



Exploring Barriers to Accessing Evidence and Federal Resources for Equitable Green Infrastructure Implementation with Communities

[Link to recording](#)

Webinar Transcript

Rebecca Aicher ([00:00:00](#)):

Welcome everyone. It's wonderful that you could join us today. You should see that this webinar is recording. We do plan to share the recording of this on our webpage, and we will send it out to all registrants. So thank you for joining us for this event: Exploring barriers to accessing evidence and federal resources for equitable green infrastructure and nature-based solutions. We have a great set of panelists with us today, and we're thrilled that you all can join us. I know there's a lot happening in the world, lots of challenges for humanity and all the different things happening and it's a lot. But today for these next two hours we'll have an opportunity to focus on the opportunity to bring together all of you to talk with folks from organizations, community-based organizations, nonprofit organizations who are working with communities throughout the US on green infrastructure and nature-based solutions.

My name is Rebecca Aicher. I'm a project director with the American Association for the Advancement of Science's Center for Scientific Evidence in Public Issues. Also known as the AAAS EPI Center. The AAAS EPI Center's mission is to bring clear, concise, and actionable scientific evidence to decision makers. Today, we're honored to be hosting this conversation about green infrastructure and nature-based solutions in partnership with our colleagues from the US EPA, including Robyn DeYoung and Clark Wilson. This discussion will provide an opportunity to hear about successes, challenges, opportunities, barriers, and some of the lessons learned from the design and planning phases to implementation, to operations and maintenance of green infrastructure and nature-based solutions. A little bit about the logistics. We're all, you know, zoom experts at this point, but just a reminder that the chat is available. And we encourage all attendees to write your name and your affiliation in the chat.

We also have the Q&A box, and that's where we encourage you to submit questions for the panelists. If you see questions that you're enthusiastic to hear our panelists answer, please go ahead and upvote those questions so we know they're of interest to multiple audience members. We want this conversation and discussion to be interactive, so we encourage you to ask questions and share ideas. We have about two hours for the discussion today. We hope to get to as many questions as possible, but we can't promise we'll get to all the questions. Please do reach out to us at the AAAS EPI Center with any follow up questions, feedback, or information that you'd like to share. I'm honored to be the moderator for today's event to help facilitate our conversation and share these wonderful people and their perspectives.

We're delighted to have our panelists and all of you join us. So I quickly wanted to just review our agenda. It was sent out this morning to everyone. So hopefully you did see that we are currently in the section where I'm welcoming you and reviewing what's going to happen today. We'll next move to the discussion. The reason you're actually here and we have three broad topics to discuss today. Our first is

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around leveraging evidence, expertise and tools for advancing resiliency. We plan to spend about 35 minutes on that portion of the discussion. Then we'll move to accessing and utilizing federal funding sources for about 30 minutes. And then third, we'll discuss centering equity and the needs of frontline communities. We'll save about five minutes at the end to close out the discussion and share the link to the survey for feedback about this event.

We are also planning to host a second discussion with states and municipalities to share their perspectives and lessons learned around green infrastructure and nature-based solutions. And we will share that link with all of you in the chat multiple times today. So you won't miss it, and we'll be sure to email the link to you as well so you can register for that event. So I think we're ready to introduce our panelists. I will do that briefly. They all have great expertise to share, and I don't want to spend time taking too much of everyone's time in the introductions, but I would like to do a little introduction for everyone. So we have Dr. Angela Chalk, who is a fourth generation seventh ward resident of New Orleans. She's the founder and Executive Director of Healthy Community Services, a nonprofit organization located in the seventh ward of New Orleans. She is a past president for the Louisiana Public Health Association, former Secretary of the fifth district police community advisory board, a foundation for Louisiana Lead the Coast Cohort and Curriculum Advisory Committee, and a retired civil service employee with the Louisiana Department of Health. And Dr. Chalk recently completed the Doctor of Health Administration degree at the Virginia University of Lynchburg, which deserves a big congratulations.

Our next panelist to introduce is Paula Conolly, who is committed to expanding green storm water infrastructure in communities throughout North America. She's the director of the Green Infrastructure Leadership Exchange, a peer learning network of public sector, green infrastructure practitioners prior to the Exchange. She led policy initiatives for Philadelphia's renowned green city, clean waters program, helping to change business as usual to implement over 30 acres of green storm water infrastructure on vacant lands, parks, streets, and private property. Ms. Conolly also helped to establish a state-of-the-art drinking water protection program for the city of Philadelphia, helping to raise over \$3 million to improve and protect the Schuylkill River watershed.

Next, we can welcome Harriet Festing, who is the co-founder and executive director of the Anthropocene Alliance, the nation's largest coalition of frontline communities fighting for climate and environmental justice. The Alliance consists of 115 community-based organizations in 35 US states and territories, totaling more than a million people. 75% of A2's grassroots leaders represent mostly low income black, Latinx, or native American communities. And 78% of their leaders are women. They're united by their experience with failing water infrastructure, including flooding, sewage back-ups, groundwater depletion, contamination, and drought.

Next, we have Caroline Koch from the WaterNow Alliance. She's a water policy director and leads the organization's work in identifying and addressing policy and legal barriers to implementation of sustainable water management practices through toolkit development, legislative and administrative advocacy at local, state, and federal levels, hands on community support, and policy white papers. She

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was previously a partner at Lawyers for Clean Water representing environmental, nonprofit, organizational clients in federal citizen suit actions and impact litigation advocating for the protection of California's water and public trust resources.

Our fifth panelist is Tanner Yess, who is the co-founder of Groundwork Ohio River Valley, and he has led the creation of one of the nation's largest youth green workforce programs and brought Climate Safe Neighborhood to Cincinnati. Yess' passion is creating new pathways for diverse youth to access green careers. Tanner's Peace Corps service involved resource management and ecotourism. During graduate school Tanner helped form greater Cincinnati's Tri-state Trails Coalition. He is a National Park Service Mountains to Main Street Ambassador, Shift Emerging Leader and recipient of the 2018 Murray Center Rising Leader Award. We're honored to have you all for this panel. So enough from me, let's hear from all of you getting into our first topic: Leveraging evidence, expertise, and tools for advancing resiliency. So I think I'll start with the first question that we identified. What types of information other than funding are you and the communities you work with interested in, why have they been unable to access that information and put it to use? I think we'll start with Harriet.

Harriet Festing ([00:09:46](#)):

Thank you so much, Rebecca. And thank you so much, everyone for this opportunity. I'm honored here to represent many of the CBOs who were addressing, you know, seeking to incorporate green infrastructure into their communities. As Rebecca mentioned, we are an Alliance of 115 CBOs in 35 US states and territories. And what's interesting about our alliances. So because we started with flood impacted communities around 70% of our members are addressing flooding and we are both a network, a peer to peer learning network, a coalition that does advocacy, a granting and grant writing organization, and then most critical to this question, we act as an anchor organization, connecting our members to both pro bono resources and federal funding and non-federal funding. And so a large element of that at work is helping our members implement green infrastructure.

So we've had quite a lot of experience you know, seeking to answer your question by testing it out, Rebecca. Thus far, we've helped our members get around \$20 million worth of both direct cash and pro bono resources to their communities. And we have a target of getting another 60 million by 2025. And there's kind of two things that we've learned from that. And the sort of the word packaging and sequencing kind of summarize them. So the first is that our members need sciences, and they need legal services, and they need technical support, and they need policy support and communication support, and they need funding and they need it all packaged together. You can't have one without the other. And so you need to find a way of bringing them all together. And then the second thing is that support needs to be sequenced.

So a lot of our work is identifying pro bono resources. That first helps a community understand their risk, then helps them go through the planning process, then the design, then the implementation, then the maintenance. And of course they need funding both for themselves. As they coordinate the partners, they need the connections to their cities, and they need the financing to implement it. So why don't they have access to these resources? And they really don't, you know, it was quite incredible as we

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first got going, how few resources there are available to our members as they seek, to implement green infrastructure. Given, as you could tell from this call, this huge amount of interest in helping communities implement green infrastructure, why isn't it there for them, the support that they need. And I would say sort of three things. The first is this back to the issue that those services that do exist and the support that exists isn't coordinated. So they're having to go through multiple applications in order to get this beautiful package of the science, policy, and technical. The second is it's not scaled, so there's too many sorts of we will help three communities you know, type projects. And then the third is it's not co-designed with an understanding of the actual users. You have to actually work, if you're seeking to serve, for example, in our case, community-based organizations, you have to actually ask them how do we best design services that support them.

Rebecca Aicher ([00:13:21](#)):

Wonderful. Thank you, Harriet. Which I think is a nice way to connect up with Caroline.

