughes: Yeah, 4 1/2 acre-feet per acre. If I had five acres, then I would have twenty-two acre-feet.

Seney: And you can divide that up, "Give me so much now and so much in two weeks, and so much in two weeks." (Hughes: Uh-huh.) So you calculate based on the water allocation.

Hughes: Well, yeah, now in the drought years it's come down to that, because what happens is in an irrigation subdivision, your water is pooled. It comes to the subdivision as one total for all the users. So what we've tried to do is say, "Okay, if we have fifty-four percent allocation, how many irrigations can we get with that fifty-four percent?" If they're talking about turning water on the first of April and turning it off the middle of September, then we would be forced to, say, go to four or five irrigations. You know, we couldn't come on at a two-week interval -- we might be at three weeks or four weeks. [We've] got to work it all out. And the farmers are having to do the same thing.

Seney: Yeah. Well then this provides an incentive for you all to do the same thing, I take it. (Hughes: Uh-huh.) You've all got to have pasture.

Hughes: Well it was all in hay when it was subdivided. Individuals went in and put it into pasture, some of us stayed in hay for a little while. It became very difficult to find somebody to come in and do that custom swathing and baling for five acres, and to meet your irrigation interval. Because oftentimes what happened, if you found somebody, they didn't come by until they were going by to see a bigger farmer, so you were kind of at their mercy as to when they could come in and do that for you.

Seney: And if you don't cut the stuff right, you don't get the premium price. I mean, that's very important, is it not?

Hughes: Most individuals on those small acres would have kept the hay for their own use.

Seney: Is that what you did?

Hughes: Uh-huh.

#### RAISING CATTLE ON FIVE ACRES

Seney: To feed cattle, then?

Hughes: Right, over the winter.

Seney: Obviously I take it this is not a hobby.

Hughes: No, not really.

Seney: It's for profit? You're making some money?

Hughes: Well, a little bit, or to supplement the food in our freezer. We would normally buy two or three calves, raise them up, put one in the freezer and sell the others.

Seney: (facetiously) You're killing it first.

Hughes: Right. (laughter) Yeah, you got to kill it before you put it in there. Now that my kids are older, they're into 4-H, they're raising livestock.

Seney: So it's kind of fun for them, and a wholesome kind of activity.

Hughes: Yeah, and it's a learning opportunity, and it provides them some income for school when they graduate from high school.

Seney: Sure, and it teaches them the things you want kids to learn.

Hughes: Right. Yeah, it really does.

Seney: You hope.

Hughes: Well, I hope, yeah. Oftentimes I find myself down there feeding when they're not available, but I enjoy that. And we're not having to buy -- it's not like a lot of

places, people with nonirrigated land may have a cow or two or a horse they're trying to raise and utilized, so they've got to go out and buy hay. We don't have to buy an awful lot of hay -- we have to have enough to get the stock over the winter, but usually the pasture is enough to sustain them through the summer.

Seney: So this isn't a cost to you.

Hughes: Other than my water costs, and the cost of purchasing the animals and the extra feed.

Seney: How much does the water cost? What's your water bill? Do you mind saying?

Hughes: I'm not really sure, I think it went up this year.

Seney: You sound like a farmer alright, boy, they never know.

Hughes: Well, the problem is, you don't get a separate bill for it.

Seney: Oh, you don't?! You don't get a bill from TCID.

Hughes: No, it's billed through our county tax roll. It's actually a line item in our county taxes.

Seney: That's interesting. I mean, for all the people I've talked to, I was unaware that Churchill County does the bill collection for TCID. (Hughes: Right.) I mean, obviously you're not paying the same amount that Carl Dodge is paying.

Hughes: No. You have a set O&M [operations and maintenance] cost per acre, and I could look that up for you, if you want it. But that's one of those things, I pay it, I'm not worried about it, I have to pay it, it's just like my taxes. I couldn't tell you how much I paid until the tax bill was due. (laughs) But there's two different rates, and then I think if you have less than five acres, then there's kind of a subdivision rate involved in it.

Seney: I see. So there's the O&M rate you're paying, and then you're paying the water rate as well?



Hughes: No the O&M rate is the only thing that you're paying, per acre. We actually own the water rights, so we're not paying a charge for that water being delivered here.

Seney: You own the water already.

#### THE VALUE OF THE WATER RIGHTS

Hughes: We already own the water, so we're not paying on that other than what we're paying in maybe our mortgage payment. And in the past, the cost of that water right has never been separated from the cost-per-acre for the land.

Seney: What do you figure that water right would be worth, an acre? If I came out and made you an offer on your place, and you'd say, "Well, we've got to add so much for the water rights here," how much would that be, do you think?

Hughes: I have never really even thought about that. I know what individuals think it's worth, in discussion with them.

Seney: What ranges do you hear?

Hughes: Oh, anywhere from \$2,500 to \$5,000.

END OF SIDE 2, TAPE 1.  
RETURN TO SIDE 1, TAPE 1.

Seney: What ranges are you hearing in terms of the value of these water rights?

Hughes: About \$2,500 to \$5,000 an acre. But you go upstream and they're worth a lot more.

Seney: And you said it depends on what you're going to use it for.

Hughes: Yeah, most individuals are looking at it being used for something besides agriculture. If it's going to M&I use, municipal and industrial, then it should be worth more.

