**NEH Oral History – Eric Hassler**

**Interviewee: Eric Hassler**

**Interviewer: Audrey Jaap**

**Interviewer: Clark Grant**

**Interview Date: 16 October 2020**

**Location: Butte Archives**

**Transcribed: May 2021, by Adrian Kien**

Jaap: It is October 16th, 2020. We're here with Eric Hassler. Eric, I would first off, you grew up in Butte, correct? I would like you to tell me just a little bit about your parents, grandparents, kind of what you know about your family's history. We'll start there.

Hassler: Okay. My parents are Jeff and Chris Hassler. My mom is originally from Minnesota and moved here with her family in the fifties. They came chasing work, of course, like most people do to Butte. My grandfather was a heavy equipment operator and my grandmother was a stay at home mom and did a little Avon work. My mom had a 35 year career with the Butte Shelter workshop. And my dad has been numerous things throughout my life. From an owner operator of a trucking company to managing Columbia Paints. So he's had a wide variety. We don't have a long history in Butte because the first ones that come were in the fifties. So, but our family has remained here ever since. So I have a younger brother and a younger sister. The younger brother is still in Butte, but my sister moved to Anaconda. So she hasn't moved too far away.

Jaap: She didn't make it too.

Hassler: No, she didn't make it too far at all. So, yeah, that's really quick on the family. But not a lot, like I said, not a deep history in Butte, but been here a while now, so yeah.

Jaap: Yeah. Can you tell me when you were born?

Hassler: I was born in 1973.

Jaap: Where did you grow up?

Hassler: I grew up on Evans Avenue down by Stodden Park. So we, yeah, my family still resides there. My parents do. And, I went to Longfellow middle school and then went to East Junior High and Butte High and then followed up at Montana tech.

Jaap: What did you study at Tech?

Hassler: Occupational safety and health. I have a bachelor's degree in Occupational Safety and Health. So kind of a little bit off for a degree for the Superfund work, but linked pretty tightly as well. So a lot of exposure work and stuff like that. So it fit.

Jaap: I feel like a lot of the Butte Superfund team has kind of got a weird little off shoot that like, it fits really nicely together, but . . .

Hassler: Everybody brings a very specific point to superfund out of all of us. And we have all facets covered, I think, between the group. So it's a very interesting group to work with and it's been quite an enjoyable career.

Jaap: Good, good. After Tech, what did you do?

Hassler: I instantly came to work for the County. I started with the County in 1998 at the Butte Silver Bow Health Department. I worked for a lead based paint abatement program that was funded through the housing and urban development. And that's how I got my start down this career path was through that program. We ran off of grant funding and in 2002, they decided that Butte was no longer big enough to receive the grants from HUD. That we weren't urban enough. So I transformed or transitioned into what was known as the Childhood Lead Poisoning Prevention Program at that time, and have been involved with Superfund ever since 2002.

Jaap: The lead paint abatement program. Can you just tell me a little bit specifically about that program and the kind of work you guys were doing?

Hassler: Sure, the main goal of that grant funding in that program was to provide lead safe housing to low-income families in town. So we did a lot of work with section eight, and determined eligible properties. And then we went in and determined what hazards may be associated with that property. And then "abated" it, is the term in their world. Then we'd abate the hazards that we found. And in turn, we were able to secure these houses in a rental situation at a locked in rent for low-income individuals for a few years where the landlord could not jump the rent in just because they had a bunch of upgrades done to their house. So it was a very enjoyable job. You got to see all walks of life. And felt that it really did a lot of good for our community. We were able to address 54 homes, I think, that way through HUD funding and provide these families with a lead safe environment.

Jaap: That is really great. So then in 2002, when you're no longer grant funded, did the program change at all kind of the, how it was working or anything?

Hassler: Well, the HUD program just went away, that program didn't. So we rolled over, we do a lot of paint work through the Superfund program, the CLPP at that time. So it was an easy transition that way. And then we had some turnover at that time and I kind of started to run the program, which is now the RMAP. It was a predecessor to the RMAP in 2002. Then transitioned and started doing all aspects of the RMAP at that point in time.

Jaap: Perfect. How many houses have you guys done and properties? Do you know?

Hassler: Oh, it's about 400 and some. We're just starting to knock at 500. It's always hard to say which ones are complete because of the aspects of attics that we don't do them all, unless there's an exposure pathway. So I don't like to give a solid number in fully done properties, if you will, fully abated, because we did a lot of soils work, but we may not have been to the attic work at this point in time. So nothing's really complete. Well, there are a handful, but you know, there's always work to be done. And with changes in protocols, we have several of those that may need to be revisited because of changes that were implemented through the consent decree.

Jaap: Can you talk a little bit about what those exposure pathways are and what that means?

Hassler: Well, when you deal with lead based paint, it's any deteriorating paint that can cause a dust exposure that's harmful mainly for children that are 72 months and younger. So you want to address anything that is in poor, fair condition and especially surfaces that may rub or be an impact situation where you're creating this dust. So that's a major exposure pathway to lead. Another one is the attic spaces, which is more on the Superfund end of things where you have the heavy metals present. And if they have cracks in their ceilings or a water leak or an improper fan installed, they may be pulling that into the living space. So we assess all of that and determine if they have exposure.

And then in turn that would trigger a remedy action of attic abatement work. And then we have the soils component too, which is pretty self-explanatory when you're talking about dirt, if it's contaminated and you have children playing out in it, it's a definite exposure pathway. Plus you may be dragging it in and out on your feet.

So it was a big plum in the Superfund process for the RMF to end up as a multi pathway program and be able to address things on a human health basis instead of just due to the fact that it was contaminated or not contaminated. So our predecessors did quite well in making sure that that program was multi-pathway based and human health based instead of just strictly remedial based.