Caroline Koch ([00:13:31](#)):

Yes, thanks. Thanks for that Harriet and Rebecca. It's good to see you all. I recognize some folks in the chat introducing themselves. So WaterNow, we're also an Alliance where our members are, those local decision makers, you know, raising their hand and voting on advancing sustainable climate, resilient water solutions for their communities, city councils, mayors, special district board members. We're about 700 members across 43 states though that fluctuates every election season, as you can imagine. And for WaterNow, our focus on green infrastructure really has been in that distributed space where we're talking about decentralized options that are implemented on property, not necessarily owned and controlled by the cities and utilities that are paying for them. Permeable pavement on big box parking lots, green roofs on commercial buildings, rain gardens, and bioswales on university and industrial campuses that really raise a lot of unique questions as compared to installing regional scale green infrastructure, which is very important of course on publicly owned properties.

So that's kind of in that context, in this distributed green infrastructure context, the number one resource need that we hear from our members is quantitative data of effectiveness and success. So, I'm very glad the EPI Center and Green Infrastructure Leadership Exchange are working on that because it is the need that we hear over and over again. A very close second are case studies of those successes. And WaterNow is working on that. And I can put in the chat our growing number of case studies. But I think, you know, it's the age-old adage. No one or very few want to go first. Folks want to go hundredth or 1000th, right? So that's another. And then to the reason why we may not be seeing that. That's a little bit more in the weeds, maybe than Harriet, is something that comes up a lot and I'm sure Paula will have more to say about this as well on the distributed side.

These are not really yet seen as capital water infrastructure projects. So they are, you know, they're treated as important public relations programs and something that happens on an annual operating budget side rather than on that capital planning and financing perspective. So the, because of that view, there is less of a quantitative role in gathering the evidence in the first place. But we do see when we do see that the data as being collected, it's often a very wide range of metrics that are used that can make

those comparisons in other communities challenging. Even when we have those good case studies, you know, folks are using a variety of metrics. And we've heard from a round table of water policy experts that WaterNow convened in partnership with the University of Irvine School of Law that having that standardized metrics data library would be very important to allow that more translatable data sharing. And then I'll just say my last point is no, actually I'll pause there.

Rebecca Aicher ([00:17:45](#)):

Well, that is really great. So I, that, you know, it's really helpful with specifics and telling us a little bit more about WaterNow Alliance and the mission. So very much appreciated. Angela, Dr. Chalk, are you up next?

Dr. Angela Chalk ([00:18:01](#)):

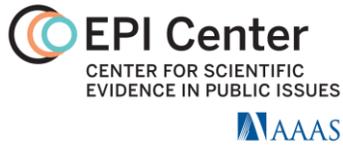
Yes. Thank you, Rebecca. I'll just follow up with what Caroline spoke about the metric points. So how are scientists engaging communities of color, particularly African American communities or, or indigenous communities. And I think that scientists need to approach that from a community participatory advantage and to respect the cultural and social norms. No one knows the community better than those folks who are living in those communities, as well as being sensitive to the needs of the community. Healthy Community Services is a part of Water Wise called South Collective in six neighborhoods; six community led organizations that are led by African American women. We've gone from three neighborhood champions to 151 neighborhood champions in seven years. We manage 160 projects on private and public land totaling a hundred thousand gallons of storm water per rain event.

And we recently had an eco benefits analysis done by Earth Economics. And so the eco benefit return on the investments of dollars that we've put into those green infrastructure projects and for proposed projects, are totally \$8 million. So how do communities of color in those organizations that work in those communities access federal funding, federal contracts, when we're constantly being told that we don't have the capacity, but yet we have a record of demonstrating that we actually have the capacity, but we don't meet the metrics that's designed by federal agencies that prevent us from applying or even have an access to understand what it is that we're applying for and working with agencies, members of those agencies. And so now with the Justice40 that the Biden administration has put in place, it has opened a lot of doors for community-based organizations to be able to participate at the federal level.

All of our projects are Healthy Community Services. Let me speak for Healthy Community Services now are all philanthropic supported. There are no taxpayer dollars involved. It's all community-led actions. And the latest project that we put in is on state property. So we're working with the state to we have, we have control of that property right now for the next five years, but that property is managing 35,000 gallons of stormwater management. And it's on a hurricane evacuation route. And so we're proud of that because this is what the community said that they wanted to see, because it was identified as a high flood prone area, as well as being an evacuation route. And so having this conversation with so many federal agencies on the line can begin to let agencies see the perspective from the community as well, the data that you have just don't put it on the shelf, it can be used, and it can be used in conjunction with what community organizations are doing. And I'll pause there.

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Rebecca Aicher ([00:21:33](#)):

Wonderful. Thank you. It is impressive what you're doing in New Orleans and the volume that you all are handling. Paula, are you ready?

Paula Conolly ([00:21:47](#)):

I'm ready. Yeah. Thank you. So I'm Paula, I'm the director of the Green Infrastructure Leadership Exchange, which we call the Exchange for short. We are a peer learning network of local government practitioners of green infrastructure, really seeking to work together to really focus on emergent learning, continuous learning and expanding the practice of green infrastructure, both at the city level, our community level and nationwide. So most of our folks that I'm working with are local government are mostly municipalities, mostly folks that are planners or policy folks engineers that are really looking to, to solve their to address their, their charge using green infrastructure. Really maybe to emphasize what Caroline said about what we hear from them. As far as what data and information they need, they need more basic information and research about green infrastructure which is really critical for them to back up their statements about green infrastructure and secure buy-in and specifically aggregated information on the life cycle costs of green infrastructure.

How long does it last and how much does it cost? We need better information on how green infrastructure responds to climate change. We need better information on the effect of green infrastructure on flooding mitigation. And I saw that someone posted a report from Dallas that starts to answer that very question. So appreciative of that better information on co-benefits, including energy use reduction in public health. And then just to you know, and then just basic information about the extent to which green infrastructure is even being implemented. We have no real baseline understanding of all of this work, all of this effort, all of this work being put into expanding use of green infrastructure, and we don't really know what progress we're making from a national perspective. So really emphasizing looking at the bird's eye view in addition to the local view of how we're doing as a country and being able to measure progress moving forward, none of that is really happening the way it needs to be.

I will also say that there's a lot of great research that's underway. EPA has very good information on the connection between green infrastructure and groundwater quality. The water research foundation has information about with their international BMP database, which is instrumental in providing an understanding of the impact of green infrastructure on water quality universities are doing great work. Drexel has some really interesting work around the connection of GSI and crime reduction. But I think what we really need is a national research agenda to tie everything together and to provide a roadmap for moving forward. And I'll stop.

Rebecca Aicher ([00:24:54](#)):

Thank you. This is all fantastic. And I know things are going by quickly in the chat, so I will say to everyone and then Tanner, we'll get to you, sorry. I would just want everyone to know that we will make the information that you all are sharing in the chat available to all registrants. So we will take what's being shared in the chat and add that in. And we plan to share a one-page summary key takeaways from

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this discussion that will be publicly available. So information that you share in the chat, as you see it fly by will, will come to you. We also hope that we made the option to save the chat available to folks, but if that didn't happen, we'll collate everything for you. So apologies on the logistics while everything was just getting interesting on the topics. So Tanner, we're thrilled to have you and hear a little bit about the work that you have been doing and answering our first question.

Tanner Yess ([00:25:58](#)):

Absolutely. And speaking of logistics, I hope you can hear me. I am on phone and webcam and everything, so, yeah. Great. thank you for having me honored to be here with the panelists and the participants. Again, my name's Tanner Yess. I'm the co-executive director of Groundwork Ohio River Valley. Groundwork USA is a 20-city network of environmental justice nonprofits. We are born out of the National Park Service and the US EPA. We all know how it is about 2000 everybody. Oh man, we're not connecting with communities of color. We're not connecting with urban residents and diverse areas. What are we going to do? So the National Park Service and the US EPA started Groundwork and we are in urban areas throughout the city. We are our own independent 501C3 nonprofit. And we all look a little bit different, but we have a lot of technical support from say the US EPA or the National Park Service.

So we implore and utilize all of these strategies together with technical systems, plus our grassroots connections to basically connect programs, connect systems and try to basically break down the systems and barriers that people that keep people shut out from all of these things. So I would, when Ms. Chalk was talking, I was, you know, I was staffing my fingers and same with Caroline, everything about the data, the metrics connecting with the people. That's true, but I'll simply put it, do you like money, right? And can you connect green infrastructure to money? A close loop. An example that I'm talking about is our youth workforce builds, maintains whatever green infrastructure projects, immediately, your connecting people, youth residents, whoever to a resource that they, it's not that people in our communities don't understand what's going on. It's that it's not connected to their quality of life.

