Soledad Audio

Interview Participants:
Melody Hunter-Pillion, *Interviewer*
Soledad Gaztambide, *Interviewee*
Jamie Currie, *Videographer*

[Due to climate control sensors in the room, occasional audible beeping occurs during the interview session]

Melody Hunter-Pillion: So, uh, for the record, I'm Melody Hunter-Pillion conducting the interview. I am interviewing Soledad Gaztambide. Is that right?

Soledad Gaztambide: Gaztambide.

Melody: Gaztambide.

Soledad: Mm-hmm.

Melody: And today's Tuesday, May the 29th, 2018, 2018. We are at the International Institute of Tropical Forestry in San Juan, Puerto Rico. And we're gonna- going to discuss, um, experiences with and lessons from past drought and other extreme weather events, including hurricanes. We are also discussing management strategies to improve resiliency in the face of future drought and other weather events, in particular, extreme weather events. So, Soledad, let's just start with, um...let's start with Hurricane Maria. Where--?

[crosstalk]

Melody: Yes, please. Yeah, say your name. I'm sorry. She said her name, for the record. But yeah, tell us your first and last name and, um, spell both for us.

Soledad: Spell them?

Melody: Yes.

Soledad: Soledad Gaztambide. It's S-O-L-E-D-A-D, and then, G-A-Z-T-A-M-B-I-D-E.

Melody: What's your current position or occupation, Soledad?

Soledad: I am government, sorry, policy and government relations coordinator with Para la Naturaleza, a non-profit, um, conservation organization here in Puerto Rico.

Melody: All right. Thank you and thank you Jamie.

[crosstalk]

Melody: Let's start with Hurricane Maria. Where were, and especially as I'm thinking now about the age of your daughter, where were you when Maria hit?

Soledad: I stayed home, and I decided to stay in my house, it's in Old San Juan, and, it was safe, I felt that was a safe place. I was little bit worried about some old windows and, um, we did a lot to ensure that they were locked up but that was my only preoccupation, so I had all these plans of, you know, if that one flies, we would go to this area, and, you know, how to, how to deal with any problems. I had my husband putting in more nails at the last minute, when things started shaking, and I was like, "Put in more nails!" [laughs]

Melody: What was that like when it hit, like, were you thinking, "Oh, it's worse than I thought, better," or what was going through your mind as it's really coming in?

Soledad: Well, you know, in, in my apartment in particular, it felt like we were in a s-, kind of a bunker because, uh, we're inside an old building and our windows, most of our windows give to, you know, face interior patio so we didn't look outside. So, we felt a little bit like we didn't know exactly what was going on outside, the, the experience was mostly what we heard. Things flying. Things crashing. Things breaking. Um, and then during the peak of it the building would shake. That was really, um–It impressed me, you know, how–that shaking. And, of course, I had to keep a–a happy face for my two-year-old. I didn't want her to see that we were worried at all. And, the, the worst part of it came in right in the morning. Um, it was so funny 'cause my husband kept on saying, "No, I'm not going to miss it so I'm not going to sleep." And then when I wake up with the shaking he's like, lying in the, [laughs], lying sleeping in the living room and I'm like, "Wake up you're missing it." [laughs]

Melody: Did it go on–Did it seem to go on for a long time or what was--?

Soledad: You know, I've thought about this a couple of times afterwards because your memory gets a little bit fuzzy, I feel, when you, when you look back, right? Because it's sort of gradual as it builds up and then it kind of goes through a peak and then it goes back down. I remember it shorter, but I know that it was longer, you know?

Melody: Yeah. Yeah.

Soledad: Uh, I, I have more memories of just those particular impressions of when it was shaking or when I felt a window was a little bit weird. But once I kind of felt that the building was holding up and things were OK, you know, I just sort of kept on playing with my kid and kept her away from the window. [laughs]

Melody: So once these noises subside and you finally think, "OK, maybe we can go out or whatever," when did you real–I mean, well, what, what did you see once you had a chance to go out after the storm? What was that like?