Seney: Than if it's going to the wetlands?

Hughes: Well, I don't know that. In my own mind, I think that if it's important enough to preserve those wetlands, then the farmers should be offered an equitable price for those water rights.

Seney: What is the market saying?

Hughes: I think the market right now is right around \$300-\$400 an acre.

Seney: So in other words if I came out to buy your five acres' worth of water rights and you were willing to sell them, \$1,500 to \$2,000 for all that water?

Hughes: Let's see, how would that compute out? Yeah, that would be about someplace in there, probably.

Seney: That doesn't seem like very much.

Hughes: No, it really isn't.

Seney: And that's the only money you get. I write you that check, it's mine, you're out of the water business now.

Hughes: Uh-huh, but then you sit there with five acres of land -- what are you going to do with it?

Seney: I understand. I'm just trying to get a sense of how it works.

Hughes: Yeah, they're really not getting a lot.

#### ABSORBING THE CULTURE OF FARMING AND THE FARMING COMMUNITY

Seney: May I make a comment? (Hughes: Uh-huh.) As we talk about these things, and as I ask you about dollar figures, you sound just like a farmer. I know enough about farmers, my parents were farmers, and I've talked to a lot of the farmers on the Project -- they can remember everything until the question of money [comes up], and then [they say], "Well, I couldn't really tell you, I don't really know. (Hughes: Uh-

huh.) And I bring this up only because it seems to me you've absorbed the culture here. Do you think you have?

Hughes: (laughs) Probably so, yeah.

Seney: And I'm not ridiculing you for it.

Hughes: Sometimes it's hard to separate Peggy Hughes the water user from Peggy Hughes the ~~Soil Conservation~~ [Natural Resources]<sup>1</sup> person, and I have to catch myself once in a while, saying "we," and who is "we"?

Seney: Which "we" is this, huh?

Hughes: (laughs) Yeah.

Seney: Let me tell you, I'm not surprised, because I think it's a very powerful culture -- generally speaking, and particularly in this community. So I can understand why (Hughes: Yeah, it really is.) you absorb it so readily and completely.

Hughes: Right. And I hate to see the agricultural culture lost here. It's very disturbing to see the effect that . . . .

BEGINNING OF SIDE 1, TAPE 2.

Seney: This is November 4, 1994, my name is Donald Seney and I'm with Peggy Hughes from the Natural Resources Conservation Service in her office in Fallon. Peggy, we were talking about how it seems to me you've absorbed the culture of the farming and the farming community. And I take it you see it that way too.

Hughes: Yeah, it's often difficult to remember who I am when I'm talking about things. Sometimes it's me, Peggy Hughes the landowner; and me, Peggy Hughes, Natural

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0. Clarification provided by Mrs. Hughes

Resources Conservation Service. And I think I'm perceived as being more Peggy Hughes the Natural Resources Conservation Service, because I've been here so long. I don't think a lot of people realize my connection, other than with NRCS.

Seney: That you have this other identity.

Hughes: Yeah, that I have another identity. And it precludes me from participating in a lot of things, because there's times I'd like to get up at meetings and say something as a water user, and I don't do that. I oftentimes have to have somebody else raise the issue because I don't want it to be perceived as being NRCS.

Seney: Do you find here in the office, as you're directing the functions, that you bring some of that feeling and information to what goes on here?

Hughes: Oh, I think so. We probably all do. And I think that helps with the job, because we're so closely tied to the individual landowner. We're into their everyday lives. There's a lot of things I don't know about their operation, I don't want to know. Sometimes they kind of direct us, "Well, we need to know more of the financial stuff." You know, conservation effects and income -- we have to classify people as being limited resource farmers. Well, one of the criteria is how much money they make. Well, I'm sorry (laughs) I'm not going to ask how much money they're making. I might ask them what kind of yields they get on their farm, and then I can compute that.

Seney: Will they tell you that readily? Will they tell you how much they're yielding?

Hughes: I think if you present your question in a manner that you can show them there's a need for that, then you can get that information. I think, because of all that's gone on here with the Bureau, the impact that they brought to the community, that sometimes there's skepticism as to what that material will be used for. And like any

Federal agency, if the information is collected, it can be made available under the Freedom of Information Act. So I can see where some of them are a little reluctant to tell you. I think that's a trait with all farmers. You know, we see it in ag statistics and those areas that a lot of them are going to tell you something, but it may not be the total truth on the farm. They don't think that's anybody's business, and I respect that.

#### THE STANDING OF THE BUREAU OF RECLAMATION IN THE COMMUNITY

Seney: Sure. Let me ask you, what do you think is the general feeling and view you get of the Bureau in the community?

Hughes: My view, or the farmers' view?

Seney: Both. But in any case, we want it with the bark off. We're not trying to make the Bureau look good, as I told you when I called to arrange the interview. (Hughes: Yeah. [laughs]) We'd rather get an accurate picture here.

Seney: I have mixed emotions about their involvement in some of the things they're doing. Well, with all the issues coming down on the farmers, it seems a lot of things they do are very biased against the farmer. Well, using bench/bottom is a good example. They've come in and made a general determination for the area, and the burden of proof is on the farmer. Why isn't the burden of proof on the Federal government? You know, to me they seem to have all the resources, there's a lot of expenditure of dollars here by the Bureau and the Department of Interior Fish and Wildlife Service. They seem to have money for anything they want to do. We, as a Federal agency, we're caught in budget constraints. We're the ones out here trying to help the farmer, and we don't have those resources to provide those.

