# **Tribal Approaches to Address the Changing Climate**

Webcast Transcript

December 11, 2012

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# Welcome

#### Slides 1-2: Title Slides

Neelam Patel: Hello, my name is Neelam Patel from the U.S. EPA. And I'd like to welcome you on behalf of the Office of Air and Radiation and Office of Atmospheric Program. We are presenting to you a webcast on Tribal Approaches to Addressing the Changing Climate. Here in the Office of Atmospheric Program, we are home to two different climate groups, the Climate Change Division and the Climate Partnership Protection Division. And we've combined forces to present this webcast to you.

In our office, we are for programs to protect the ozone layer, address climate change and improve regional air quality. And these programs range from partnership programs such as the Green Power Partnership to regulatory efforts for rule making and doing climate analytical work.

We're hosting today's webinar to compliment similar series that we offer for other stakeholders at the state, local and industry representatives. And as we were developing this webcast, we reached out to a number of tribes and tribal organizations as well as colleagues across EPA to bring together the most useful information to you.

And so our main goal today for today's webcast is to bring you stories from tribes explaining how they are addressing greenhouse gas emissions, which is oftentimes considered a cause of climate change and the impacts from climate change which represents the affect side.

# Slide 3: Webcast Agenda

Neelam Patel: So for today's webcast agenda, you had the introduction from myself. We will have our official welcome from Beth Craig, the division director of the Climate Partnership Protection Division. And through her time at EPA, she's worked in many different levels and has worked closely with tribes.

We'll have Ann Marie Chischilly from the Institute for Tribal Environment Professionals talking about the tribal voice and the welcome and talking about tribes and climate change. I will then come to you and talk to you a little bit about the benefits of addressing the causes of climate change which we also refer to as climate mitigation followed by Sky Dawn Reed from Gila River Indian Community talking about the recycling initiative they have and how that relates to climate. Sky will be followed by Tracy Horst from the Choctaw Nation talking about their Healthy Energy Living Project which focuses on energy efficiency.

Then we're going to switch into the opportunities to work with tribes – sorry, tribes to work on climate change issues. And through this, we'll talk about funding opportunities and partnerships. Kathy Lynn from the University of Oregon will start us off followed by Garrit Voggesser who works with the National Wildlife Federation. And I had the opportunity to meet when I was on a panel with him and he does such an excellent job. He's here again to talk to us about strategies for funding.

And then after we talk about the funding, we'll move into how to adapt to climate change. And Lesley Jantarasami from the EPA Climate Change Division will give us a brief introduction into this. And we'll have a case study, Jeff Mears, who will talk about what the Oneida Nation of

Wisconsin is doing to address and integrate climate into their processes. And then at the end, we'll have a question and answer session.

Slide 4: GoToWebinar Software Logistics

Neelam Patel: So before we continue, we want to explain to you how this webcast software works called GoToMeeting. And I'm going to turn it over to Wendy Jaglom from ICF International who is helping us today.

Wendy Jaglom: Thank you, Neelam. So everybody will be muted throughout the webcast to minimize background noise. However, we do encourage you to submit questions and comments throughout the webcast in writing. And we'll tell you how to do that on the next slide.

PDF and audio files of today's session – oops, sorry. Can you go back a slide?

Neelam Patel: Sure.

Wendy Jaglom: So PDF and audio files of this session will be made available online in a couple of weeks at the URL that's appearing on your slide. And if you have any technical difficulties during the webinar, please feel free to e-mail me at wendy.jaglom@icfi.com.

Slide 5: Questions (GoToWebinar)

Wendy Jaglom: Next slide, please. As I mentioned, we encourage you to submit questions throughout the webcast using the GoToWebinar question pane. And as shown on this slide now, you can simply enter your question into the box and hit "Send". We will comply all of the questions and then ask them at the end of the webcast during the Q&A session. But again, we encourage you to submit those questions throughout the webcast.

And if you could please include the name of the presenter you would like to answer your question. And that will help us direct the question at the – at the end.

Slide 6: Optional Feedback (GoToWebinar)

Wendy Jaglom: Next slide. So last thing is at the end of the webcast, a pop-up window will appear when you exit GoToWebinar. And we love to hear your feedback about the webcast. So if you could please take a few minutes to respond to the optional questions and provide your feedback, we'd appreciate that.

Next slide.

Slide 7: Tribal Approaches to Address the Changing Climate

Neelam Patel: Thank you. And now we will have Beth Craig start off with our welcome.

Elizabeth Craig: Good afternoon, everyone. Thank you so much for joining us for this webinar. I want to echo what Neelam said earlier that one of the things we wanted to do in bringing everyone together was to give you an opportunity to hear from other tribes about the work that they are doing. But also to share the tools and the resources that are available to tribes to work in the areas of climate change either on mitigation issues or on adaptation issues.

It's very exciting to see the number of individuals who registered for this webinar. I guess we're close to 140 individuals who are on the line. But I wanted to give you a little bit of background on who was interested in joining this. You know, obviously, we had over 80 tribal governments that signed up. Now, you know, as we know once you register, you're not – you know, there may be some people who may not join us at the beginning. There are about 15 other tribal organizations. And then there are a group of federal employees who are part of the – part of the discussion today. And some of them are EPA's staff that work with tribes who want to make sure that we're hearing all the same story and will be helpful to tribes who are not part of this call in the future, as well as about seven or eight states and some local governments and some from – some individuals from universities.

One of the things that I think is going to be very – I think that you're going to be able to see during the next couple of hours is the examples of mitigation were selected from EPA's Climate Showcase Communities Program. And it was a two-year grant program in which we were able to support six tribes in terms of specific work they could do in greenhouse gas mitigation. Our asking a couple of those tribes to be part of – a part of this is not only are those projects replicable but also they are different. So we were able to show their work that comes at climate from different approaches.

EPA also has an agreement with ITEP to develop a national climate change adaptation planning training program as well as online resources and peer exchanges among tribes. So the Oneida Nation, which is going to be of Wisconsin that's going to be giving you the presentation later, they participated in one of ITEP's training workshops. And they are going to be describing their adaptation planning process and their philosophy and where it's taken them.

So we are hoping that through the next couple of hours, this will start connecting tribes in terms of what they've learned, giving all of you who have not started working in this area an opportunity to hear from others. But also, I think, a chance to just expand the dialogue on climate change.

So I want to say thank you to everyone for joining us. I think it's going to be a very exciting couple of hours. And I'm going to turn the baton back to Neelam. Thank you very much.

Neelam Patel: Thank you, Beth.

# **Tribes and Climate Change**

Neelam Patel: So we're going to move forward in our agenda. Next, we'll have Ann Marie from the Institute for Tribal Environmental Professionals opening the conversation with tribes and their – and their approach to climate the way tribes think about and how they fit into their climate picture. Ann Marie.

Ann Marie Chischilly: Thank you very much. Can you see my screen up? I'm just checking on that.

Wendy Jaglom: We can see it now.