Soledad: I mean, for me, there's a part that I feel a little bit broken because I have a curious personality and I would have probably gone out really fast. But I, I didn't want to take the baby outside because we did sort of look outside a little bit and it was just chaos. You know, you don't know what, if there's a cable lying down. You don't know what other thing might be hanging from a balcony or something that might fall. You know, felt it was still dangerous to walk in the

street. Especially, I mean, at least in Old San Juan, there's so many things that went flying around. So, it–For me in particular, the experience was weird because I felt like I was two days where I barely left the house until I felt things were more--clear to walk around. Um, but then it was, uh, as soon as it started subsiding, in our experience, it was seeing the neighbors dealing with things, right? So, suddenly when people felt safe enough to open a window and, and, or open the balcony and start plugging out water, 'cause some of them have water getting into their houses 'cause their balconies had gotten filled up. So, it was basically the dynamic of people dealing with, with issues that they were having, um, and then the neighbors we–I live in a community where there's, uh, you know it's mostly, not elderly but, you know, they're not super young.

Melody: Right, more mature. Older, mature--

Soledad: More mature. And, um, we had some people who were having water leaking in, but they didn't know where it was coming from, and there was an empty apartment on the top floor. So, basically, my husband was the one who had to go and help them, and they basically broke into one of the apartments, uh, like open–I don't know how they did it. He knew how to get in, and, and to be able to see where the water was coming from and help out, you know. So, it was dealing, helping the, helping the neighbors go up to the roof, unplug the, uh, what's the word? Where the water comes down from the roofs--

Melody: Oh, the, the water spouts--

Soledad: The drainage.

Melody: Right, right.

Soledad: It gotten filled up, you know, you had to clean it out so to make sure all the water came out and it stopped getting into people's houses. So, the experience is mostly that communal, um, trying to help each other out with, with the immediate.

Melody: When did you see, yourself, the devastation, um, that happened with the trees, the vegetation, just nature? When did you see that? And describe that for me. What was that like?

Soledad: It was just amazing. Um, when we, when we went outside it looked like winter, basically. It's no green, no trees. No–It was defoliated, basically. Nothing. Um, and, and of course the impact of trees on the floor, trees sideways, um, it was, it was quite, quite impressive. The first–It was also interesting to see how quick green came back, um, especially in the tropics. And there was so much rain afterwards. But, even though the trees look a little bit weird, like Dr. Seuss-ish, the way that they've, that they've come back, many of them, but, but yeah, for immediately it was...wow.

Um, I have to say that my, my worst–the, the toughest thing for me was the no communication, no radio, uh, feeling completely disconnected. From not knowing if my family, immediate family was OK. You know, it took a couple of days to make sure that we knew that everybody was OK. Um, that was rough. Rougher than no vegetation.

Melody: [laughs] Right.

Soledad: I mean, you know?

Melody: Yeah.

Soledad: Immediately.

Melody: Yeah. As a scientist when you saw that, though, 'cause you are, I mean, you are more of...

Soledad: More of a planner.

Melody: Right. But you deal with, you know–What, what did–How did that, did–had you ever seen it look that way before? The, um, defoliage that, that happened. Had you ever seen Puerto Rico look like that before?

Soledad: No, I, I lived the 1998, um, Hurricane Georges, and my first hurricane was Hugo in 1989, and neither of them were as rough as this one. Um, and, no, not that way. And the other thing that's important to highlight is that it was Irma and then Maria. So, we had a hurricane that was really strong that didn't hit us as hard, but, at least in San Juan, it was felt, and it had already caused quite a lot of defoliage and, and, and damage to trees. And then Maria came and just took it to another level.

Melody: Like a one-two punch.

Soledad: Yeah.

Melody: Like they call it in boxing. Um, what has sort of changed for you since Maria did happen, and you hadn't seen anything like that before? Has anything changed for you in, sort of, um, how you prepare your, um, expectations of weather? Have you let anything at all change for you?

