**Transcription:** Grand Canyon Historical Society

Interviewee: John Weisheit (JW) Interviewer: Tom Martin (TM)

Subject: John recounts the various campaigns he and Living Rivers were involved with from 2001-2018

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TM: Today is Friday, December 6<sup>th</sup>, 2019. This is a Part 6 Grand Canyon oral history interview with John Weisheit. My name is Tom Martin. Good morning, John. How are you today?

JW: I'm very well, Tom. Thank you.

TM: Good. Glad to hear it. May we have your permission to record this interview over the telephone?

JW: Yes.

TM: Thank you, thank you very much. We wrapped up Part 5. You'd introduced us to the formation of the group Glen Canyon Action Network, which soon transitioned into an organization called Living Rivers.

JW: Yes.

TM: As part of Living Rivers you did some interesting campaigns. Can you talk about some of those campaigns?

JW: So we want to do different stuff. We want to return to grassroots organizing and so we did road shows. It would take anywhere from six to nine months to prepare for this stuff. The first one was a tour in a water truck. We went to a construction rental facility in Grand Junction and rented a five thousand-gallon water tank. We did a road show called the "Sustainable Water Project" We went to the seven states and collected water from irrigation districts, and fountains, and reservoirs, and we would put it inside the water tank. Eventually what we did was we went to the Colorado River limitrophe and put that water in the Colorado River to demonstrate and support the restoration of the Colorado River delta.

TM: How did you get the water from fountains and those sorts of places? Like buckets? Did you bucket it out there? How'd that work?

JW: Yeah, so like we went to the old plaza in Los Angeles which was... When the Spaniards were occupying the coastal plain of California, they were using the Los Angeles River. There's an old plaza there with a fountain and we just took a five-gallon bucket of water. It was done very ceremoniously. We had tribal people with us, too. We would gather the water in a five-gallon bucket—it was an orange pail—and we would climb up the ladder of the water trunk, and open up the lid and throw it in. So

obviously we had rallies. The press was invited. When we went to Hoover Dam, for example, we got permission from the Bureau of Reclamation to access Lake Mead on the Nevada side through the ladders and stuff that they have there next to the spillway and allowed us to actually dip our bucket into Lake Mead. When we went to Imperial Valley, we would see an open ditch and we would fill it up. So we did this in every state. I don't think we went to Wyoming, though.

TM: So there's a five thousand-gallon tank, and a five-gallon bucket, maybe a little less than that. So that's over a thousand trips up and down with the little bucket.

JW: We didn't fill the tank. We did a prank. It wasn't a prank. It was very ceremoniously. It was done very respectfully.

TM: Right. And the concept here was to help people sort of get an education about where Colorado River water has gone, being drawn out of the river in so many different locations.

JW: Yes.

TM: Nice. How many miles did you put on the truck?

JW: Oh, not as much as you might think. More than 3,000, less than 5,000, somewhere in there.

TM: That's a good distance in a water truck.

JW: Yeah. I was the driver.

TM: That must've been kind of terrifying at times.

JW: You just, you know, think slow, react slow, just take your time. You know, the tank had a big banner on it, like a 15-foot banner. We had another truck that carried instruments, and sleeping bags, and camp gear. We camped out a lot. Very rarely did we stay in a... You know, obviously we're not gonna park a water tank in a residential area or a... So we camped out.

TM: Where did you let the water go?

JW: Well, we ended our tour...I think it was... Yeah, it was in California when we decided to go home. We intentionally went to Yuma. You have to think about a dual-axle water truck, where you can actually go. Our goal was to go at least below Morales Dam. So when we were doing this, it was like 9:00 P.M. or 10:00 P.M. It was dark. There were border patrol people everywhere but not one of them... They must have known we were coming. They ignored us. Then we attached the hose to the tank and then we dragged the hose into the Colorado River and we let her rip. You know, there's actually no river there. There's some seepage. And, of course, it went into the ground immediately. Of course it didn't go all the way to the delta but we did restore it to where it really belongs.

TM: What did you specifically learn from that journey?

JW: Well, number one: we still do have our constitutional rights to express ourselves. We learned you have to get permits. We were very transparent about where we were going and who we were going to see. We did press releases every day. We had cell phones. We called the press, "Hey, we're here." We got a lot of response from the press. It's well-recorded in the public record. We got front-page stuff. One in particular was a picture of the water tank going across the top of Hoover Dam, *Las Vegas Review-Journal*, front page. We called all our activist friends and organizations and they all showed up. We had

tribal singers and musicians. It was a really good event. Well-organized, no flaws, no catastrophes. Everything went really, really well. And we did it...

TM: Sorry, I'm gonna jump in there. Did David Brower attend any of these? Did he come along?