Up until a lot of this stuff happened with OCAP [operating criteria and procedures], bench/bottom, Negotiated Settlement, recoupmnt, everything -- we never really worked with the Bureau much. Our involvement is basically with TCID. So we never really had that working relationship. But as these things started to happen, we had to begin to work with those agencies, and oftentimes it was somewhat difficult, because we've always worked with the farmer, had a very good working relationship with them. Individuals in the Bureau didn't have that expertise. They often offended the farmers by the things they did and said. Oftentimes we would hear about that. The farmer would come in here and stomp and carry on. "You can't believe what the Bureau man told me!" and this and that and the other. We'd kind of go, "That's not real good, because here we are a government agency, and this reflects on us." And it takes its toll a little bit. I've had some soul searching, being a Federal employee and seeing what the Federal government is doing to the individuals here. It's been real hard, I've had some depression as a result of it -- having worked here for twenty years and seeing what these individuals have done to improve their farms, to improve their water management. They've spent a lot of money, the Federal government's spent a lot of money here, trying to make improvements on their farm -- and then to have the government come in and start to just slowly whittle away at them, and always the timing seems to be bad. It always seems that they issue something about the time we have a three-day holiday, it's always on a Friday. You begin to wonder if there's something going on in the background that "We want to do this because it just slowly tends to wear them down."

#### TIME FOR A CHANGE IN JOBS?

Seney: Let me ask you, is this one of the reason you've been looking at these job flyers a little more seriously?

Hughes: A little bit. I'm not really sure what I want to do. Having been here twenty years, maybe I've been here too long, I've gotten too close to the issues.

Seney: Can't leave it at the office so much?

#### TRYING TO RE-ESTABLISH FLOWS IN THE LOWER CARSON RIVER

Hughes: Yeah, and sometimes it's real hard to do that. It would be real difficult to leave, because I think the Natural Resources Conservation Service can provide a lot of assistance to help them. We've been involved in quite a few projects, trying to help the community deal with the issues, and I'd like to see some resolution to those, see some things funded, see some accomplishments -- kind of like the Carson River, we're involved with the Lahontan Conservation District in trying to get flows back into the river system.

Seney: Above the reservoir or below?

Hughes: Well, below the reservoir. What happens is, there's a section below the dam to what they call [the] diversion dam, it has water in it. At diversion dam they take it out into the canal system. From the diversion dam to what we call Lewis Spill, has basically been abandoned.

Seney: I know that stretch. I was given a tour, and I know what you mean, where it branches off in one direction and the canal kind of goes in another.

Hughes: Uh-huh, and the river's been abandoned, it's in pretty poor condition. And then at Lewis Spill to what they call Coleman Dam, there's water brought back in from the canal, into the river. And then at Coleman Dam it's taken back out of the river into the canal system, and from Coleman to Soguspe has basically been abandoned

again. We have some real problems in there. That's a real important desert, riverine -- what I call desert riverine wetlands situation, riparian area.

Seney: What does that mean? Why are you so concerned about it?

Hughes: Well the desert systems are very important ecologically, and I hate to see us lose that system. The river system was very important to the Indian culture prior to the Project going in.

Seney: There's wildlife, obviously, implications too.

Hughes: Lots of wildlife. A real concern on our part for flood control, because what's happening is vegetation is growing up in there, beaver dams are increasing. With the drought there's a loss of vegetation for lack of water, so you're getting kind of a disrepair in that river system. And if we ever have any real high flows, and the District has to put water into the river, then we could have some real problems. We had flooding in 1983, that occurred in June, and all of the irrigation system was full, and they had to put a lot of water down the river, and we had flooding into the farm areas.

Seney: Because it won't hold the water?

Hughes: Didn't have enough capacity. If it had come, say, early spring when the reservoirs were down, when we weren't using all the canal systems, then we might have been able to accommodate that water. But we were already irrigating, the dam was full, all this water came down as a result of the snowpack melting, and we had flooding.

Seney: That was a very late snow in the Sierras.

Hughes: Yeah, I think it was in May, and it came down fairly fast. A lot of the farms on the upper end had inundation along the river. There's quite a bit of urban buildup along



the river now, and there were several subdivisions that were inundated with water. So there's a potential for that to happen.

Seney: So if you had those available, you could run some of that water off into them.

#### LAND EVALUATION AND SITE ASSESSMENT

Hughes: Uh-huh, but we've been involved in that project, we've been involved with what we call land evaluation and site assessment. It's a system that was developed by Natural Resources Conservation Service in response to the Farmland Protection Policy Act, which allows Federal agencies to evaluate the impact of their conversion of agricultural lands to nonagricultural uses. So we're trying to develop that system in response to the wetland water purchase program. And hopefully we've got that system pretty well developed. What we've done is taken the nation-wide system and modified it. It just doesn't solely look at agriculture, but it looks at the impacts to the Newlands operation and maintenance and the impact to the community as well: what I kind of look at as a mini-EIS [environmental impact statement]. It's directed just to on-farm, as that farm is offered for sale. We've got quite a bit of involvement here in the valley. We participated in the EIS for the Water Purchase Program.

