

ABBY JOHNSON'S

INTERVIEW WITH

MARIE BOUTTÉ

EUREKA COUNTY, NEVADA

YUCCA MOUNTAIN LESSONS LEARNED PROJECT

held in

RENO, NEVADA

May 27, 2011

1 (21:08 Begin Raw Footage)

2 MS. CLANCY: This is Gwen Clancy doing the  
3 videography for this interview. And, today is May 27, 2011,  
4 and we're in Reno, Nevada. And, Abby Johnson is doing the  
5 interview.

6 MS. JOHNSON: My name is Abby Johnson. I'm the  
7 Nuclear Waste Advisor for Eureka County, Nevada. Today,  
8 we're at the University of Nevada, Reno, and we're  
9 interviewing Dr. Marie Boutté.

10 (21:24 Begin Raw Footage 1)

11 Marie, thank you so much for talking with us today.  
12 Could we start out by having you tell us about yourself, your  
13 position here at the University of Nevada, Reno, and how you  
14 got here?

15 MS. BOUTTÉ: Sure. I am a medical anthropologist.  
16 I have a Ph.D. from U.C. Berkeley. And, I'm associate  
17 professor here in the School of Community Health Sciences at  
18 UNR. I've been in this Department for about maybe ten years.  
19 I was in Anthropology before.

20 MS. JOHNSON: What is a medical anthropologist?

21 MS. BOUTTÉ: Everyone asks that. Actually, we  
22 study health from a cultural perspective. And, usually in  
23 most cases, a cross-cultural perspective. And, that's what  
24 brought me here to Nevada. I'm very interested in rural  
25 health, for example. I take a medical anthropological

1 perspective to rural health. And, you find medical  
2 anthropologists looking at all different aspects of health,  
3 but, generally, in a cross-cultural situation. But, we also  
4 work within our own cultures. But, for me, going to rural  
5 Nevada was a cross-cultural experience.

6 MS. JOHNSON: And, in general, with medical  
7 anthropologists, what kinds of--what's the purpose, what's  
8 the outcome of doing the research?

9 MS. BOUTTÉ: Yes. Well, I'm also an applied  
10 anthropologist. I like to take my work and try to influence  
11 policy and procedure, but generally policy, either at the  
12 local level or at the national level. My previous work was  
13 on a genetic disease in Portugal. And, in that work, I  
14 worked with disease foundations on helping them to get  
15 guidelines, for example, for genetic testing, what kind of  
16 guidelines should be in place. So, I do both theoretical  
17 work, but I'm also very interested in applied work.

18 MS. JOHNSON: Okay.

19 MS. BOUTTÉ: That is, solving health problems based  
20 upon my research.

21 MS. JOHNSON: Now, you got involved with the Yucca  
22 Mountain Project by doing some research for the State's  
23 Nuclear Waste Project Office. Did you already know about  
24 Yucca Mountain before that?

25 MS. BOUTTÉ: No. Actually, what happened was I

1 came from the Bay Area here to Nevada, and I was looking for  
2 a research project. I was always running off to Portugal,  
3 and my Department Chair said, "We really would like for you  
4 to get a local interest." And, I--a person in Carson City  
5 one day we were chatting, and I had just arrived here a few  
6 months, and he said, "You should go out to Ely and look at  
7 all those slit throats." And, being new to Nevada, even  
8 though I came to ski, I never had really done any work here,  
9 I didn't know what he meant. And, I said, "Well, what do you  
10 mean?" And, he said, "I'm not going to tell you. You need  
11 to go out there and just look at all the slit throats."

12 Well, I thought it would be due to like maybe  
13 mining violence, like young men in mining who got into  
14 altercations, you know, and cut each other up, is basically  
15 what I was thinking.

16 But, I drove out to Ely. I packed up the car and I  
17 drove out to Ely, and I stopped at Ruth on the way in, and  
18 the only thing open was a little bar, and I went in, because  
19 I really wasn't sure where I was. And, they always say to  
20 me, "You're not from around here, are you?" And, I said,  
21 "Well, I'm from the University, and I'm out here because  
22 someone said I should come out and look at all the slit  
23 throats. Like, what is that?" And, she said, this is just  
24 how she said it, she said, "Well, Honey, that's from all  
25 those nuclear tests we had out here, and those are thyroid

1 scars." And, I said, "You're kidding." And, she said, "No,  
2 just walk around town and you will see people who have  
3 evidence of their thyroids being removed, thyroid surgery."

4 And, sure enough, I did. I walked around for three  
5 days, and I talked to anybody just off the cuff who would  
6 talk with me. And, I was stunned by what I perceived to be  
7 the effects of the atomic testing.

8 So, then, I started research out in these rural  
9 communities, initially on the effects of the atomic testing.  
10 And, I interviewed ranchers, and I interviewed everybody. I  
11 mean, I covered every rural county that was downwind from the  
12 Nevada Test Site.

13 And, from that then, then I started learning about  
14 Yucca Mountain. And, then, one of my other colleagues, Dr.  
15 Kay Fowler, had done some work for the Nuclear Waste Project  
16 Office, and then they were looking for someone to start  
17 thinking about health impacts. And, so, then they gave me a  
18 call, and that's how then I started working under contract  
19 with the Nuclear Waste Project Office. But, it started by me  
20 looking at the problems of nuclear testing.

21 MS. JOHNSON: Okay. So, when you started working  
22 for the State's--on this project for the State Nuclear Waste  
23 Project Office, did you start by gathering baseline data?

24 MS. BOUTTÉ: No. Actually, there was a three-phase  
25 to the project. The Nuclear Waste Project Office was

1 interested in really initiating sort of a health impacts  
2 initiative, you might say. And, I said to them initially,  
3 "I'm really learning a lot about nuclear. I'm still  
4 learning." Well, everybody was learning about nuclear.