JW: No, he died November 2000. This is was in 2001. We had a lot of John Muir Sierrans on the trip. John Muir Sierrans were a faction of the Sierra Club. There were a few of them on the Sierra Club board. David Brower, Dave Foreman, and there were some others. Gordon Labay and the Bollona Wetlands, Marcia Hanscom.

TM: You mentioned Brent Blackwelder when we were...

JW: Yeah, that was the next event. It was called the Sedimental Journey. Not sentimental, sedimental. It was about sediment. This time it wasn't a water truck, it was a dump truck full of sand.

TM: Did you go back to the same rental company and say, "We need a dump truck"?

JW: We did.

TM: Did ya?

JW: We never told them what it was for. We just said we need it for ten days and they said okay, sign here. Yeah, so we had a dual-axle dump truck. Our opening event was below Moab at Gold Bar. We went out in inflatable kayaks with five-gallon buckets and we would... There was a sand island out there and we were using the sand beach materials to fill our buckets, which we then put into sandbags, because, you know, if we just put it in the back of the truck, it would just blow all over the place. So we put them in bags that people used for like temporary flood control—sandbags, yeah. We had a big party and we had musicians, and that inaugurated our Sedimental Journey. And we did the same thing.

TM: So, again, the concept was?

JW: This was some of the stuff that Brower and Ingram brought up in their testimony for the Colorado River Storage Project Act of 1968. Well, let's start this over. The Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968 which was sediment is going to eventually compromise flood control and water storage. You might be saving Lake Mead, but now Lake Powell's gonna fill up with sediment. To demonstrate that, they really haven't—they being the states and the feds—haven't really...they don't have a sustainable plan. These dams have lifespans. They don't last forever, and therefore, these water projects don't last forever. At one point there was only five million people in the Basin, and now there's 40. And pretty soon, they're saying there's gonna 60. But they're all dependent on a infrastructure that has a finite lifespan. Sediment is the first thing that's gonna take that away because reservoirs fill up with sediment. When they become 50% full, they're no longer able to provide flood control, which is actually the primary reason why these reservoirs were built, and you don't have room for water storage to regulate water for year-round purposes. Especially for farmers that have 12 months of growing season. So in other words, sediment is the number one enemy of the Colorado River Compact in its need and purpose statement. "So what are you guys gonna do about it?" the press asked. This is a legitimate question. "Mr. Bureau of Reclamation Commissioner, what are you gonna do about this?" They said, basically, "Kick the can down the road. We don't have to worry about that now. That's a problem for later."

TM: So the idea was to slowly fill the truck up with sediment and take it down to Yuma, and then hit the "dump" button? How was that gonna work?

JW: We didn't go to the Colorado River Delta to dump our sediment load. We went to the Little Colorado River, because, as you know, Glen Canyon Dam releases clear cold water and consequently all the sediment in the Grand Canyon is creeping into the river and flowing down into Lake Mead, and there's no sediment there for vegetation, archaeology sites are being exposed, river runners don't have places to camp. We wanted to go to Lees Ferry and the Park Service said absolutely not, you need a 404 permit to do that.

TM: Okay. So the concept is we're gonna take a bunch of sediment from the river above Lake Powell, and we're gonna go around to the other side of Glen Canyon Dam and put the sediment back in the river. Pretty simple concept, but at Lees Ferry, which is downstream of Glen Canyon Dam, managed by the National Park Service, they wouldn't let you put the sediment in the river.

JW: No, they would not.

TM: Now there are rules about sediment going into clear rivers. Certainly the Army Corps of Engineers has that sediment rule, is that right?

JW: Yes, it does. 404 permit.

TM: Okay, and that's what the Park Service was citing?

JW: Yeah, you can't do this, even though we were restoring a natural process. They just didn't want us there. It was too embarrassing for them. So we came up with an alternative plan. On the way home, we got to Cameron and you know how there's the truck bypass road which no longer is used? We used that road to get to Little Colorado River. That's where we put it.

TM: Alright, so that sediment, then, would've washed back into the Grand Canyon, back into the Colorado River, below Glen Canyon Dam?

JW: Yes.

TM: Excellent. How was that received by the press and Bureau of Reclamation, and...?

JW: You know, it worked very well. Like the water truck, we got a lot of press. We went through the seven states, except Wyoming. Lots of press and lots of events. I should also add that we did educational venues, "Here's what's happening in Grand Canyon," to create awareness. What also was happening was the hundredth anniversary of the Reclamation Act of 1902. So we did a big rally at Hoover Dam in the visitors' parking lot on the Arizona side, very close to the dam. Getting permits for this wasn't time-consuming or hard, it just involved a lot of telephone calls, a lot of writing. Here's what we're gonna do, here's what we're not gonna do. Phone calls with security—law enforcement of the dam, which is Bureau of Reclamation law enforcement officers—letting them know what we're gonna do. They were very cooperative, very helpful. They made sure that we passed through the dam safely without interrupting traffic. They escorted us through. They allowed the press to, like, stand in high places that normally visitors aren't allowed to go to so that they can get their optimal picture. They were, I thought, very cooperative. Very helpful.