Soledad: A lot of things changed. Um, in terms of personally, there was a couple of things that I hadn't really thought about. Um, there was a bit of a scare with the water quality, and I wasn't–There was water coming out, but we, we–Our water service was fairly quickly restored. Um, but to fear that there was a virus, because the virus is the hardest thing to get out of the water. Not any filter will, will clean it, and then, you know, they said "Well, boil it," but I, I was using propane to cook. We could barely find propane. There were–You, you couldn't find it, and if you could find it, you can only buy two bottles. And I'm not about to use the propane that I have to cook with to boil all the water I'm gonna use even to brush my teeth and to shower. So, in a way I'm–It's OK because I'm, I'm sort of not too hysterical about that stuff. But I was, you know, a bit worried that I didn't have–It was hard to find those little, you know, those pills that you put in the water. So that was a scare. So now, for this hurricane season, I think I'm gonna get, you know, a couple of those pill thingies that you throw in the water and that you can disinfect. Um, I had never thought of that really previously.

Melody: So, you do prepare. You're preparing differently as hurricane season is –'Cause it's already officially hurricane season, right?

Soledad: Yeah.

Melody: It just started.

Soledad: Mm-hmm.

Melody: So you are preparing differently.

Soledad: Yes.

Melody: I haven't seen that.

Soledad: Yes.

Melody: Um, let me ask you, because you said Hugo came in-Was it '89?

Soledad: '89.

Melody: You were...?

Soledad: 10.

Melody: You were a kid then. So, um, talk about do you re-, have any memories of Hugo and how your family and people in the community reacted? Can you talk to me about that?

Soledad: Um, I remember that my father left the door open until there was a tree that was basically sort of flattened out. And he was sort of he–Of course he did it to let us see enough to know the force of it before he would shut down everything and close off. Um, and that's an image that stayed in my head. And then I remember waking up at night and putting my feet down, and there was water all over. And it had just, it had gone in through, um–We had covered, and I guess there was an air-conditioning in the wall with wood. And, I guess we hadn't covered it enough. It was a tiny crack. You couldn't even see anything. The water was coming in there. And then the eye of the storm passed. And, you know, there's a calm. And our neighbors in front had, they had a sliding door that was right in the direction of the wind, and it had completely broken in. It was an elderly couple, they had, they had, um, um, stayed in the kitchen because it had no windows. So, all the neighbors came out and started taking out like closet doors and things they had in their–You know, just grabbing pieces of wood from everywhere. And in the time of the eye of the storm, they managed to, to nail up enough so that they wouldn't be completely exposed for, for the winds, that when they came back.

Melody: Do you feel like you saw that same sort of community coming together to help each other in this latest storm, would you say?

Soledad: I think that in my urban environment you don't see it that much, but yes, definitely. I mean, I think that that's our greatest strength. Uh, under this kind of, um, situation, people tend to really try to help each other out. You know, I had a stove because I do camping. So, I have a lot of gear that works also well for this kind of event. So, you know, even if it's just come up and have some coffee, I would be sharing with my neighbors. You know, it's not a super emergency but a nice cup of coffee when things are going bad, it's, it's [laughs] important as well. Um, and yes, definitely in those, maybe somebody had access to a little bit of ice, and, and they would come and give me some ice they had. You know, there's no reason why they had to. It's just like

maybe just a cup that you would have something cold would be amazing. You, yeah, you miss a lot. You, you, [laughs] I missed something cold for a lot of weeks.

Melody: And it's those small things that give you that feeling of support, I think, um, is part of that.

Soledad: Yeah.

Melody: One more thing I'll ask you right now about hurricanes. Do you ever, e-, especially then when Hugo came through or even before, anything your parents or even your grandparents might tell you about hurricanes or storms, how to behave, how to act during– anything you can remember concerning hurricanes and storms that your grandparents or your parents might have told you or talked to each other about? If you can't, that's OK.

Soledad: Um, my grandmother had a, would always say that the sky would get, like the sun would get brighter before a hurricane. It's not really a prep-, preparation thing. It's just sort of a perception, I suppose. Um, I think it has to do with how that high pressure sort of sucks everything in right before, and it gives maybe a certain light. And that's something that I always remember her saying.

Um, I don't know anything in particular. I mean, I think there's, there's a few basic things that we all grow up with. Because every year, and, and that's the irony of it, right? Um, you never know if it's gonna come or not, if it's gonna go a little bit north, or if it's gonna go a little bit south, so, you really have to prepare as if it was coming. And for many years, Puerto Rico did the preparation part, and it never came, and people would complain. "Ah, so much preparing, dah, dah, dah." Um, and you always get this feeling, you know, thinking, I really hope people don't let their guard down, right? Because there's gonna be one that's really gonna come and...