5 And, so, the phase one really was to get the lay of  
6 the land in terms of nuclear and Nevada. So, the phase one  
7 was for me to read and study all the studies that had been  
8 done concerning nuclear fall-out, or anything nuclear at all.

9 MS. JOHNSON: Now, did that include government  
10 studies?

11 MS. BOUTTÉ: It did. It did. It included the  
12 epidemiological studies that were done in the Sixties and  
13 Seventies from atomic fall-out, the thyroid and leukemia  
14 studies. In fact, I ended up writing a report about each one  
15 of those big epidemiological studies, and, other studies that  
16 had to do with radiation. And, I was interested in what kind  
17 of methodologies were they using, and what were some of the  
18 strengths and weaknesses of those studies.

19 In that phase one, I also read Congressional  
20 hearings. There had been many Congressional hearings held on  
21 atomic fall-out. The atomic veterans, for example, had  
22 testified. Downwinders had testified. Ranchers had  
23 testified about the problem with their sheep. So, I read all  
24 the Congressional hearings that I could get my hands on.

25 And, then, I ended up reading like books by--they

1 were often photo journalists, who had interviewed downwinders  
2 and atomic veterans. And, they had really good first-hand  
3 quotes from people describing their experiences. So, I just,  
4 for about a year, I even had a graduate assistant, we just  
5 really studied radiation for about a year.

6           And, then, from that then we went to the--that was  
7 the first phase. And, the Nuclear Waste Project Office got  
8 two reports on leukemia studies, the thyroid studies, and  
9 then when we all felt like we knew what we were kind of  
10 talking about, what had been done, and really beginning to  
11 understand the complexity of the problem, then we moved to  
12 the second phase of the initiative.

13           And, in the second phase, I convened a panel of  
14 experts, partly from the Centers for Disease Control from  
15 Atlanta, and some other experts from leading universities.  
16 We all met in Chicago for two days. And, we, me and other  
17 people from the Nuclear Waste Project Office, but I kind of  
18 led the discussion about what could they recommend given our  
19 unique situation in Nevada. We have small, rural  
20 communities, and the problem of doing epidemiological studies  
21 is we don't have a large enough population to really get good  
22 data.

23           So, out of those two days, they came up and  
24 recommended to us that we have a four pronged approach, and  
25 that was that we have health assessment, health monitoring,

1 environmental assessment and environmental monitoring in  
2 terms of Yucca Mountain. If we were going to move forward,  
3 those are the four components that we should pay attention  
4 to.

5 MS. JOHNSON: So, if the project were to come, then  
6 this would be a roadmap for how to collect data to understand  
7 the additional impacts from Yucca Mountain, given this  
8 underlying baseline of what had already occurred from atomic  
9 testing; is that right?

10 MS. BOUTTÉ: Exactly. Because the problem with  
11 atomic testing was we had really poor health data for a  
12 comparison. So, when families said they had health problems,  
13 we didn't know whether those health problems had been there  
14 before or not. So, that was part of the problems of getting  
15 compensation, was proof of causation.

16 And, so, it was decided well, can we get some  
17 baseline health data in place should Yucca Mountain go  
18 forward. And, then, if something should happen, we'd know  
19 what the baseline was before Yucca Mountain became  
20 operational. That was kind of the idea, because we had seen  
21 the problems of not having good health data in the nuclear  
22 testing phase.

23 MS. JOHNSON: Yes.

24 MS. BOUTTÉ: And, so, we were trying to overcome  
25 that problem, should Yucca Mountain go forward.



1           And, then, as part of that second phase, after the  
2 Blue Panel Commission or discussion, I then went to numerous  
3 Nevada State agencies for collaboration. I actually went to  
4 the Health Department, the Nevada Environmental Protection,  
5 just various agencies, and we discussed the complexities, how  
6 could they come on board with this project, and basically,  
7 they were short of funds for this kind of work. They didn't  
8 have personnel to come on board, and there's always this idea  
9 that Yucca Mountain is really a political issue. And, a lot  
10 of the agencies really are hesitant to get involved in this  
11 kind of hot political issue.

12           So, that collaboration did not come forward. It  
13 was not very fruitful at all. Everybody understood what was  
14 needed, but it just did not go forward. So, then, I took on  
15 the health assessment component, and the other three went by  
16 the wayside more or less.

17           So, then, that moved me into the third phase of the  
18 project, which I said then--and, I called it the Community  
19 Health Assessment Project, CHAP is what I called it.

20           MS. JOHNSON: Okay.

21           MS. BOUTTÉ: Okay. And, this was now--we started  
22 in '94. This is probably now about mid '95. I mean, this  
23 kind of took a long time to get all this up and running.

24           Then, the first thing I did in the third phase was  
25 I visited nine communities that were in close proximity to

1 Yucca Mountain.

2 MS. JOHNSON: Were they all in Nevada?

3 MS. BOUTTÉ: Yes, they were all in Nevada.

4 MS. JOHNSON: Okay.

5 MS. BOUTTÉ: Yes, because this was a Nevada  
6 project--nuclear waste project funded, so, yes, they were all  
7 in Nevada. And, out of the nine communities, this one we  
8 called it Windshield Anthropology. Okay? But, I spent at  
9 least two or three or four days in each of these nine  
10 communities looking--and, I had a set of questions that I was  
11 attempting to answer. For example, how likely were these  
12 communities to be impacted by Yucca Mountain, and in what way  
13 were they likely to be impacted, and also would the community  
14 be open to working with me in this kind of a project over a  
15 period of time.

16 I would need things like, you know, could the  
17 county commissioners, for example, provide me with an office  
18 if I needed one. And, how open was the community to really  
19 looking at this issue and working with me? And, so, out of  
20 the nine communities, I chose Caliente in Lincoln County, and  
21 I chose it for a number of reasons. One, that it was  
22 downwind from the Nevada Test site. And, many of the  
23 residents in that community had participated in the thyroid  
24 and leukemia studies in the past, and I thought, well, okay,  
25 I can draw upon that data if necessary. They're familiar

1 with what I would be doing.