#### THE NATURAL RESOURCES CONSERVATION SERVICE ACTIVITIES IN THE LAHONTAN VALLEY

Seney: This is the Water Purchase Program for Stillwater?

Hughes: For the wetlands, yeah. The Natural Resources Conservation Service was asked to provide testimony before the Senate Subcommittee on Water and Power, I think, if that's the right title of the committee -- Senator [Bill] Bradley. That would be the reauthorization hearings for the Newlands Project. We were asked to participate in that.

Seney: These are the Washington, D.C. hearings?

Hughes: Right. And so I think as a whole, the Natural Resources Conservation Service has really done an awful lot here, and those are the kinds of things that I want to see implemented, and some action take place before I leave. You know, I'm kind of torn. I need a career change because I'm somewhat burned out on all the issues and seeing what's happening, but I don't want to leave either, because I have a tie to the community, the individuals that I worked with for years and years as a technician doing all their surveying and design work. It's hard. It'll be a hard decision for me when the right place comes open for me to make that decision.

#### THE PROBLEMS OF THE BUREAU OF RECLAMATION IN THE COMMUNITY

Seney: You know, you were saying that the farmers will come in here and complain about the Bureau of Reclamation. I take it you probably have a very different relationship with the farmers in the Natural Resources Conservation Service than the Bureau does.

Hughes: Yeah, we do. You know, it's the fact that we're out there trying to help them. Sometimes we may raise an issue with them that they don't like, but we try to give them as many alternatives to make improvements. We're not a regulatory agency. Sometimes we're seen as being somewhat regulatory with some of the programs that are coming down, but we still have some policies that we have to follow and it requires us to do some things. But I think our relationship with the farmer is excellent, and that's what makes us unique from the Bureau or any other Federal agency: We have the sole mission, as established by Congress, as working with the private landowner. And that's where the Bureau has gotten in trouble, or Fish and Wildlife Service and those individuals coming in and BLM, trying to talk to the landowners. They don't have that expertise on an everyday basis of going out and

talking to people and being somewhat sympathetic and being open-minded when they're talking about their problems. And I've confronted the Bureau, I had a situation where I had some people come in and talk to me, oh, some time ago, and I'd had somebody come in and vent their anger about the Bureau, and it happened to be that I had this meeting a few days later, and they introduced themselves and said, "Well, we're going to do this and going to do that." And I said, "Well, you know what, one of the things you guys have is a real credibility problem here. You're perceived as the guy in the black hat. You're always negative. You never stop to listen to the individual and try to understand their problems. You need to really start looking at that." We got through with the meeting and I thought, "Peggy, why did you say that?!" That wasn't real good, but it was something that I felt that needed to be said, and it wasn't necessarily those individuals that had confronted this farmer, but somebody working under him, and I thought, "I think we need to start telling them this, because it sure will help down the line."

We have a very good working relationship with them on all our projects. What we've tried to do, SCS, with the Bureau and other Federal agencies as well, is try to coordinate. We do an awful lot of coordinating for meetings and projects, and we've included them in that process from the very start -- where oftentimes maybe what they're doing hasn't included the people that they're affecting in the process. And I think that's one of the big problems now with the negotiated settlement, because we were never really included in the process.

Seney: Should you have been, do you think?

WHO SPEAKS FOR THE COMMUNITY IN THE LAHONTAN VALLEY?

Hughes: I think so. Maybe we really wouldn't be where we are today. And it goes back that the community always hung their hat on TCID taking care of them.

Seney: Well, that's certainly changed, has it not?

Hughes: And it has changed and TCID is out of the picture in a lot of the things that are going on. They're still there in the background, but they've not stayed the spokesman for the community.

Seney: Do you think that's a good development?

Hughes: Yeah, I think that's very good. I'm glad to see the community becoming involved, and they become more and more involved every day, in the issues. And the Bureau's trying to work with them. They've been very responsive to us in our projects, been very supportive. I can't criticize them at all for that. And they've tried to work things through with us. It's worked real, real well -- but then you get into more of the politics and it becomes more difficult.

#### THE TRUCKEE-CARSON IRRIGATION DISTRICT

Seney: How would you characterize TCID overall? How would you describe it as an organization?

Hughes: I think they've improved their relationship in the community, become more business-minded. They've done a lot of soul searching, and tried to accommodate everybody's needs: for instance, including the [Fallon] tribe on the Board; looking to expand really the function of the District. I think for years maybe they had been their own worst enemy by some of the things they did.

Seney: What do you mean by that?

Hughes: Well, I think sometimes they may not have kept very good records as to what was going on in the field. I'm not so sure how their structure is set up with a lot of that.

If they were measuring water on a farm, I'm so sure that they kept records. You know, the ditch rider made his measurements, but sometimes TCID had to go back out and measure water, and we had to go measure water too, because there was a little discrepancy there. Some individuals have tried to go back to get that information, that information hasn't been kept. You know, there might have been a lack of those kind of things that are important to the individual farm, and TCID may not have seen that as being important to their overall operations, so it wasn't kept. You know, they've become of age with their technology and improvement.

I think they've been put in a bad situation being the contract agent for the Bureau -- they're always perceived as being the guy in the black hat, they're always the one that's sending the notice to the farmer or the water user. But I think people have become very aware of the structure there, that it's really the Bureau that's telling them to do that, it's not an action of TCID.