Slide 1: Tribes and Climate Change

Ann Marie Chischilly: Perfect, OK. Thank you. Well, good morning, everyone or good afternoon in some parts of the country. My name is Ann Marie Chischilly. And I'm the Executive Director for the Institute for Tribal Environmental Professionals, or ITEP, here in Flagstaff, Arizona. And I just want to thank the presenter – the organizers for inviting me. Originally, Sue Wotkyns who is ITEP's Climate Change Manager was supposed to present this. But she's on unfortunate. She's not able to come today so I'm pinch hitting for her. So, welcome, I am – for those of you tribal folks, I am Diné from Navaho Nation. So I just want to say thank you for inviting me.

I've been here with ITEP for about a year and a half now and – but prior to that, I used to work with Gila River Indian Community down in Sacaton, Arizona as an attorney for water rights, environmental issues and renewables. So the combination of those all fit in with our topic areas today.

As far as – I'm going down. Let's see. There you go. Can you see my second slide, everyone?

Neelam Patel: Yes, we see it.

Slide 2: Tribes – Background Information

Ann Marie Chischilly: Perfect. OK. So my first slide is about these tribes. For those of you who don't know about tribes around the United States, we have 566 federally recognized tribes. And 229 of them are in Alaska. We make up about 1.7 percent of the total U.S. population. Most of their populations are concentrated in the west, the southwest and Midwest. But I would also say Alaska is well because almost half the tribes are there as well. And to try to – vary in population and reservation sites. However in Alaska, there are some differences there because a lot of tribes don't have their own reservations.

Slide 3: Impacts of Climate Change

Ann Marie Chischilly: So the impacts of climate change, as we all know are disproportionately impacting tribes in that tribes suffer the most because of many, many issues. Mostly because they're tied to the land they're in. Reservations have very distinct boundaries and so moving out of those boundaries is not really an option for a tribe. Tribes are also very dependent on

subsistence, livelihood, meaning they fish, they gather. So a lot of their food forces, not only for themselves but for their livestock, come from their land and their water.

There are also – tribes are also very close to their tribal ecological knowledge base, meaning, their spiritual sense. A lot of their stories, their customs, their religion, their ceremonies come from a tribal knowledge system that they pass on either orally – mostly orally but also passed on through writing in some cases now. So the diversity of how climate changes impacts tribes is much higher and – but all very different to tribes based on where you live.

# Slide 4: Challenges to Addressing Climate Change

Ann Marie Chischilly: Some of the challenges when you're addressing climate change that ITEP has – or just anyone has realized from the last couple of years is when it's finally come to the forefront. And so one of the issues that we see here most of the time is there's no one really to work on it. That's a bullet down at the bottom, it's limited time – staff time. And then how you start addressing this full topic of climate change when you're dealing with economic housing, health, and education, all these other big topic areas that tribes have to deal with as well. And then you have no one to work on it. And then where you start from. So these are all the issues that tribes deal with on a big – a big way. And so funding for the climate change has been very slow, I would say. But it's coming and looking at the vulnerability and some of the renewable energy aspects are important. Developing some of your plans for tribes, it will be vital to get some of those funding forces in the future.

And a big - I say from an attorney's viewpoint that one of the biggest issues is the jurisdictional boundaries and how treaty is supplying their reservations. And, again, how tribes are dealing with having to move or not move out of their boundary sources - boundary lines to gain their food or sources is a big - a big problem.

#### Slide 5: Approaches to Addressing Climate Change

Ann Marie Chischilly: So what ITEP is – and help tribes do is looking at the approaches of adjusting climate change is one of our – one of the mitigation is reasons is to focus on the cause, to reduce the amount of greenhouse gases in the atmosphere but also getting some benefits. We have a new program called the Tribal Clean Energy Resource Center that will help tribes look at their energy resources from here until the future.

We also have an adaptation course that focuses on the effect, minimizes the impacts and help tribes to look at how they can start adapting to the different climate change issues that are impacting them specifically. And we do this through courses that are set up regionally. So you can actually sit down with an instructor and start looking at developing a plan. And that's key, I believe, to addressing climate change. Because a lot of tribes right now, they already know about it. Climate change is not new to them. But planning for it is new. So having an integrated approach or mainstream into all the planning sources that you can reach is vital.

And we all know that climate change is very specific to your area. Someone from Alaska is going to have a much different plan than someone from Arizona. So developing your plan and then dealing with, not only your plan and climate but also your political climate, is going to be very important as well. So doing all those things is very important when you're looking at climate change.

# Slide 6: Contact Information

Ann Marie Chischilly: And if you need information, please we have our contact information here. Or you can find us on the web, just Google Institute for Tribal Environmental Professionals and we'll be happy to help you start that process.

All right, thank you for your time. I know it's very quick but I just want to say I hope everyone is doing well and happy holidays. Thank you.

# **Poll Question #1**

Neelam Patel: Thank you, Ann Marie. And I will reiterate one of the points that you made and that is that we are providing a lot of high level information. And if you're interested in hearing more about anything you hear, we encourage you to use the question function. So, now on your screen, you will see a poll question. We'll have a couple of these throughout the webcast. And this poll question is primarily targeting the tribes or tribal members, tribal government employees, or tribal representatives. We did have to start to find balance between our audience which is federal employees and the tribes themselves.

So, we did hear in Ann Marie's presentation that tribes have to deal with a number of competing priorities. And what we'd like to get a sense of is: what are your tribe's top two priorities? So please select any two of these responses. And we will be showing you the responses in just a moment.

If we could see what most people responded to, describing their top two priorities. And you can see on the screen that economic development is one of the top priorities followed closely by environment and climate change. And that actually is a great to hear. We're glad to see the climate is close to the top of the list. But the other reason that economic development and climate go hand in hand is because some of the benefits of investing in climate programs could help with your economic situation.

And, again, I encourage you to submit questions if you have thoughts on these responses from both the tribes themselves or from the federal employees that we have on the line.

# **Benefits of Addressing the Causes of Climate Change**

Slide 1: The Benefits of Addressing the Causes of Climate Change: Mitigation of Greenhouse Gases (GHGs)

Neelam Patel: And I'd like to then go to the next presentation which will be me. And I will be talking about the benefits of addressing the causes of climate change. And this is the mitigation of greenhouse gases, reducing greenhouse gas emission.

Slide 2: What is Mitigation?

Neelam Patel: So I'd like to just start off and echo something that Ann Marie mentioned. She talked about the causes and effect of climate. And one of the causes of climate is the greenhouse gases that are emitted into our – into our atmosphere. And so mitigation is really just reducing these greenhouse gases. And you can see that there are several different types than the primary gas...

Wendy Jaglom: Sorry – Neelam, sorry to interrupt but I'm not seeing your slide.

Neelam Patel: Oh, you're not. OK, thank you. Would you like to press control over?

Wendy Jaglom: I have.

Neelam Patel: And the next best thing to do is maybe for you to show the slides.

Wendy Jaglom: OK, sure.

Neelam Patel: And I apologize to everyone. But as I was saying, mitigation is really addressing the cause, the emissions themselves. And we try to focus on reducing these emissions when we talk about climate mitigation.

Slide 3: Benefits of Reducing Greenhouse Gas Emissions

Neelam Patel: So moving on to the benefits slide. I would just like to, you know, reiterate one of the things that Ann Marie said that tribes may not – but tribes are not the key contributors of greenhouse gases. And oftentimes, they – oftentimes, it may not seem worst and best thing in reducing emissions. But one of the things that are not – is not often thought when it comes to reducing greenhouse gas emissions is what – some of those additional benefits are from investing in reducing greenhouse gas emissions.