2           And, also, it was likely, because of the rail line,  
3 that bisects Caliente, that they would be on the  
4 transportation route to Yucca Mountain. So, that seemed like  
5 the best community to start the project. And, the county  
6 commissioners and the municipal government was very open to  
7 the idea, and they had a community center that was very  
8 active, because that's a good way for me to make entrée into  
9 the community. It was just an excellent community for me to  
10 start in.

11           So, I then, my next thing then after identifying a  
12 community, was to actually move to Caliente. I, instead of  
13 my regular teaching load, I negotiated to double up on my  
14 teaching load one semester, so I could just do research the  
15 second semester. So, I moved to Caliente for a semester, for  
16 three months, and I did what we call a medical ethnography.  
17 And, that was just to, again, to get the lay of the land of  
18 the community. Who were the health providers? What kind of  
19 health data did they already have out there? What kind of  
20 health data could be collected out there? What kind of  
21 resources were there?

22           For example, I was thinking, well, the pharmacist,  
23 for example, we could track what kind of prescriptions get  
24 filled. That would tell us a little bit about what kind of  
25 health problems are out here. But, then, I learned well, a

1 lot of people out there go elsewhere to get their  
2 prescriptions filled.

3 MS. JOHNSON: And, sometimes their medical service.

4 MS. BOUTTÉ: And, sometimes their medical services.  
5 But, that's the kind of things that I learned about the  
6 community. That's what I needed to know about the community.

7 So, I lived out there. I went to everything. In  
8 my discipline, we do like what we call key informant  
9 interviews, so I interviewed everybody that would talk to me  
10 practically. I went to all the community events. I, as much  
11 as possible, became a member of the community to get a sense  
12 of the community.

13 Then, after that, I then moved in to what I call  
14 the pilot survey, household survey study. And, I had a Ph.D.  
15 student at the time, and she and I then again moved out to  
16 Caliente and we carried out a household health survey. I  
17 used the utilities list, because I wanted to do a random  
18 sample. And, the time that we had and the funding that we  
19 had, we could do 35 households. So, we chose actually 105  
20 addresses, using a random chart, and used the utilities list,  
21 and we ended up interviewing 33 households, with a very  
22 extensive environmental health survey.

23 MS. JOHNSON: And, this was a one on one--

24 MS. BOUTTÉ: It was a one on one with every member  
25 in every household.

1 MS. JOHNSON: Oh.

2 MS. BOUTTÉ: Yes, it took hours to actually do each  
3 interview. And, part of that work was really to test the  
4 methodology. How difficult was it going to be to really do  
5 health studies and to get baseline health data out in a rural  
6 community? And, that pilot survey then gave us a lot of  
7 information about the complexities that that would be.

8 MS. JOHNSON: And, it is complex?

9 MS. BOUTTÉ: Very complex. Some of the issues that  
10 we found, for example, in doing the study was that a lot of  
11 the community had lived there during the time of atomic  
12 testing, and other families had moved in since that period of  
13 time. And, we found a real difference of opinion among those  
14 two different populations.

15 For example, the ones that had been there during  
16 the testing, especially the families that had suffered some  
17 health consequences of that exposure and had gone for  
18 radiation compensation, they were more likely to be adamant  
19 against Yucca Mountain, for example. And, the new families  
20 that had moved in who had no history of that, they tended, in  
21 general, to be more for Yucca Mountain. They saw it as an  
22 economic stimulus to the community. And, even some other  
23 families who had been there in the old days, you might say,  
24 also saw Yucca Mountain as an economic stimulus. But, they  
25 also were concerned about the health problems that they

1 perceived, that they had had from testing, and also the  
2 difficulties they had had in getting compensation. That was  
3 one thing.

4           The community was very split on the issue, and we  
5 had a problem as researchers because they wanted us to take a  
6 stand on it. They would say well, what do you think about  
7 it, and we were neutral about the project.

8           And, also, there were things that we hadn't thought  
9 about, like street names, like some of the streets had no  
10 names on them at all, and then some streets that did have  
11 names, there were like two streets named the same name. And,  
12 so, looking at the list and the addresses, sometimes it would  
13 take us like a couple hours to find an address. And, they  
14 didn't have numbers on the homes, necessarily, and I would  
15 say do you live at 236 whatever, and they would say I don't  
16 know, is that where I live, because they get their mail at  
17 the post office. And, so, some people didn't even know  
18 really kind of what their address was.

19           And, then, there were so many more seasonal homes  
20 in Caliente that we hadn't thought about. There were a lot  
21 of abandoned homes. And, a lot of people just flat out  
22 refused to talk to us because they had participated in the  
23 studies in the Fifties and Sixties as part of the Nevada Test  
24 Site.

25           MS. JOHNSON: And, those were government studies,

1 federal government?

2 MS. BOUTTÉ: Yeah, they were public health  
3 government studies. And, they had never gotten any results  
4 from those studies. They said they were told that they would  
5 be told the results of those studies. They were never told.  
6 In many cases, no one came back to report to them about the  
7 outcome of those studies. And, even when they were told what  
8 the outcome was, there was no health benefits along with it.  
9 So, it was just research.

10 So, here we come along asking questions. People  
11 would say look, you know what, we gave you all this  
12 information, putting me in with the government people, we  
13 gave you all this information to begin with, and nothing came  
14 of it. We're not going to waste our time telling you again  
15 about this.