TM: And this was before September 11.

JW: No, it was after September 11.

TM: After September 11, okay.

JW: Yeah, this event was after September 11<sup>th</sup>. The first event was after... No, I think... Yeah, it was before 9/11. The water truck event was before 9/11 and the dump truck event was after 9/11.

TM: But you still had a lot of help and assistance, that's great. So these two tours, sort of the "no water" tour and the "no sediment" tour... Then what happened?

JW: Well, we did another one. And you were involved in that one, so was Kim Crumbo. That was about the Colorado River Management Plan and operations for recreational opportunities management in Grand Canyon National Park. We wanted to emphasize that the Grand Canyon should become a wilderness, and that it should be a non-motorized river corridor. I think that happened during—actually, that did happening during the Sedimental Journey. We brought the dump truck to Lees Ferry. They cordoned off a first amendment site at the overflow parking lot. We camped out at Lees Ferry campground, on the high bench. We had microphones, people were rigging trips, and we did an event there. We had music, some speakers, and it was gonna be a nice, warm, sunny day. Brent Blackwelder was there and we did a float trip. We actually hired... We brought our paddle boats and we used the outfitter that services the section above Lees Ferry for tourists. They did a downstream tour from the dam, unloaded their clients and then we loaded our paddle boats onto their boats, and they drove us up to the top of the river below the power dam release area. We blew up our boats and did a float trip. Brent Blackwelder was there, president of Friends of the Earth. Was Jeff there? Jeff Ingram came, too, didn't he? Oh no, that was an event... Then we did an event at the North Rim of the Grand Canyon. Jeff was there, and David Haskell. We got permission to use the outside court to stage our event. We had Havasupai people there and Hualapai people there. We had speakers. Jeff Ingram gave a speech, David Haskell gave a speech. It wasn't well-attended, but all the National Park Service people were there. And you were there. Or were you?

TM: Not on the North Rim.

JW: Crumbo was there, I think.

TM: Probably.

JW: 'Cause he lived there. Yeah, I think Crumbo was there. He was definitely at Lees Ferry.

TM: So the concepts are the dams and the water management has altered the river, not only for its waters which do not make it to the Sea of Cortez, but for the flotsam, the biotic community destruction, once the sediment and driftwood, and all the biotic material has been stripped out of the water, which is what dams do. It also impacts recreation, certainly. I guess the Bureau of Reclamation would say, "Yeah, but this is all..." trying to figure out the word to say... "serving 40-45 million people living in the Southwest off this water structure is way more important than delivering water to the Sea of Cortez, or having healthy rivers with sediment and biotic material, and having river runners camp on sandbars. I certainly get that last part there. What were you guys thinking about this?

JW: Well, that's why we did it. We want to show that this all comes to an end someday and that in the meantime our biodiversity is in decline; the values for which we created the National Park Service through the Organic Act is compromised; we unfortunately destroyed very beautiful places, very sacred places, that should've been in the Park Service not in the domain of the Bureau of Reclamation to build concrete dams. Especially since we know they don't last forever. National Parks last forever. At least they're supposed to. So are we gonna preserve public lands or are our public lands... We understand multiple use, but we think you went too far. In fact, we know you went too far. So it's about creating an atmosphere of, like, scaling down demands. Not building redundant infrastructure that has diminishing

returns. It means not interrupting the natural flow of nature. The Colorado River has been going to the Pacific Ocean for six million years, and it never hurt anybody until we showed up. And so, you know, 20<sup>th</sup> century/19<sup>th</sup> century ideas weren't properly vetted. We definitely didn't listen to the tribes. We didn't ask them about their sacred sites, their burials. We just did it. You know, Manifest Destiny. We planted our flag and we just took over. So we're doing everything after... So now there's a new conscious, like, "Oh, we shouldn't have done that." Well, then they say, "Well we did, so we'll just use it while we can." "But it doesn't last forever." "Well yeah, again, like I said, we'll just use it while we can." I go, "But what are you gonna do? How are you gonna decommission this? How are you gonna get rid of the sediment? What happens if a big flood comes and takes everything out?" The answer is, "Well, we're gonna kick the can down the road and talk about that later. We have shortages to worry about, and we have surpluses to worry about, and we have seven states and Mexico and tribes. We have all these problems that are more urgent than long-term stability." So it's business as usual. It's not best management practices, for sure.

