



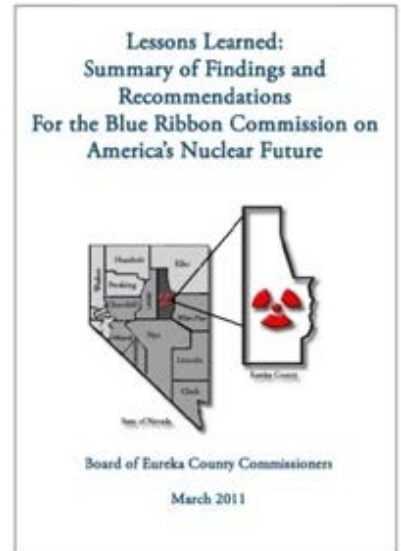
# YuccaMountain.org

Eureka County, Nevada - Nuclear Waste Office

## Lessons Learned

Eureka County's nuclear waste program is looking back to reflect on what has occurred in the decades-long federal nuclear waste repository program. The County's effort is two-fold. With the assistance of its technical team, the County prepared a [Lessons Learned Report](#) [600 KB PDF] which was submitted to the President's Blue Ribbon Commission on America's Nuclear Future; the report was submitted in March 2011.

The County is also undertaking a [Lessons Learned Video Project](#), to capture on film and transcript the recollections and insights of key participants and observers. Nuggets of the interviews are presented below along with the full transcript of each interview. The complete videos and transcripts will also be made available to researchers for historical and archival purposes.



## Interview Participants

- [Marie Boutte](#)
- [Joseph Carruthers](#)
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**Marie Boutte** — Dr. Boutté is a cultural anthropologist at University of Nevada Reno School of Community Health Sciences. She has studied the effects of nuclear testing on downwind communities in Nevada.

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- [YouTube Video Clip of Marie Boutte](#) 

**Slit Throats** — You should go out to Ely and look at all those slit throats . . . Well, I thought it might be mining violence, like young men in mining who got into altercations, you know, and cut each other up.



You're not from around here, are you?" And, I said, "Well, I'm from the University, and I'm out here because someone said I should come out and look at all the slit throats. Like, what is that?" And she said [lady at bar in Ruth Nevada], "Well, Honey, that's from all those nuclear tests we had out here, and those are thyroid scars." And, I said, "You're kidding." And, she said, "No, just walk around town and . . ." "So, then, I started research out in these rural communities, initially on the effects of the atomic testing. And, I interviewed everybody, I mean, I covered every rural county that was downwind from the Nevada Test Site."

**Joseph Carruthers** — Mr. Carruthers is a resident of Crescent Valley, Nevada

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- [YouTube Video Clip of Joseph Carruther](#) 

**A Local Perspective** — If a rail line came through Crescent Valley, there would be a variety of different things that would disturb or alter people's way of life. Anyone who owned property anywhere near this area, or in the town itself, because of the close proximity of a rail line -- about a mile and a half away, or even closer in some cases -- would obviously effect local property values.



Also, because I live out here in the Dry Hills, there's a road that goes from here to town, and if the rail line was built, I would be sitting and waiting next to the trains, in pretty close proximity to the waste itself. And other folks such as ranchers would be affect to, because they have grazing, they lease land for grazing throughout all these areas. So, any of these areas all the way to Yucca Mountain would be affected, and the ranchers would feel the impact in a big way.

Excerpts from the transcript -- June 1, 2011

**Ron Damele** — Mr. Damele is the public works director for Eureka County and the manager of the County's Yucca Mountain nuclear waste oversight program.

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- [YouTube Video Clip of Ron Damele](#) 



**Radiation** — As a young kid in the early Sixties the DOE would come to our ranch and they'd drop off a plastic jug, and my grandmother would fill it up with milk from our cows, and then in a few days the DOE would come back and pick it up. And, I was always curious about what they were looking at, and we always knew they were looking for radiation, but we didn't know what radiation was or what it did to you. Now with this whole downwinders program, my dad and my uncles go and get tested once a year in Ely. So, obviously, our milk must have had some sort of radiation in it, because they've developed this downwinders program, and a good portion of my family that was on the ranch at that time has died from cancer.



And, I can remember my granddad telling me that there were occasions where they were out riding after a nuclear test, and they would come in and their faces would be burning, and it would be like they had a bad sunburn. And, after a few days, it would go away . . . And you can relate this to the Yucca Mountain Project, where you have this tunnel and you have this series of alcoves, and you're going to plant nuclear waste in there, and it's in an earthquake fault zone, so what are we doing . . . And, you know, there's water in close proximity to that, and, so, we're going to contaminate water. It just doesn't make any sense to me.