16 And, I remember one man got really angry with us,  
17 and he said I want to be in your study, and we said, sir,  
18 we're doing a random sample, and we actually explained in  
19 detail what we were doing. And, he said I don't know why  
20 you're out here studying Yucca Mountain. We still have  
21 problems from Nevada testing, and you're out here now with  
22 Yucca Mountain. We need to be in your study. So, we spent a  
23 lot of time explaining Yucca Mountain work versus the Nevada  
24 Test Site work. And, so, it was far more complicated.

25 Another thing we hadn't thought about was we drove

1 university cars. And--

2 MS. JOHNSON: With the exempt plate?

3 MS. BOUTTÉ: Well, yes, and when we would drive up  
4 to, like there was a huge apartment house, and, in fact,  
5 people would be out in the yard, and we would drive up and we  
6 could see them running into their houses and shutting their  
7 doors. So, finally, I made contact with the manager of the  
8 apartment, and she laughed and she said, "They think you're  
9 child protective services, or some other services. They  
10 don't know who you are." We came back, got our own personal  
11 cars, and drove back and we were much more successful.

12 And, then, I also talked to a community center, and  
13 started to really identify more people who could be that  
14 entrée for us. But, it was a very complex problem to work in  
15 rural Nevada. And, we came out of that making several  
16 recommendations.

17 Should I just keep talking about the  
18 recommendations?

19 MS. JOHNSON: Well, why don't we move on to the  
20 next question.

21 MS. BOUTTÉ: Okay.

22 (21:45 End Raw Footage 1.)

23 (12:28 Begin Raw Footage 2.)

24 MS. JOHNSON: For your pilot study, what were the  
25 recommendations?



1 MS. BOUTTÉ: There were several. One was that--it  
2 is feasible to collect baseline health data. We really think  
3 it is feasible at the household level. But, instead of  
4 interviewing everyone in the household, we really only need  
5 to interview the women, because the woman of the household  
6 knew all of the health data. Husbands knew nothing about  
7 their own health data, for example. They would have to go  
8 and ask their wives. So, we really realized we could save a  
9 lot of time by just interviewing the head women of the  
10 households, for example.

11 And, it may even be possible to do phone surveys.  
12 A phone survey could certainly work with enough advanced  
13 warning. Our instrument was way too long. It took sometimes  
14 two hours, and we were trying to get so much data, and  
15 because it was initial, we really didn't know. But, we  
16 learned it was way too long. And, so, we could shorten that  
17 a lot.

18 The other thing to consider would be index  
19 families, which is what the Department of Energy had done  
20 initially with some families. You just follow those families  
21 over a long period of time. You do complete health histories  
22 on them. You take blood samples. You do biological samples.  
23 And, that might be possible to consider, is just people who  
24 have been there, are going to be there for a long time.  
25 They're your index families that are sort of surrogates for

1 the rest of the community.

2           And, we think we could get over a lot of the  
3 complexities with good advertising, good rapport. We did  
4 feel that women should be the interviewers, and they should  
5 be from outside the community. Many people said they would  
6 not give information to people who lived in the community.  
7 That was just too personal. It's too face to face, as we  
8 would say in my discipline. But, we felt like well-trained  
9 women interviewers, this project could certainly go forward.

10           It did not go forward because of funding. But that  
11 was some of our major recommendations, was that we did think  
12 it could go forward. But, the complexity of separating what  
13 happened in the past, from what is potential in the future  
14 makes this a very difficult project. Very difficult. It's  
15 almost impossible to separate the two projects. Almost  
16 impossible. Because, the health problems that were there  
17 before, and then what would be potential from now. So, it  
18 would be very complex. But, we think we could get baseline  
19 health data.

20           MS. JOHNSON: Let's move on to the next question.

21           MS. BOUTTÉ: Okay.

22           (21:31 End of Raw Footage 2.)

23           (21:29 Begin Raw Footage 3.)

24           MS. JOHNSON: Marie, why don't you kind of sum up  
25 your work.

1 MS. BOUTTÉ: In summary, I would say that in  
2 Nevada, it is very difficult to separate what happened, the  
3 effects of atomic testing, from what might be the potential  
4 effects of Yucca Mountain.

5 We have been exposed to radiation in the past, and  
6 with the potential of being exposed from radiation from Yucca  
7 Mountain, it would be impossible to separate the two  
8 exposures. And, I argued to the Department of Energy, we've  
9 carried the nuclear load before, now they're asking us to  
10 carry it again. That makes this project much more complex  
11 for us than it might be if this was placed elsewhere, because  
12 we already have effects.

13 (21:30 End of Raw Footage 3.)

14 (21:33 - Begin Raw Footage 4.)

15 MS. JOHNSON: Marie, I know you never got a chance  
16 to tour Yucca Mountain, but you did get to tour the Nevada  
17 Test Site. Can you tell us about that experience?

18 MS. BOUTTÉ: Yes. As part of my work in the  
19 counties, actually Lincoln County arranged for me to take a  
20 tour with them of the Nevada Test Site. I have to tell you,  
21 I've actually got a picture of this. This is the most  
22 amazing thing I have ever seen. The Sedan Crater--

23 MS. JOHNSON: Sedan Crater?

24 MS. BOUTTÉ: The Sedan Crater, I keep this here  
25 because I show it to students. They cannot believe that this

1 crater raised 12 million tons of radioactive debris. And, it  
2 was so much debris that Ely had to turn its street lights on  
3 at 4 o'clock in the afternoon. And, so, looking at these  
4 kinds of things out at the Nevada Test Site just puts this  
5 all into perspective of the impacts of the past.

6 And, I just--I'm anxious at some point, perhaps to  
7 even see Yucca Mountain, because of these impacts, it's just  
8 amazing. I think I'll put it like that.

9 MS. JOHNSON: When you were on the tour of the  
10 Nevada Test Site, which I have also taken, when you saw those  
11 buildings that still were standing there that you see in the  
12 testing movies, what was your reaction to that?

13 MS. BOUTTÉ: Well, I see these films all the time.  
14 I have a huge collection of these atomic films. I probably  
15 have one of the largest collections of atomic films there  
16 are.