TM: Those sound like some pretty energetic, really brilliant campaigns to simply help the population of the Southwest understand the technological ramifications of their very existence.

JW: Exactly.

TM: And this is now approaching 20 years ago.

JW: It is.

TM: And the same issues continue. But let's not jump ahead too fast. What did these campaigns morph into, or did you continue with... You know, you mentioned the Colorado River Management Plan for Grand Canyon National Park and that journey. After that, did you do more campaigns like this?

JW: No. We left our ice cream location in Moab in 2005, and Owen got married to a Chinese woman and moved to Southeast Asia to work on river and dam issues in Southeast Asia. And the economy, of course, crashed and the Energy Policy Act of 2005 was initiated. This is the policy that created what we now call fracking for oil and gas. It also included strip mining, tar sands, and kerogen deposits, known as hard rock oil shale. So that kind of distracted us for a while, because we... It was looking a lot at where I live, in eastern Utah, because the oil shale, non-conventional oil and gas development, and tar sands were all in eastern Utah and western Colorado. It potentially, of course, was gonna become a greenhouse emissions bomb, a carbon bomb. And it was also gonna take at least 500,000 acre-feet of water that the Colorado River doesn't have. So we put a lot of time and energy into the Energy Policy Act of 2005. We had lawsuits. I mean, boy did we have lawsuits. I think I must be signed on to 80 of them. So it's about groundwater pollution, industrial accidents that have gone down the river, and...

TM: Right, it's surface-water pollution, as well.

JW: Yes, groundwater pollution. Fortunately, the only that has happened is oil and gas development. The tar sands and oil shale's just not happening. I think it's very clear that's because we don't have the water. But you have all these young startup investors that want to play with it, get investors to think about it. Lot of proposals, but nothing's ever really developed. So for the last ten years it's been very much a dead dog. And the oil and gas...the gas will probably be producing gas for another 50 years. But the oil, it's very deep oil. It's paraphonitic oil. In the earth's crust it's liquid, but when you bring it to the surface it turns to candle wax, essentially. That's gonna be gone in ten years. They do a lot of flaring, there's a lot of methane emissions, and boy has it scarred the landscape. It's a disaster area. Tens of thousands of well pads.

TM: Yeah, the images from Google Earth are stunning. Looks like a bad case of acne.

JW: It's really bad. And for what? So yeah, it was a "keep-it-in-the-ground campaign" and it was done through a lot of coalitions of some of the organizations that actually do stuff. File lawsuits, run campaigns... Center for Biological Diversity, WildEarth Guardians, a lot of biological diversity groups. Sage Grouse Habitat, Endangered Fish of the Colorado River. A lot of time and effort into this campaign. But maybe in 2014, Owen comes... You know, he comes every year to visit. He said, "John, let's get in the car, just you and I, and let's just do a road tour and talk to people." We've been doing that for the last five years. We have a Toyota Highlander. It's a hatchback and we put in our camping gear. We camped out as much as possible. We would make phone calls and say, "Hey, we're in your area. Can we talk to you?" People were... Nobody said no. Everybody wanted to talk to us.

TM: Who did you visit with?

JW: We visited allies. We visited top water managers. We visited scientists, mostly scientists. We spent a lot of time with scientists that work on climate change issues, hydrology and atmospheric scientists. Wherever we went, we would ask questions like, "So are we in trouble?" And the answers were, "Oh, yeah. We're in trouble." And so, "What should we do?" They would all say, "We need to do something different." Nobody said, "Oh, no. Everything's fine." Nobody said that. We began to realize that everybody knows this all comes to an end. Even the water managers. I won't name names 'cause I don't think... You'll just to trust me when I say top-dog water managers.

TM: Well, they must be looking at demand outstripping supply, even in the best of scenarios, that would happen year after year, decade after decade. If any of that were to fail, like supply decreased a little more as demand continues to increase, that's a recipe for failure. Not to mention global warming, species collapse, etc.

JW: It became very apparent to us that the scientists were going to be the most helpful. We would ask them questions like, "What do you think of 2000 interim guidelines?" "Oh, Band-Aid, too little." "What do you think of the 2012 Basin study?" "Oh, absolutely terrible. You know, it wasn't even an EIS. The peer review was terrible. We don't like it. It's not a useful document." We were surprised that people actually read this stuff. We certainly did. We asked the right questions and only because we'd read the documents. Also, you know, we're on record. All our comments are on the internet. You can find them in less than a minute. So we went out there knowing the science, knowing the policy, knowing the law. We knew the right questions. We found out that everybody else has that same level of knowledge and experience and they all have the same opinion: that this is a system that's going to fail. Then the next question is "Will you help?" and they all said yes, except for federal scientists. Federal scientists are kind of like in a... You know, their style is cramped a little bit. The most helpful people were Harold Tyus, who's an ecologist from University of Colorado at Boulder. He worked for the Fish and Wildlife Service in the 70s and 80s with William L. Minckley. He's a die-hard conservation biologist who said, "Yeah, we're not..." The question to Harold is, "Are we conserving fish?" and he said absolutely not. "Tell us more." The other helpful person was Vic Baker. We talked to a lot of scientists, Tom. Maybe 80 of them.