Excerpts from the transcript -- May 18, 2011

**Barbara and Ken Dugan** — The Dugans live in Crescent Valley, Nevada



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- [YouTube Video Clip of Barbara and Ken Dugan](#) 

**A Local Perspective** — We just didn't like it. Radiation leaks are dangerous. And then there are the safety aspects --I don't know quite how to put it, it just didn't make sense to transport that kind of stuff through this area. I got the impression for the Department of Energy that everything was good, and they did not give you any information about the dangers involved in transporting nuclear waste. They claimed everything was perfect. There was no danger to the water. There was no danger of earthquakes or anything. It was all positive from the Department of Energy's point of view.



Excerpts from the transcript -- June 5, 2011

**Leonard Fiorenzi** — Mr. Fiorenzi is a Eureka County Commissioner and former public works director.

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- [YouTube Video Clip of Leonard Fiorenzi](#) 

**Local Oversight** — There were a lot of people opposed to Yucca Mountain in the county although some people were kind of up in the air about it. We was getting funding [from DOE] and we tried to work with them to do the best for the citizens of Eureka County, [and we ] remained neutral and just tried to keep everybody informed of the process of the project . . .



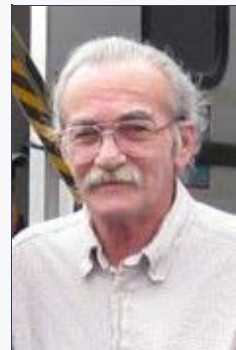
Well, I'm kind of glad that the Yucca Mountain itself is dead, because I, if something went wrong underground, I don't think they were going to be able to get in there and take care of it. After that Japanese stuff, which is on the surface and it looks like they can't manage it — so I don't know how they would manage all the radioactive waste that would be buried at Yucca Mountain.

Excerpts from the transcript -- May 17, 2011

**Steve Frishman** — Mr. Frishman served as a technical consultant to the Nevada Agency For Nuclear Projects. Mr. Frishman served in that capacity for more than 20 years.

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- [YouTube Video Clip of Steve Frishman](#) 

**The Environmental Impact Statement (EIS) Process** — The Environmental Impact Statement (EIS) process — One of the things we thought was important to do was to help people understand what an Environmental Impact Statement is. You know that you don't have to read a thousand pages and you can pick out something, just one issue that's important to get on the record. And, it's sort of an intimidating process unless you know ahead of time that your comment is as good as anybody's comment.



So we held a workshop in Crescent Valley [Nevada] that was remarkably well attended. I was really pleased to see that it was a real representation of the community. And, it included people who were environmentally concerned. It included people who had connections to mining, it included Native Americans, and whether they agree on many other topics, they all agreed about needing to be effective in communicating their concerns to the Department of Energy (DOE). One of their primary concerns focused on the potential for a rail corridor coming through Crescent Valley.

So, overall, it was very effective, and the workshop contributed to DOE getting barraged by comments on the EIS for the Yucca Mountain Repository. In the course of the EIS hearings held by DOE, there were over 12,000 public comments the Department had to categorize, had to respond to, and it convinced DOE officials that yes, there is real interest from Nevada residents over the proposed repository at Yucca Mountain.

Excerpts from the transcript -- June 23, 2011

**Susan Fye** — Ms. Fye lives in Crescent Valley, Nevada.

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- [YouTube Video Clip of Susan Fye](#) 

**The Local Perspective** — There were many unanswered questions -- will the rail line through Crescent Valley be dedicated for nuclear waste shipments only, or will the line be available to other users. Will compensation be giving to people whose property is affected -- and what about mining claims and grazing rights, let alone the property values here in town?



Having a nuclear waste train going through your backyard for 35 years is probably not a great selling point, if you're comparing property, say, in Lander County [Nevada] where you don't have the train. So, those questions were asked over and over again, and were never really answered by the DOE.

Excerpts from the transcript -- June 1, 2011

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**John Gervers** — Mr. Gervers has been a consultant for Eureka County's nuclear waste program. He is president of Latir Energy Consultants in Santa Fe, NM.

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- [YouTube Video Clip of John Gervers](#) 

**A Controversial Decision** — John What kept you engaged, involved and excited about this work? Sometimes I would ask myself that question. But, I think fundamentally, it is a major policy issue that involves a controversial decision that has to be made by the national government in order to support a major source of energy in the United States.