And, you know, when we were asking the poll question about the top two priorities for tribes, economic development was on the list. But, you know, that directly connects to some of the benefits of reducing your greenhouse gas emissions. For example, if you were trying to reduce energy use, there would be an opportunity to save money from the energy that you're not using. And that would be an additional benefit of reducing your greenhouse gas emissions in the energy efficiency sector. There's also the opportunity to use renewable energy sources which helps save like the energy prices for you because you are developing and producing your own energy.

So the main message to the folks – the listeners out there is that by reducing greenhouse gas emissions, you have the opportunity to achieve additional benefits such as improving your air

quality, having energy security and reliability when you're producing your own energy, saving money, and also improving health and the quality of life. And health wasn't the top – was number three on the list of tribal priorities. So there is an opportunity to tie those tribal priorities to reducing greenhouse gases.

# Slide 4: Planning Steps to Reduce Greenhouse Gas Emissions

Neelam Patel: Next slide, please. One of the questions that comes up then is how can I reduce greenhouse gases? And here on the slide, you see a list of different planning steps that you can pursue to reduce greenhouse gases.

Now, I want to go back to something and really laid out for us and that is the approach that tribes can take when trying to reduce greenhouse gases. There is definitely the integrated approach which means including climate and climate mitigation in all of your planning efforts across various tribal departments for priority issues. And then there's also the approach of addressing a specific issue and going through these steps in a systematic way so you can develop a specific program to reduce greenhouse gases. And those of the – these steps can be part of either one of those processes.

And the other processes and the other main point I want to make about this slide is that these different steps can be applied in different ways for different priorities. So definitely you might want to start off with finding funding and then start goals and select the type of program that you want to do. Other folks might already have a project in mind and then they'll pursue different steps. So you can start with any one of these steps when you're starting to think about either taking an integrated approach to reducing greenhouse gas emissions or a project specific approach.

#### Slide 5: Strategies to Reduce GHG Emissions

Neelam Patel: And on the next slide, you'll see different strategies that can be used to reduce greenhouse gases. There's energy efficiency which – and green building which can lead to energy savings in privately owned buildings and residential homes and on manufacturing sites and – but those are owned by the tribes. There's a direct benefit in terms of cost savings.

Another category of strategies to reduce greenhouse gas emissions is alternative energy. And there are different types of alternative energy in different levels. For example, solar you can use passive solar heaters at homes when they can be localized on a small scale or on a large scale. And other strategies which are tied to natural resources would be solid waste material diversion which we're going to hear from Gila River about today. And then also the way water is treated and transferred on tribal lands. And lastly, the land use in transportation sector which provides the opportunities to increase land cover which is change land covers, for example, increased forested land. And also change transportation patterns to reduce movement – vehicle movement on tribal lands. And each one of these has to be applied in a way that best suits the tribe's circumstances because there is so much variation amongst tribe.

# Slide 6-7: Key Resources, Contact Information

Neelam Patel: Next slide, please. We have some key resources that would be useful.

# **Poll Question #2**

Neelam Patel: And as I wrap up my conversation on the causes and what we also call mitigation, I'd like to open it up to a poll question that focuses on one of our key areas that we encourage tribes to invest in and that is energy efficiency or renewable energy. And so the question on your screen now says, what is your level of experience or familiarity with energy efficiency or renewable energy?

And if you could take a moment to wrap up your responses.

If you could show the responses, please.

And it looks like the level of experience really comes down to having considered it but not taking action due to lack of resources. And I think what we'll hear from Kathy Lynn and Garrit Voggesser, I think, will help in – in thinking about how to get the right resources and find the right partners to move forward. And I'm hoping that what we – the stories we hear from Tracy and Sky and Jeff will help us think about ways to creatively use resources to move programs forward so we can actually get them in place. So thank you for your responses.

# **Gila River Indian Community Recycling Initiative**

Neelam Patel: I'd like to now introduce Sky Dawn Reed from Gila River Indian Community to talk about how they have used their recycling program to reduce greenhouse gas emissions. And you'll hear Sky mention that reducing greenhouse gas emissions while it was an important objective of their program, they were actually able to focus and connect their program to the tribal priorities that we saw come from the earlier question such as economic development and health. Sky.

Sky Dawn Reed: Yes. Can you hear me?

Neelam Patel: Yes, I can hear you.

Sky Dawn Reed: OK, here we go.

OK.

Neelam Patel: And we now see your presentation.

Sky Dawn Reed: OK. I know, I'm just delayed.

OK. I am Sky Dawn Reed. I am the Environmental Quality Project Associate of Gila River Indian Community.

Neelam Patel: Sky?

Sky Dawn Reed: Yes.

Neelam Patel: I'm having a hard time hearing you, if you could speak more closely into the mic.

Sky Dawn Reed: OK.

Neelam Patel: Thank you, perfect.

Slide 1: Gila River Indian Community Recycling Initiative: Reducing Greenhouse Gases with Development of an Innovative Climate Projects Coordination Structure

Sky Dawn Reed: OK. I'm going to share with you today our experience working or initiating a recycling program. I have worked with the Gila River Indian Community since 2007. And I worked on several climate related program including the air quality, water quality and now with the waste program. I am – I was reminded, I am – my mother is Navajo. She's from the northern part of Arizona. My dad is actually from the Gila River Community so I'm an enrolled member. GRIC began their full-fledged recycling program in 2010.

Slide 2: Gila River Indian Community Background

Sky Dawn Reed: A little about the Gila River Indian Community background. It is homeland to the Akimel O'Odham and Pee Posh people. That is the Pima and Maricopan tribe. Highlighted in the map, the Gila River Community is circled with the few other facts listed below. We are the tenth largest nation in the United States and consist of 640 square miles.

### Slide 3: DEQ Programs

Sky Dawn Reed: And background about the Department of Environmental Quality within the Gila River Community. We have four regulatory programs including air quality, pesticides, water quality, and waste. And the waste program is the largest program. We have about – well, we have in total 25 fulltime employees. And we also include educational and environmental outreach and several – in all of these programs and hosts events throughout the year.

The programs here with the asterisk, I listed it on the bottom and include climate elements.

# Slide 4: GRIC Recycling Timeline

Sky Dawn Reed: Timeline of the recycling initiatives with the Gila River within the community, in 1995 when the department was established, we had a cardboard recycling program. And this was really targeted towards the community department and not so much focused on residents. In 2007, we carried that on through – we carry through that with the paper recycling program. And with that, we worked with a third-party or a private facility to turn our paper material into.

In 2008, we worked with an EPA program that would structure to the community based. And it was really geared toward toxic reduction. It succumb our staff out to the community and provided a list some information to provide to community members and to connect with them and ask the community members what their primary environmental concern would be. Although it didn't come out to be anything toxic related in particular, it went through recycling. A lot of people asked about recycling. When are we going to be getting it? Are we going to have blue bins like the outside city? And that led us to putting a proposal together in 2009 for the Climate Showcase Communities Program. And that provided us an opportunity to get resources to start a recycling initiative.