TM: I'm assuming that this road tour, the annual road tour, must take you to all seven states, if not more.

JW: Yes. We spent a lot of time in Wyoming this time.

TM: What did you learn at Wyoming that you hadn't touched on before?

JW: Well, you know, Wyoming is very high country, high-elevation country. Not much of a growing season. There's no tribes in Wyoming in the Colorado River Basin. There are in the Missouri River Basin and the Snake River Basin there are tribes, but there's no tribes in the Colorado River Basin in Wyoming. It's called the Great Sage Ocean. Water coming out of the Wind Range. Owen and I went to Flaming Gorge and thought, "Why is this even here?" It's basically to just keep the fishery alive while they divert water. You know, it doesn't really have any other use than that. But it's got non-native fish in it, so, I mean, really, what are you conserving? Are you conserving wild fish or non-native? The answer is both. It's important to understand that the section actually below Flaming Gorge is why we have the Endangered Species Act. That is the incident that happened in 1962.

TM: Right, the fish kill.

JW: Yes. That was instigated by the state fisheries and the federal fisheries. Departments agreed, and obviously, they didn't consult with their boss Steward Udall. They start this rotenone poisoning to kill all the native fish so they can put in rainbow trout and brown trout. This is the connection with Harold Tyus and Minckley because they stood on the shoulders of Robert Miller. He's from the University of...it's either Minnesota or Michigan. He, every summer, would come to the Colorado River Basin with students and they found the humpback chub in like 1947. They didn't even know it existed until Robert Miller started poking around. This is post-World War II. So these ecologists start showing up and Robert Miller knew they were... He was in the field and he noticed they were poisoning the river. He wrote an op-ed in The New York Times which was read by Wallace Stegner, who had monthly meetings with Stewart Udall of National Parks Committee. Stewart Udall's reaction was to call up his employees in Wyoming and Colorado and Utah to cease and desist. Stop this rotenone poisoning. Then the 1964 Wilderness Act was passed and they used the conservation of biology discussed in the Wilderness Act to create the first endangered species list in 1967. Then, of course, we got the Endangered Species Act in 1973. In that 1967 list is the Colorado River pikeminnow and the humpback chub. That was a national list. But, the thing that promulgated it was the rotenone poisoning below Flaming Gorge Dam on the Green River. That's where we got the Endangered Species Act.

TM: It's a fascinating journey of building dams, trying to control water and water delivery. And then if the dams weren't bad enough, trying to support exotic fisheries in the clear-water releases below the dams, whether it was Flaming Gorge or Glen Canyon, which has the same issue of the state trying to maintain a trophy trout fishery for 12 miles. And then the water crosses a line and goes into a national park, Grand Canyon National Park, in which case the exotic fish being stocked upstream are not desirable and the native fish are. So it's a complete flip of focus. So the poison dumped in the river upstream to make the trophy trout fishing, of course, goes down into the national park lands below. You suddenly have the feds against the states, and the feds against the feds, which has a long history of Reclamation against National Park Service and vice versa, and the resources caught in the middle in a terrible place. So as you did this road tour, these scientists were well-aware of this?

JW: Oh, absolutely. But scientists are busy. They have papers to write, and students to teach, and funding to acquire. We asked them, like, "How about we write a letter? We'll write the first draft and let you take a look at the final draft and edit it." They said, "Yeah, okay. We'll do that." So we had a statement. We're working together. Owen and I had the idea, yes, but we worked on this together with all the scientists. We thought that this should be a letter addressed to Secretary of Interior Sally Jewell, and it should be about why the Basin Study is not the document to carry us through the 21st century. The ask was could the National Academy of Sciences review the Basin Study. That was the ask. We got 23 scientists to sign on to this letter and we sent it to Vic Baker who wrote the cover letter on University of Arizona letterhead. We did email exchanges with the 23 to let them know what we were up to.

Nobody said don't do it, so we did. We did some press and we got some bites. We didn't get a response from Sally until... That was in October of 2015 and in February of 2016 they finally addressed it. The person who signed the response letter was some secretary or something. It didn't really have Sally's name on it or Estevan, the commissioner of Bureau of Reclamation's name on it. But the letter did make it clear that this was an official statement from Bureau of Reclamation and the Department of Interior that says, "Thank you very much for your letter, but we're not gonna do this. The Basin Study's fine. It's a great document."