And, so, the siting of a nuclear waste repository is something that has to be done in order to close the fuel cycle and to allow the reactors that are producing 20 percent of our energy to dispose of their waste. . . . And, I think that any future [siting] effort should be placed in the hands of a group of people who are committed to reflecting the local interests, the local views, and to listening, as well as speaking about what is important.

Excerpts from the transcript -- June 10, 2011

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**Sandy Green** — Ms. Green is a former Eureka County Commissioner and past coordinator of the County's Yucca Mountain Information Office.

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- [YouTube Video Clip of Sandy Green](#) 



**Site Suitability** — Well, we did learn that [Yucca Mountain] is a very active place, [that has] a very young volcanic area, so that there are lots of fault lines through it. The last volcano, I think, was probably 10,000 years ago, which in geologic time is pretty new.



And there were those concerns about water, and the heat that generated from the [spent fuel] casks that were going to be buried in Yucca Mountain, and what would happen with that kind of drip, drip, drip in an already wet mountain. And, I think those findings probably should have alerted all of us about the fact that it was not the safest place to store waste.

Excerpts from the transcript -- May 17, 2011

**Jamie Gruening** — Ms. Gruening lives in Crescent Valley, Nevada.

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- [YouTube Video Clip of Jamie Gruening](#) 

**The Local Perspective** — I live seven to eight miles southeast of the township [of Crescent Valley Nevada] itself, and in looking into the transportation of nuclear waste, I was immediately alarmed about the possibility of a rail route in the valley. In reading some materials and in exploring the Draft Environmental Impact Statement (EIS) for Yucca Mountain, and in looking at detailed maps of the rail corridors, I discovered the rail corridor for shipment of nuclear waste, would be three-tenths of a mile from my home. That is too close for comfort.



I read a lot of the Draft EIS and I became very concerned about health and safety issues, the real nuts and bolts of the process, just the construction of the rail line, and access roads to my home. Would there be an overpass, an underpass, a guarded crossing, no access at all? So, I was concerned about that.

I do think about the historical lessons, for instance, the down-winders who were so tragically affected by exposure to radiation. And there are other lessons through history that I can't cite, recent and not so recent, but it all builds to a picture of exposure to low-level radiation. It's not healthy for humans, the environment, the plants and animals and our water sources.

Excerpts from the transcript -- June 1, 2011

**Robert Halstead** — Mr. Halstead was appointed executive director of the [Nevada Agency for Nuclear Projects](#) in 2011. He has been the agency's transportation consultant since the 1980's.

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- [YouTube Video Clip of Robert Halstead](#) 

**Transportation of Spent Fuel and High-Level Waste to Yucca Mountain** — I think the most important thing that we've learned through the 30 years of studies for the repository program generally, and Yucca Mountain specifically, is that the transportation impacts are going to occur nationally over perhaps as long as half a century.



They're going to affect an enormous number of communities and people. Looking at the specific routes that might be used for shipments to Yucca Mountain, we know that more than 40 states will be affected, 30 to 50 Indian nations would be affected, 800 to 900 counties would be affected, somewhere in the neighborhood of 160 million people live in those affected counties. 10 to 12 million people actually live within half a mile of one of the shipping routes.

Excerpts from the transcript -- March 31, 2011

**Jim Ithurrealde** — Mr. Ithurrealde is a Eureka County Commissioner and former Assessor for the County.

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- [YouTube Video Clip of Jim Ithurrealde](#) 

**Atomic Testing** — We would go on top of Pinto Summit to watch the actual setting off of the [atomic] bombs down south. While we didn't actually see the mushroom [cloud], we saw this big flash, and we were 300 miles north of where they actually set off the bombs.

We were always in the sheep industry, so we knew some of the stuff that happened in the State of Utah, where several thousand sheep died from radioactive fallout. So, that's when we started to say there might be some negative impact from [nuclear] testing.



Excerpts from the transcript -- May 18, 2011

**Abby Johnson** — Ms. Johnson is the nuclear waste advisor for Eureka County, Nevada.

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- [YouTube Video Clip of Abby Johnson](#) 

**The Yucca Mountain Siting Process & Fairness** — If you had said that [the repository] was going to be in Vermont or Wisconsin or New Hampshire, people would have said well, of course we can't do that. That's not safe.

But because it was Nevada, people think Nevada is a wasteland, and that it doesn't matter what you do to Nevada. We as a state did not get the respect that we deserved. And, there are legitimate scientific concerns, and for decades Nevada's concerns were belittled and ignored . . .