So if you connect these things to quality of life, through whatever you may do at the EPA or whatever, federal or entity you're at that's what I'm looking for. That's what I'm pushing you all to do to connect it to quality of life and the people who need most, especially we're looking at climate vulnerability, as it relates to the data. I'd love to see updated hundred-year flood maps. And we know none of that is real anymore. It matters. I'd love to see standardized metrics so I can push our council people, our city folks, our county folks, and say that these things should be integrated into code into workforce, into storm water practice, whatever it may be. And we do our part as Ms. Chalk was saying, the knowledge is there, the resources are there, the hustle is there, but connected to the quality of life and the priorities of people who are, especially in these areas, especially communities of color. And that's the key in what we're working towards, how we try to kind of break down the barriers and disrupt the systems that we're in.

Rebecca Aicher ([00:28:41](#)):

Yes. So thank you. This is all great. And I think a really wonderful starting point for this conversation. One of the questions that came in through the registration was really related to how do you communicate the benefits of green infrastructure and nature-based solutions to community members and decision makers? So since you all are experts in this, I'd love to hear from anyone who wants to share a little bit about how you have communicated the benefits.

Dr. Angela Chalk ([00:29:21](#)):

I'll jump in Rebecca, so for us, it requires building that relationship and having that trusted relationship. First of all with the community, I have the pleasure of working in living in the community in which I serve. And I say this all the time, folks come in with a large grand scheme of things by saying, we can do X, we can do Y and they're there for the moment, as long as the money is there. But believe me living the in, in a close community, like the seventh ward, if I don't get this right. And if those of us in the Water Wise South Collective don't get this right. Our neighbors will be working, will be knocking on outdoors. And so in order to have those dialogues with folks, now you have to leave communities with tangible assets.

You have to get out and speak with people and meet people where they, where they are in order to communicate this, because we know that those of us who are most affected and least likely to recover are communities of color. And so to get folks to understand their role in it, I don't care if you're a homeowner or a renter. All of us have a role to play in the climate issues that we're having, because those of us in communities of color, we suffer the effects greater than our counterparts. And so when you make it personal for people, and they begin to understand not only how this affects their doing their daily essential activities people understand and they get involved. And I just wanted to follow up with Tanner Healthy Community Services works closely with Groundworks New Orleans in helping yeah.

In helping to create that space for employment. And so we're intentional about hiring workforce development, training organizations that will pay high or high wages for young people to get into the green sector. And they do the work just as, as they're trained, just as a professional contractor would be, and they're doing the work and they are making a difference and it, and I'm seeing it. And so for organizations to reach out to these community workforce development organizations, it's right on point. I would put these young men up against any long-term construction person who honestly, when you talk about green infrastructure, they don't even know what green infrastructure is. It's a new term. And so I'll say in closing is that the key is engaging, and I always call it the three E's engaging, educating, and empowering people to make decisions that are best for them in their communities.

Rebecca Aicher ([00:32:24](#)):

Wonderful. Really, really helpful to hear that. Harriet.

Harriet Festing ([00:32:30](#)):

Yeah, I've got sort of a half answer in, in a way a half question. So when I was kind of looking at the questions and preparing for this, and there was a lot of for this event a lot of stuff about questions around information, my immediate gut reaction is we don't need more information. It's a distraction.

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We don't need a lot more research. We really need a focus on just get on delivery because we're having a real problem with delivery. And the amongst 115 members when I've talked about green infrastructure, I don't on the whole, most of the community leaders have don't know what green infrastructure is, but as soon as we show it to them, they know as that's what I want. And you know, and so it's just like, they, you know, they need solutions to the flooding and to the issues they're facing.

Dr. Angela Chalk ([00:34:03](#)):

Actually, once again, I'm blessed and fortunate because I'm working with researchers as a result of the American Geophysical Union relationship that I have. So we're studying the urban heat island effect. And so I would say to individuals, whether you're working in your official capacity to get out and meet with people in the community, I mean, the science of it for me is, okay, that's good, that's your technical expertise, but how do we put that into real, relatable terms? And so our urban heat island effect research study is also studying those social benefits with the reduction of crime, air quality. And we need scientists let's not get this twisted or mistaken. We need the scientists to support us in our theories so that we can actually draw from both experiences of both the community and the scientists. And we have to marry and complement each other.

Rebecca Aicher ([00:35:19](#)):

Go ahead, Paula.

Paula Conolly ([00:35:20](#)):

Okay. Sorry. I wasn't sure if, what order our hands were up, but I did want to say that I think that maybe the tension we're experiencing is that Caroline and I are representing maybe a slightly different audience working primarily with local government folks who are going up against their finance directors and having to make the case that green infrastructure is a better choice than maybe some historical, maybe traditional infrastructure. I'd love to show a finance director a picture of green infrastructure and have them get it, but they don't work that way. And I'm so glad to hear that communities do work that way. So I think the tension we're seeing might be that the audiences are slightly different. And then I guess I would just add, I'm not suggesting we need, I want to say that we don't need a whole bunch of data. We need a better data plan, a better research plan, so that we're all working towards the same goals and that we're really clear on where that's taking us. So, I'm not advocating for all data everywhere. I'm suggesting we need a better plan to work together to gather that data.

Caroline Koch ([00:36:34](#)):

Yeah. And I'll just say, I agree with everything Paula just said for WaterNow, the way we like to talk about it is that institutional muscle memory that, you know, water utilities and water managers have been doing things one way for a very long time. And we're asking them to do something new and that muscle memory can stick. And, you know, there, is a shift that we've seen somewhat, you know, it's moving kind of slowly, but I think to your question about the data gathering and one of the questions that was posed ahead of time about the tools out there, and maybe why they're not achieving everything that we would hope they are has to do with that muscle memory around using the tools that folks are comfortable with and using the data that have been used over the last 150 years.

Right. And there are a growing number of resources out there to conduct a triple bottom line analysis that are important for green infrastructure, to pencil out for the CFOs out there at the local level to shift it into these capital plans and put it on par with traditional approaches, which certainly are still needed. We have to, you know, do a hybrid of these. And I think the more that we can make those new tools visible and comfortable for people to be using will be an important way to kind of get past this, this data, and communication hurdle.

Dr. Angela Chalk ([00:38:28](#)):

And I'll just say following up with Caroline, I'd like to see where more agencies and scientists get out into the community and actually see there's nothing more rewarding to, than to physically be in the area of which you're studying. You know, I have a public health background. I'm not going to pretend that I know the science of things. I can relate it to the public health benefits or the public health detriments to populations, but I don't know how to calculate this. And so what is it that I'm even reading when it's put in a report or a tool? And I think that's where we need to combine and work together as opposed to working in our own disciplines and become more interdisciplinary with this work and Paula I'm all for national database to see what folks are doing. So let me just put my hand up and say, if anybody wants to do that project and can find some funding for it, give me a call.

Rebecca Aicher ([00:39:37](#)):

That's a really nice segue. We saw a question come in from one of our participants that asked for Tanner and other panelists, are you measuring environmental and economic benefits or ecosystems services and curious if anyone is making those measurements from the communities they're working with.

Tanner Yess ([00:40:00](#)):

Absolutely. It's just thrown in the chat. Not only are we doing it, our organization, our youth employees are doing it. Our young adult green workforce is doing it as part of their training. They're learning how to map for learning about the impacts of their installation and putting it all out there. So a little bit back to the data point too, it's obvious I'm pro data and science. It's not that we, it's the convolution. It's not finding the right data for the right grant or the right process etcetera. That's what we're looking at. And then furthermore I think you've heard this a couple times. It's making sure residents have the ability to advocate and add this data into their toolkit or arsenal when they're trying to make their push. Something is far more effective if resident and youth are up to date with their kind of local knowledge plus arms with the scientific and the judicial or legislation, whatever terminology that they might need when we're advocating for stuff.

So the data is great. But the last thing I ever want to do is go into a neighborhood and study them again with no action. So if there's no action tied to it, we're not going to do it. You heard Dr. Chalk say, we need to see stuff too. We need to be on the ground project wise, income wise, quality of life wise, whatever it is, and ideally your systems or your grants, or whatever can start to connect these things. It's our job to connect HUD money to EPA money, to CDBG money, to local grant money, and then make sure that something's happening on the ground. And I will throw it out to all y'all who work on EJScreen

out there, like, well done, we use it. But I think it's hard for the layman to approach it. We use it. And what we do is take it and use it in our program and use it in our data recognition and what informs our priorities.

So helping the middle person like us learn working in the communities that we're at but also have some staff or expertise to translate your work, your data into action and provide funding when possible is the key. And then to the question, yeah, we've got to showcase everything, right? This is the fight, right? We're constantly fighting for resources and we, if we're not showcasing what we're doing, it doesn't really matter. So the kids are mapping the economic kind of value input is out there. And depending on the funder, depending on the program whatever it might be, that's how we're telling our story. And the data really helps that. And we've been able to use that as a way to set priorities, like I said, so it's just going the next step.

Rebecca Aicher ([00:42:27](#)):

If you have a second Tanner, could you tell us what EJ screen is and put a link to it in the chat after you tell us about it.