#### Slide 5: 2010 Climate Showcase Communities Grant

Sky Dawn Reed: So at the beginning of 2010, in January, we were able to provide some – a foundation to establish this residential recycling program. And this would be a recycling program geared towards the residential community not only department or public locations, but it would be for individual residents. This was also a key priority to reduce greenhouse gas emissions.

A number of other objectives listed and are included in their proposals and include the solar and energy feasibility study. We were able to provide support to our tribal projects development department which they were able to get one lead certified building which is highlighted or pictured here on the bottom. Of course the building really isn't green but that was included. And it also provided lead to education. And we exchanged – we bought CFL bulbs and were able to go out to the community to exchange the incandescent bulbs. Our air program also conducted a baseline greenhouse gas emissions inventory.

# Slide 6: GRIC Recycling Goals

Sky Dawn Reed: There were two key goals that were listed under the recycling program: reducing costs that are paid to off-community landfills was one of the priorities and also to reduce the waste stream. Although, we had in mind that this would become a tool to reduce emissions of greenhouse gases and mitigate the effect of the climate change, we found that of

course relating cost and trash or garbage to the community, they were able to resonate better with these two top goals.

And the picture here really quickly, you can see the outline of the community. And also letter A here in the middle is where Sacaton is located. And that was where we began our residential program. Letter B here, between Florence and Coolidge, that is where our key landfill is. And we take much of our trash to that one. And see at the very top, close to bordering Phoenix, is where our materials recovery facility is where we take our recyclables now.

# Slide 7: Pilot Program Objectives

Sky Dawn Reed: With the establishment of our pilot recycling program came many objectives. One of the key things we have to do was create a working partnership with the Department of Public Works. They were able to get it to assess our need where we were able to carry out a LEED characterization study. The first time we did it was in April 2010. And thereafter, we did one every year.

We began the program officially in District 3, Sacaton, as I had mentioned a little before. The map here in the corner, District 3 is located in the southeastern area. And we were able to go to District 2, our neighboring residential community as well.

We were – our department, the DEU is responsible for the educational component. We went out to the community to deliver why we wanted to recycle. We provided some benefit. We gave out brochures and magnets, a calendar, and what not. And we wanted people to remember to save clean materials. We want a clean paper, plastic, metal, glass, and of course, save natural resources.

# Slide 8: Coordination and Partnerships

Sky Dawn Reed: This slide here outlines a lot of the work that we have done. We had to coordinate partnerships and coordinate the activity. We had to work with the recycling center, the MRF, Materials Recovery Facility. They had actually provided an agreement for us for our pilot program, of course, the Department of Public Works. We reached out to Community Housing Facilities Maintenance and the Community Services Department to have these key representatives to be in the know about the program, what the program was about, why we wanted to implement it, and the benefits.

The community outreach is consisted of newspaper articles, billing statement where we were able to provide information to the Public Work Information. We did door-to-door visits and numerous presentations throughout the community with key stakeholders as listed in the slide.

# Slide 9: Curbside Residential Recycling Program

Sky Dawn Reed: With the establishment of the curbside with residential recycling, we began in this single district as highlighted in that map with nearly 700 residents. That was in May of 2011. Nearly a year later, we were able to expand to one additional district. With the Department of Public Works, we now have a bi-monthly pick up schedule – collection schedule. Meaning that, recycling is picked up every other Wednesday of the month. I think, there's two months where

we actually get three collections. Maybe there are two or it's like per week or bi-weekly collection. Within Sacaton, trash is picked up every Monday and Thursday.

That was one of the messages that we delivered to the community. We told the community that rather than have the community pay and bury eight tons of trash, every Monday, every Thursday, we want to recycle some of this because rather than having to pay \$30 per ton, the community can get paid \$30 per ton.

#### Slide 10: Impacts of GRIC Recycling

Sky Dawn Reed: Some of the key impacts of the GRIC Recycling Program, we were able to increase community actions not only get people to think about recycling, knowing what to recycle, what can be recycled, but we were able to give them a tangible resource. We were able to have these blue bins delivered to their home where they could actually save their material. This built the foundation for us to continue into the future. You know, the parents now will be able to, you know, give this message to their kids. Their kids will have this knowledge. And hopefully they'll carry out throughout the future. They have a better awareness of all environmental programs, clean air, water, maintaining clean waste or separating it from garbage.

# Slide 11: GRIC Recycling Results

Sky Dawn Reed: Some quick results as an overview. In the 18th month of the program, as of October 2012, our residents have recycled 117 tons of clean glass, metal, paper, and plastic. This is about 6 tons per month, excuse me. We have done this with 40 percent participation. It took us awhile to get to 40 percent participation but with that we have been able to save 327 metric tons of CO<sub>2</sub> equivalents.

Working with the EPA waste reduction model, or as referred to as the WARM – as WARM, this is equivalent to the amount of emissions released from 66 passenger vehicles or the amount of emissions released from energy used in 16 homes over the course of one year.

Initially, as a little bit of background information, it was a little intimidating pulling up this website or URL at the bottom here. Looking at all those figures and different components, it took me a while to actually input the numbers that I have. But it turned out to be pretty easy to use.

# Slide 12: Future Plans for GRIC Recycling Program

Sky Dawn Reed: Some of the future plans for the GRIC recycling program include updating our schedules. Many people have requested for an additional bin because they are collecting so much. We told them, you know, this wasn't possible because as it is, we have to provide one bin with one resident. So our last meeting with the Department of Public Works Director, he had agreed to be able to maybe as a trial run, go ahead and substitute one trash pickup in the pilot districts that we're working with. We are anticipating that will go through at the beginning of the New Year after January 2013. We want to extend one additional curbside to one additional district that would be the last one in District 1 in the very eastern part of the community.

We are also looking at other materials. Our fulltime recycling coordinator now is reaching with the schools to implement our printer cartridge recycling program, cooling recycling and really thinking about electronics.

#### Slide 13: Lessons Learned

Sky Dawn Reed: Some of the lessons learned, we wanted to stay creative and be creative in order to engage people and get people to recycle their materials, separate it, not be too burden – or I think too burdened to save clean materials. The doors were out which is really great. That bumped up our numbers quite a bit. What we could have done was to start small, maybe in a smaller district and then go bigger. We could have sat down with our key partner, the Public Work to set a joint goal and expectations. And then be able to celebrate the milestone achieved.

# Slide 14: Other Funding Resources:

Sky Dawn Reed: Some other funding resources are listed here which I know we will be hearing about shortly. One key are I wanted to highlight is working with the state, local and national recycling coalitions because they do have small grants ranging from \$500 to \$1000. That was a good networking resource. Some other ones are listed here as well, seasonal Home Depot and private funding. And finally, our budget allocations.

## Slide 15: Recycling Program Contact Information

Sky Dawn Reed: Here is the DEQ contact information if you have any other questions. Our address, phone number, my information is here, Rudy Mix, Janet Travis who is the fulltime recycling coordinator. Our e-mails and extensions are listed there. Thank you.

Neelam Patel: Thank you, Sky. That was an excellent example of a greenhouse gas mitigation program that has multiple other benefits. And, you know, as you said, the economic savings was the driver for that program. And so thank you for walking us through that program.