And we have a real good working relationship with them. We try to accommodate each other.

Seney: Tell me a little about the working relationship you have with them. Are you on the phone much to them? Do you go down there much? Or how do you work with them?

Hughes: Well, yeah. (laughs) Off and on. I think it depends on the timeframe and the issues that are going on with bench/bottom. I've probably talked to them three or four times since they told me that they were releasing the letters. Oftentimes if an individual is looking at doing some construction that affects a facility and their easements, then they refer that individual to us for the technical support. If they were changing a field that might impact the water delivery off of their headgate or we were tying a

concrete ditch into a headgate, they want to know what impact that design will have. So we work real closely. If an individual needs a new take-out, we go through the process to show the need or not show the need. If we're doing some design work that TCID requires review by them, then we'll go down to the Board meeting with the farmer and be there as the technical support for the farmer. You know, pretty good open discussion. If I need some of the farm information on a particular farm, water deliveries, hours of deliveries. If I need a water right map, if I'm working with an individual on trying to level something up, then they oftentimes provide that. And we provide it at no cost between each other. It's just a courtesy to each other. And they're very good at responding to our needs, and we're good at responding to theirs.

#### LASER LEVELING FARM FIELDS

Seney: Let me ask about leveling a field. My field needs leveling, you tell me, "Listen, we've got to level this and grade it." Who then actually does that?

Hughes: The farmer is responsible for finding a contractor, and most of the land levellers here are farmer-contractors themselves. And some individuals work over others so they have that person come in and do it. But we recommend that they get cost estimates from two or three individuals.

Seney: What's it going to cost me to have twenty acres taken care of?

Hughes: It really depends on the condition of the ground, what's being proposed. If you're hauling fill from one end to the upper end, then it's going to cost more. It's based on the length of haul, those kind of things -- they look at that -- the light cuts versus the heavy cuts, the types of machinery that they have to bring in. The bids are all based on that.

Seney: Can you give me some sense of what an average job might cost?

Hughes: No, not really. An average land levelling job probably costs anywhere from seventy to eighty cents a cubic yard.

Seney: For material moved?

Hughes: For material moved, yeah. It's the actual cut material moved, it's not the fill.

Seney: So it's what has to be scraped up, rather than what has to be emptied, as we're doing all this.

Hughes: Right.

Seney: I'd still like to get a sense of what an average job might cost for twenty acres. Can you give me any sense of what that might be? Are we talking \$2,000-\$3,000?

Hughes: It's probably more than that. Let me just use my cheater here. (laughs)

Seney: Okay, get your calculator out.

Hughes: I'm not involved in a lot of the construction any more. I would prefer to be.

Seney: Kind of fun, is it?

Hughes: Oh, I really enjoy it. Oftentimes if I'm fairly stressed or I need a break, I take my sanity break by going out (laughs) in the field and working on projects.

Probably anywhere from \$4,200 to \$5,000.

Seney: That doesn't seem like a lot of money -- is it? -- for the good you get out of it?

Hughes: No, I don't think so, especially if they come in and sign up for cost-sharing.

Seney: And that program is available still? (Hughes: Uh-huh.) How much would I get, say, if my bill was \$5,000?

Hughes: Okay, you'd get \$2,500.

Seney: So I'd get half that back.

Hughes: Yeah, basically. That's the best way to figure that.

Seney: And do I have to declare that on my taxes?

Hughes: That stuff is exempt, I believe.

Seney: And then I get to write the \$2,500 off as a business-related expense.

Hughes: Yeah, I've got an IRS form out on the counter that would tell you that. But conservation activities, I think, are exempt. Are not taxable.

Seney: How often am I going to have to do this to my field?

Hughes: Once you've got it levelled up and what we call laser-finished, where they put the fine tuning on, most individuals don't have to relevel. When they went out of rotation from hay, say hay to grain, when they went back into hay from the grain, then they would laser finish it to smooth it out again.

Seney: But that would be a very minor kind of operation.

Hughes: Very minor, and I couldn't even tell you what that cost is.

Seney: Hundreds maybe.

Hughes: Yeah. It wouldn't qualify for the cost-sharing program.

#### THE SOILS IN THE LAHONTAN VALLEY

Seney: Right. This may be a question you simply can't answer, but can you give me a general description, ranging over the Project, of the kind of soils? Is there a way to generalize about them?

Hughes: Very mixed, very mixed. It's kind of interesting, when I first started, using our irrigation information and designing systems, they talk about designing systems within one soil. Well, this valley doesn't lend itself, because that's not the way the soils were laid down here. So you get a very mixed composition of soils. To the west is mostly the sands and the more porous material. As you go down towards the Carson Lake, you start to get mixing of the sands with the finer soils, the loam and clay loams and those kind of things. As you go to Stillwater you pick up more clay



loams and clays. But what happens is, the water came through those various soils<sup>†</sup>, [and] as you come through the valley, the sands go out first, and then the finer material lays out, and then the real fine laid out at the bottom end of the river system.

Seney: Whose spread would I want to buy if I wanted the best land on the Project? And where would it be?

Hughes: (sigh) That would be very hard to say, because you would almost have to look at the soils themselves. I would look at water duty, I would look at the improvements of that farm.