Tanner Yess ([00:42:36](#)):

I'll let someone else put a link to it, but it's a mapping package or an online web-based mapping platform that allows you to zoom into anywhere in the US, go to your house and look at different environmental indicators, different environmental threats, whether it be air quality flooding, stormwater runoff. Let me throw in a plug for all those cities who are under a federal consent decree because they're combined stormwater overflow. We need to have performance for green infrastructure projects to tell our city and our metropolitan sewer district, that these can be solutions just as well as putting a pipe somewhere. But anyway, back to EJ screen you can look at all these different metrics and indicators and then see how they interact with social indicators like race socioeconomic whatever it may be down to the census block.

And then I think beyond, so it's a great way to start a conversation. We go a little further and we say, here's the redlining maps in 1940 or whatever, what you think now, you know, it's like, and that is the type of thing where residents say, oh, this is what happened in my community. Potentially, I'm going to use this to advocate. I'm going to work with a partner like Groundwork or Dr. Chalk and say, we can raise our own voice and elevate these things get funding, create jobs for our community and not just have someone else of the outside coming in, putting these things in that don't line up with our culture or our values. We're going to do it from the ground up. So hopefully I answered some questions in between all that.

Rebecca Aicher ([00:44:02](#)):

Yes. Very, very helpful. Thank you. And thank you for putting the link to EJ screen from EPA. So this is already a wonderful discussion and to try and keep us moving along, I am going to move to our second topic, which is really about accessing and utilizing federal funding, which I think has started to come up a little bit in each of your talking points thus far. So, you know, we have this question and, you know, try

and highlight some of the barriers. So where have you encountered barriers when trying to access and use federal funds? I don't know if someone's ready to tackle that. Right, thanks. Go ahead.

Dr. Angela Chalk ([00:44:57](#)):

Yeah, let me, let me go because Healthy Community Services just received an award from the EPA and, oh my God. Let me just say once again, the program person that's assigned to our organization and the awards manager were just excellent in guiding me through this because it is daunting to go through the process of making sure that everything that you need, whether it's policy statements and they're worded correctly and it can be overwhelming for folks in small community organizations to have to meet the need of what federal agencies need to receive the funding. It's one thing to be awarded a grant, but to be able to actually receive the funding is another thing and that entire process, if you've never been through it. I just took the position of just being patient and sticking with it.

Because I knew that I couldn't, I had no choice in giving up so failure, wasn't an option I had to move forward with it because my community was looking for that funding and the opportunity to do what we needed to do with that grant. But it can be overwhelming and scary. And I'm just grateful that the folks that were working with me and I'm going to give them a little plug here, Diane Reese and Darrell Hobbs. So if you all know these ladies congratulate them for the work that they do. And that just made me realize and believe that other folks working in federal agencies even state agencies really do want to do what's right for the community and helping guide me through those policies and procedures and having been a civil service state civil service employee. I get it. So thank you to the folks who are working in those federal agencies, that's helping community organizations like mine to get through the process. Yeah. And I'm serious that's really heartfelt.

Rebecca Aicher ([00:47:20](#)):

Yes. And really helpful to hear that, you know, people can make a difference. Right. So being there and supporting someone can make the difference in them being able to use the money. Harriet, I see you're ready?

Harriet Festing ([00:47:35](#)):

Yeah. Thank you. So we've been helping our members, so we both help our members access pro bono, federal resources. We apply for funding and then distribute it. We help our members apply for funding by writing their grants for them. And we help our members advocate for funding to come directly to their cities. So we've kind of experimented with all those strategies and had some notable successes and many failures. I think one of my observations is that I know that many federal governments are trying to think right now how to reduce the barriers. And my advice would be that the barriers start way before the application process, you need to have a shovel ready project. You need to have the metrics and the data that I've just critiqued, but you do need to have them in, you know, developing a robust application, which means, so I spent a really fraught November trying to help one of our members in this case they had linked up with the city. So it was their city trying to submit a FEMA BRIC application in order to secure a community engineer in order to do engineering designs. And the conclusion was that they needed an engineer in order to do the application in order to get a community engineer. So you

just see the barriers start early. And, you know, my advice to those agencies that are thinking about it is to really focus around the technical assistance side of things, you know, prior to that application process, that would really reduce the barriers.

Paula Conolly ([00:49:28](#)):

Yeah. I second what Harriet says. And I think from the feedback that I'm getting, again from some of the local governments that we work with, I think you can bucket the barriers into three different categories. The first thing I'm hearing is that the backend requirements for reporting, invoicing, providing status updates, checking boxes are extremely onerous. One higher capacity organization that I spoke with said that for a recent project that combined SRF and WIFIA funds it was admittedly a very high-priced job, but the administrative costs for them to pull this off where it was about a million dollars to the actual organization. Now, it's saving them overall a lot of money, but the administrative burden is not to be disregarded. And they also said that while large organizations can handle that kind of administrative burden, the smaller and midsize communities that surround them, expressly avoid the opportunities because of the administrative burden.

So bucket number two is the lack of examples and experience for navigating these programs in terms of their use towards nature-based solutions. FEMA, as an example requires a benefit cost analysis for projects submitted through the BRIC program. And this is a challenge for communities seeking that funding expressly for nature-based solutions, because of the lack of solid examples and agreed upon methodology for assigning cost benefit to nature-based solutions. So it's a, you know, again, bucket number two is we're all new at this and we're trying to figure it out. And it's a barrier to try and do some of these applications without better case studies. And then the last bucket I've been hearing is that, and I think it relates maybe the most to some of what Harriet was saying is that most funding sources place the emphasis on funding projects, maybe rather than on supporting planning and program development.

And I think that has a number of different effects. Communities who know they have needs, but don't yet know what the solutions are, are already out of funding contention projects that are being funded aren't necessarily the best or most impactful they're the projects that are available. And there's a mismatch between how the funds are structured, which is on a project-by-project basis with communities who are seeking to fund multiple multi-year projects that are part of more comprehensive program packages. And this is maybe a missed opportunity for substantive change. And then lastly, I think while planning support is available through technical assistance, it does tend to be more of a second or a nice to have, or an afterthought than it is maybe the lead. And so just kind of thinking about how to restructure and rethink about what these programs could really do and really be capable of, I think, is something for us all to think about. And then lastly, I'll say that generally the feedback I get is that these programs are a force of good. And that it's been a tremendous opportunity for folks to access funding, low interest rate funding, and even no interest and grant loans. So I think that there's lots of great feedback for these programs as well.

Caroline Koch ([00:53:15](#)):

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And maybe I'll just follow up on Paula's point about funding opportunities for programmatic approaches multi-year projects. And again, from WaterNow's perspective around distributed infrastructure. Distributed green infrastructure in particular that is most often implemented through grant or rebate or incentive programs to get those private property owners to install these BMPs that we've been talking about that are not really receiving capital dollars, for example, they are eligible for SRF funds. But that's not widely understood that you can use SRF dollars to fund a rebate program. So I think there's lots of opportunities for the federal agencies, EPA, to provide states guidance on how they can update their intended use plans to better prioritize these, the distributed options that are really important to getting widespread adoption of green infrastructure, understanding how that's going to work, because it is certainly different, you know, getting an SRF loan for a rebate program is brand new.

We've been talking with some states about this, they're interested and they're like, I don't know how that works. So having some guidance from EPA I think would be really helpful on that. And then on the flip side there's a lack of dedicated funding for stormwater that I think we're all well aware of, but if you're going out and you're trying to get an SRF loan and you don't have a dedicated revenue stream, then you know, that's not an option. So I think working with communities to establish fees and I know New Orleans is working on this to help close that funding gap is really important. But also better understanding the local options for creating a portfolio of matching federal funds. Even if you're not getting a loan, you often need a local match for a grant program. So WaterNow works a lot on helping local utilities and cities understand that they can use their capital dollars to pay for these rebate programs as well. You know, it's going to take a mix of approaches to get to the scale that we need and helping again shift that thinking that this is infrastructure that is funded the same way that tunnels and pipelines are funded.

Rebecca Aicher ([00:56:03](#)):

So we had a question that came in through the registration that I think might be related here, which is how can EPA regions or other federal agency regions or centers better support some of these efforts that you all are talking about or opportunities to receive some of that federal funding?

Dr. Angela Chalk ([00:56:28](#)):

I would just say reach out to an organization that has a proven record. Often times we know that folks say that they can do a certain task, but that's not the reality of it. Things look nice on a nice handout or document, but again, I'm going to invite folks to visit the communities that they want to work in and see what's already happening and how we can best complement each other to move forward. We're working in silos and what my grandfather used to say, you're just constantly changing your till to no end. Work with communities, we're here. We are willing to learn, and it may be something that, let just say this, it's not always about the money, but if we can come out with a tangible asset that can give us that jump start, then that will lead us to have a baseline and a foundation to work from that we can then go out to search for money.