And I'd also like to highlight that DEQ Gila River Indian Community has taken an integrated approach. They have climate wrapped into their air quality work, their waste work, and their water work. And while Sky focused on primarily recycling program, they do have a few other excellent programs that are set to be replicated if other tribes were interested such as their greenhouse gas inventory which provides a baseline for greenhouse gases, their LED work and then the renewable – excuse me – the LEED building work and their renewable energy work.

So while not all tribes may have this full range of capacity that Gila River has, there are certainly some excellent lessons learned and resources that you provided us back. And if anyone has more questions for Sky on how she was able to run this program or how those funding opportunities or some of their communications and outreach strategies work, please send those questions in and we will try to answer them at the end of the webcast.

# **Choctaw Nation HELP**

Neelam Patel: I'd like to switch gears a little from the waste and recycling world to energy efficiency. We have Tracy Horst from Choctaw Nation who's going to talk about the energy efficiency initiative that they have – they've implemented throughout their healthcare clinics. And some of the innovations they've used to sustain this program. Tracy.

Tracy Horst: Good afternoon. Can everybody hear me OK?

Neelam Patel: We can.

Slide 1: Choctaw Nation HELP (Healthy Energy Living Project)

Tracy Horst: Great, OK. My name is Tracy Horst. I am the Director of Project Management and responsible for our Going Green Team here at the Choctaw Nation. We are located in the southeastern corner of the state of Oklahoma.

And just a little background for you – and I'm not getting my screen to advance. Are you there?

Neelam Patel: We're here.

Wendy Jaglom: Would be able to click or hit the arrow key?

Slide 2: Choctaw Nation Introduction

Tracy Horst: It does. All right, got it, thank you. Just a little bit of background about this. Our coverage area, we are not a reservation tribe. We are intertwined with the communities within southeastern Oklahoma. And our boundaries are 11,299 square miles. We bordered with Arkansas and Texas. And total tribal members – we have a little over 205,000 tribal members worldwide. The focus of our grant funding here was to take our health system which includes one hospital that we have built and maintained ourselves and seven health clinics which are outpatient clinics only located throughout those two and a half counties of the 11,400 square miles and make them more energy efficient.

Our hospital, as a little bit of background for you is about 145,000 square feet with 37 inpatient beds and 52 exam rooms. As far as the initial energy savings program, that was started through a grant that was funded through—excuse me—through the Department of Energy. It was funded to us in 2009. And what it really helped us to be able to do is get started and understand what we needed to do and where we needed to move forward. It has allowed us to fund an energy manager. And that energy manager has been invaluable to us. He was an ex-utility guy who came in and knew all the ins and outs of utilities and how they ran. And he was also a certified energy manager which allowed us to learn from him as far as—as far as the best ways are to save money from an energy perspective and what to look for and what to do. So we've learned a lot from him.

Also, he was able to come in and we have a little over 200 facilities within the Choctaw Nation that we owned or that we use. And we were able to do complete energy audits of all those facilities. And then from that, we were able to take the listing of all of the priorities that needed

to be done – or all of the projects that needed to be done and identify them and then prioritize them in order to identify where we needed to go with this.

# Slide 3: Our Energy Conservation History

Tracy Horst: As far as our energy conservation history then, we started out just trying to figure out what the best thing was for us to do and trying to determine what conservation measures that we should take. So our first go, we decided to focus on our tribal headquarters and look at HVAC system, riding in window replacements that we actually leased from one of the cities that we're located within an old cafeteria in Grow College. And the windows in it were not good and we didn't get that feeling around them. So that's where we decided to go with the window replacement. It made the morale of the employees much better because they didn't freeze in the winter and cooked in the summer quite so much. And not only that, but it also helped with our energy bills. So it was a – it was a dual purpose in fixing that one and it was a great way for us to get started.

Then we also went into the building and looked at areas of where insulation might be needed and added additional insulation. And I think I talked in the previous slide too about the energy audits that we did for the facility. And then I'll go into a little bit more detail in the next slide as to what those energy auditing entailed. We can kind of get an idea of where we went with that. But those are extremely important for us because they help with everything within a facility and help you get a good understanding of what the facility has and what it needs in order to be able to move forward and determine what retrofit should be done.

Now, along their lines, when we started making building – new construction on buildings, we looked at – and our construction staff and our Choctaw leaders are looking at options for how we can be more energy efficient in lighting and in windows and making sure that we have the correct amount of insulation. So it's been a great learning from that side of things because now rather than trying to go back and do things over and make sure that they are, we just do them right to begin with. And in that, of course, saves us a lot from that side of things. And it also helps save the environment.

# Slide 4: Building Retrofits to Date

Tracy Horst: I did mention a little bit the building retrofits that we've done to date. The hospital and we had one clinic and then three small facilities that are also in the same campus as the hospital. We did a lot of retrofits. And we actually went in with light leaders. We worked very over lit in the facilities themselves. And there are standards out there that you can get from utility companies and just different electricians in general because most electricians will come in and they will want to over light it. They'll be able to sell you more products that way and you'll be able to read very well. But it actually turns out that too much light can actually stress your eyes and make you even more tired than you would have suspected. And so we were able to actually reduce the number light bulbs we needed plus also make them more efficient so it was kind of a dual cleanup for us.

We also went in to bathrooms and rooms that weren't used on a regular basis and installed occupancy centers. And, therefore, the lights had to go off after about 15 minutes of non-use or non-movement. And then you weren't paying the utility bill for that as well.

Now, Durant Headquarters Facility, I have mentioned that a little bit about kind of how we got started. One of the other things that I didn't have in the previous slide is the vending machine misers. You can actually install this little miser, as they call it, into the vending machines. They will always keep the product cold and they will keep writing in there as well. But it has the ability to reduce the amount that's there until someone comes up and is in front of the machine or uses the machine. So it actually reduces the amount of energy that's required.

In our gaming facilities, we have about eight different facilities of various sizes. Some are extremely large, some are very small. And we went in to those facilities and we did light bulb replacement as well. And then we did the reduction in addition for that. And then the same with the community centers and we've been able to save a great amount there as well. And we even have a parking garage where we went in and reduced the amount of lightings. And no one in this instance – the headquarters facility we actually did during the week when people are around and so they had noticed the lighting differences. And the other facilities, we tried to do them on off hours or on weekends when there's less people around. And absolutely, no one really noticed that we had changed the lighting. So even though it had been much brighter before and we reduced the amount, the lights – the more efficient lights actually distribute the amounts of light in a better way. And so you reduced the levels of light but you don't do it so that it impacts anyone.

So my recommendation for you there is to go in and do that if you can at all when it's the off hours and you have less people around and you won't have any concerns at all.

And so we had seven community centers that we went in. And these community centers, we were able to do earlier this year. And based on some information that I will share with you too, we were able to make those light bulb replacement and reduction efforts actually free of charge to us. And that's through a program that we were able to get started with utility replacement — utility rebate. And I'll get in to that but that's how we have continued to fund this program once our grant funding has ended.

### Slide 5: Facility Audits

Tracy Horst: A little bit – but about the energy audits that I had previously referenced, the audits what we do is go in and we looked at the building from top to bottom. We looked at the type of the – and construction of the building. We looked at the internal load. And by that, I mean, what's the lighting? Is there refrigeration involved? Did they cook there? And the office equipment. How many people were in there? All of those different items in effect how energy efficient a building is and how much energy it's required to use.