17 MS. JOHNSON: Oh, I didn't know that.

18 MS. BOUTTÉ: And, I am always just amazed. But, I  
19 have to tell you the students when I show--I teach this in  
20 class, and when I show this in class, what they always sort  
21 of mostly pay attention to is the animal testing.

22 MS. JOHNSON: Oh.

23 MS. BOUTTÉ: The buildings and the rail lines and  
24 all of that, they can understand. But, when they show the  
25 animals being tested, they do not like that at all. And, so,

1 going there, you could get a sense of how much went on there,  
2 and until you go there, you don't see the extent of how much  
3 testing was done. And, this one in particular. And, I'm  
4 amazed also at my students whose grandparents were here,  
5 their grandparents have been here, and they know nothing  
6 about any of this.

7 MS. JOHNSON: Really?

8 MS. BOUTTÉ: Yes. And, that's why I purposely  
9 include it in my classes, and I show a film, an old film from  
10 Nightline, with Peter Jennings, called "Cover Up At Ground  
11 Zero." And, the film talks about, for example, the  
12 downwinders, and it talks about the atomic soldiers, and it  
13 talks about the Nevada Test Site workers, and it shows their  
14 exposures, and it shows many interviews with them about the  
15 health effects that they perceive that they have out there.

16 And, so, I don't know why it's not taught more in  
17 our schools as part of Nevada history. I purposely do it  
18 because I want students to know. And, then, I've had  
19 students back and say gosh, my grandparents, in fact, I had a  
20 student come recently and say, "I didn't know it, but my  
21 grandparents actually applied for compensation."

22 MS. JOHNSON: Really?

23 MS. BOUTTÉ: Yes. And, then, we would talk about  
24 the problems that people have had getting compensation.

25 MS. JOHNSON: Well, tell us a little bit about

1 that.

2 MS. BOUTTÉ: Yes, sure. In fact, I published an  
3 article in "Human Organization" about the problems that  
4 downwinders, people, families who live downwind from the  
5 Nevada Test Site, and basically there were three major  
6 problems they had from the compensation legislation. One is  
7 that the criteria is so complex that they generally have to  
8 hire attorneys to help them get documentation. And, that's  
9 very difficult. Again, more difficult as time passes.

10 The second is, so the complexity of the process,  
11 and the amount of money. Downwinders, \$50,000, at least  
12 initially. And, other groups, for example, the uranium  
13 miners, got more. The Test Site workers got more. And, what  
14 that does is it splits the community, because in some  
15 families you might have a soldier as well as a downwinder,  
16 and they're both getting different compensations. And, that  
17 splits families.

18 Then, the third--I've kind of--let me think. I  
19 can't remember the third.

20 (21:37 End of Raw Footage 4.)

21 (21:53 Begin Raw Footage 5.)

22 MS. BOUTTÉ: Yes, I had forgotten the third. But,  
23 let's see, it's the strict and rigid criteria, is one. The  
24 amendments to that Act has corrected some of this. For  
25 example, in this particular case, strict and rigid criteria,

1 just as an example, the original law said female breast  
2 cancer. But, I interviewed a man that had male breast  
3 cancer, and he fit all of the criteria, but because the law  
4 said female, he didn't get compensation. Now, with the new  
5 amendment, then that was covered. It just says breast  
6 cancer.

7           And, then, the--yeah, I'm glad I had this because  
8 the second is the complexity of the application process.  
9 That's where they need an attorney, and then the amount of  
10 compensation. And, the amount of compensation has really  
11 worked to kind of split families in many ways, and groups,  
12 whereas if everybody came together, they probably would have  
13 been more effective. But, that just kind of split people.  
14 But, this compensation issue is still a very active issue.

15           MS. JOHNSON: Well, in fact, this is a copy from  
16 our impact assessment report, and this is--that was in the  
17 Eureka Sentinel this spring of 2011 to let people in the area  
18 know that they could get a cancer screening.

19           MS. BOUTTÉ: Yes.

20           MS. JOHNSON: But, that's just a screening.

21           MS. BOUTTÉ: Yes. Yes. From the University of  
22 Nevada School of Medicine. There is funding in the  
23 Compensation Act for that, and so the School of Medicine  
24 wrote a grant, and they are doing some screening for that.

25           Actually, also in communities, you will still see

1 attorneys with posters up soliciting people if they need  
2 assistance with the compensation process. So, compensation  
3 has been a real issue. Right now, I'm writing about the  
4 problems that atomic soldiers are having in getting care  
5 through the Veterans Administration and compensation.

6 MS. JOHNSON: Well, Marie, in our--in Eureka  
7 County's Draft Environmental Impact Statement comments that  
8 we did in 2000, we included the mitigation measure request  
9 for baseline health assessment and compensation fund. We  
10 identified that this was something that Eureka County and the  
11 other counties would need if Yucca Mountain came. And, we  
12 included a reference to a story in the Las Vegas Sun January  
13 8, 2000 as an analogy. The article said that many veterans'  
14 widows cannot find evidence that their husbands' participated  
15 in secret experiments related to the effects of radiation on  
16 battlefield soldiers. Without such records they cannot  
17 request compensation.

18 Pat Brody, the wife of deceased veteran Chuck  
19 Brody, said, "The government is waiting for us all to die."  
20 She said, "When they ask for compensation for disability, and  
21 indemnity in compensation from the V.A., government officials  
22 say prove it. They've got the documents. We don't have the  
23 documents. They've got the proof. We don't have the proof."  
24 That seems like a Catch 22.