I'm going to be clear here, Healthy Community Services didn't always have funding. We started this program with our program, our urban ag program with people that I know that believed in me and gave me their money and with the support of Dillard University. So I want people to understand that I'm just an ordinary person, don't let the title and the degrees fool you. I'm just an ordinary person that has the voice to go out into the community to work. Because again, I live and work in the community that I serve, and I really can't get this wrong. Because I realize that there are so many people in the community that don't have the access to the things that I do. And so it's incumbent upon me a baby of the sixties to come back and bring that information to the community. You know, I live in a community where we had 4 centenarians and so people will stop me. And I'm okay with that, but we have to get this right, because if we don't, we're no longer going to be able to inhabit the planet and enjoy the cultural aspects of life here in Southeast Louisiana. So you know, make a connection with an organization. You have friends and communities, or even start with your own community. You know, you live and work in a community, start there.

Harriet Festing ([00:59:05](#)):

I'd love to add something. So when I started, I talked about, you know, our realization that most of our members and Angela is quite right, that, you know, people need a lot of help in the first instance. They might not be in the position where they can actually deliver and implement a large program. And so we realized that they needed a lot of support and they needed support shaped by their terms, you know, so they're firmly in the lead. And so we started quickly, Angela had mentioned her partnership with the American Geophysical Union. They have a program called the Thriving Earth Exchange, which matches pro bono scientists to communities. So 45 of our members are now matched, currently working with pro bono scientists through that phenomenal program. And we realized that they needed more than that. So then we found another program the Environmental Protection Network, which helps our members understand the sort of legal policy, technical challenges they face.

And so they're now coordinating their volunteers in coordination with the Thriving Earth Exchange. And then we found the Environmental Law Institute, which is already matching their members, lawyers to frontline communities. So we said, let's coordinate with you too. And so now let's bring the lawyers and everybody's coordinating. And then we find a fifth partner the Center for Applied Environmental Sciences, which is part of the Environmental Integrity Project which provides technical support. So every single one of our members can get this core suite of support and then Anthropocene Alliance does the grant writing the communications and kind of community organizing and media support side of things. And then what we do on top of that is layer the green infrastructure support. So we have partnerships with, for example, the Silver Jackets program of the Army Corps of Engineers. We find green infrastructure experts either through the SEA Grant program or the American Planning Association. We bring in this package of support and we would love to work with EPA and any other federal agencies, because often our biggest challenge is knowing who to pick up the phone to in order to get influence and connectivity. So, if anybody here wants to work with frontline communities we would love to support you, you know to help connect you to our members.

Rebecca Aicher ([01:01:44](#)):

That's really helpful. And part of what we've heard from a lot of people is about the importance of collaboration and building these partnerships. So the examples and information that you shared is a

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great connection. One spot that we have not spent much time talking about, and it has come in through the Q&A is around agriculture and the opportunities for green infrastructure and nature-based solutions in the broader agricultural world and community specifically about the funding question. There's a question. Have any of the presenters been able to tap into the private sector, carbon markets to act as private sector match? This is happening much more frequently on USDA agricultural projects that benefit water quality, increased resilience and mitigate multiple hazards concurrently. So I don't know if anyone, oh, Harriet you're ready.

Harriet Festing ([01:02:46](#)):

Oh, no, sorry. No.

Rebecca Aicher ([01:02:48](#)):

Oh, darn.

Dr. Angela Chalk ([01:02:52](#)):

We have an urban ag component and USDA is so broad and there are so many different aspects that you can reach through the USDA. So we have not been able to do that, I haven't even heard of that. What we are working on is we're partnering with another organization for hemp to use hemp as a resilient means for both insulation and building constructions of homes and incorporating that with nature-based solutions. The other part to our urban ag is again, engaging, educating, and empowering people to be able to have access to affordable food options. And so while we're delving off into this new area of hemp and resiliency, we have not, but I would be interested in learning the information to provide as resources because we are a resource organization, even if we don't use it, we want to be able to have that resource available to folks in our network to be able to point them in the right direction. So again, I'll put my information in the chat, if you whoever has asked that question, reach out to me to provide me some more information about it. Right now we're focusing on again, accessibility and affordability of food, and we're looking into the hemp portion of it to use for sustainable building projects.

Rebecca Aicher ([01:04:41](#)):

Thank you. That is a great example. So I think one question that this sort of helps bring up is multiple funding sources from multiple federal agencies. So have any of you been able to access or know of stories of communities that have been able to access funding from multiple federal agencies simultaneously? And can you speak to how that might work or the sequencing or how it was helpful?

Dr. Angela Chalk ([01:05:19](#)):

Let me take this again. I was just on a call yesterday with federal agencies and it was recommended that one to the max would be three agencies to work with because of the different rules and regulations and policies that each agency works with. So I'm beginning this journey with the federal agency with the EPA. And it was also advised not to apply multiple times with the same grant opportunity or the RFP because you need to be clear and concise in what you're doing. And so it sends a message that you're all over the place when applying for federal grants. And so we are going to be intentional on how we spend our time with getting federal resources, because we want to be able to deliver what it is we say that we

can deliver and not be all over the place. So that would be my recommendation to be able to not spread yourself too thinly.

Rebecca Aicher ([01:06:31](#)):

Yeah. Tanner, it looks like you might have some input there, too.

Tanner Yess ([01:06:36](#)):

Sure. Yeah. And, sometimes we're lucky enough to do that, you know, we're successful in the grant or program or whatever, but it brings us back to barrier questions for some agencies. I need a task agreement for some agencies, I need a cooperative agreement or SAM registration or an ASAP registration or right, whatever it may be. These are all things that make it a little tough. And then, of course there are different regions and contradictory regions, depending on what agency you're working with. So I think it's hard for especially startups or younger or new organizations to figure that all out. And then the ultimate goal of course, is using that to match or spur something else with the state, with the city, etcetera, if it's an appropriate matching fund scenario. So those are goals, but there is a lot of learning along the way.

Paula Conolly ([01:07:41](#)):

I'll just add that the examples that I've seen often combine state revolving funds and are starting to combine that with WIFIA funds. That's the combination that I'm starting to see most often. And part of why I think local governments are looking in that direction is because with WIFIA, the loan payments can be deferred for up to five years which keeps rate increases manageable and projects affordable. So that combination seems to be one that's working well for local governments. But I will add that the more, just to Angela's point, the more federal agencies you're working with, the more compounded the reporting requirements are and the backend requirements. So the level of complexity just is an exponential increase the more funding sources you're bringing in. And as far as I've seen the onus for that coordination is on the applicant. There's not as much of the coordination going on the federal and state side that I've seen. I think maybe that happens in some cases, but so yep.

Caroline Koch ([01:08:57](#)):

I think Harriet had her hand up next. I don't want to jump a line.

Harriet Festing ([01:09:03](#)):

So ours is slightly less direct and therefore perhaps less risky. So we have now a sort of pattern where we're working with communities and matching them up with the Army Corps of Engineers, Silver Jackets program, and that's pro bono support. And then we are helping them also match up with this National College Sea Grant program, which is pro bono support from NOAA and then helping them apply to the National Fish and Wildlife National Coastal Resilience Fund, which is a nonprofit with, you know, NOAA funding going into a nonprofit and then using that to help apply for federal funding. So it's a little less risky, but it's trying to tap into multiple opportunities out there and we are doing that kind of across multiple communities and seeing what we learned.

Caroline Koch ([01:09:57](#)):

Yeah. And maybe just another example of ways that we've seen some coordination around the HUD funding, community development block grant funding and section 108 loan guarantee program. I think there's been some recent efforts at the federal level to align those funding opportunities with WIFIA, which share eligibilities with SRF. So I think that is a really useful exercise. Especially as, you know, people look to those more non-traditional water infrastructure funding options like HUD and transportation dollars that the federal agencies can provide those crosswalks and guidance of where the overlaps are. So it would be great to see more of those types of even just a two pager. That's easy to understand from the federal side.

Rebecca Aicher ([01:11:00](#)):

Yeah, I think, and sorry, Paula, I just see that there's a question in the chat that says, do you think there is potential to align and streamline proposal processes and reporting across agency programs? So that's a great example of what is already out there and what could be expanded upon, so, Paula?

Paula Conolly ([01:11:22](#)):

Yeah, when I was preparing for this, I did hear from the folks that I was interviewing that some, and this is specific to SRF, but some SRF programs, state revolving fund programs are managed through the state ecological agency or the environmental agency. Some are managed through a financing authority and there's differences in how that works. My understanding is the programs that run through the state environmental agencies are much more about the enforcement aspect of Clean Water Act in compliance much more focused on what these projects are achieving, which of course is important. Whereas the programs that run through the financial authority maybe are a little bit better suited towards matching funds. And the folks that are in charge are really looking out for ways to match and leverage and stream funding sources together.