Melody: It came.

Soledad: It came.

[laughter]

Melody: I like what you said about your, your grandmother because it wasn't about preparation, but it was about how do we know if something's coming 'cause that's probably very important generation, and generations, and generations before.

Soledad: Right.

Melody: Before we had all this, you know, 24/7--

Soledad: Mm-hmm.

Melody: --of it's gonna be here then, and here's the track. And so that probably would have been very important to her generation and then generations before.

Soledad: Right.

Melody: And being able to see signs--

Soledad: Mm-hmm. Right.

Melody: --first.

Soledad: Yeah.

Melody: Yeah. Um, let me ask you about drought though. What is your experience with drought. In, in, in particular, can you describe your experience during the 2015 drought?

Soledad: Mm-hmm. You know, it's funny. I was thinking about that. And I feel that we have such short memory. Right now, right now, we're all thinking about Maria, and we're not thinking about the drought necessarily. Um, I was not as badly hit in terms of the, what do they call it? The rationing of water service.

Melody: Mm-hmm.

Soledad: Um, I know a lot of people were worse off. I remember though, because many years ago, they did, they took a big, um, the super-tube they call it, um, to move water from one watershed in the north we-, towards northwest to bring to, to the metro area.

Melody: Mm-hmm.

Soledad: And, I mean, I, this is not scientific, you know, I haven't done the research really. But I had this feeling like because I was in an urban metro area I was receiving water while other people, uh, were-We were maybe taking the water that belonged to them. So, I had this, I have a feeling of guilt, um, during that time. I also felt that, and this is typical of Puerto Rico and maybe of other places as well, but we really don't think of the problems until they're there. And then, because they're so severe, there's not really a, um - a calm dialog, conversation where you're really taking into consideration all aspects. And coming from, from an environmental point of view, we've been, um, at least in my rental community, has been proposing, for example, things related to land use controls around our, uh, reservoirs and other measures to, to ensure that, you know, water quality is better and, and water quantity of course, [clears throat] which is, what we're talking about now. But it's, it just felt that, you know, drought really, though there is, of course, environmental drought in the sense that there can be, uh, such less normal, um, precipitation that it has impacts on wildlife and, and the natural environment. Most of the time drought is actually measured more in terms of how it, it, it impacts a certain sector, right - either the agricultural sector or, or the service, you know, water that w-, that we, drink or, or we use for human consumption or industrial consumption. And, um, I just felt that there was a lot of management problems that caused the drought more than an environmental drought. Uh, um, and clearly there was less water, you know, it's not that, that there wasn't abnormal conditions, there were. But, if we had been thinking that these abnormal conditions could occur and plan better then maybe, um, the services wouldn't have been disrupted as badly.

Melody: So, when you say a management problem, you are definitely talking about in the-If plans have been done ahead of time if we're already working on these solutions-

Soledad: Right, right.

Melody: OK.

Soledad: Right. Definitely.

Melody: Wha-, wha-, and why do you think that is? What do you think might be-? And this is purely, purely, your, uh, you think, what do you think is getting in the way of the, of the progress in finding some solutions?

Soledad: Um.

Melody: If you're comfortable talking. [laughs]

Soledad: No, I think there's a lack of, of long-term planning in Puerto Rico on many levels, uh, lack of consistency and, and, um, of- Maybe there has, have been many efforts but they're separated, and they don't continue, right? So maybe one person starts and because of our particular problem in terms of, um, what's the word? Partisan politics, right? Uh, four years, short-term, voting, and, there's not really, the, the, end objective which should be that everybody has a service or that we have, um, efficiency at some sort of good management, I don't think it's the actual goal of our politicians. [laughs]

Melody: So, cohesion, commitment and that's sort of-

Soledad: Yeah...

Melody: Yeah.

Soledad: --yeah. Or even to say, "OK, we know we have differences, we know we have a partisan politics type of situation, then let's everybody get together so that we do a plan that everybody agrees with." Right?