You also look at the external loading, not includes the parking light, security lighting. Any motors that are a part of that which may be your hot water heating. It may be your central heating air, anything like that. You also go in and you look at your duct work. See what the thermostat settings are. You looked at and talked to people about their practices, you know, is it 90 degrees outside on a full June day and the air conditioners are set on 68 degrees but they propped up in the front door because they want some sunshine to come in the building. You know, if their habits aren't good then you have to look at that and be able to take that into effect as well.

You looked at the insulation within each facility to determine how much is or is not there. And then you'll take and you'll go back and you'll get the utility bills for the previous 12 months. You look at the amount of usage they have had and you look at the utility rate. And one other things that I have learned through this whole process is utility company is not responsible for providing you with the appropriate utility rate based upon your usage. They will – when you were set up, they will provide an energy rate and they will charge you for that.

If you have any questions or concerns about that utility rate or if the amount that you use goes up or you used it in like non-peak times or just peak times, they will not assist you with that unless you contact them. So my biggest recommendation for you is to make sure you get the close relationships with your utility companies and ask lots of questions whether it's gas, natural or propane, whether it's water, whether it's electricity itself, whatever the case maybe. But we've learned through the use of an energy manager is that they are more than happy to help you. It's just a matter of getting involved with them and making your contacts.

#### Slide 6: Benefits of the Program

Tracy Horst: Big benefits to this program have been awareness and education of our tribal members, our employees and even local people, the local communities. We've been able to share a lot of information with them. Your training sessions and newspaper articles and just meetings so we get together and share information. And people are very receptive to it so that's the great part. And then the most important part for the environment perspective is that we're reducing the amount of energy consumption that we're using and improving the greenhouse gases.

#### Slide 7: CSC Grant Initiatives

Tracy Horst: A little bit more then in a detail about our CSC grants. We were – we installed energy efficiency lighting in our hospital and in our clinics. We did an ongoing education with our employees to let them know what we were doing and reduced – and how we were going about to reduce the energy. And then we also, in that training, shared with them light bulbs that they could take home and use at home, the efficient light bulbs as well.

We're creating a white paper. And we've created a DVD explaining the whole thing that we had planned to send out to rural hospitals or small hospitals within the state of Oklahoma to share the information as well. If you're interested in anything like that, please at the end, you look at my contact information and I'll be happy to share with you the information we have.

We also completed an earth day. It's every day event with sixth graders. We've got about 700 kids show up for the event that day. And we'd point them various things that conservation including electrical usage and recycling just to get them started thinking. And it has worked out great because through our recycling program, we've had several schools contact us about recycling.

#### Slide 8: CSC Grant Results

Tracy Horst: The results of our grant are included here. You can see that we've filled our hour usage, we've reduced it by about 400,000 kilowatts per year with an estimated savings of \$21,500. And we can see our greenhouse reduction there as well.

#### Slide 9: Grant Continuation Plans

Tracy Horst: As far as how we plan to continue this, our DOE grant funding has ended our EPA grant – or funding is about to come to an end. What we've looked at is we've got our prioritization list of everything that we want to be able to do from an energy consumption perspective. We have started working with our utility companies. Contact your utility companies. They have many rates that are available or if you reduced the lighting level and you go to a more efficient bulb, if we use occupancy centers where you haven't used them before, even the vending machine misers, they will offer you a rebate based upon the amount of energy you reduced. It's in their best interest to reduce that energy usage as well because they can then share it in other locations they don't have to go out and build more resources for it as you increase. So they like to be able to help when you decrease.

What we're doing is when we go into a building, if we save, let's say, \$100,000 a year from the energy cost, then we would take 25 percent or \$25,000 plus the energy rebates that we would get back and we combine those to put it back into the fund. And then that, let's say, it's \$45,000. We take that \$45,000 and we put it towards other projects that are of the same type. That allows us when we go in, we purchase all the supplies. And usually the maintenance person in that facility can do all of the retrofits themselves. And then we just buy the supplies and then we rake the first year's benefits. And then after that, then the benefit savings will come out of there – it will reduce the amount of usage that they have.

There are standardized documented reductions out there that will explain to you if you reduced the wattage of a bulb from 125 to 23. It will tell you how much usage you can expect to reduce and that's – we just go with those standardized numbers.

#### Slide 10: Other Environmental Initiatives

Tracy Horst: A little bit about the other environmental initiatives we have going on. We do have a recycling facility. We were able to start two years ago. We, again, cover the whole 11,300 square miles that we are a part of. You can see listed there all the different types of materials that we recycle. We are very excited that in the first eight months of the year, we were able to recycle a million pounds of materials. And so far to date, through October – or through November, I'm sorry, we have recycled over 1.5 million pounds of materials.

We expect to open a second recycling facility. We are on – our current facility is on the southern border of our territory. We're looking at doing one on the northeastern side. And that will allow us to work with more businesses. We do – we are open to the public and so it's not just for tribal facilities. It's for anyone interested.

We've also adopted some highway areas. We've done some park cleanups and lake cleanups. We've conducted numerous recycling events. And then, like right now, we're in a middle of a used toy drive so that we can take the, good and gently loved is what we called them, toys and share them with others who don't have any.

## Slide 11: Questions

Tracy Horst: So I would take questions but I think they're saving questions for the end. I very much thank everyone for signing in today. And I appreciate the EPA for asking us to get

involved today. And hope that I would able to help share and pass on to you what we might not be able to do with others in the future. Thanks.

Neelam Patel: Great. Thank you, Tracy.

# Opportunities for Tribal Engagements in Climate Change Policies and Programs

Neelam Patel: And your message about working with utilities and developing a relationship to do an energy efficiency program was an excellent one that actually leads us into our next presentation by Kathy Lynn and Garrit Voggesser who will talk about funding opportunities and partnerships as an approach to getting these programs and moving forward for our tribes. So I'm going to turn it over to Kathy.

Kathy Lynn: Good morning. This is Kathy. I guess, good afternoon. Can everyone hear me?

Neelam Patel: Yes, we can.

Slide 1: Opportunities for Tribal Engagement in Climate Change Policies and Programs

Kathy Lynn: Great. Well, thank you very much again for the opportunity to participate in this webcast today. Garrit Voggesser and I are going to switch gears a little bit and talk about resources to help tribes engage in a whole range of climate change policies, programs, grants. And I'll start off just by giving a quick bit of background about the Pacific Northwest Tribal Climate Change Project and how that kind of led us into identifying various resources. And then I'll hand it over to Garrit for the second half of the presentation.

# Slide 2: PNW Tribal Climate Change Project

Kathy Lynn: The Pacific Northwest Tribal Climate Change Project forms a couple of years ago really to try to increase an understanding of the way as much climate change may affect the tribal culture and sovereignty and resources. And also to help make stronger connections between the various programs, funds, and ways in which tribes, you know, could participate in regional, national, and local climate change programs.