And so that might be a strategy in the case of SRF funds and other funding sources as well. You know, what resources at the state level are actually, you know, involved in distributing some of this funding? And maybe shifting more towards this finance authority approach as is, and maybe in addition to our, instead of the environmental you know, the environmental agencies so that might be a strategy to look at. And I don't know what the distribution is. But it does seem like there's some creative streamlining and leveraging of funding that is happening.

Rebecca Aicher ([01:13:15](#)):

Great. And this is really helpful. And I think hopefully this is interesting for the agency folks that are here to hear a little bit more from what it means to manage federal grants and challenges around that capacity challenge. We are doing fantastic on our time and moving right as our agenda had guided us. So I think it's about time to move into our third topic around centering equity and the needs of frontline communities. I've seen a couple of questions come in the Q&A box, and I do want to get to those, and I thought a good way to start. This is one of the things we've heard a fair amount is to think about and talk about what are the motivations or interest in green infrastructure and nature-based solutions. So what is it that communities or community-based organizations or NGOs, nonprofit organizations, are

hoping to accomplish with their green infrastructure and nature-based solutions? We know there are lots of motivations, so it'd be great to hear some examples and what that means. Please go ahead, Dr. Chalk.

Dr. Angela Chalk ([01:14:36](#)):

For us, it's need, it's just simple need and survival. When have a rain event that occurs, or it's predicted that we're going to have heavy rainfalls, it's become normal here in New Orleans to know which streets you're going to travel on, moving your car to the neutral ground or the median. And it becomes scary because you don't know if this is the one that will get into your home. And so the more people that we know are educated about nature-based solutions and green infrastructure we can begin to make that shift and we can help government to understand that we can't wait. We all know that government's response is slow, but if I'm at work and it rains and there are three feet or even four feet of water in the street. And literally that's the amount of water that can fall in a short period of time.

How do I get my kids from school? How do I get home? So it becomes a whole event for the community. So now you have, teachers having to stay at school. I mean, we saw the effects in Georgia with the snow where people were at the schools, they couldn't go anywhere. So the same thing happens here. When we have flood events, you can't go anywhere. And so we have to resolve the issues of an aged infrastructure in the 300 year old city, we have to marry the technology with what we know works, and we do know that the drains, the pumps and the canals work, but we need that nature based solution to complement that because we are living in more dense populations and we need the equal services benefits that comes from having green infrastructure interventions.

Rebecca Aicher ([01:16:48](#)):

Yeah, thank you. That is really meaningful and probably the most compelling argument for why these solutions are helpful.

Caroline Koch ([01:16:54](#)):

And maybe I'll just add to that point, that WaterNow regularly surveys our members and asks this very question, Rebecca. And between 2018 and our most recent survey last fall, climate change has gone from a lesser selected driver to the number one driver that people are identifying why they're choosing green infrastructure and other sustainable water options. So, it really highlights at a more national perspective exactly what Dr. Chalk is saying. I think one thing that we've seen too in case studies and examples, even just anecdotally, that we've tried to pull together is that there's never just one driver, right? Climate change is a very important one. But communities have identified at least a set of three reasons climate change, basement backups, and surface water quality, just as an example. So that we're really seeing, what we take away from that, is that there are multiple reasons and experiences of why you're choosing green infrastructure to capture the multiple benefits that these nature-based solutions can provide. So at least at an anecdotal level that's happening. We would like to see it happening a lot more. But we do see some examples of that.

Harriet Festing ([01:18:47](#)):

Maybe I could use this as the opportunity to just virtually introduce some of our leaders who are on this call, Gloria Horning from Higher Ground Pensacola in Florida, Ramona Taylor from Mississippi Citizens United for Prosperity (MCUP) in Duck Hill, Mississippi, Jackie Jones from Reedsville, Georgia, Susan Liley Citizens Committee for Flood Relief in DeSoto, Missouri, all community leaders, either their homes flooded directly or their neighbor's homes flooded directly just as Dr. Chalk said, just saw that absolutely necessity to find solutions. And perhaps my guess is, I mean, you know, they could say differently, but I think probably at least three of them did not know what green infrastructure was when they first connected to us. And then when we explained it to them, they said, absolutely, this is what we are seeking, and we're going to at least test it out. And so we have then been working with them to connect them up to agencies and support, and they're all getting some way along now to, you know, in some cases, federal funding, to actually both plan and implement, but that absolute, just clear understanding that we have to do something because our lives are in risk.

Rebecca Aicher ([01:20:18](#)):

Yeah. And then a question came in through the Q&A box that Tanner, I think you might be interested in answering if I followed along that the question is: Do you have any insight or advice for low income, environmental justice communities of color that are overshadowed by conventional big green organizations and their work in GSI? So how can more of the local communities get involved and link up with the organizations rather than the larger NGO organizations that are maybe using resources that don't always make it into the community, I think is what the question was getting at.

Tanner Yess ([01:21:11](#)):

Yeah. And surprise, surprise. It's not a level playing field. Right. and I'm sure the person who asked that question knows that and basically that's, the story of our group. It is having to blaze this new trail and new niche to fight for all of these things that aren't happening in our communities, or aren't connecting to the youth that we serve, or the neighborhoods that we serve. So that's not an easy answer. What I will say is that you have power and take advantage of the moment. Tokenization within this industry is vast. And your comfort, how you use that and manipulate that, is up to you. I won't tell you how to do that. But we do it quite effectively. And within the systems that you do know, in that you do have access to, I think those are the places to create change and start to break down barriers. For example, our cities youth work initiatives usually serve lower income kids of color, usually African American and you know, it's a summer job.

Maybe it goes nowhere. What we've done is connected it to real credentials, to real community projects for green infrastructure and to real stewardship, right. In people and communities when they're working on it. So that's just one system that if you're able to break in, and maybe you have knowledge of it, you can infuse some of the principles that we're talking about, but there is no easy answer as I'm sure that person knew as they asked the question. But I believe Dr. Chalk is tagged on that question as well.

Harriet Festing ([01:22:49](#)):

Please ask them to join Anthropocene Alliance. We would be absolutely honored to have them join. And our job is to get resources to grassroots, frontline groups, particularly the small, very grassroots groups.

And so, you know, what we do is help bring funding and resources directly to those community leaders. And we'd be honored to have them as a member. It's completely free, more than 50% of our operations budgets go straight out to our members. And then we also do the grant writing on top of that.

Dr. Angela Chalk ([01:23:22](#)):

And I'm going to add with this, when I started Healthy Community Services and there were all these organizations, and it can be intimidating those large organizations, and I just decided that I wasn't going to wait, invited to someone's table to get the work done. I made my own table. And so I would suggest if you can't join a group like Harriet's or someone else, make your own table and build it. And from there, you have to be true to what it is that you say you're going to do. Make your own table. That's all I can say with that one. If you're not getting what it is you need from large groups. Because large groups have a whole host of things that they have to deal with, but if you can start small and build it and do the real work that your community will recognize that's an option that you can always explore? I could have never imagined where I'm at doing the work that I'm doing now with this organization and the impact that it's had nationally, internationally. But most importantly, the fact that my neighbors believe in me and they allow me this opportunity to serve, and that is more rewarding than anything else that I could do in this sector.

Rebecca Aicher ([01:25:04](#)):

You're always a tough act to follow. There's not much I can say after you share what amazing work you've been doing in the community, and it really has a lasting impact. So thank you. And thank you for sharing with us. It's really generous of you to share. I think one of the other questions in a similar vein of thought here is around the impacts of green infrastructure and amplifying green gentrification and or displacement in communities and thinking about how you balance those tensions. So I'm curious if anyone wants to talk about that and share any thoughts, resources I believe there was a resource shared in the chat. But if anyone wants to add any comments, please do,

Dr. Angela Chalk ([01:26:08](#)):

I don't want to hog everything, but I'm going to go back to this. It's out of necessity. So as a community, we're not supposed to use the best practices to prevent us from flooding because of the fear of gentrification. And to me, when I think about that, I think that's ludicrous. It's just a two-edge sword that we have to balance, because if we don't do anything to mitigate flooding, then what are we working for? What are we living for? It just has to be a balance and New Orleans has seen a lot of gentrification and it has priced people out of their homes with as far as taxes. And again, I think that is a policy issue that we have to balance along with solving solutions for flooding, urban flooding. And I think that, well, I know that contractors need to be held accountable as they're building these houses that people can't afford based on the income of the neighborhood, they should be accountable.

And what we're finding is that contractors are just building willy nilly, and they just include in their cost any fines and penalties that they may incur as a result of just building in an unsustainable way. With that being said, I think that once a policy is set whether it is locally, statewide, or nationally, we really want to get a handle on mitigating against flooding. We have the technology, we have the know how to build

better and sustainable, incentivize it. And then hold those contractors that are not adhering to that, hold them accountable. I'm actually all for listing them in the paper, the way you used to do with drunk drivers. And let people know that this person is not acting responsible and how that impacts our communities and not just communities of color, because those folks who say my neighborhood doesn't flood well, your water is running downhill to those communities that are flooding. And so you have a role to play in this in mitigating flooding as well. So that's my soapbox issue.