25 MS. BOUTTÉ: Yes, it is. And, I have spent many



1 hours with Mrs. Brody, interviewing her for some writing that  
2 I'm doing about the soldiers. And, yes, in fact out of the  
3 groups, the uranium miners, the Test Site workers, the  
4 downwinders, the veterans are having the most difficult time,  
5 partly because they were part of provisional units. In other  
6 words, they were pulled from several different units and sent  
7 then as a provisional unit. Then, after they had  
8 participated in the atomic testing series, they were then  
9 sent back to their original units. That really made it  
10 harder to see patterns of illness among the soldiers.

11 MS. JOHNSON: I see.

12 MS. BOUTTÉ: Yes. And, also, they were--all the  
13 atomic soldiers signed a secrecy oath at the time, and that  
14 was not lifted until the early Nineties, until the early  
15 1990s was that oath lifted.

16 And, it's so complex among--to figure out the steps  
17 in the V.A. process. I was looking the other day, I think  
18 it's like 23 steps that application would have to go through  
19 in order to be approved. So, the atomic veterans and their  
20 wives and widows have just--it's almost unbearable what they  
21 have to go through.

22 I've been interviewing the atomic soldiers now for  
23 about four years. I go to their meetings, the National  
24 Association of Atomic Veterans. And, a few years back, I  
25 took one of my graduate students, and she wrote her public

1 health thesis on the wives and widows, and their problems of  
2 getting compensation.

3           Also, what people don't realize, in 1974, there was  
4 a huge fire in St. Louis, and millions of military records  
5 were burned. So, for them to prove this strict criteria, and  
6 for them to find documentation is almost impossible.

7           And, the other thing, if you think about any of  
8 these groups, any of these four, let's say, exposed groups,  
9 their ill and family members need to take care of their ill  
10 loved ones, and then trying to fight for compensation on the  
11 side of taking care of ill people just seems unbearable.

12           MS. JOHNSON: It's hard enough getting through the  
13 medical system these days.

14           MS. BOUTTÉ: Yes. In fact, I may in fact, I will  
15 use that quote that you just used from Ms. Brody, because I  
16 really do believe, and she believes that they're waiting for  
17 them to die.

18           MS. JOHNSON: Yes. Well, that quote has been very  
19 helpful to use because we've been able to, in just a very  
20 couple of sentences, to say you know, try for compensation or  
21 die first.

22           MS. BOUTTÉ: Yes.

23           MS. JOHNSON: And, that really conveys to the  
24 public what the conundrum is and the irony.

25           MS. BOUTTÉ: Yes. And, also in the past, the

1 Radiation, RECA, Exposure Compensation Act, really means that  
2 each individual has to go for compensation. I argue in this  
3 publication that I did that basically the states, the State  
4 should go for compensation, should ask for compensation.  
5 They should have asked for compensation in the past, and I  
6 would argue they need to ask for compensation should Yucca  
7 Mountain have gone forward.

8           Counties themselves should have asked for  
9 compensation, because the State and the counties, they're the  
10 brunt if health problems arise. And, for example, the Nevada  
11 State Health Department, if they had been funded, could have  
12 been very helpful to rural communities to identify whether or  
13 not--one of the problems is perception versus actual. People  
14 perceive health problems. But, we have evidence from the  
15 epidemiological studies that we have thyroid problems, that  
16 we had leukemia problems in the past.

17           And, given the complexity of all that, though, I  
18 believe it's necessary--well, I would say it's to spread the  
19 compensation out. Families need to be compensated. Counties  
20 need to be compensated, and the State needs to be  
21 compensated. And, I think, for example, the State of Utah  
22 was very--they were better at getting compensation from the  
23 government for radiation. They actually have a really good  
24 cancer institute, and I think in part that came from funding  
25 from the government. And, we just did not get that. The

1 Marshall Islanders, for example, our government paid the  
2 Marshallese and the Marshallese' governments. We paid Japan  
3 when we would shot (inaudible) and we contaminated the tuna  
4 industry.

5           And, the men who were on the lucky dragon boat, we  
6 paid the widow of one of the men who died. We didn't call it  
7 compensation. We called in condolence money. But, when you  
8 talk with downwinders, they say look, what they really will  
9 say is that we paid the--they say the islanders and we paid  
10 Japan, now, when is it so hard for them to pay us. And,  
11 there's no answer for that.

12           MS. JOHNSON: No, there isn't.

13           MS. BOUTTÉ: There is no answer for that. But, the  
14 State and the County ought to be compensated because of the  
15 brunt of the cost that results from these situations.

16           MS. JOHNSON: I like the term "condolence."

17           MS. BOUTTÉ: Yes, condolence.

18           MS. JOHNSON: It really conveys much more than  
19 what's in it for me compensation. It conveys the loss.

20           MS. BOUTTÉ: It does, but it also, though, does not  
21 assume responsibility.

22           MS. JOHNSON: Right.

23           MS. BOUTTÉ: That's the point. In fact, what I  
24 talk about in this article and in my class is there's really  
25 four forms of redress for communities. There's an apology.

1 I'm just sorry it happened. And, in the first line of the  
2 RECA Act says, President Clinton says, "I apologize on behalf  
3 of the nation." And, that's important, because he didn't  
4 apologize, he apologized for all of us on what happened  
5 during the atomic testing.

6 And, then, there's apology and money. And, then,  
7 there's just money. And, then, there are, again, these  
8 resources given to the community.

9 MS. JOHNSON: Yes.

10 MS. BOUTTÉ: Now, it doesn't matter whether people  
11 are given money or not. What they want also is an apology,  
12 because the apology says I did you wrong, or there was an  
13 injustice, at least people feel there was an injustice, and  
14 the government says I'm acknowledging your feelings about an  
15 injustice. And, that's what people want, is they want that  
16 apology.

17 And, with the RECA Act, we actually got both, but  
18 it only went to individuals, and it did not go farther to the  
19 County, or the State. And, I believe that everybody who  
20 bears the brunts of what happened, should be compensated.