While we were doing our roadshow, we were in Orange County and were introduced to a grant officer for the National Science Foundation who has the right to approve discretionary funding under \$50,000 without going through committees. They're allowed to wave their magic wand if it's less than \$50,000. So we asked him if this was something he would find value in and he said absolutely. So then our next job is we need to find a university to accept this \$50,000 grant and write the grant. Owen and I, of course, by this time have talked to several scientists in all different states and we decided that maybe we should ask Kathy Jacobs to write the grant from the University of Arizona. She said she would, and she did, and she got the money. But \$50,000 doesn't go very far. So then, Owen and I are talking to funders. The funders that have been supporting funders that actually live in the Colorado River Basin, funders that actually understand what's going on along the Colorado River because they lived near it. They all said, "Yeah, we'll support this. You bet." So we got it up to, like, \$125,000, and then we eventually got it up to, like, \$250,000. So then Kathy had enough money to get something going. In October of 2017, 33 scientists met for a three-day conference with the question, like, "What do we need to start doing in the Colorado River Basin in the future?" The answer from the 33 scientists was, "You need to do scenario planning for low-probability, high-consequence events." In other words, long and enduring drought and extreme flooding. The reason why is because the infrastructure cannot support this kind of climate regime. So we're talking about not the normal hydrologic spectrum, but the complete hydrological spectrum.

TM: I think of a bell-shaped curve, sort of the cross-section of what a church bell would look like. The typical events happen on the sides and the top of the bell, but down on the far right- and far left-hand sides are these low-probability, high-severity areas, whether it's drought or flood, that will really make the bell ring.

JW: Exactly. So in other words, get out of your box, start... Think outside of the box and develop... It's not to say that the Bureau has not done scenario planning, they have. It's kind of like tucked away. It's not front and center. It's there. If you get a 1600-page document, it's in there but it's not clear, it's not concise, and it doesn't really have good, strong data or a good, strong narrative. It's a placemark. "Yeah, we know this could happen, but we're not..." But they don't spend a lot of time or effort. It's over with in a paragraph. You know, it should be a chapter.

TM: That's interesting. You saw the Grand Canyon National Park incident planning for a failure of Glen Canyon Dam. It was a few pages long, that's all. So you're, "Okay. Alright." This is how high the water's gonna go. All these people below this line need to get out. This is how we're gonna do it, with helicopters, and that's that.

JW: Yeah. It's a big deal for Grand Canyon. I mean, if Glen Canyon Dam goes, it just eviscerates 300 feet of the corridor if not 400. I mean, what kind of national park are you gonna have?

TM: Well, some people would argue a pretty dynamic one. Let's go visit.

JW: Yeah, but look what's gonna get flushed downstream. Snowmelts rise slowly, go down slowly. They're very, very high, but not 300 feet tall.

TM: Well this would be, as we talked about the day, the buzz cut in the haircut analogy. This is not a trim, this is a Yul Brynner event.

JW: Oh god, yeah.

TM: On the magnitude that the basin may have never seen before, though possibly once or twice in... You know, nine million years is a long time to have some sort of upper basin entrapment failure that sends a fairly large scouring flow down to the Sea of Cortez.

JW: With buildings.

TM: Oh, yeah. Well, the material/the toxics involved would be phenomenal. So it's a journey in looking at these high-severity, low-probability events. It sounds like the agency agreed to do that, but they just haven't done it in a robust kind of way.

JW: Well yeah. So the first event was in October 2017, just 33 scientists. The next event was with stakeholders, and that's in 2018. It was in April. I was invited to that particular event. The Bureau of Reclamation gave Kathy some money, and Denver Water gave Kathy some money, and eventually the Walton Foundation showed up and gave her some money. But the Walton family, I want to make this clear, they came later. They weren't the first to show up.

TM: And they seem to have a reputation for having an agenda, which isn't necessarily fitting the journey of... Well, can you speak that a little bit? I don't want to sort of put words in your mouth.

JW: Well, every founder has an agenda. If dam removal wanted those for the Walton Foundation, then I would say no. They're pretty much business as usual, status-quo. "Here's a few million dollars to help you." But they're involved in scenario planning now, so maybe their agenda has changed? If Denver Water and the Bureau of Reclamation want to do scenario planning, then, you know, this was epic to us. This didn't happen after the water tank event. It didn't happen after the dump truck event. But talking to 80 to 100 individuals face-to-face with just me and Owen bringing sleeping bags and camping out in the seven states of the Basin... I mean, sometimes we would get a motel room. But, you know, Owen and I were having a great time. We learned a lot and we found out that, you know, there's a lot of people out there who actually feel the same way we do and they want to help. So we went, "Let's just light a fire here and see where it goes." And sure enough, people started lining up. The people who you wouldn't think would line up are now lined up. So, will it work? I have no idea. But I would say the dialogue has changed a little bit.