Melody: Absolutely. Great. Um, let me ask you about the-You've told me about that particular impact of, you know, the drought being there, the lack of broad or long-term planning, um, but, can you tell me about in terms of resources that you manage, um, and I'm, I'm trying to figure out in your role, how that, maybe this is a little different for some of the other but, um, examples of, of drought like that you've observed in, um, specific plants or wil-, you talked about wildlife or-Can you talk about very specific things where you, you know, like, we know that when we see this, this is, when I see it, I know this is drought that is the cause of this. And I'm seeing a change here. I'm seeing damage here.

Soledad: Uh-huh. Well, I personally, I'm n-, I'm not a biologist, uh, and I, I, I'm not working actively in, in the protected areas that Para la Naturaleza manages. Uh, however, um, in terms of our preparedness, I do know, that, that, you know, [inaudible 21:59] and, um, some protocols of understanding more, um, more in terms of our water levels, at, you know, where, what type of water we're using and how much we have maybe in cistern here or there. Um, we do have fire problems in one of our areas, um, and, and that clearly is an issue because if the vegetation gets super dry then it's much more prone to the, to any fire getting out of hand. Unfortunately, in Puerto Rico, um, the fires are mor-, are usually the vast majority of times, human-caused. And, and, because the dry conditions then it's, you know, an opportunity for, for that fire to, to take over, but they're not naturally caused. But we have had problems and we'd have, we've had to do some active, uh, management and, and, collaborations. I know that in Hacienda la Esperanza

they've had collaborations with NRCS [Natural Resources Conservation Service], for example, and other different actors to do, uh, what they call, basically sort of like fire lines, so that you, so that if a fire coming it has nothing at where to feed, continue feeding. So, they sort of clear, clear out some areas, um, to sort of stop that fire from, from getting out of hand. And I think they've been, um, fairly efficient at that.

Melody: Um, and when you talked about that from a professional standpoint you were able to talk about that and different things you know are going on. Just from a personal standpoint, what sort of things do you observe, in particular thinking about being, uh, a mother raising a young daughter, um, the beautiful nature you were able to see growing up–

Soledad: Mm-hmm. Mm-hmm.

Melody: -in Puerto Rico, do you ever think about that in terms of your daughter and what's available for her and what will be available for her?

Soledad: Oh, definitely. Um, but more, thinking of that lack of long-term planning and how, you know, there's also, not just long-term planning but of holistic thinking, right? Of seeing the interconnection between, um, the services that we get from nature or ecosystem services, um, and economic development, for example. I feel, uh, there is still an outdated mode where conservation is put as an opposite to economic development, instead of seeing it as something quite the contrary, uh, right? That, that ensures your quality of life and your sustainability, and, and, and, the resources that you depend on into the future. So, it's definitely something that I think about it in terms of the drought, per se, that's why I say that it's sort of, you do see a change of color for example, especially in the south. Um, Puerto Rico has a central mountainous region and a lot of the water stays in the northern karst and it's fairly dry normally. It, it rains less in the south, but of course, um, during this past drought, it really, uh, severely impacted the, the southern region. And you would see this change of color and the, the vegetation and everything sort of dried out. But in other areas you couldn't, at plain eyesight, see it, right? You'd have to be a, a person who is looking at how certain species, um, who may be more sensitive to these weather and changes in precipitation. You, if you, if you're not a specialist you might not necessarily see it.

Melody: No, no. I get it. And I love what you're saying about economic development and environmental things, that they can complement each other and that sometimes people don't see them as being complementary elements. And so, I think that's important, and I'm glad you mentioned that. Let me ask you, [papers sound], you're very good at these, I'll tell you that. [crosstalk] Um, how have you coped with the impacts of drought? You know, as you're talking about the different things you've seen, um, the lack of cooperation that you've seen also but what it might mean for water quality and water quantity, how have you been coping with drought, uh, yourself? And, and, um, have your coping mechanisms included practices or methods you haven't used before, or haven't had to use before? Think about you and your community and your family.

Soledad: I'm, I'm trying to remember back, um, 'cause I also, apparently, suffer from that short-term memory.