We facilitate a network of tribes primarily in the Pacific Northwest so it extends up to Alaska. And we have partners in the southwest and in different places. We also worked really closely with the Institute for Tribal Environmental Professionals who we have heard from earlier. I'm on a series of tribal climate change profile and those profiles, they're really out there to help build an understanding of the ways the tribes are really being innovative around climate change. And I'll just add in there that we have a number of profiles of tribal mitigation efforts, the Lummi Nation in Washington State and their renewable energy efforts, the Select Tribal Energy Program which was also an EPA Climate Change Showcase Communities Grant recipient. So those are the sorts of profiles that we have. And, again, we partner with the Institute for Tribal Environmental Professionals. And they have a full series of profiles as well.

#### Slide 3: Climate Considerations

Kathy Lynn: Some of the key areas that we focused on and the project are related to traditional knowledge in climate change, understanding the government – the government relationship and what that means in identifying opportunities to plan for climate change whether that's through adaptation or through reducing greenhouse gas emissions, and thinking about the various resources and sectors that may be affected by climate change that tribes are interested in

planning for. And I put this slide up because it was through these different areas that we were working that.

I had a number of conversations with Michelle Davis who is with the Environmental Protection Agency in Region 10 and works with Southeastern Alaskan Tribe. And she and I worked together to figure out well how do we help tribes access the resources and the funds that might be available to help in addressing climate change. So what we recognized was that there are very few climate specific grants out there that tribes may be eligible for. You know, very few climate specific grants out there on the whole. And so we wanted to think about all of the different sectors and areas that tribes could be accessing resources and grants for that would help in addressing the broad issues that climate change present to tribes.

# Slide 4: Tribal Climate Change Funding Guide

Kathy Lynn: And so with that, we have developed a tribal climate change funding guide. And the goal of the guide is to really provide up-to-date information on tribal – on climate change grants that tribes are eligible for. And so I'll talk for another minute or two and give a couple of examples. And then I'm actually going to switch my screen away from the PowerPoint to actually work to kind of give a demonstration of how the guide works. It's an online searchable database that you look things up by grants, meaning, by agency, you can sort by deadline. We have a number of categories that you can select in a dropdown. And then we've also tried to provide as much relevant information on funding amounts, eligibility and kind of details about the grant.

# Slide 5: Example: Administration for Native Americans ANA Grant Fund

Kathy Lynn: So a couple of examples that I'll provide before I go to the guide is just that it has — well, I'll start here. The Administration for Native Americans grant fund which is a program for the Departments of Human Services funded the Swinomish Tribe in Washington State to kick start their adaptation plan. And they put this up there because it's not a climate change specific grant and yet the goals of the grant promotes self-sufficiency for Native Americans through grant funding for community based project resulted in this very comprehensive and vulnerability assessment for the Swinomish as end in adaptation plan.

And, you know, it was a fairly large grant and those may not be very common. And yet I think what's important here is to really understand the ways in which going to maybe non-traditional or non-climate specific funding sources can help tribes in figuring where can we get started? Even with a much smaller grant, what can we get started with in doing? And so the Swinomish, for example, formed a really strong partnership with the University of Washington Climate Impacts Group which was able to provide a lot of the technical assistance in the assessment – the climate risk assessment. They had partnerships with the county and with other NGOs to really figure out how to leverage resources.

And so while, again, this Swinomish may have done a very comprehensive adaptation plan that — I think, thinking about the components that, you know, maybe there's enough funding just to do the vulnerability assessment. The Port Gamble S'Klallam Tribe and Jamestown S'Klallam Tribe in Washington State have those recently received Environmental Protection Agency IGAP funds. And they're just as much smaller grant funds but they're just using it to start their vulnerability

assessment so they can figure out whether our greatest risk from climate change and how that, you know, can they move forward to act on those.

#### Demonstration

Kathy Lynn: I'm going to switch now to the actual tribal climate change funding guide page which – first, I'm going to click over here. And on our website, if you click on the "Publications" tab, one of the very first links is directly to the Tribal Climate Change Funding Guide. So you can click on that and that will take you directly to this online searchable database. And when the screen comes up, what you see first is just all of the grants. And we have them in order of deadline. And so if you scroll through, you can see those. We have one that just recently passed and we have one that's due on Tuesday. And you can kind of scroll through to see what some of those upcoming grants are.

But that's not necessarily going to be the best way to use this funding guide because there's so much information in here. I think, right now, we have more than a hundred grant entries included in this. And I have a student here at the University of Oregon whose sole job is to continue to update this database with updated deadlines, with new grant information. I will also know that we have kept a lot of grants in here that were funded in the last year too that don't have specific deadlines for 2013 or 2014. But we wanted to keep them in here if they were funded in the last year or two to give tribes the sense of what kind of information or what kind of grant might be possible in the future. And also, we have included contact information – sorry about that. We have included contact information over here so that if it looks like a grant that might be of particular interest, you can find out who's that direct contact is. And even if the deadline is unknown, you might still be able to do some outreach to that – to that organization.

So to give a couple of examples of how it works, we could go here and we could look directly at the Environmental Protection Agency and see what grants are available through the EPA that might help tribes in addressing climate change. And so the grant is due in a couple of days. They're on environmental education next week or I should say – I'm sorry, in early January, the Environmental Justice Small Grant Program has a deadline upcoming that might be of interest to people. And, again, all of these entries are going to link directly to the grant information. And it will actually come up in another browser so that you don't lose your place of where you're at. Here's the information on the Environmental Justice Small Grant Program.

We've also included – they're not just agency grants. So you could go here and you could look at NGO grants, non-governmental organizations, and take a look at the kind of grants that might be available here. Now, most of these are unknown for 2013 but I did want to highlight a specific grant through the Climate Solutions University. And these grants are actually kind of come along with technical assistance to help tribes in climate change adaptation planning. They've had, I think, two years of funding thus far. Then that first tribe in Idaho was one of their – was one of the recipients. And it's a program where there's technical assistance to do the adaptation planning. And they have extended their deadline which was originally early in the fall. But I believe it's kind of open and maybe it's on a rolling basis right now. So if you're interested in technical assistance around adaptation planning, this might be a grant that you might be interested in taking a look at.

And then the last example I'll give is just to go into the category. And if you're specifically interested in mitigation – I'm going to reset this up here – you can submit for mitigation and see what comes up. And, again, so it's just an opportunity to kind of scroll through and see the various mitigation related grants that might be available. Or you could – you could the same thing for renewable energy. You could do the same thing for natural resources or fisheries or wildlife. We really wanted to, again, make this something that helps tribes identify relevant funding.

And I'll just throw out a reminder that if you have questions about how this works, you can type that into your chat browser. And we'll – I'm happy to answer questions about how the funding guide works at the end of the webcast.

Slide 6: Upcoming Grants

Kathy Lynn: So I'll switch back over here to the PowerPoint. I talked a little bit about some of these grants. So I'm going to just move to my last slide before I hand it over to Garrit.

Slide 7: NGO and Academic Partnerships

And this slide is really just focused on thinking about leveraging resources to support climate change program, looking to entities that have trainings and workshops like the Institute for Tribal Environmental Professionals. And resources to assist in climate change planning might really help to leverage with limited resources.

I also wanted to highlight the American Indian Alaska Native Climate Change Working Group which is convened by Daniel Wildcat with Haskell Indian Nations University. And it's comprised of many tribal colleges and agencies. But many of the tribal college students that have participated in this working group have gone on to do research through their academic program with their tribes to look at a range of climate change issues. And so it's just – again, when you're thinking about how do – how do we leverage limited resources, there's nothing like an enthusiastic motivated student to really help get the legwork done.