TM: Well, let's wrap this back around to something you mentioned... We were talking before we started this interview about another Reclamation project—well, Reclamation has taken this project over from the Federal Energy Regulatory Commission.

JW: Oh, the Lake Powell Pipeline?

TM: Yeah, and so, clearly, ever-larger groups of people are coming together to look at both sides of that cross-section of the bell, where it's not just a phenomenal flood event, some sort of catastrophic failure, but it's not enough water in the system to meet demand. And here comes a new straw into the glass, which is about a third full, not quite half-full anymore, and that straw's gonna yet take more water out of the system.

JW: Yeah, I think you need to realize that the Lake Powell Pipeline is what gets most attention, but it's not the only project. There's the Windy Gap Firming Project, there's the Gross Reservoir Expansion. These are in the state of Colorado. You have the Aaron Million proposal to bring Green River water to the Front Range of Colorado. Wyoming wants to increase diversions from the Green River. Then on the Gila River, there's a water project to extract more water from the Gila water. So, you know, it's not stopping these projects. And, by the way, we file lawsuits on all this stuff. Somebody's got to do it because it's outrageous. You just can't... You don't solve a water shortage problem by building more reservoirs. It's just ridiculous. I mean diversion projects.

TM: Well, this begs an interesting question, which is we're talking about sedimentation. Yeah, you can build more dams, but the ones you've got are filling with sediment, and that means that the new dams will fill with sediment as well. As you say, then you lose flood control. So those two extremes of the bell will eventually catch you. But in the meantime, even though Bureau of Reclamation is aware of what's happening, they're continuing with, as you say, continuing with these projects.

JW: Yeah. So this all means there's still a lot of work to be done. And the states are kind of like not on board.

TM: Meaning the states are looking out for themselves?

JW: Yes, yeah. It's Chamber of Commerce real estate. It used to be for farmers. It used to be about securing borders with populations, and now it's about making sure the never-ending growth cycle does not stop. Growth for the sake of growth. This is a serious ethic. It's a serious problem because the Earth is finite. Natural resources are finite. You eventually run out of them and the pollution from the extraction of these natural resources will eventually affect human health and happiness. We're already there but, you know, money is more important than happiness. Or they assume that money is how you get happiness.

TM: Right, right. Interesting. Well on that cheery thought...

JW: Well, you know, that's the fundamental problem. Our economy is why we suffer so we need a different economy. I'm not saying we don't need an economy. We just don't need the one we have.

TM: The other way of looking at this is to flip this around and say alright, we see that we put in these massive water projects, which have allowed massive growth, and now to sustain or continue that growth, we need to completely rethink our use of water and resources. I mean, just completely rethink it. Otherwise, the foreseeable pain looks pretty terrifying.

JW: Yeah. You know, what it initiated was an episode of plunder. Okay, well the raid is over with. Now what do we do? I mean, it's like talking to pirates.

TM: It's interesting thinking of plunder, thinking of First Nations fighting with each other, and then the Europeans arrive to fight with each other and the First Nations in a journey of plunder. One group gets the other hand in a war, whether it's the Brits fighting the Brits to form a country called America, or the Spanish fighting the Spanish to form a country called Mexico. And the French are in there as well. All fighting the people that got there first, the First Nations—and this is a journey of plunder. So we have a long history of that. And looking forward, okay, how do we acknowledge that and make sure we don't live outside our means, as the saying goes. Whether it's water or natural resources.

JW: Yeah. Well, natural resources is why we go to war. For Germany is was...it doesn't have oil. Of course they're gonna launch a campaign to acquire territories that do have oil. So that legacy continues. And now it's the lack of water is creating wars. Especially in the Middle East.

TM: Right. Again, the seven western states that make up the Colorado River Basin must be looking at these projects, Gross Dam, the Lake Powell Pipeline to Kanab and St. George, must be looking at this going, "Wait a minute, have we not learned this lesson yet?" Because we don't have the supply, and the demand that requires these additional infrastructures are dependent on resource that may not be there.

JW: Right. The Central Arizona Project is designed for 1.6 million acre-feet, but that's not gonna happen. That aqueduct is gonna be half-full and eventually it'll go empty.

TM: Well, this is the interesting thing about the Central Arizona Project, which is sort of junior in the whole rights concept. Here comes new construction to take water out of the Upper Basin—Central Arizona Project's in the Lower Basin—but the Upper Basin is taxed with providing a certain amount of water every year to the Lower Basin that the CAP relies on. It seems as though a straw like this in the Upper Basin will set the Upper Basin states...must have them worried would they be able to continue to meet the downstream obligations.