Melody: [laughs]

Soledad: Um, no, I really trying to think of, of, you know, if there's something. In general, I feel that I have a sense of water conservation even during times of, um, where there's not necessarily a problem, right? Um, in little things, you know, when you're buying your shower head, or the toilet, or you want something water-efficient, or you turn off the faucet while you're brushing your teeth, and I try to teach my daughter that as well. Um, because I also feel that, that, that's a large component of, of when something like this occurs, right? If you don't have an already educated, uh, public in terms of, of the need to conserve water regardless of if you have a lot or not at that moment, then when it comes to a time where you really need to do it then it's rougher because we're creatures of habit, right? Um, s-, so pretty much-I'm trying to remember if there was like anything in particular, um, that changed or that we did or that affected me. You know, at it all kinds-It all ends up coming to saving water and taking a shower with a, as much, as little water as possible. You, you become an expert at this.

[laughter]

Melody: I don't know if, um, did it get to the point where the, I know in Cary [North Carolina], where I am, there certain times in the summer, um, and I don't know if Durham [North Carolina] did this too, where you can only wash your car certain days of the week, you're only supposed to water your lawn certain days of the week. So, if we go into drought, they're like, "Hey, no car washing except on Mondays and no-"

Soledad: Well, that's the thing. It felt a little extreme, right? It went from, "Oh, you know, this is worry" to, "OK, we're cutting off your water two times a week and you only have water Monday to-" So, it doesn't uh, you'd think that the in-between is don't wa-, don't wash your car or don't do this, but it, wh-, when they finally take measures they're basically shutting off your water during a certain time. That's what happened in, in, in this last drought.

Melody: So, they shut it off? It's not like a voluntary-?

Soledad: Oh no, no, no, no, no. The ration? They would, the, basically, people would be without water for a couple of days and then they'd have water a couple of days and then they put the water back on, like that. For months.

Melody: I am so sorry that I'm looking shocked.

Soledad: [laughs] I thought you knew that already.

[laughter]**Soledad**: Yeah! Yeah, yeah, yeah. It was-

Melody: That's severe.

Soledad: And it didn't touch me that bad, that's why I was telling you that I felt guilty, because it didn't touch me that bad, my rationing wasn't that bad, but I kept hearing of all my co-workers and all other people who were like, "Oh, you know we haven't had water for-" And I'll tell you, straight up. It's worse to not have water than to not have electricity. Electricity, you can kind of do this and that, I mean, of course, we live in a tropical island where there's no winter, I, I guess that would make a difference. But, um, but water's the worst.

Melody: Did you- Had you ever even thought about that before until that happened it was or was it one of those realizations when that happened like-?

Soledad: Um, I had thought of it because during hurricanes and, previous hurricanes as a child, water service had been disrupted worse than this time. Um, so I remember it being a challenge, for example, during Hugo, um, and even during Georges. So, I had already decided very young that I preferred water to electricity.

[laughter]

Melody: And when you talked about the, the rationing, you cutting off the water-

Soledad: Right.

Melody: -But then in between, no sort of recommendations for some sort of more voluntary sort of, or doing the things in between to-

Soledad: I think there was.

Melody: OK, there was.

Soledad: There was some kind of public campaign, um. Definitely not enough in terms of the cars. And people here really love their cars. They really have to have them shiny squeaky clean. Um, and I'm sure there was a bunch of people washing cars even during times like this. [laughs] Um, but I can't, I can't remember very well what the campaigns focused on, now that you mention it.

Melody: And again I think that your experience may be very different from say, maybe the farmers that Aranzazu-

Soledad: Oh, right.

Melody: -talked to yesterday, like how they had to cope, the things they had to do and, um-

Soledad: Yes. Yes.

Melody: So, um, even though you shouldn't feel guilty th-, I think probably there was some sort of, um, disparity in how things might have been.

Soledad: Oh, there was. There was. Yeah, no.

Melody: Just maybe, so. That's interesting.

Soledad: And, I know there was. And I know, for example, for cattle folks it was really rough. Um, I heard there was a lot of death in terms of, of cattle, um, and the aquifers in the south were really bad and they had rationing as well. So, the agri-, the agricultural community, um, suffered greatly. They've been hit back to back. You know, first the drought and now, now this.

Melody: Uh, to what extent do you consider drought when planning for the future? So are there any proactive-

Soledad: P-, p-, personally?

Melody: Personally, and professionally, but let's start with personally. And are there like, proactive measures that you're able to take to prep-, to prepare for drought, do you think?