Jaap: So can you talk to me a little bit about what was your role in the superfund negotiations?

Hassler: Well, I started getting involved with the negotiations in the 2008 timeframe. And at first I'll admit, I was just kind of a fly on the wall. I was trying to get my feet wet with it and learn the whole process of it and was starting to get a little bit more involved when things derailed, if you will, in 2010. I mean, we thought we were close to a consent decree in 2010, and we weren't able to push it through and really became involved during the 2010, 2011 UAO phase, where they kind of tell you what work needs to be done regardless of a CD. And from that point, I was kind of a full on member of the negotiating team from 10 till we finalized the CD.

Jaap: Why did those negotiations fall apart in 2010?

Hassler: There was just some vast differences in opinion, I think is the best way to describe it. I mean, when you're dealing with water science, it can be interpreted so many different ways. That we really couldn't come to agreement. And mainly my take on it was, you know, it was all in and around storm water. And like I said, the data can be interpreted several different ways. And there just wasn't a consensus on the necessary remedy in regards to the storm water at that point in time. And everybody was so far apart that it probably was best for us all to take a step back, keep working, but not get in the negotiation room and reassess a few things before we proceeded. So that was the big crux in my mind, was we just couldn't come to consensus in regards to stormwater.

Jaap: So how were things proceeding at that time? What kind of projects were being done while there were no negotiations?

Hassler: We had major changes with the RMAP. That's when they implemented triple depth sampling and kind of an expansion to the program where we were able to go and address homes for attic dust, mainly outside of BPSOSU. And, uh, so that was a big plus through that phase, we were able to do every house within the urban corridor instead of just the operable unit. And so we started implementing those changes. There were some things that weren't addressed early on that were directly called out in the record of decision. So a few of those projects were conducted. Um, we had 13 stormwater areas on the Hill that needed to be addressed. So we started implementing that work at that time. And it's not like things stopped. It just, no final decisions were made until the consent decree came out.

Jaap: You know, everyone we talked to, they talk about just the difference that was made with superfund work. And, you know, you hear a lot of people say, "Oh, when I was growing up, this looked like a moonscape and now there's grasses." And I know you also have people that don't think work has been done because superfund is such a slow process. Can you just talk a little bit about in your mind growing up here versus then and now, and the difference?

Hassler: At 47, I've got to see all of the changes implemented through superfund where some of the younger generation has not. So I can understand where if you are, you know, in your thirties that you're not going to realize, you know, to the extent that the amount of work that's been conducted to date, because you didn't get to see it, you didn't get to see that change. But, uh, yeah, I remember the moonscapes everywhere. They were free to play in. They were open spaces that kids went to. And now you don't see the yellows and orange mine waste dumps throughout town and uptown. And in my mind it's been a major transformation, but I understand where people are coming from is, you know, those major projects were implemented early on, where you saw the visual differences. If you're not in my age group or close to it, you didn't get to see that. So I understand where they thought it was stalled out and nothing was really being done, but we were still implementing things that weren't so much out there for people to see. There was a lot of storm water work that was being done. A lot of groundwater work. Like I said, the RMAP was expanding, doing considerably more work than we were originally built to do or designed to do. So it's not like things stopped. It just wasn't quite as visible as early on.

Jaap: Is it frustrating for you when people say that?

Hassler: Yes and no. Well, I mean, like I said, I do understand where it . . . it depends on the demographics. The age demographic. If it's somebody that's my age or older, I'm kind of like, how can you say that? Unless you just moved here. But if it's been somebody that's lived here throughout the Superfund process, it just, to me seemed a little disingenuous to say nothing had been done, because if you stand downtown and look at the Hill, it is drastically different than it was in the late eighties, early nineties.

Jaap: So when you were growing up here, did you think about Butte's landscape? Probably not. But did you think about Butte's landscape as you know, being mine waste? And then when you were in the OSHA program, did you think of, "Oh," or anything like that?

Hassler: It didn't really even come across my mind until late in my college time when I was doing sampling activities and, you know, for sampling classes and actually had to access some of these areas that it became evident that there was a problem. But until that point, no, it was just . . . It was normal. I mean, it was our normal environment. It's where we lived. It's where we grew up. And like I said, you had kind of free gratis to these areas as children. That's exciting. At least it was for me, as, you know, you got to ride bikes everywhere, you got to dig on this, you know, it just kind of was no holds barred. And it didn't ever even ring a bell with me until I was just about done with Montana Tech. And then it was kind of like, "okay, well you do have an issue here."

Jaap: So when negotiations kind of started happening again, can you tell me a little bit about that process and what timeframe that was?

Hassler: It wasn't too long. We were back in the room, started discussions intermittently, I'd say in the 12, 13 timeframe. I'm not the best with timeframes. Things kind of mold together when you're doing the same thing for a long period of time. But I know 14, we were back in full-on negotiation mode and it was exciting. Um, you still had those same discrepancies if you will, between each party and to what was necessary, what was the right direction to go. But we were back in the room. And it was very exciting and hopeful. It was a hopeful time, that we'd be able to finalize this and, you know, get to a solution that will hopefully help us remove that stigma of superfund from our community. So it was long and arduous from that point on, I mean, it was not, they were, they were long days, lots of disagreements. Um, but where we ended up is pretty amazing in my mind. I never thought we'd get to this, to the package that we have within this CD now, when we were discussing in 2010.

Jaap: Yeah. Can you talk a little bit about that package in the CD? What changes will be happening?