JW: Yes, I think they are concerned about that, and the attitude of Utah is, "We don't care. We want our water. St. George is growing."

TM: I get that for Utah, but the Bureau of Reclamation is in control of this project and plan. Wouldn't they be looking at water supplies going, "We can build this thing, but will we have water to go in it?"

JW: Well, we certainly hope that the document will say that. Who knows? They might choose the conservation alternative proposed by Western Resource Advocates, which means don't build the project, start doing water conservation programs. Maybe that will become the preferred alternative. But that won't make the state of Utah happy. So, yeah, it's going into a lawsuit situation, that is for sure. It's not gonna be a slam-dunk EIS. It'll definitely be litigated. By the time it's over with, who knows, Lake Powell and Lake Mead might be empty and people will finally go, "Okay, yeah this is too much. We're not gonna do this." But don't forget, I'll be completely honest, the hydrological cycle can go the other way.

TM: That's right, that's right. And they could say, "Gee, we need more dams because we're swimming in water. We don't want these dams to fail, so let's build more."

JW: Only problem is there's no place to put them unless the National Park Service decides to let it happen. So yeah, it's gonna be a challenge for the National Park Service.

TM: Right, as it always has been since the days of Hetch Hetchy.

JW: Good point, yeah. So there you go. And that was 110 years ago? John Muir's last site.

TM: And the first journey of the Park Service looking one way and water managers looking another. And that continues.

JW: The so-called "liberal" San Francisco people.

TM: Those Lower Basin-state people...they're all...it's their problem.

JW: Water projects, they're very partisan. Used to be Republicans didn't like spending money for this kind of stuff. Democrats supported water projects more than republicans did. But now it doesn't seem to matter, everybody wants a water project.

TM: It's interesting to look at the two parties. It seems like there's always been a contingent of either party coming down one side or the other of the issue. I was thinking of Echo Park where Republicans didn't want it, and Republicans did want it. And Democrats didn't want it, and Democrats did want it. And the dids and didn'ts about equaled out.

JW: Yeah, well let's look at that. Let's think about this for a minute. So Roosevelt's a Republican, right? But he also has a conservationist ethic, a multiple-use conservation ethic. Hoover's a Republican. Hoover Dam was authorized in his term, or while he was campaigning, but he's the one who initiated all the contracts. But Roosevelt is a four-term Democratic president, and he just left and right does dams. Grand Coulee. Then we have Eisenhower, who authorized the Colorado River Storage Project Act. But, of course, all of that came from the Natural Resources Committee, who was chaired by Wayne Aspinall from Grand Junction, a Democrat. And then...

TM: And it was interesting, in that fight, people were like, "We want to keep the national park sacrosanct. We don't want Echo Park Dam, but we're okay with Glen Canyon Dam and all these other dams; Navajo, Flaming Gorge. We're fine with that. And that was coming out of both Republicans and the Democrats and the conservation community as a whole. So, I think, we've come a long way to realize maybe this whole concept of big dams on this river is not such a good idea. Whether it's the Mississippi, or the Colorado, or the Missouri, this concept of, okay, we're just gonna build lots of dams and locks, and we're gonna channelize this flow. Maybe there's another way.

JW: Yeah. The Colorado is unique because of the deep canyon structures in the Basin it's perfect for building dams. There's what, 25 rivers in the United States, including Alaska, that are bigger than the Colorado River, but the Colorado River has the two largest reservoirs in the United States. I mean, right there, how can a little river support the two largest reservoirs under a system of total consumption. There's no surplus anymore. Of course the reservoirs are gonna go down. And it's also the muddiest river of the 25.

TM: And the most saline.

JW: Yeah. And it has a huge paleoflood record to demonstrate that the spillways weren't built correctly. So yeah, it's not a question of "if," it's a question of "when."

TM: Well, that's what makes the bell ring. The far ends of the bell-shaped curve there. Low-probability, high-severity.

JW: High-consequence. I think that's what they call it. Black swans. Swans are known to be white, but eventually when a black one shows up, why is that?

TM: Well, it's the variability of natural systems. John Weisheit, this has been most enlightening and a most enjoyable interview but I think our chariot's gonna turn into a pumpkin here. Is there anything else you'd like to bring in before we wrap this up?

JW: No, it's gone long enough.

TM: Well, thank you very much. This concludes Part 6 Grand Canyon oral history interview with John Weisheit. Today is Friday, December 6<sup>th</sup>, 2019. My name is Tom Martin. John, thank you so very much for this.

JW: You're welcome.