Soledad: Hmm. You know again, I feel like if I was in, um, you know, in a house, sort of a suburb house or in a farm, I'd have more flexibility? Now I kinda feel like it's more what-, whatever you can save of water, almost. Um, 'cause the other part, which is of course the part where I feel more connected, would be to, to move or advocate for long-term planning. Of course, I'm a policy, and a plan-, a policy person and a planner person, so I can't- That's my, my immediate thinking is, um, the need for just an integrated watershed management approach at all levels. Not just for water for, for drought, but also for flooding, right? 'Cause those are the, [laughs] the extremes. Too much water, too little water, how do you prepare for that.

Melody: When we think about drou-, you talked about the hurricane, and being younger, and you know, Hugo, do you remember though, as a child do you remember any drought experiences? And maybe hurricanes are so different because they're so dramatic-

Soledad: Mm-hmm, mm-hmm.

Melody: -when they happen, but can you remember going through drought and-

Soledad: There was another big drought that was actually worse than the 2014-'15. I can't remember exactly the date though. I think it was maybe 2009? And I'm thinking that I might have not been in Puerto Rico.

Melody: Ah.

Soledad: Um, but I remember that it was worse. Um, and I believe that there was rationing as well. But no, I don't- Usually my first feeling is that we, that drought is not the biggest problem that we've had, here in Puerto Rico. Though, I'm worried m-, more and more because reading all the projections for climate change, it seems that that's pretty much what's projected. Um, so I feel that it's now that I'm thinking about that more.

Melody: Do you have the sense of the community is thinking about it more?

Soledad: No.

Melody: Does that bother you?

Soledad: Um, yes.

Melody: O-, OK. So, touch-, talk to me about why that might be troublesome and prob-, problematic and what indicators do you have that, "That's really not what people are thinking about here." Just regular folks in the community.

Soledad: I mean it, I definitely think that some people, again, once it's happening, you're thinking about it. But when there's a bigger problem that comes in, then you don't necessarily focus so much on, on that memory. Um, and I might be judging improperly. Maybe some people

who really suffered the drought more than I did, uh, are thinking of it much more, and especially, as you were mentioning, in the agricultural sector, if it means that you–, loss, right?

Melody: Mm-hmm.

Soledad: Economic loss. For businesses or for industry, I could definitely see how, how they would like to avoid and be more prepared for something like that. Um, but in general, right now I feel that climate change seems far away, um, and because some of the measures that, or the conversations that need to be had regarding how to prepare, uh, can be painful, or can be difficult, or can be, um, decisions where you have to choose the lesser evil or find ways of making something that, difficult decisions, right?

Melody: Mm-hmm.

Soledad: Um, you have communities living in places where they probably shouldn't be living but they have a very strong sense of community. Uh, how–, you don't want to take those people out of where they're living, but you kind of wish that they'd want to be in a safer place.

Melody: Mm-hmm.

Soledad: How, how does that conversation happen, right? And do we, should we wait till it's too late? Or when it's already ended in either a tragedy, or a loss, or an economic loss? Um, and how do you balance, for example, economic efficiency in terms of, say, funding that's, that, that, that is then needed after the emergency with community values or sense of identity and that kind of thing? It's really hard, right? Just to give an example. Um, and I feel that those are things that are processes and that you can't wait till the problem is at hand and people– Because, um, I remember we were doing a climate change workshop years back, and the drought– we were right in the middle of the drought. And you ask people, "What is your worst fear?" And everybody was talking about drought, drought, drought, drought, drought. And then you do the same workshop two years later, and they're talking about hurricanes and coastal erosion and flooding. So, really, they, the– it would seem sometimes that the preoccupation is more related to whatever they're living at the moment. You're not really seeing the big, the broader picture, right?

Melody: So, whatever the current event is, it sounds like.

Soledad: Mm-hmm, but when you're making decisions and long-term decisions, you really have to think about not just what's happening, like, right now. So go back a little bit or forward. [laughs]

Melody: That is perfect. I'm trying to think if there's anything else you didn't cover. 'Cause I'm not sure I'm the timekeeper, and so, I'm not sure how I am on time.

Jamie: We've been, we've been going for about 40 minutes right now.