Hassler: The main one is all the corridor work. I mean, a lot of that area was not going to be addressed underneath the original record of decision, even though we knew there were some impacts, it wasn't human health impacts so much. And, uh, but just to the extent of work that will be conducted through the stream corridors is amazing in my mind just because it was not really even on the table early on and, uh, removing the tailings out of water's way, giving the community an area that you can kind of enjoy and play is a pretty big deal. I've been impressed with Butte Silver Bow's Superfund stance that you weren't just going to make it safe. We still needed to be able to access this and not dissect our town, if you will, with areas that you just could not access at all and, you know, ending up with it usable land use, you know, beneficial end-land use has been pretty big goal. And I think a pretty big achievement from the negotiations that occurred. Most Superfund sites, one of the fixes is just keep people off of it. And we were not going to allow that because our town is kind of dissected as it is because of Superfund. And our neighborhood connectivity is tough and we just didn't want to see it get any worse than it already was. And we actually wanted to promote connectivity back into our community.

Jaap: I think it's really great. And I think it's really great young people now can go on the areas that have been cleaned up and they get a piece of what it was, but can actually go there and recreate there.

Hassler: I look at Butte, hopefully in the future is almost like a living classroom due to this. I mean, to where other communities that may be having similar issues, I don't think you'll have one that'll have quite the extent of issues that we did, but they can come here and see, you can fix it. You know, you can render it in a safe condition for both human health and the environment. And also still have that aspect of 'don't do what happened here.' You know, you kind of have that learning experience as well with leaving the historic landscape and things like that. I think that's very instrumental in the educational process going forward is that we'll leave some areas to where you can see the degradation and compare it to the repairs, if you will. And I hope that we can embrace that and kind of become a living classroom in regards to remedy and restoration.

Jaap: That's really great.

Grant: Are there risks for new mothers in Butte today?

Hassler: I would say there's kind of risks for new mothers in every community. I think we've minimized those greatly in Butte, but until a property has been fully assessed and addressed through the RMAP, there's no guarantee that there is not, you know, some concerns associated with it, but we have the mechanisms in place to eliminate that aspect for young mothers and pregnant women. We're not going to say that there's not risks, but we have ways to mitigate those risks.

Grant: If you're a renter in Butte, you can't trigger the RMAP process, right?

Hassler: Yes, and no. Previously you could not, we have implemented some language within the new work plan that is yet to be released. And through the UAO that the RMAP will be ran under here in the immediate future, where the EPA will play a bigger role in obtaining access for the program. They have a little bit sharper teeth, if you will, than the local government and can help us obtain access where we traditionally have had to work different avenues to get into them. I wouldn't say we've ever really had a big problem with getting access as long as we've had the opportunity to visit with the landlords and explain to them the process and that there's no hindrances to them. They have usually come on board, but the tenant being able to sign a property up directly, that is true. We just don't have those capabilities. Montana's pretty strong in regards to property rights. And that was one of the major hurdles that way, is we still have to work underneath the letter of the law.

Grant: And it was a matter of state law that prevented you from doing that?

Hassler: That's my understanding of it. I'm not a lawyer, but my understanding was you just, you can't, you can't bull your way into a property as readily in Montana, as you can some other places, for lack of a better way to describe it. But the language within the UAO and the new work plan, I think solidify that and tidy it up a little bit to where it'll make it a little bit more streamlined as to, um, gaining access into some more of our recalcitrant landlord issues.

Jaap: Are you able to kind of give any more details of what that process would look like, kind of going forward?

Hassler: We'll still kind of follow our normal process, but if they still are a dead set, no, then the EPA can step in with a letter stating these are your options. Either let them in, or you can become a responsible party yourself. And, so there's some avenues that way that, like I said, it's the best way I could describe it is that they have sharper teeth than we do, and have a few more tools in their bag than we do to gain access.

Grant: Over all the years you've been doing this work, have you run into landlords that absolutely refuse to let you abate?

Hassler: We have, yes. I have to admit we have had a handful. It's not that they will not allow you to abate, but they don't even really allow you to start the process. A big move they do is they'll turn in blanket, sample requests, but not schedule times for you to actually obtain the necessary sampling. So you can't get the data necessary to proceed. But we've worked through it pretty well in my mind. We'll back off a little bit, if we don't, I mean, you can kind of assess from a distance. So we'll assess from a distance as well, but we get really heavy handed if there is an elevated blood lead case involved. And that's where we ask the tenant as well, because we can't get into HIPAA type discussions, but the tenant can, and you have a tenant come to you saying I have a sick child. You know, these guys can remedy this situation. They tend to change their mind rather quickly.

Grant: So I was just trying to think what would be the possible argument from a landlord against having you guys come in?

Hassler: The biggest one we've heard throughout time is the paperwork associated with the disclosure rule at the federal level. They just, if they don't know, they don't have to disclose. And that is their disclosure is we're older than a 1978 unit. There may be problems with it and that's the extent of what they have to do under the law until they have this data in their hands.

And then they have to provide it to each and every tenant from that point forward. And that's probably what we've heard the most, but we don't have the ability to change the federal laws. And I don't think we want to, I mean, it's beneficial, it's there for a reason. But that's what we hear from the vast majority of them. It's more so the ones that have large numbers of properties where they'd have to do this multiple times. That's where they get a little bit of heartburn on having to do it to follow disclosure rules.

Grant: I wanted to talk about action levels. Sorry, Eric.

Hassler: I thought you said this was going to be nice.

Grant: Right? Good cop. Bad cop. I was just curious how the actions levels fit into the work of RMAP and why they're different in Butte, you know, than in most places, and maybe in your answer consider people might be listening to this 20 years from now and not know what an action level is, and what we're talking about.