Seney: I'm not worried about any of that. I'm just concerned about the soil. I went out to Charlie Frey's place -- beautiful place, which is right next to Carl Dodge's on the Island Ranch out there -- and I know that even though I think both Carl Dodge and Charlie Frey told me when I interviewed them, that even though this was a fifty-seven percent year, they were going to do better than eighty percent in terms of productivity, because of the kind of soil that they had. When I asked Mr. Frey about how good his soil was, it was very good, but there's others, he said, that's as good or better around. (Hughes: Right.) You'd agree with that?

Hughes: Uh-huh. What I would probably do is recommend those soils that are in the prime category, you know, they're the best soils for the production of food and fiber: The Dia [phonetic spelling] series, the Fallon series, East Fork series, those would be some that you'd want to look at. Even some of the sandier soils.

Seney: Where are those located?

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0. Clarification provided by Mrs. Hughes.

Hughes: The Dias are through the central part of the valley, the Fallon is too. The Appians, there are several Appian soils that are fairly good in production -- they're located on the west edge. Some of the clay soils are even prime. So it's really hard to say, once you get beyond the soil, then like I said, you really need to look at what's been done on them, the improvements, and it really gets into the individual's management, because I could farm a Dia, and you could farm a Dia, but the way we manage it makes all the difference in the world as far as production.

#### FARMING KNOWLEDGE AND SKILL ON THE NEWLANDS PROJECT

Seney: Has it tended to be the case that the better soils have found their way into the better farmers' hands, and vice versa? How would you characterize the distribution of farming talent and management skill on the Project as you see it?

Hughes: Well, I think it's all fairly good, myself. I would say that the individual farmers are very efficient. The larger farmers have had more opportunity, had the resources to make improvements, where maybe the littler person never really had that ability financially, other than to slowly do it. The larger farms were able to do it in a faster manner. But I think most individuals, and especially with what's gone on between the drought and all the water issues, everybody's become more and more efficient. We're seeing more and more the work we're doing is with the little farmer, because the larger operations have done theirs. You know, once in a while we still get some individual in that's replacing structures or doing something, but for the most part our work is with the smaller farmer now.

#### THE CONTINUING RESPONSIBILITIES OF THE NATURAL RESOURCES CONSERVATION SERVICE

Seney: And you find your work is continuous.

Hughes: Other than the drought. The drought hasn't helped. We don't have as much of the engineering assistance as we used to.

Seney: Yeah, I would think once you've -- that's why I asked about the laser levelling -- once you do that, that's pretty much over with.

Hughes: Uh-huh. Unless somebody comes in and maybe subdivided a place, and an individual wants to turn something around. And they can do that, and maybe it might not be really cost effective, but we would try and recommend that they not do that. We're really watching now, because places have been levelled and releveled, and we have to make sure that we're not taking the good soil off and leaving the sand below at the surface. It creates some different problems for us, as far as our engineering. You know, to be more acutely aware of what's going on there.

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

#### ALFALFA AS A CROP AND ITS EFFECT ON THE SOIL

Seney: I think one of the other questions I wanted to ask you was, How is alfalfa as a crop in terms of the soil? It's hardly, I suppose, in the category of tobacco or cotton, which wears the soil out. Is it a good crop to grow?

Hughes: Yeah, it's a good crop, because it's a nitrogen-fixing crop.

Seney: What does that mean?

Hughes: Well, it fixes nitrogen in the soil. As it grows, it has nodules on it that put nitrogen back into the soil.

Seney: So it actually improves things?

Hughes: Yeah. From a simplistic standpoint, you could say it's providing it's own fertilizer. They don't have to come back with a lot of fertilizers to increase the yields. We don't use a lot of chemicals here. Maybe in the grains there's some fertilizer

application, but I think most individuals have gotten away from that. They're doing a lot of soil testing to see what is actually needed, and not applying things that aren't really needed or being applied at the wrong time. You know, pest management is the same way. Individuals have gone to mechanical means of reducing pests, rather than application of [chemicals].

#### TRYING TO GET AWAY FROM PESTICIDES

Seney: What's mechanical means?

Hughes: Maybe haying a little earlier, if the bugs have gotten into the hay, they can come in and swathe and not apply the pesticides. We have some individuals that are growing row crops that are looking at microorganisms and other kinds of insects as a means of pest control.

Seney: Biocontrols?

Hughes: Biocontrol, yeah.

Seney: Why is that? Why are the farmers so enlightened here? I would think one thing in the pesticides, there's probably an expense question. I'm sure that's a lot of it. It's a fairly big expense, especially if you've got short water years and you've got all the legal fees and everything else. That's one thing they're going to look at, and I think as they do that and start to look at the real need, they're finding that there's other ways to take care of that.

Seney: How would you apply pesticides to a pretty high alfalfa field? Do you have to do that aerially?

Hughes: Most of it's done aerially, yeah. We have one crop duster that works in the area and applies that.

Seney: And that's not cheap, is it?

Hughes: That I don't know, because I'm not directly involved in it. I'm sure it's fairly expensive.

#### THE SETTLEMENT II NEGOTIATIONS

Seney: Tell me how you see these Settlement II negotiations playing out. What's your best guess on what's going to happen there?

Hughes: Well, let's just say I'm optimistic.

Seney: Are you hopeful or optimistic? There's a difference.