Rebecca Aicher ([01:28:37](#)):

Yep. Very helpful. I'll just give a moment. I don't know if anyone on the panel wants to talk at all about their experience or planned efforts around green gentrification and understanding it, Paula.

Paula Conolly ([01:28:54](#)):

I guess again, from the local government perspective I think that there is some hesitancy towards implementing these solutions because of the unknowns around displacement and the potential for displacement. And I think what we're finding is that typically when these projects are being put in place, a lot of times, it is the water department or you know, the water utility that's implementing them, not always, of course, a lot of it's coming from the community as well. But I think that local governments need to be aware of the importance of planning these installations with communities so that what they're putting in place is informed by the community and what the community's needs are is really a first, very first step towards making sure that community is engaged.

The other thing that I think that local governments need to be aware of is reaching out towards partners who are thinking about displacement and have resources and knowledge about how to approach these things the right way. So again, reaching out beyond just their technical knowledge and really pulling in resources from outside that are working with, you know, workforce development, working with local jobs, working with community development organizations, so that these projects aren't put in place in isolation, they're being put in place with the support behind them in order to really prevent the kind of unfortunate consequences that are possible.

Tanner Yess ([01:30:42](#)):

Actually, I think I'm just echoing most of that at this point. Yes, these communities deserve that installation, that project. Yes. It should be intentionally designed. Can I stop the free market if this is a big attraction? No. So I think the lesson there is that climate change is not the final issue anymore, right? It's a transportation issue. It's a housing issue, it's a socioeconomic issue. It's all these things. So you can't look at the infrastructure or any of these climate solutions in a bubble. It's getting ahead of it. It's anticipating, that's working on policy throughout all levels of whatever government you're talking about. It's with local partners and your local community development corporations and making sure you're doing the best of your ability to fit something into the area that you're trying to do work and working with the residents there. So I agree.

Rebecca Aicher ([01:31:39](#)):

Thank you. Thank you all for sharing. This question came in and it's not precisely in this realm, but I think it does align with community engagement, which is: Are there any co-benefits other than storm water-related benefits that the local communities you work with were interested in?

Tanner Yess ([01:32:06](#)):

Yeah, that's probably not even near the top because it's communicating, like Dr. Chalk said, the benefits of these projects, way beyond the storm water, that might be the implementation tool or the funding mechanism. But is it providing quality of life? Is it providing recreation? That's where we start, never walk into a community and say let me tell you about green infrastructure. Let me tell you how we meet, or our city meets our consent decree standards or anything like that. No, it's like you like outdoor recreation system, do you like to make money, whatever it may be, identifying what the priorities of that community is, and then tying it into something like green infrastructure.

Paula Conolly ([01:32:44](#)):

And I'll just add to that. Yes. I think absolutely the carbon capture potential of these is really interesting to certain audiences, and the mitigation potential, the heat island mitigation potential is huge. In certain really high, dense, high urban areas. You know, the water supply recharge, you know, actually charging up water supply with green infrastructure is huge for especially water challenged and water supply challenged areas. Energy use reduction is something, you know, depending on maybe that's not important for a community as much as it might be for local utilities, but, you know, there's so much tremendous potential. And that's really why we're having this conversation I think at all. It's because it's not just about the water quality and the flooding though that's key. It's about, these are really crosscutting solutions that have tremendous value to communities as a whole.

Caroline Koch ([01:33:39](#)):

And I'll just quickly add a second for that point that Paula made around the water supply intersection. And the importance of remembering that these solutions do have a water supply and reuse and capture and use aspect that maybe isn't as highlighted, as much as it, it could be. And another silo to break down between local community groups and utilities because storm water and water supply managers are often separate and even within a local government and groups that are working on supply and flooding may not be talking to each other as well. So just to second Paula's point on that.

Harriet Festing ([01:34:34](#)):

I'll chip in, you know, the phenomenal thing about working with community leaders, community-based organizations, and many of the groups we work with are not community, they have no formal structure. They are groups of residents normally one single, typically determined woman who goes, we have to fix this, this is not acceptable, and just persistently goes to city hall meetings and starts to organize their neighbors. So many like Susan Nilly, Jackie Jones, many of the people who on this call are such people. And what I have found so inspiring is their instinctive understanding of the multi benefits of green infrastructure. And they're not just thinking of flooding, they're thinking of affordable housing, community land trusts, revitalizing the main street, getting in recreation. And there doesn't even need to be a kind of thing, it's just, they just get it. It's very, very inspiring.

And maybe we are also working with people who are in really quite extreme circumstances in the sense that they are waking up fearful that the water that maybe didn't enter their home last year might enter their home this year. It's extremely stressful. And we work with many community leaders who are living in hotels because they have been displaced. And so the organizing in itself in many ways has a way of helping them with their stress as they start to connect with other community leaders in the same situation and start to feel slightly less isolated. And as they start to get allies within their own community who are working with them.

Dr. Angela Chalk ([01:36:21](#)):

And I was going to mention it, Harriet. So first of all, we're community organization leaders, but we're not immune from any of the effects of climate change. And whether it's behavioral, mental health issues that we have, we have our own families that we're dealing with, that we have to tend to. And oftentimes our families are left untaken care of because we're taking care of the community. But with that said, realizing that all of us are part of a community. And realizing that we each have a role, whether it's in our professional capacity or our personal capacity as mothers, fathers, daughters, spouses we have a role to play in mitigating climate change and not all roles are for everyone. I mean, I don't deal with transportation issues, but I work with people who deal with transportation issues.

My organization doesn't focus on workforce development, but I work with organizations that deal with that highlight workforce development. And so I would say to those federal agencies, realize that all of us are not working in the same sector, but if you come across a funding opportunity and you see where there's a need for people to perhaps collaborate, you know, make that suggestion or that offer to those organizations that perhaps resources can be shared and it lessens the burden on the mental health capacity that leaders are facing in doing this work.

Rebecca Aicher ([01:38:14](#)):

Yeah. So I think as you sort of said, right, we have a fair amount of federal agency staff joining in for this. And so we had outlined this question on the agenda and that I'd like to hear from each of our panelists, what suggestions would you offer federal and state agencies regarding the Justice40 commitment to support frontline communities? So whoever is ready please, you know, feel free to start. But I think it is really interesting to hear.

Dr. Angela Chalk ([01:38:50](#)):

I'm going to say patience and knowing that these organizations are not used to what federal agencies are requiring. So I'm just going to say patience and just hold our hands because we need our hands to be held to walk through this process. If we're first-time grantees of federal funding or contracts just be patient with us, because know that we're, for the most part, we're trying to do the right thing for the right reasons. We just don't understand the federal lingo and the requirements that we know we have to get through just be patient with us. And if it requires holding our hands, just hold it. I'm not going to press charges against anyone for holding my hand.

Rebecca Aicher ([01:39:42](#)):

Harriet.

Harriet Festing ([01:39:44](#)):

Yeah. So three things, if there was someone in a different in each federal agency or each federal program who could just help with connectivity and kind of, I guess, you know, in wealthy communities it's influence. But that kind of sounds a little dodgy and I'm really just saying we need the door to be open and there are people in organizations who could just help open doors. So that's number one. The second is build off the good stuff that already exists. I'm a huge fan. For example, we talked a little bit about the need for multi-agency support teams, MASTs, and the Army Corps of Engineers Silver Jackets program for example, is a good example at where a community without having to fill in an application form can get access to multi-agency support in this case with the focus on flooding.

And it's a really good program. It's been under resourced, invest in it. The National Fish and Wildlife Foundation's various programs they're really well run. They allow nonprofits community-based organizations to apply. They allow for a pathway for communities to go from planning to design, to implementation, invest in it. And then my third thing is that our model and we call it Frontline Three Sixty, where we help our members connect to legal, scientific, technical, policy, support, communications, advocacy, grant writing. It perhaps operates a little bit a health system where you have one person who acts as the first point of contact to a community and then makes referrals with that one person still being the ally and the advocate on behalf of the community. We think we have a model that other partners could align with directly, but we also have a model that we think other federal agencies could learn from. So we don't want to, you know, do this on our own. We want to see other people, you know, using a similar model and share experiences.

Caroline Koch ([01:42:05](#)):

I think I'll go next if I'm in line to echo Harriet's point about investing in things that are working while also making opportunities for connectivity this might be a wonky suggestion, but there's a Municipal Ombudsman office in the EPA. And I think it probably is an underutilized resource that can be available to those smaller mid-sized utilities and cities who are working through these exact issues that we're talking about. So making sure that is fully staffed and invested in, I think would be my suggestion. And then second, which will probably not be of surprise to anyone, because I think I've already said this, but providing guidance to the states on how SRF programs can be implemented to prioritize green infrastructure and nature-based solutions, particularly those distributed options.