Hassler: Absolutely. Well, the action levels were determined by the environmental protection agency through bioavailability studies. I'm not overly astute in regards to the bioavailability studies, but the forms of metals that we have here weren't as readily uptaken into your system as other forms of the same metals. Like the lead and lead based paint is way more bioavailable than the lead in the byproducts from mining. And one thing in regards to our action levels is the multi-pathway aspect and actually having to be able to go through a human health approach, I think it kind of minimizes the impacts of those differences. In say Anaconda with their 400, they do a weighted average over the whole yard, and you may have hotspots left behind, if you will, where we don't. We break our yards down into 625 square foot areas. And it doesn't matter if one area exceeds and another doesn't, there's no average that area is addressed. And like I said, with the multi pathway aspect, we could hit every aspect of lead, not just the soils or the dust associated with Superfund. So being a human health based program and making that the driver of our work, if you will, I think takes a little bit of the pressure off of having these higher action levels. So our arsenic action level is the same. I understand it's higher than what HUD does, but what they're doing, they're looking at areas that there is no known impacts.

So I understand where they're a little bit more stringent, if you will, on having a lower action level. Because they don't even know where it's coming from. At least here, we have an idea of what and why we are dealing with these materials where, when they're doing their 400 screens for lead and they're 25 screens for arsenic, they don't really have a known source for that. So they're going on the ultra conservative side, if you will. But the biggest plum is the fact that we can approach this on a human health basis. Not so much just a remedy basis. And I think it's been. Uh, I'm trying to think of the best way to say it. I think it's worked here. I mean, we've dropped our blood lead numbers down, you know, 10 fold. I mean, it's kind of amazing from when I first started on here that, you know, when Superfund first came in, that 11% of our children were above a ten. And now we're down at the national average in the older community, we kind of meet those same numbers and that's at a blood level of five.

So, I mean, even just saying, we went from 11 down to that, I want to say three'ish percent range. Now 2 1/2 - 3 is the national level. I mean, you're also half of the level of concern, so it's not comparing apples to apples. So I think it's actually had a greater impact than what the data shows, because you're really not comparing apples to apples.

Grant: Have you had to field a lot of concerns from people like in meetings and stuff about action levels because people see 400 elsewhere, 1200 in Butte.

Hassler: There's had to be a lot of explanation. Yes. We've had to explain that quite a bit. And the main explanation that I've been able to kind of give people a level of comfort is the fact that we have the multi-pathway and we're human health driven, not just remedy driven.

Grant: Do people take that and understand it?

Hassler: And, uh, yes and no. I mean, there's some that are just steadfast, that it should be the same across the board. And continuity is good. I mean, continuity is not a bad thing. But the science behind it and kind of our track record shows that it's not as big an adverse impact as some may think it may be.

Grant: When you started out, when RMAP was first beginning, were you one of the guys running the vacuum?

Hassler: Yes, I was part of the team that did the feasibility investigation to determine how, and if it was even possible to remediate an attic. It was a very interesting process. We started out with individual canister vacuums that were HEPA equipped and dust pans for insulation and, you know, bringing it into bags. And then we morphed into the equipment we do now. We had to do a lot of trial and error. Chad Anderson and myself, we worked with a company that did our vacuum systems. Our systems are actually based off of a vacuum truck for sewer companies. And we turned it into a dry unit and just through trial and error, like, okay, we have to tweak this aspect. We need a different containment here. We've got to piggyback more HEPA filters there because our main concern through that was you didn't want to discharge the materials you were removing out into the environment. So long story short, Yes. I was highly involved in the early stages of determining whether attics could be remediated or not.

Jaap: That must have been hopeless and very rewarding at the same time.

Hassler: About the seventh or eighth one I did, I went into my bosses at that time and said, "I didn't go to school to do this. If I have to do another one, I'm done." So I haven't been in an attic since. Let's put it that way, but our process has evolved so much that it's not near as arduous as it was in the beginning. Nobody really had a clue as to how to address these. I mean, we did everything from, like I said, the individual canisters to gut remodeling and trying to come up with a happy medium that still ended up with a safe end result was quite the process to go through.

Grant: Do you think all the smelters operating back when knew what they were doing depositing all this dust in everyone's attic?

Hassler: I would hope not, but I can't say if they knew or if they didn't, but I would hope they didn't realize what they were doing.

Grant: Otherwise if they did know and kept doing it, you know, what does that say? Well, I was curious to work under the consent decree. You know, there's going to be a lot of heavy equipment jobs, I guess, you know, for some period of time and someone we were speaking to in here, kind of framed that as a continuation of this boom to bust cycle in Butte. Like, you know, back in the past when the mine's would boom and then there'd be a strike that shut down and be a bust for a while or. And so with this, I'm wondering if there'll be some kind of boom to bust in the remediation world, you know, how are you thinking about that?

Hassler: Well, I would assume it'll be a boom in the beginning. But I'm expecting this to be conducted by local contractors that will have to bring on additional crew potentially through this timeframe.

But I don't know how much of a bust it will be in the after. I mean, we have some long running programs involved with this that aren't just the existing ones, like the RMAP and the BREEZE and ONM aspect. We have the uncontrolled watershed, which still needs to be investigated and will be kind of an ongoing process for several years.

And we have both the insufficient and unreclaimed work plans. These three kind of seem to get kicked to the side, because they're not as splashy, if you will, as the corridor work. But with you having to kind of reassess some of the areas on the Hill. And assess areas that have never been assessed, there's potential for a lot of ongoing construction activity here that would make it not so much of a boom and bust in my mind. It'll be a little extended out more than boom and bust scenario.

Grant: Is there a focus for those sites that were unremediated? Are they kind of in one area?