Hughes: Let's just say I'm optimistic. I'm optimistic that agriculture will remain in Churchill County.

Seney: Think there'll be less of it?

Hughes: Oh, I'm sure there will be less. I just hope that the farmers get a fair shake for what they deserve. It seems to be that everything to date has been taken from the farmer. And I don't think they've been justly compensated for some of that. To me it seems that the Federal government created the problem here, and that the Federal government should pay to correct the problem. What do I want to say? I don't know how best to say it. (laughs) They deserve some compensation, just like the Indian tribes have. Like I said, the government brought the Project here, I think the government has some responsibility to them. And I'm optimistic that through the negotiations, that again, everything won't come just solely from the farmers. And I think as the community has become more and more involved in the issues, there is a voice here, it's being recognized, other parties in the negotiations have recognized the impact of the community. They're looking for alternative ways to acquire other water. I think Fish and Wildlife Service has made a concerted effort to recognize those impacts. I'm not sure, once it leaves the negotiation table, how Congress will

deal with it. But I'm hopeful that we'll still have a viable agriculture community here, because I think that's very important economically, and from a resource standpoint. You know, once you've changed something, I don't think you ever can go totally back to what it was. We'll never see the wetlands as they were before, and I think we need to preserve a good base that's here.

We're going to see more and more, I think, with the ecobased system planning. They're starting to look at the total impact -- I think that's been a concern in the community that you had the wetland purchase, and then you had the *cui-ui* recovery, TROA [Truckee River Operating Agreement] -- but nobody was looking at the cumulative effect of those, despite the fact that TROA does affect us, *cui-ui* recovery affects us, wetland purchase affects us, and they were looking at those impacts separately. We're beginning to see that change. The Bureau's starting to see those things, the Department of Interior is starting to become more acutely aware that it's not just here, it's a broader picture. So I'm optimistic. I think there's really a question as to where all the parties can come together and say, "Okay, we can agree to this." I hope the community is given a fair chance to, once they conceptually decide what they want, that the government and Senator [Harry] Reid and everybody else will allow us time to really say what we want on site, because we just don't have the resources or the funds like everybody else does to make those decisions, and it'll take a little time.

Seney: You know, I've heard it said that there are suspicions that this is just, because it's such an abbreviated process -- negotiations are to be wrapped-up in January and there are so many issues, and subissues, and side issues, (Hughes: That's right.) and sub-side issues -- I mean, it's such a complicated situation -- that it's maybe a smoke

screen, that the negotiations will go on, "Well, we couldn't resolve anything," and then legislation will be introduced which will not be beneficial to the District. Do you feel that might be so? (Hughes gives an exasperated sigh.) And then just let me add here that some people say maybe the best we can hope for is that what will be left is about the acreage . . . . (brief interruption)

I'm not sure where we stopped. The best maybe that can be hoped for on the District is that agriculture will be back to about the acreage it was at before the Project was constructed, which is somewhere around 20,000-plus, maybe 22,000 [acres]. Is that your vision? Is that what you see? Maybe not "vision," maybe "nightmare" would be more like it.

Hughes: No, from the Natural Resources Conservation Service's perspective, I think we would like to see everything remain here. I think under the Farmland Protection Policy Act we feel that the government should at least leave all the prime farmland. And we have an issue there that hasn't been resolved, whether they're supposed to look for alternatives because of the Act, and try and keep the prime in. But (sigh) I would really like to see the prime land remain. I don't know that that's going to happen. You know, you hear the 30,000, and then you hear the next day the Bureau's proposed 10,000 acres. Well, what does that leave us? I'm not sure what that leaves us, and that's what the community has to look at. If that's what it comes down to, then we really need to sit down and decide where we want that to take place.

#### THE FRUSTRATIONS OF THE FARMERS IN PROJECT

My own opinion in listening to the farmers discuss the water issues, if the Federal government came in with the right price, they probably could get all the water they wanted.

Seney: Yeah, I think a lot of them are demoralized, are they not?

Hughes: Yeah, really. I think they are frustrated.

Seney: A little fearful?

Hughes: Fearful and just totally -- you know, they've come to a point where they can't deal with it any more. I think we're a community in stress -- especially in the agriculture community. There's so many new people that don't really understand the issues, and I don't think they're fully aware of what can happen to the community. A lot of them have bought here because, again, it's the culture or the lifestyle that they like. But what happens when ag leaves? Are all these individuals going to leave?

#### CHANGES IN THE FALLON COMMUNITY AND THE PROPOSED FEDERAL PRISON

Seney: How are you going to vote on the prison?

Hughes: I'm not going to vote for it. I really believe it's the olive branch that's been put out in front of us, and dangled. And I don't think the community has the resources to support it. You know, we need the industry, we need the things that would come with it, but I think if there was funding sources available to put the municipal water supply in, that we could attract other, better businesses.

Seney: What's your reading on how it's going to do?

Hughes: Boy, I think it really will have a negative vote, from all the people I've talked to.

Seney: The farmers seem to feel the same way you do? You've got your farmer's hat on now?



Hughes: (sigh) To be honest with you, I haven't really talked to too many farmers on that -- it's been more those of us in the professional area, and working with the community we're seeing a lot of individuals saying "no" to it. But I've kind of tried to stay out of that. I just don't get into that. We've been involved with the prison system, looking at the land and where they're proposing to construct the prison, from a soil standpoint.