Excerpts from the transcript -- January 12, 2011

**Nancy Louden** — Ms. Louden Lives in Crescent Valley, Nevada.


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- [YouTube Video Clip of Abby Johnson](#) 

**A Local Perspective** — I just visualized a railroad track going through the middle of the Valley, and we have a shop in town in Crescent Valley, and we drive out there a couple times a day. And we go back and forth all the time, and here I'd be stopped at this train track pulling canisters of nuclear waste, and who knows if one of them would be leaking. And, the people in town here, none of them wanted it, not one of them, whether they were on the right side of politics or the left side of politics, nobody wanted it. And that kind of tells you how people really feel about it. When they're threatened with nukes being near them, you don't want them. Nobody does. Everybody in the Valley was against it. And, we all fought hard together, we really stuck together on that. We never stuck together on anything before, but we really stuck together on that one.



Excerpts from the transcript -- April 21, 2010

**Robert Loux** — Mr. Loux served as the Executive Director of Nevada's Agency For Nuclear Projects for more than 20 years.

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- [YouTube Video Clip of Robert Loux](#) 

**State Government Oversight** — I think the lesson about Yucca Mountain is that you don't have to take what the Federal Government wants to dish out. You can stand up and fight city hall. And even if you don't necessarily win, citizens acquire self-respect, as I think the Yucca Mountain saga demonstrated . . . when the Nuclear Waste Policy Amendments Act passed, commonly known and dubbed by Dick Bryan as the "Screw Nevada" bill, the legislation just outright selected Nevada without any scientific criteria. At that point the gloves were off and everyone knew the game, we knew what the Federal Government wanted to do.



So, the direction to me, and to the folks we work with, was fairly clear, just do what you can to stop this. So we developed comprehensive sophisticated strategy that involved not only trying to acquire and defeat DOE in the scientific arena, but also in the public relations arena, in the political arena on Capitol Hill, as well as in Nevada. We also knew DOE had much more money, more power, and we knew that we could leave no stone unturned. We couldn't afford to make a mistake, and we had to use every bit of the resources we had to counter them.

In 1988, I asked the Attorney General's office for an opinion of what would be the implication



if the State began to entertain signing an agreement with the Federal Government. And, in September 1988, the Attorney General's office produced a legal opinion, which indicated blatantly, that in fact by negotiating, the act of negotiation, the act of showing a willingness to negotiate, was legally implying your consent for the project, that once you had done that, then it put in jeopardy your ability to enforce health and safety regulations, to carry out meaningful oversight, and could in fact defeat any sort of legal challenge you had in the courts.

Excerpts from the transcript -- August 31, 2011

**Michon Mackedon** — Ms. Mackedon is the author of *Bombast: Spinning Atoms in the Desert* and a former member of the Nevada Commission for Nuclear Projects. She is Professor Emeritus of the Western Nevada College.

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- [YouTube Video Clip of Michon Mackedon](#) 

**Trust & Confidence** — We are left with residue from atomic testing in Nevada, underground as well as above ground. We're left with a legacy of health problems that we still don't really have a good handle on. We have radiation physics and radiation health physics and we pretty much understand what kinds of radiation cause what kinds of cancer -- But, there are a lot of mysterious cancers and mysterious illnesses that we can't really trace directly to above ground testing or our below ground testing. So, this creates a climate, a climate of mistrust.



Excerpts from the transcript -- May 16, 2011

**Michael Mears** — Mr. Mears is the Eureka County Assessor.

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- [YouTube Video Clip of Michael Mears](#) 

**Building a Local Response to Potential Repository Program Impacts in Eureka County, Nevada** — Following a visit to Yucca Mountain we ramped up our efforts to start utilizing the tools that we had, and acquiring what other tools we thought we needed, whether it was consultants or creating additional data. What the County really needed was this mapping capability.

We needed to be able to do that kind of deep detailed analysis that wasn't being done, and we needed to do that for the protection of the County, protection of its citizens, and protection of its resources.



Excerpts from the transcript -- April 20, 2011

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**Irene Navis** — Ms. Navis is the Manager of the Clark County Nuclear Waste Oversight Program and the Director of Emergency Management and Homeland Security.

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- [YouTube Video Clip of Irene Navis](#) 

**Trust and Confidence / Local Oversight** — Finding the delicate balance of being factual and credible and keeping our integrity, while still putting forward that strong opposition taken by the Clark County Commission to Yucca Mountain, has been a priority throughout the course of Clark County's local oversight program. I always directed my staff to stay out of the politics, and focus on the research, the assessments, and provide factual, reliable information to the public.