Hassler: No, they're kind of throughout. When Superfund started, you know, the main point of concern was human health. So a lot of the areas were addressed for the heavy metals that had direct impacts on human health. And a lot of them up on the Hill did not, were not assessed or may not have been remediated just for stormwater concerns. But when you're starting to neck it down to the minute amount of metals that are reaching the stream, that are still having harmful impacts on the stream. You have to look at those areas now to get into compliance when you're dealing with such small amounts.

So I understand why they're still there. I understand the rationale for it, but now it's time to get to it. And there's a lot of areas. They did a fuchsia study in the nineties which was looking at the impacts on stormwater. So we have a lot of that data already, so it's not reinventing the wheel. We were able to kind of hit the ground running and do further evaluation of these other than what the fuchsia pointed out at that time, fill in some data gaps. But it's not like we're jumping off from scratch in regards to the unreclaimed areas. I mean, the 13 stormwater sites that I said went on through there. They came about due to the fuchsia study, they weren't human health sites. They were definitely areas that we knew how a direct impact to our storm water system and the streams. But now we're going to the ones that may not quite be as impactful, but still are contributing.

Grant: So I wanted to take kind of an aside and talk about Ed Banderob, real quick. Because you've dealt so much with this hazardous dust in this town and, you know, know so much about the subject, I was just wanting to see if you thought, is there merit to Ed Banderob's concerns about dust from active mining?

Hassler: Um, I think that they're regulated heavy enough that there probably isn't like an immediate impact, but I do have concerns over the long term. Mainly accumulation. I understand the air monitoring study that has been conducted over the last year, that's being finalized up, will be telling. I think that is the most important part. I don't think that Ed's concerns are unwarranted. Yeah. I think they need further investigation. Um, like I said, what they may be letting out on a daily basis in the short term, you know, is pretty certain it's not hazardous, but what does that do after twenty-five years of accumulation? So we need to kind of look at it in the long-term in my mind, not the short term. Ed seems to be more, a little bit driven on the short-term and immediate. Where we need to, we need to study a little bit further and kind of determine, like I said, the long range impacts.

Grant: So I guess I'm curious too, in general, your job forces you to some extent to interact with the public. What has that part of your job been like for you?

Hassler: I actually enjoy that part of my job. I don't mind. I've been at it for a very long time. I mean, RMAP, you're dealing with the general public on a daily basis. I've since kind of taken a step back out of that role. And I miss it. I have to admit that. I miss meeting people. I miss, you know, getting to know them through this. My role with the general public has become a little bit more contentious than when I was just with the RMAP but I still don't mind that. I like to be able to provide people with information and try to minimize or lessen their concerns about their environment and where they live. So it's been interesting. I do have to admit, I kinda miss the daily interaction that you received during the RMAP when it was just strictly with the RMAP.

Grant: And what's your title now?

Hassler: The operations manager, Superfund operations manager. So I have oversight responsibilities, not daily with the RMAP. And then I do have, um, all the oversight responsibilities for the Butte reclamation evaluation system, the BRES, which is the long-term ONM of all the large capped areas, open space areas, and then all the stormwater infrastructure as well that has been implemented through the superfund. So that eats up a lot of my daily activity is on the ONM side, and then just provide oversight and guidance in regards to the RMAP.

Jaap: Can you talk a little bit about the maintenance? I believe Abby said, you guys look at sites every, is it five years?

Hassler: Every four years.

Jaap: Could you just talk a little bit about that? Because I don't know, everyone knows about that.

Hassler: We have about 600 reclaimed acres on the hill now. And we have broken that up into a process where we do the same amount of acreage every four years, four quadrants. We've broke the site down into and evaluate the sites for everything, for stormwater issues, such as erosion, um, the human factor on damaging caps and the ensuring that there's appropriate vegetative cover on these sites as well. So during the evaluation process, we bring in CFWEP because we want it to be a third party unbiased. We don't want to be evaluating ourselves. I mean, that's not effective. So when they go out and do their evaluation process and we review it and determine, you know, kind of prioritize what work should be done and when. We address everything that is found as a deficiency, if you will, through the evaluation process. And we go out and address those. And they could be everything from additional stormwater BMPs to prevent future impacts from stormwaters, to a capped area. And we kind of jokingly referred to it as we're kind of high-tech farmers and make sure that the vegetative cover is appropriate and repair as necessary through sampling and analysis and determine what may have caused that problem and then repair it and try to prevent it from happening in the future. You hear a lot about "waste in place" and caps are not effective. This program makes it effective in my mind because it's perpetual. We're here forever. And this evaluation process will be in place forever. To ensure that the integrity of the cap is there in perpetuity. So it's, it's something different all the time. It changes every day. So it's very interesting work.

Jaap: How do you feel about native grasses? Versus people saying native grasses are ugly and it should be something more city-like or something?

Hassler: I don't think we want 600 acres of manicured space myself. Just the maintenance of a manicured grass field, if you will, is astronomical. I am a big proponent of natives versus the original grasses that were implemented early on. I understand why they did it, they needed it to come in hardy and fast. The natives take a little bit longer, but now that we are to a maintenance stage, we hope that it'll take over throughout time. But I kinda like it.

The only thing that the native grass has versus manicure, what I think is instrumental in this is the BNRC's program, you know, funding in the program for implementing the native trees, shrubs, and forbes, and things like that. To start providing a little bit further diversification on these sites and not just make them kind of look like an open grass field. And I think that will be beneficial. And I really enjoy that aspect of seeing the transformation from grasses to more of a true ecosystem.

Grant: If the caps, maybe one day are more diversified and resilient, could the fences ever go away?