I think would be a really important mechanism for making sure that these dollars get to the communities that most need them. And those private property owners that are experiencing the impacts through those rebate programs. It's a long chain, but I think it's an important one. And then the third, and I think this has already come up as well, but the Clean Water Act and the Safe Drinking Water Act do allow for technical assistance to small and mid-sized communities and utilities. There are some barriers there that the technical assistance is somewhat limited. So I think there's opportunities to expand who can provide that technical assistance and who it can be provided to. So I think some

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updates, which would require legislation certainly, but there could be some opportunities to expanding the scope of technical assistance. That would be very helpful.

Paula Conolly ([01:44:30](#)):

I second everything that's been said and would just add really looking at reporting requirements, streamlining them, having more structured offerings and pro formas in terms of reporting can go a long way towards reducing burdens on communities that are going after some of these funding sources.

Tanner Yess ([01:44:53](#)):

I, again, agree. I'll add a couple things but just put some peace in it, right? Let's intentionally invest in kind of non-traditional groups, which is leadership of color. Whatever it may be, have been left out. And then allowance or guidance to layer this stuff right. So we've all talked about climate changes is multipronged every infrastructure project, be it green or not, should have social cohesion objectives. We have once in a generation opportunity to kind of re-patch our communities that have been split from interstates or whatever projects have going on. So I think all of these things, hopefully Justice40 can help to get that done.

Rebecca Aicher ([01:45:42](#)):

Great. I think that's really, really powerful information for folks to think about as this initiative continues to develop and hopefully money can start to come to communities.

Paula Conolly ([01:45:58](#)):

Can I just add one thing, Rebecca? You know, I guess I just wanted to draw the connections that in order to help frontline communities, I think you need more investment in nature-based solutions. They're a direct pathway towards addressing the needs of frontline communities as we've talked about. And there's a recent report out by a group called EPIC, Environmental Policy and Innovation Technology Center. Anyway, they looked at the amount of funding from state revolving funds, that's actually been spent on nature-based solutions nationally and all the money that's been spent historically only 3% has gone towards nature-based solutions. So while there there's a clear need there and there's a ton of recommendations for how it can happen. We've talked about some today. EPA has its own guidelines as to how more money can be directed towards nature-based solutions that are really creative and really on point yet the reality is that money isn't being directed at least through SRF to nature-based solutions, which are key to helping fund and to address the needs of frontline communities.

So there's a total disconnect between what the need is and where the money is being spent and that needs to be addressed. And maybe one of the key ways is for there actually to be a plan in place for how the spending will be spent on nature-based solutions and accountability for ensuring that that plan is followed.

Rebecca Aicher ([01:47:35](#)):

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Thank you. That was very welcome. We are kind of coming toward the end of our time. And so I wanted to close with a final question which will hopefully end us on a positive, which is, you know, could each of you share what you are most interested in or excited about the federal agency's interests in green infrastructure and nature-based solutions? We've shared a little bit of some of the challenges, so I think it would be great to hear what folks are most excited about.

Paula Conolly ([01:48:17](#)):

I can start. I think, yeah, I do agree. We've spent a lot of time on the negatives and there are a ton of positives. And what I've heard is that the programs that are most successful and again, my experience is more on the SRF, WIFIA side are the ones where the folks at the helm that are at the state level that are distributing this money, are working with communities to figure out creative solutions. And there's a ton of really great SRF administrators that are doing this. So trying to find different sources of funding and trying to meet communities where they are, and they're really being flexible in the face of what the different challenges are of communities. And so I'm seeing that happen and it's coming from the people. The people are the ones that are making this work. And I think that's what I'm really excited about seeing. And I think we just need more of that support for them in achieving what they're already setting out to do in many cases.

Dr. Angela Chalk ([01:49:22](#)):

I'm just going to follow Paula with that. At the end of the day, we know that all of us live and work in the communities and we're impacted by climate and weather events. And so my experiences thus far has been positive with the agency that I've worked with. But again, I would invite those decision makers or those folks who are grant reviewers and the folks who disperse the money to actually get out into the community to see the impact of what your decisions are and how they affect real people, because you're a part of the community as well. And then personally get involved in your own neighborhood, aside from where your professional duties are, to see how you can make that impact in your community. I promise you; you see a tree bud, or a native plant come up for the first time through the ground. You will be rewarded handsomely and realize, oh, this is my purpose. Not only just what would I do professionally, the opportunities that you have to be with nature, and you can make that change. And so I say, thank you for your so service in your federal agencies, because I know working for government is difficult. So thank you for all that you do.

Harriet Festing ([01:50:52](#)):

I'm happy to go next. I'm someone who gets excited easily. So this is easy for me. There's two things right now that I find particularly kind of whoa, big breakthrough for us, at least working with our members. The National Fish and Wildlife Foundation, thanks to the infrastructure bill, has tripled the amount of money that's in their National Coastal Resilience Fund which is, as I mentioned, is a phenomenal fund. Because it actually takes community members on a pathway, potentially not only in terms of using NFWF funding, but using the designs that they get to apply for federal funding. And we are helping 12 of our members. We've launched a grant writing slam. We have 45 incredible volunteers who have agreed to help 12 of our members submit application to that fund.

So that's kind of exciting where we'll get them into a pathway if we are successful with those applications. The second thing that I find exciting is that, you know, I have heard rumors of, please let them be right, advocacy going on here that some of the philanthropy foundations are starting to self-organize because they realize that there's an awful lot of money coming out of the infrastructure bill and that frontline communities need help actually tapping into that funding. And so they're starting to think about how they can best help frontline communities access that.

Rebecca Aicher ([01:52:24](#)):

Well, your enthusiasm is contagious Harriet, so thank you.

Caroline Koch ([01:52:29](#)):

I can go next. I think something that was very exciting for me to echo Harriet's comment about the federal funding that's come out recently in the, IJJA, but also not forgetting about the ARPA funding, that the treasury guidance specifically called out climate resilience and green infrastructure as eligible projects. And did clarify that you can use that funding for rebate and incentive programs to keep beating that drum. That was very exciting for us from WaterNow's perspective. And then to also see that infrastructure funding and the shift in the distribution between loans and grants and that more of those dollars can be allocated through grant and principal forgiveness loan. So, I think that's a really important policy change that we're watching how it gets implemented and to make sure that they are grants and principal forgiveness loans. But I think that's a really key way to, you know, get funds to where they need to go, which is exciting for me to see.

Rebecca Aicher ([01:53:54](#)):

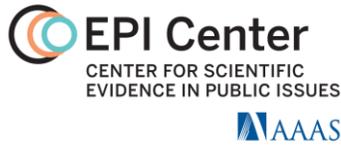
Go ahead, Tanner.

Tanner Yess ([01:53:56](#)):

Yeah. Again, also want to thank everyone, especially on the federal side for what they, and appreciate how difficult it is inside the system. Whatever you can do to keep the longevity of this going with the next administration or through the next election cycle or whatever, you know, better than me, but appreciative of right now working with EPA Environmental Justice office. And some of the other grants that we're applying for, I see a change in tenor about, yes, you have to correlate some of the source documents and so forth that you all produced or that are out there. But more of like, let's look at the residents are the experts here and let's use the resident power and what we're doing so that that's been noticed. And I think it's obviously intentional on your end about how you're putting things out and what we're responding to.

Rebecca Aicher ([01:54:59](#)):

Great. I'm not sure if Tanner was finished, but he looked a little frozen. So hopefully he had finished his thought there. We are coming to the close, but before you leave, we are going to put some really important links in the chat. So first of all, we always want feedback about how our conversations, events, webinars go. We are going to ask you to take a few minutes to fill out a quick survey for us. You should see that in the chat now. Additionally of course I want to thank all of our panelists for sharing



such wonderful expertise stories motivating us to, to be exceptional. Although Dr. Chalk claims she is not, we all can tell that she is so, you know, being there for our communities and doing what we can. Thank you to all of the participants that have been here.

This is a series. So our next event will be bringing panelists from state associations and municipalities to share their perspectives and expertise on this topic. So it will be a similar structure with a new set of panelists, and we welcome you all to join that. My colleague, Erin Saybolt has put that link in the chat as well. So please go ahead and register for that. I've learned so much that I really just want to thank everyone. And, we have been recording this, so we will post a recording of this on the AAAS EPI Center website. We'll share the link with everyone who registered for the event, along with a one-page summary of what we've heard and what is coming from these panelists and their expertise. So with that, I'll just say thank you again. And if you have any questions, please feel free to reach out to me or the AAAS EPI Center email address. And I think most of our panelists have shared their email addresses. So please do reach out to them with any connections that could be made. So thank you all very much.

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