Melody: Oh, this is great. Really good.

Jaymie: The current time is 11:17.

Melody: It seems like, it seemed like 10 minutes to me so I know [inaudible 38:04].

Soledad: [laughs]

Melody: So let me, um, I think I've hit all the key things they really, really wanted me to [crosstalk]. And I don't know if this would be for your agency or not. Does your agency or organization consider climate change in its management planning?

Soledad: Um, we are starting to. That would be the honest question, uh, response. We're definitely starting to. We are going to incorporate it, um, in the future into all of our management plans, at least some aspects of it. It's a little bit hard because a lot of the spatial data that we have is old. Right now, I'm actually trying to- I'm doing research on, on how I could maybe start, um, modeling ecosystem migration and focus where should we focus our conservation efforts considering climate change and considering maybe creating connectivity and that kind of thing. Um, but it's, it's, uh, it's something that we're really starting to do now. Definitely there, definitely in the planning. [laughs]

Melody: Perfect. Is there anything else you want to add that my questions haven't addressed about climate, weather, drought, extreme? - What's your big- This is so funny.

[crosstalk]

[laughter]

Melody: In the workshops you asked the question of whatever has happened most recently. Was the, you know, the most traumatic and your top of mind, that's what people say is their biggest concern. What's your biggest concern with weather? Be it drought, hurricane, flame, whatev- what's your, what's your biggest concern?

Soledad: Um, I think I already touched upon it. I mean, lack of planning, you know. I'm, I'm worried that we're not thinking about it enough. Uh, I'm worried of the impacts of that, that can continue having on the economy and on different sectors in the economy. Um, I'm ha-, I'm happy as well to see a lot of different initiatives, you know, just this, for example what the Climate Hub is doing, having a focus on agriculture and finding solutions to make them stronger and more resilient to, to these different extremes. Um, and I see in terms of the hurricane how mu- how many, how much communities have also gotten together and said, "You know what? We can't wait for people to bring the solutions to us. We need to really just do those solutions among ourselves." And, and that's great for a lot of communities that are already organized or that have more access to that kind of organizing. I just feel that it's not across the board, um, and that, again, there's that inequality in terms of the benefits and the impacts. And, and Puerto Rico, in general, I feel has a severe inequality problem. That worries me.

Melody: Excellent. Anything else? So that was my last question but I just, was there anything else that you thought, "Hey, when I come here today I, I really wanna make sure I mention this, um, and that-" Yeah. Anything?

Soledad: I think we've touched upon a fair amount.

Melody: Yeah, you got anything Jamie?

Jaymie: I got, I got just, I got just one, um, that just kind of popped into my head as you were talking just during this last question actually. Just talking about, um, you know, how lack of planning is a, is a si-, is one of the problems that you're most concerned about. Do you- Is there anything that people without, uh, significant training or like ordinary, ordinary people, is there anything that they can specifically do to address that problem? Um, or to address some, some of the other problems you might foresee? What can an ordinary person do, to your mind?

Melody: I like that [sighs]. But make sure you look at me when you answer. Great question.

[laughter]

[crosstalk]

Soledad: Um, what I recommend they do, or? [laughs]

Jamie: Yeah.

Melody: What can they do?

Jamie: Yeah. Whatever you feel comfortable.

Soledad: Um, you know, for me it's, uh, it's I like to believe in like participatory processes. Um, I know that they're also quite difficult, right? Um, and definitely not all answers lie in those process. There's some technical, um, science things that need to be analyzed as well, um, so that you can, you know, gather the, what's great of the history, or the perceptions or, or what people have to bring, um, and balance, right, with the technical scientific, but it's ha-, it's important to give that space for that dialogue, right, to see what, what can be brought in.

Um, I think people need to- I mean and I guess this goes back to something else that I already mentioned, of the- How do you separate your ideal, for example, of what Puerto Rico should be in terms of, of the future in its status versus what you expect your representatives, or your politicians, or the people who are there to do for you? Um, and I feel that people should be very, be more vocal in terms of ensuring that those who are making the decisions are capable of doing it for their well-being and not necessarily for their political career or for their profit. Um...

Melody: Perfect.

Jamie: Make your voices heard.

Soledad: Yeah.

Melody: Yeah.