Hassler: Our goal is to have no fences. We will have to have some. There are just some areas that are just inappropriate for a lot of activity. But for the most part, we don't want to have it. It kind of goes back to our earlier discussion of our town being somewhat dissected by the sites. We don't want to see that. I mean, a big aspect on the maintenance side is if we see people are creating a trail, don't stop them, build the trail, you know, make that part of your maintenance aspect. Instead of you keep getting a deficiency for the vegetation being beat down and, you know, a trough that may be an erosion issue going forward. They've told you, this is where we want to walk. Let's give them the opportunities to go that direction. And the ability to do that through the ONM programs, I think is beneficial going forward and will improve the integrity of these and make the long term maintenance start to lessen if you will, over time.

Grant: Where do the mine yards fit into that conversation?

Hassler: Well, each mine yard has some areas that are reclaimed. So they fall within that evaluation system in the ONM protocols. But some of the areas of the mine yards that are more open for the public and things like that are, should be managed more like a park-type setting by the local government as a whole. And not so much of a Superfund responsibility. I mean, we're working on this as we speak. It's kind of interesting that you brought that up. Making a management team that kind of can cover all aspects. Because we all have a different view of the mine yards, if you will, at Butte Silver Bow. Some are an event venue. They are for weddings. They are to be locked up and kept historically sound and just do tours. So we've got to kind of modify how we think about them so that all aspects are being managed in a fashion that fits all the potential uses of these areas. So mine yards I would like to see them not strictly be managed by superfund, more as a community as a whole, the county as a whole, because we accepted them and rightfully so. Now we just need to determine how we want to utilize them and best utilize them and protect them going forward.

Grant: It's probably going to come across in this project on our tape recordings, I'm an opponent of fences.

Hassler: I'm an opponent of fences as well.

Grant: Well, like you say, it, uh, it's a barrier. Like if you just think of the Original, it's like this wall between the hill and the uptown. And if the fence wasn't there, you could just walk right through that to the walking trail, or God forbid connect the walking trail to the central business district.

Hassler: A little bit on that. Our community needs to take a little bit more ownership as well. I mean, there's some rationale for fences. I mean, we caused a lot of damage ourselves, just being people. I mean, we have a lot of vandalism, a lot of break-ins. And when you do want to try to keep that historical integrity of it, you can't have things being packed off on a regular basis as well. So it's a double-edged sword. We just have to take a little bit better ownership and stewardship of these assets. And that kind of falls clear to the general public, not so much the local government.

Grant: I wanted to kind of turn back to RMAP. And one thing I was always curious about was why it didn't include commercial buildings.

Hassler: Best description I've come up with for that is the name.

Grant: Residential.

Hassler: It's the residential program. I don't have a good answer on the commercial, other than through the bioavailability studies and time-weighted averages and things like that. You just don't spend the time in a commercial building that you do in your residence. So the action level would need to be adjusted even more so than it is. Potentially a two time weighted averages and how much time people are spending in there. Underneath the UAO commercial buildings with a residential component have now become eligible for the RMAP, but they still have to have that residential component associated with it. The UAO also stipulated that we will do schools going forward. Which is a big benefit in my mind. I mean, that is your at most at risk population that you're trying to get to is young children and the ability to go in and assess our schools and abate our schools as necessary is very important going forward.

Grant: Why was it that this whole aspect of the cleanup was a UAO and not part of the consent decree?

Hassler: Mainly the way I like to describe it is we felt it necessary to learn how to walk before we could run. I mean, this is a very major transition for that program. We're going from a responsibility of about 36, 3,800 parcels to about 11,000 and just being able to get our hands around it. It was very important before it was finalized in a CD. Um, and we don't have a very robust data set on that gap from 36, 38 to the 11,000. We just don't really know as of right now what that workload may be. And I mean, BPSOU has been sampled and studied heavily. We know underneath our current protocols that, you know, we're about 40% of soils are coming back contaminated. So we can forecast what the workload for BPSOU costs associated with that workload. We just don't have the ability to forecast these areas that we've never been in before. So it provided, at least me on a personal level, a lot of comfort as to not finalizing it, you know, with the CD until we had a little bit more data and a little bit more time to kind of determine those factors.

Grant: Sure. That makes sense. Going back in time a bit to childhood lead poisoning, you know, you touched on it a little bit. I don't know how bad it was, I guess in Butte?

Hassler: Well, early on, like I said, about 11% of our children under 72 months were above a blood level of 10 and 11% is alarming.

Grant: There was widespread testing?

Hassler: Yes. They came in. The University of Cincinnati did a study here at the beginning. The EPA actually had contracted with them. So they tried to correlate it, blood lead levels with areas of concern. And it really kind of led back to the residential aspect. That was a big driver of these, all of these elevated cases. So that's where that came from. And then throughout time we started, you know, implementing the CLPP and then the RMF. And like I said, we have now dropped those levels to where we're on par with the national average. So a pretty big jump downward. Downward trend. We're seeing it plateau right now, but I think that's kind of common now. You've taken the low lying fruit, if you will. And now we're just more in a holding pattern. Just keep going forward. You're not going to see those drastic drops like you did early on. Now that you've been in existence for the better part of 25 years.

Grant: What's your understanding of how that affects children?

Hassler: A multitude of different aspects. I mean, the main one is their mental development is a major concern in my mind. It starts causing them to have issues with the learning process. And that's not detrimental just for today. That's detrimental for all time for these children. So being able to eliminate that aspect is . . . it was a good thing.

Grant: It was urgent.

Hassler: Yeah. Hmm. So, um, digestive problems, they can cause. It's very hard to determine just off of symptoms, if it's lead. You need to do the blood lead testing to determine if that is, because it follows in line with several other things that may be happening in a child's life.

Grant: I was just curious about your parents' understanding of the work you do.