21 MS. JOHNSON: Well, there's an additional issue,  
22 too, that if you had a functional health management program,  
23 let's say at the state level, that it's not--it would not be  
24 run by the people who had done it to you.

25 MS. BOUTTÉ: Yes. Yes.

1 MS. JOHNSON: It would be removed from that. It  
2 would be more neutral.

3 MS. BOUTTÉ: Yes. In fact, in the Marshall  
4 Islands, they have a nuclear tribunal, for example.

5 MS. JOHNSON: Yes.

6 MS. BOUTTÉ: We could have a state tribunal. But,  
7 also, what's interesting--

8 MS. JOHNSON: A medical clinic.

9 MS. BOUTTÉ: Yes, but what's interesting, though,  
10 about RECA, the Radiation Exposure Compensation Act, is it's  
11 administered by the Department of Justice. Now, the  
12 Department of Justice was the department that was involved in  
13 all the lawsuits when all the groups brought lawsuits against  
14 the government. The downwinders brought lawsuits, the  
15 veterans brought lawsuits, the workers brought lawsuits,  
16 everybody brought lawsuits, and they were not successful.  
17 But, it was the Department of Justice that fought those--

18 MS. JOHNSON: Right, that defended their clients.

19 MS. BOUTTÉ: Yes. And, now, the program is put in  
20 their hands. I believe it should have been put in the  
21 health, or another agency, but certainly not that agency. I  
22 even argued that in this article that I published, that  
23 that's the last one that should have been given the program,  
24 was the Department of Justice. And, so, they are very strict  
25 about this criteria.

1           MS. JOHNSON: Well, I think some Nevadans think  
2 that giving the Department of Energy the responsibility for  
3 Yucca Mountain, when their predecessor, the Atomic Energy  
4 Commission, had done so much damage to Nevadans from the  
5 testing is a similar kind of irony.

6           MS. BOUTTÉ: Yeah. I will say, though, that now  
7 the--at least for a while, the Department of Energy was much  
8 more open with their records. Actually, under O'Leary, the  
9 Clinton Administration was very open, and that helped a lot  
10 to bring forward a lot that we now know about atomic testing,  
11 about medical experimentations with radiation, and all of  
12 that. And, the archives, the DOE archives in Las Vegas,  
13 every time I've been there, they have been very helpful.  
14 I've never felt that they have held anything back. They have  
15 been more helpful of anything I have ever asked for. I have  
16 not asked for Freedom of Information material, but the  
17 material that I have gotten, they've been very helpful with  
18 it. Very helpful.

19           MS. JOHNSON: We've been interviewing people in  
20 Eureka County, and they have told us that they remember the  
21 government coming to test the milk, and Ron's grandmother  
22 would put the sample in the jug, and somebody would come get  
23 it. But, they never found out what the results were.  
24 Commissioner Itheralde said that as a third or fourth grader,  
25 he went to the top of Pinto Summit, and they had little

1 badges or meters, or something, around their necks as they  
2 watched the sunrise to the south, which was the atomic blast.  
3 Is it possible to find that information?

4 MS. BOUTTÉ: It probably is. It would take a lot  
5 of digging, but it probably is because I've been amazed at  
6 the amount of information that they kept, that they collected  
7 and they kept and they have in their archives. And, I have  
8 gotten, actually, some records that have shown radiation  
9 levels. So, I think it is possible, but it would take an--  
10 the individual would have to dig it and find it themselves.  
11 People are not going to come forward with this information.

12 MS. JOHNSON: If they didn't at the time--

13 MS. BOUTTÉ: If they didn't at the time--

14 MS. JOHNSON: --when it was most useful, it  
15 wouldn't--they're not going to do it now.

16 MS. BOUTTÉ: Yes, they're not going to do it now.

17 And, the other thing that I think is important to  
18 talk about is that radiation went country-wide.

19 MS. JOHNSON: Yes.

20 MS. BOUTTÉ: And, it's an issue of who gets  
21 compensated. And, so, information is there all across the  
22 United States, but--and, it's there, but it would take a lot  
23 of digging to get at it, and they're not going to bring it  
24 forward because again, I don't believe the government is  
25 going to help you get compensation.



1 MS. JOHNSON: Let's move on to the next question.

2 (22:07 - End of Raw Footage 5.)

3 (21:59 - Begin Raw Footage 6.)

4 MS. JOHNSON: Marie, in your research, what  
5 differences did you find within the community regarding the  
6 atomic testing as a project and the Yucca Mountain Project?

7 MS. BOUTTÉ: Well, during atomic testing period,  
8 people were very patriotic. That was the Fifties and the  
9 Sixties. And, people seemed to understand that there might  
10 be a need for testing. Initially, especially in these small  
11 Mormon communities, there was much support for atomic  
12 testing. Like you say, they went out and they watched it.

13 But, then over time, as health problems started to  
14 arise, then the communities started to not be so homogeneous  
15 in thinking about the testing, especially families that  
16 started having health problems, children with leukemia, for  
17 example. And, then, when they identified that the leukemia  
18 could possibly be due to the atomic testing, then the  
19 communities started getting conflict in it. But, initially,  
20 those communities were all very supportive of testing.

21 With Yucca Mountain, it was a split from the  
22 beginning, it seems, again, from the people who had been here  
23 for a while during the testing, and those who had moved in.  
24 And, those who see it as an economic asset, people really  
25 didn't talk about the Nevada Test Site, nuclear testing as

1 being an economic thing. It was not for economics. But,  
2 people talk about Yucca Mountain as it's an economic need in  
3 these rural communities that are suffering economically.

4           And, so, the purpose of each project is different,  
5 and that has worked to split the communities in different  
6 ways, I would say.