Seney: Evaluating it for them, you mean?

Hughes: Yeah. There's some wetlands involved. And that's really only our total involvement there, as an agency. But I'm not sure where that's going to go. The problem with the prison, they keep saying, "Well, it'll offset agriculture." Well, I don't see the people in agriculture working in the prison system. They don't have the background, they won't have the age.

Seney: They won't have the temperament.

Hughes: No, they won't have the temperament. And where are they going to be? I just don't see them going into that. But like I said, I think if the Federal government is willing to offer what's a fair and justifiable price for their water and their land, a lot of individuals would sell. A lot of them have depended on that land as a means for retirement. There's a question whether they can ever retire now. You try to sell something now and there's really no market for the land or the water, other than the water for the wildlife areas. You talk to people out of the area that have been looking to buy agricultural land, and they hear about Newlands Project and various pieces being offered, but it's being recommended that you don't do that until the water issues are resolved. So that kind of hurts the community. But I don't blame

them. I would be skeptical about buying something now myself if I was coming into the community.

Seney: Is there anything I haven't asked that you want to tell us about?

#### MORE ON SETTLEMENT II

Hughes: Pretty much the same thing. Just a little bit back to the Negotiated Settlement: I'm just real hopeful that it is resolved, and resolved, basically, to the benefit of the community as a whole. I participated in the reauthorization hearings and I felt that that whole process was biased.

Seney: Against the Project?

Hughes: Against the Project. And that was having sat-in on the hearing process and seeing how the process was run. I guess I got my eyes opened up to how the government actually functions in Congress. (laughter)

Seney: The deck was a little stacked there?

Hughes: Oh, definitely. I really felt that when I left there, I kind of questioned why they even invited the non-Department of Interior agencies to participate. I really felt down. That was about the point in time that I became depressed over all the things that were going on.

Seney: This is last spring, the hearings last spring?

Hughes: Yeah, in April.

Seney: I'm looking forward to seeing a copy of those. They haven't been printed yet, I understand.

Hughes: Well, yeah, and I'm not sure where the whole thing was. I was going to ask our national headquarters if they'd ever seen anything on all the questions and answers and things that came out.

Seney: Well, I'm on the mailing list for that report (Hughes: That's good.) and as of a month or so ago, it had not yet been printed.

Hughes: See, and I didn't know what that process was. I spent many a week preparing the background information for the Natural Resources Conservation Service to prepare their testimony, and then went back in support. The Chief gave NRCS's testimony, and I was there to field any questions that might come up from the subcommittee.

Seney: Did they have any questions?

Hughes: Yeah, they asked us a question that we couldn't answer. And I think that was disturbing to us, because NRCS felt that if they were going to ask a question, we should have been privy to what that question was going to be so we could have been prepared. But we did answer it afterwards, and we had a whole series of additional questions that we had to answer. I was very pleased because most of the information that I provided to our headquarters was used. There was very little modification of that material. So hopefully it gave them a little different insight as to a different agency and what's going on, on the Project. So I'm anxious to see what happens there, and I'm glad they delayed that. I think that was something that was good for us, not to have reauthorization hanging over our heads as we went into negotiations.

Seney: Sure, that stopped pending the negotiations.

Hughes: Right. So hopefully it'll all be resolved. I hope the government gets out of here. I think they're just spending way, way too much money. And the amount of money that's gone in for everything could have been put to better use for improvements.

Seney: All the study and the personnel and all?

Hughes: Yeah. They could have lined lots of canals and done lots of other things to make some improvements. So I'm hopeful that at some point in time at least some of us

get out! (laughs) Hopefully we're still here. I think our work is really beginning in a lot of different areas. It's like bench/bottom is something we've never really had to deal with. As we change as an organization, this is the kind of thing I see us getting more and more involved in. And Natural Resources Conservation Service is reorganizing -- well, we're reorganized, because we're no longer the Natural Resources Conservation Service.

Seney: What are you called now?

Hughes: Natural Resources Conservation Service. They're not really letting us use the new name yet, because they're going to do a marketing project to kind of introduce us, nothing's really changed. You know, we're still providing services. The mission changes a little bit because we were branching out more into the resource area, watershed planning. They've actually come down with a proposal to restructure the Natural Resources Conservation Service in Nevada, and we're going to go from ten Field Offices to four Resource Area Offices with some sub-offices in there, and really streamlining the agency. So I'm hoping the other Federal agencies won't be required to do that too.

Seney: Anything else?

Hughes: Nope, that's all I have.

Seney: On behalf of the Bureau, I really appreciate it.

Hughes: Well, thank you. I hope it useful. (laughs)

Seney: It'll be useful, believe me.

END OF SIDE 2, TAPE 2.

## **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>1</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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<sup>1</sup> 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>1</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:

---

<sup>1</sup> 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>1</sup>

Italics are used:

For titles: books, plays, newspapers<sup>2</sup>, periodicals, journals, long poems, musical productions, paintings, films; the names of ships, trains, and aircraft.

For foreign words not yet anglicized.<sup>3</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:

<sup>1</sup> If a typewriter is being used for some reason, a single underline of the word indicates it is italicized.

<sup>2</sup> 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.

<sup>3</sup> 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 initialling 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