Hassler: They don't. They are kind of old school, I guess. They came here and Butte was the moonscape that we discussed earlier. They are healthy. We get a lot of the old timers that just don't think, they kind of think 'why?', you know, 'we have other more urgent needs in our community than this.' They just don't understand the funding scenario of it. The funding is for this particular aspect. So we hear that. "I've been here for 70 years and I'm fit as a fiddle. I don't need you to assess my home." And my parents were kind of the same way. And, but over time they've become more or more interested. They are on the flats, so it didn't directly impact them. But now they're a stone's throw away from this corridor work. And I think that's brought a little bit more urgency to my parents and a little bit more interest because now it's going to be something out their back door instead of up on the Hill. So that they don't understand it whatsoever. They don't.

Jaap: Fix the roads.

Hassler: 'You've got all this money. Why don't you fix the potholes on my street?' So, well, a good example of that is, I mean, I've been at this for a long time and my parents now just had their attic addressed. Within the last couple of weeks. That's the sense of urgency they have in regards to superfund.

Grant: Did it test hot?

Hassler: It did. Yep.

Jaap: If only they knew someone who could have helped them.

Hassler: It explains a lot because we did several remodels when I was growing up in this house and all the exposure that we had is just kind of wow. But they just about three weeks ago finally decided to participate and have it done.

Grant: So you'd said your dad was a heavy equipment operator. Is he going to be down there at the Parrot saying, "You're doing it wrong!"

Hassler: That was my grandfather. He is no longer with us, but my dad was a transporter. But he's since retired. Both my parents are retired. So if they're doing anything, they'll be down there as Looky-Lou's and probably complaining about the extra traffic.

Grant: You'd mentioned just when we first started about, uh, your mom. I just wanted to hear a little bit more about her. Was it her that was involved with BSW?

Hassler: It was. Like I said, she was born in Minnesota and they came out here. Her father was a heavy equipment operator and notorious for chasing big projects. Interesting fact about her. She, I think she went to 12 different schools in 12 years, so, I mean, they moved. And moved frequently to wherever the big money jobs were, if you will. And then finally settled here permanently when she was in her later years of high school. But had been in and out of Butte several times in the interim chasing other jobs. She originally started out as a hairdresser and decided that working with the developmentally disabled was rewarding and she did 35 years of that. And from the beginning of BSW, very early on. I can remember we would have family Christmases with the developmentally disabled at their place of residence and just became a, you know, normal everyday part of life. So yeah, now she's retired and grandkids are her main goal in life is to hang out and watch grandkids.

Grant: Wow, 35 years. Was she a higher up in the company by the end of it?

Hassler: I believe kind of purposely stayed at just the home management level because she wanted the direct interaction with the clients. "Clients" isn't really the right term, but essentially the residents. She wanted to stay involved at that one-on-one level. And if you went much higher than managing their residential facilities, you lost that aspect. And that was an important aspect to my mother.

Grant: Well, we usually ask people what they see in the future of Butte. And I guess in your mind, probably a lot of maintenance.

Hassler: I have a lot of questions in regards to maintenance. I mean, we have a lot of new technologies being implemented through the upcoming remedies. So there's a lot of questions to be answered. A lot of, you know, observation, I think learning how to maintain these new facilities and things like that. But change is good. I see. I mean, really you've heard it throughout this whole process is it's going to be a major transformation right in the heart of our city. And I hope that that kind of changes our image, if you will, going forward, makes us a little bit more inviting to non-residents. Um, and I'm very excited for my son to see this implemented. I mean, he's at an age where he can grasp it at this point in time and he can see it before we've moved anything and he definitely will be able to see the end product. So I'm excited is probably the best way to describe where we're at as a community. Because I think it's going to provide a lot of benefits, not just a healthier, safer community. I think there's going to be, you know, fringe benefits associated with that as well.

Jaap: How old is your son?

Hassler: He's eight years old. So yeah. So I should throw him out there. He's Fin Ray Hassler, Findlay Ray Hassler. He's a very science driven little fella. So this kind of fits right in. We did a lot of the restoration activities that the NRC programs put on and still have to take him back to sites because he thinks they're his trees, you know, wants to make sure that they're still there and they're thriving. So, yeah, it's fun with him. So I had him on remediation sites when he was about eight months old. So he's a little familiar with it, you know, he's, we'd bring them right out around the heavy equipment and let them watch and see. So he probably understands what I do more so than my parents.

Grant: So, yeah, you're hopeful then that this will bring some kind of transformation to Butte.

Hassler: Very hopeful. I hope at some point in time, when you Google Butte, the first thing you see isn't a superfund site. And I think that will help, you know, with economic development and a little bit more stability, try to provide some better jobs in our community, a little bit higher paying jobs, and hopefully we can start retaining some of our kids. I grew up here, raised here. A lot of the guys and people I grew up with there. They're not here anymore. And it's a little disheartening, you know, so I hoped that we can grow a little bit and keep some of our children around here.

Jaap: What were some of the public comments, um, when you guys were, uh, talking about the consent decree, when, you know, you said this is the package. What are some of those comments you received?

Hassler: A lot of comments in and around the waste-in-place remedy, you know, and had to do a lot of explaining as to how that works and that the ONM programs are perpetual. Um, a lot of questions in and around the Berkeley, which was hard for people to separate that from the BPSOUCD. I mean, it's still in your town, but it's a completely different aspect of Superfund. So that was probably the most trying aspect of dealing with the community is, you know, explaining that this doesn't really deal with the Berkeley. The Berkeley is a separate issue. West side soils was another one as to why. We got that a lot as to 'why is my house not currently eligible where they are on the Hill.' And groundwater. Groundwater was a contentious issue. We have Montana Tech. We have a lot of intelligent scientists here that were following this for many years as well. So we had a lot of concerns in and around the groundwater remedy and things like that, which all of this will have a direct impact on that as well. We're implementing two more control areas that will gather contaminated groundwater, treat it. So, I mean, those were the big ones and action levels. We heard quite a bit about action levels through the public participation process and all of our community coffees and things like. . . an explanation. And the explanation I gave was the same as here. We have the ability to address it on the human health basis, not so much just remedy. So those were the main points of concern that I dealt with through all the public engagement.