We felt very successful in Clark County when the Department of Energy's Final Environmental Impact Study came out. In the draft documents the Department said there were no negative impacts to local property value or to the Las Vegas tourism industry. However by the time the Final EIS came out, Clark County had done studies that the Department of Energy deemed credible and were acknowledged in their Final EIS; the impacts we identified were real, and were included in the final EIS.

I think one of the most important things we learned over the past decade is integrity and credibility concerning the words you say and the documents that you produce for the public. The public trusts us to tell the truth, and it's very important that we do that in credible way, a very engaging way to keep them interested, and also to present all the information that we've gathered so that people can have a choice about what they believe.

We weren't out there trying to convince people that they had to be opposed the repository. But, we wanted them to have enough information so they could make an informed choice, and that's really what people are looking for. From a public education campaign, from a technical and science perspective, I think what we have determined is whatever people thought was impossible, is possible, whether you're talking about the Japan disaster or 911, and what potential consequences are for human health and safety and for the environment. Anything is possible.

Excerpts from the transcript -- May 19, 2011

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**Joe Strolin** — Mr. Strolin has been the acting director of the Nevada Agency for Nuclear Projects, and was the agency's planning director for more than 25 years.

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- [YouTube Video Clip of Joe Strolin](#) 

**The Yucca Mountain Siting Process** — Any future repository siting process, any future process for siting a centralized storage facility for spent fuel must be voluntary, and it has to be a real meaningfully voluntary program.

What it really comes down to is a volunteer process and the ability of the Federal Government to give up control and say we are confident enough in the work that we're doing, that we are willing to involve you in a voluntary way, and you may bail out at any time if you think the site isn't suitable or we're not doing what we say we're supposed to be doing.



That would be my advice, and that's the thing that I've taken away from this project in the many years that we've been battling with the Federal Government over this.

Excerpts from the transcript -- March 18, 2011

**Judy Treichel** — Ms. Treichel is the Executive Director of the [Nevada Nuclear Waste Task Force](#).

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- [YouTube Video Clip of Judy Treichel](#) 

**Touring Yucca Mountain** — one of the things that got us on those tours at Yucca Mountain was that we occasionally would be told by people who went on a tour what the tour leaders were telling them about the proposed repository at Yucca Mountain. And, we were sort of indignant about the extent to which Department of Energy (DOE) officials were misrepresenting what was going on there. So, through a period of time, and some fairly tough negotiations, we convinced DOE that we should go along on the public tours.

We found that our presence on the tour sort of kept the DOE from misleading people about what was going on there. And, it was because we weren't shy about interrupting them when they were telling people things that were absolutely false. And, they got kind of used to it. Overall, just our being present made a difference in what people were told. And, we thought that it was our public obligation to keep DOE from misleading people about public health and safety issues associated with the disposal of nuclear waste at Yucca Mountain.




And there was the Nevada Initiative which was put together by a lobbying group associated with the nuclear industry. The initiative was put together to win over the people of Nevada. They recruited some newscasters that were familiar faces in Las Vegas. There was a sportscaster and a couple of other people involved in T.V. news. Before this ever started however, a person who worked for another public interest group got a copy of this thing called

the Nevada Initiative, and gave it to us here in Nevada, and said, "Look at this thing that's coming."

It was unbelievable. It had their strategy that used military language about establishing a beach head, and getting to women that were in their thirties and early forties, because these were the people that could probably influence their husbands, certainly their children. And, one of the larger auto dealerships here in Las Vegas was using the Yucca Mountain man in their ads. A couple of drive to work disk jockeys increased their ratings tremendously by doing spoofs about the Yucca Mountain ads that were running on T.V. from the Nevada Initiative. And, it was a miserable expensive failure, and it didn't go anywhere and probably solidified opposition, because people who had never heard of Yucca Mountain heard it now, and saw the ridiculousness of the hard sell.

Excerpts from the transcript -- June 23, 2011

**Mark Waite** — Mr. Waite is a journalist with the Pahrump Valley Times. He covered the Yucca Mountain issue in Eureka County for the Elko Free Press.

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- [YouTube Video Clip of Mark Waite](#) 

**Repository Program Impacts in Eureka County, Nevada** — So, the project would have been the largest construction project in the U.S. since World War I, I'm told, and there were just concerns by Eureka County that there wasn't enough information. The County Commissioner at the time, Pete Goicoechea, who is now a State Assemblyman, mentioned that 59 percent of all the assessed parcels in Eureka County were within ten miles of this route.



Excerpts from the transcript -- April 15, 2011

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