7           I would like to say--I'd like to read a poem from a  
8 woman in Caliente that kind of gives an idea of what the  
9 communities are still suffering from in terms of the testing,  
10 and even now thinking about Yucca Mountain. This was a poem  
11 written by--she wrote it in 1993, Margaret Sibley wrote this,  
12 and she gave me permission to use it in this latest--I  
13 actually wrote a chapter in this book, "Half lies and Half  
14 Truths," and it's a book of confronting the radioactive  
15 legacies of the cold war, and it's written all by  
16 anthropologists.

17           And, of course, we always look at the culture  
18 aspect of this, and so this is an interesting edited book,  
19 and so I wrote a chapter here, and here is her poem. "The  
20 cool breeze and fresh air, a small town atmosphere. Caliente  
21 is a beautiful place. Its name came from the warmth of the  
22 water, not from the heat of the sun's face, yet since the  
23 nuclear years of the arms race, Caliente is not such a nice  
24 place. The radiation level is of course too high. It has  
25 caused many family members and friends to die. Cancer is the

1 leading disease which plagues the people here, and it's what  
2 everyone has come to fear."

3           And, so, there's this level of almost a constant  
4 level of fear in communities about, you know, because of the  
5 long latency period of cancer. So, it takes a huge  
6 psychological load, you might say, is placed on communities  
7 that have suffered from this. And, they were there. They  
8 saw it. And, they feel very--there's a sense of anger, as  
9 well. They were patriotic, and then they feel--the  
10 government says they could have compensation. They've gone  
11 for compensation, but it's been very, very difficult to get  
12 it. And, now, here's Yucca Mountain, they can't--and, they  
13 tell me they can't trust the government that they'll do the  
14 right thing. They thought they would have done the right  
15 thing in the testing, and they didn't. They don't feel now  
16 that they did do the right thing toward them, and now there's  
17 fear that they're not going to do the right thing by them if  
18 something should ever go wrong with Yucca Mountain. It's  
19 that past experience that's shadowing them on this next  
20 project.

21           MS. JOHNSON: And, then, Marie, as a medical  
22 anthropologist, you observe this situation. So, what kinds  
23 of conclusions do you draw from that in terms of how these  
24 projects should go forward?

25           MS. BOUTTÉ: Well, one of the things I highly

1 recommend for communities and community leaders is self-  
2 education. They really need to learn about radiation, what  
3 it does, what protections are. Every community needs to  
4 self-educate about any impacts that may come its way.

5 I teach a course on toxic communities and public  
6 health, for example, and we talk about popular epidemiology,  
7 which is quite different from scientific epidemiology. But,  
8 that's where communities take a role in identifying their own  
9 health problems, getting help from the outside for  
10 themselves. And, so, I'm always for community empowerment.  
11 And, as an anthropologist, I often can help communities  
12 articulate the voice they'd like to go forward, you might  
13 say. So, I have spent a lot of time educating people in  
14 communities about how do you deal with agencies, for example,  
15 not just federal agencies, but how do you deal with state  
16 agencies.

17 I had some experience in Ely with the state when  
18 the prison went there, and they had negotiated certain things  
19 for the prison. But, they negotiated before they really  
20 understood prison industry. And, so, a lot of our  
21 communities don't understand, let's just say nuclear  
22 industry, and what that means for them, and what does it mean  
23 to have a certain amount of money. What are the other  
24 aspects of that.

25 And, so, I feel as an anthropologist that I can

1 actually act as what we would call a cultural broker. I can  
2 work with the DOE. I can work with the state agencies. I  
3 can work with the communities. But, communities need to take  
4 responsibility for their own empowerment in terms of  
5 educating themselves about what can happen, and to be able to  
6 mediate, because these are face to face communities where  
7 everybody knows everybody. You need to depend on your  
8 neighbor a lot of times. And, you can have disagreements for  
9 sure, but how do you come and solve those disagreements and  
10 still remain neighbors and friends.

11 I'll show you, I've kept this for a long time.  
12 When I was in Caliente, I was struck by--there were many  
13 people who were very--they were opposed to Yucca Mountain or  
14 they were for Yucca Mountain, for example, and they would be  
15 right next door to each other. And, I've always saved this  
16 poster. "Do we oppose nuclear waste in Lincoln County? You  
17 bet. Our families are not expendable." But right next door  
18 would be someone who was fully supportive of Yucca Mountain.  
19 And, they'd lived together for years and they were going to  
20 continue to live together for years.

21 But, I think older families in Nevada are better at  
22 that than newer families moving in. They don't have that  
23 history of negotiation among families and communities. But,  
24 anthropologists can help a community to figure out what it  
25 needs to know and how do you go about getting it, and carry

1 out these kind of studies.

2           And thinking about the culture, like in Ely, I  
3 talked about the culture of corrections. Culture of mining.  
4 Culture of ranching. And, what we have then when these big  
5 projects come in is we have a clash of cultures often. And,  
6 often communities, when they say they're going to employ so  
7 many people, they think people from that community will be  
8 employed. But, that's not necessarily true. It depends on  
9 what expertise is needed. And, so, anthropologists are very  
10 good at cultural brokers when these big kinds of projects  
11 come in.

12           MS. JOHNSON: Let's move on to the next question.

13           (22:07 End of Raw Footage 6)

14           (21:59 Begin Raw Footage 7)

15           MS. JOHNSON: Marie, you've been so helpful to us  
16 in this interview. Thank you so much for your time.

17           MS. BOUTTÉ: Well, thank you for inviting me to  
18 participate.

19           (22:00 End of Raw Footage 7)

20           (22:00 Begin Raw Footage 8)

21           MS. JOHNSON: Marie, so we're going to be using the  
22 footage in two ways. One as the interviews on DVD for  
23 researchers, they'll be put in archives, and the other is to  
24 take some clips, short clips for the web. So, do we have  
25 your permission to use the footage that way?

1 MS. BOUTTÉ: Yes, you do.

2 MS. JOHNSON: Thank you very much.

3 (22:00 End of Raw Footage 8)

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