Jaap: And then you've kind of answered this, but maybe not directly. So do you think this cleanup we're getting, could you think of any better cleanup we could get? If it was totally your dream or do you think we're getting the best we could have possibly gotten?

Hassler: It is much further advanced than I ever dreamed it would have been. Like I said, in 2010, I would've never dreamed that we would get this far. And this holistic, I mean, it's a very complex site on numerous aspects of it. I mean, it's very complex and for it to be as advanced as it is through this CD, I find it very gratifying. So, um, can you always do more? I mean, yes, you can always do more, but then they kind of get to the point of diminishing returns. And I think we are truly, at that point, to the diminishing returns. So, I think it has a lot of benefits for us as a municipality outside of Superfund. I mean, we have our own stormwater issues as a municipality in regards to the state of Montana which this remedy kind of takes care of that for us, without having to burden our taxpayers in that regard as well. That's probably the biggest plum through this. When we talked about end-land uses, I mean, pretty sure the other ones mentioned the three legged stool that our main goal was, you know, to protect human health and the environment, provide a good end-land use and protect our taxpayers. For us to be able to go through this process as a PRP and not have to provide any of the funding for the remedy, I think is drastically overlooked by our community and is a very important aspect that we were able to get to this remedy without having to hinder our taxpayers with paying for it. Because we're every bit as responsible as Atlantic Richfield by the letter of the law.

Grant: Who can we credit for that?

Hassler: Uh, I would credit John Sesso. They did the position paper in 2004 that stated those three tenets and they stuck to them. And it's been through the negotiation process, more so directly with Atlantic Richfield, with their allocation agreement and things like that, that we were able to add that layer of protection with, through that, where the funding came from them, and where we run the programs. It has a benefit economically that way, as well. We now kind of control our own destiny. It's going to be in house staff that make sure that this operates the way it's supposed to in the forever.

Grant: Not to mention county jobs, I guess.

Hassler: County jobs. I mean, right now, we're at about 22 I want to say. And through this process, we've got to bring on a whole other RMAP crew, a few samplers. I'm looking for a project manager. By the time it's all said and done, we'll be upwards of, you know, 30 plus that are well-paying jobs that are strictly funded through the allocation agreement.

Grant: Thank you, ARCO.

Hassler: Thank you, Jon Sesso.

Jaap: Eric, thanks. Unless you have anything you want to add finally, but yeah, no we're done with you.

Hassler: Okay.

Grant: I guess, I did think of one more thing. With regard to the negotiations, you know, we've asked a couple of people now that were in the room, what it was like, and I've always just been looking for some story about some really tense moment where someone slammed a table or something, or, you know, did that happen? What was the negotiation actually like?

Hassler: They never really got to a full fledged screaming match or table pounding in the last go around. We did see a little bit of that, but more so on the construction side of things early on, when I came started with the negotiating team in like 08, 09. It was a little bit more contentious, a little bit more lively, but really everybody was committed to get to an end goal.

And so they weren't those full on disagreements and not a lot of hollering and screaming, a lot of caucuses. And I think that happened behind closed doors, but when the group was together as a whole, it was, I just didn't see that. It was a much more professional setting than people having full-on fits.

Jaap: Were people fighting in your caucus then?

Hassler: Not so much on Butte Silver Bow's end. We'd have our moments where it's like, where are they coming from on this? Where it would get a little bit animated and heated. But, um, for the most part you just didn't see that. You're pretty professional level at that stage. And everybody's also trying to protect their side and their interests. So you don't, you just didn't act that way.

Grant: Cool. Thanks.

Hassler: Sorry.

Jaap: You're not going to get your story.

Grant: It didn't happen.

Hassler: You just didn't see it. You knew. You could read body languages. Okay. So-and-so is pissed and is up against it. We may see some fireworks, but it just never really came to that. It was very professional.

Grant: Well, thanks, Eric.

Hassler: I probably should have mentioned my wife at some point in this.

Jaap: Yeah! Eric, would you please tell me about your wife?

Hassler: My wife is a born and raised Butte girl as well. Her maiden name was Karen Powley. We were high school sweethearts, essentially. We've been together since her junior year, my senior year. She is the assistant budget director for Butte Silver Bow, and a graduate of the U of M. And she wanted to kind of stay here and we were lucky enough that we were able to stay here.

Jaap: Is it hard? I know you guys don't work directly with each other, but is it hard working in the same building as your spouse?

Hassler: We don't work in the same building. So that's a plus. I'm at the Kelly mine. But it's interesting. Let's put it that way. I think at times we become a little more knowledgeable than is beneficial because you kind of know other aspects that aren't necessarily pertinent, but you do know. Um, but other than that, it's been good. I mean, she's been here for quite a while now, not quite as long as me, but I think between her two stints here, she's at about 10 years, 10, 12 years. So, but yeah, no, it's good. I don't want to move to the courthouse. I hope I don't have to move to the courthouse. I like the Kelly. So a little separation is also not a bad thing.

Jaap: Yeah, the auxiliary buildings are kind of nice. I feel everyone is pretty happy that they're not at home base. Unless you're at home base, then I'm sure it's fine.

Hassler: Thank you for letting me do that.

Grant: I'll move that to the beginning.

Jaap: Let me tell you about my wife. Tell us about yourself. I'll tell you about my wife.

[Laughter]