And in the final partnership, I was going to mention is the Intertribal Timber Council in the last year has formed a research subcommittee. And many of the – they've done a survey and an initial report identifying research days and climate change is something that came up as a strong need. And so, you know, again, if a lot of climate change planning depends on an understanding of a specific climate impact, that might be another group to consider in, you know, in contacting and leveraging resources.

So with that, I am going to continue to click through the slides but hand it over to Garrit.

Garrit Voggesser: Thanks, Kathy. Can everyone hear me?

Neelam Patel: Yes, we can.

Slide 8: Federal Funding Trends and Opportunities

Garrit Voggesser: OK. So, what I want to do is the portion of my presentation today is to bounce off of what Kathy just presented that talk about some of the challenges, the opportunities and strategies for tribal engagement of federal agencies and resources when it comes to climate

adaptation. And I think we have to be honest that there are big challenges we know that's going on with the federal budget in the fiscal cliff.

So, on this slide what I want to give you a sense of is where the Bureau of Indian Affairs stands in comparison to the other interior agencies. Essentially what I'm showing you here with this slide is that between 2004 and 2012 when the Interior Department's budget increases, the BIA often gets the smallest increase overall. If you can go to the next slide.

## Slide 9: BIA Trust Natural Resource Funding

Garrit Voggesser: So, I'm sure many of you are familiar with the Bureau of Indian Affairs Trust Natural Resource Program. It funds all the wide array of activities that many tribes undertake in regards to wildlife conservation, history, treaty rights and protection, water quantity and quality, forestry. So this is the main Bureau of Indian Affairs funding source for tribal natural resource program. And it's the largest base funding provider.

But as reflected to the previous as well, if we go back 1999, the BIA did a report and found that tribes has \$356 million from that annual needs for natural resource management and conservation. So, again, that's a challenge that's existed and it continues to exist. And we just need to be aware of that. Over the last 12 years, Trust Natural Resources Program has remained essentially flat. And so the tribal needs have multiplied.

So with this kind of somber news, what are the opportunities? I think, this really points the need to figure out creatively how to integrate climate change planning into tribal – normal tribal natural resource planning efforts like integrated resource management plan. If that's a process your tribe goes through, you need to think creatively about how to work climate change into that and adaptation strategies. And if your staff doesn't have the capacity or the technical expertise to integrate that, then it's a good opportunity to reach out to agency or university or NGO partners to help integrate that into your planning effort. Next, tribes can use their Trust Natural Resource Funding for climate change adaptation planning. So, if you're integrating that with your natural resources management plan, that can be part of your normal practices.

And why I want to give this back on and what the state of play is with the BIA budget and the Trust Natural Resource Program is that this is information, I think, everyone should be aware of, that when you're meeting with the Interior Department or Bureau of Indian Affairs at the regional or national level, this can provide your justifications for saying, "Hey, we need more support to adapt to climate change."

Let's go to the next slide, please.

#### Slide 10: DOI Cooperative Landscape Conservation

Garrit Voggesser: The Department of Interior Cooperative Landscape Conservation Program is essentially the largest interior program for funding climate adaptation. So this is a program that started in 2009 shortly after the new administration came in for its first term. And it's meant to provide resources to the various Interior Department agencies to address the scientific and data gaps for dealing with climate change and to implement solutions to climate change.

Here, what I wanted to show you is where BIA once again stands in the scheme of things when it comes to this funding source this cooperative land conservation program. As you can see, tribes haven't really gotten much money. There's some overlap funding from FY '11 into FY '12, \$419,000. In the grant scheme of things, that would mean that in fiscal year '12 when they got \$219,000, the BIA did help tribes. Tribes officially got about .25 percent of the total funding earmarks for this climate change funding program.

And what did BIA do with that money? Part of it was to run to hire and keep on board BIA climate change coordinator. They also made \$319,000 available for a competitive grant program for tribes to conduct vulnerability assessments and adaptation plans for climate change activities.

Two other things I wanted to point out and this will kind of give you some knowledge moving into a slide that I'm going to give the mic to Kathy to explain. But USGS, you can see them now. USGS is the main hub for what are called the Climate Science Centers or CSCs. And the Fish and Wildlife Service is the main hub for what are called the Landscape Conservation Cooperatives or LCCs which Kathy will mention in a minute.

But also I want to point out all these agencies for a couple of reasons. And the amount of funding that the BIA will have will be limited. But tribes should look at reaching out to the other agencies to leverage funding and support, talking to your local BLM office, Bureau of Reclamation or USGS office or talking to the National Office and telling them about your need or support for climate change adaptation is a – is a way to leverage funding and partnerships.

# Slide 11: DOI Cooperative Landscape Conservation

Garrit Voggesser: Next slide, please. So with this slide, what I wanted to show – again, we're still looking at the BOI and Cooperative Landscape Conservation Program. So some ongoing activities undertaken by National Wildlife Federation, National Congress of American Indians, National Tribal and Environmental Council, and other partners is – I just want to make you aware of this information so that you have opportunities to use this information, elevate your voice and gain increased support for tribes to address climate change from federal agencies.

So we look at that total pot of money that's been going into this CLC program. And we broke down the money based on the anchorage managed by each agency. What that showed us is that tribes should actually be getting about 27.4 million of that total pot of 175 million. So that's an argument that can be used to, you know, to talk to your interior agencies about your increased need for support. And those agencies can talk about these agencies as the amount of anchorage that you own and manage, the growing population of Indian country compared to the declining rural populations in many parts of the Midwest and west, and also the abundant habitat and wildlife on tribal lands compared to other places. These are all justifications for why you should get increased support.

NTEC and NCAI last year asked for 8.55 million out of that total pot of 175 million as based on 5 percent which was looking at tribal land of anchorage and population. That's what they felt comfortable asking for.

Next, another thing that you can be used to justify your needs for support of the federal trust responsibility, the federal government has a trust responsibility to you that to help you manage

and protect your resources. And so morally, they have an obligation to assist you in your efforts to adapt to climate change.

Another piece of information, the Secretarial Order 3289 issued by Ken Salazar in 2009 outlined his climate change policy setting the course of protecting that nation's natural resources, cultural heritage, and tribal lands and resources from the effects of climate change. In addition to that executive order, he said, he required in depth government to government consultation with tribes. He supports substantial participation by tribes and their climate change activities. So the Interior Secretary issued an order requiring all of the agencies to fully engage and support tribes.

And then just a quick piece of information in this year's administration's budget request, they've asked for \$800,000 in that Cooperative Landscape Conservation Program for the BIA to help tribes with climate change.

Next slide. Now back to you, Kathy.

Slide 12: DOI Cooperative Landscape Conservation

Neelam Patel: Yes. And actually in the interest of time, it might be best for the audience to take a look at the slide and just review it on their own to the presentations they received. So, if we can move on to the next slide, please.

# Slide 13: Department of Energy Tribal Energy Program

Garrit Voggesser: OK. So with that, I'll move a little more rapidly then. So also, there's funding available from the federal agencies for mitigation. Many of you may be familiar with the Department of Energy Travel Energy Program which funds renewable energy projects. They funded about 130 projects at over 31 -- \$30 million. In 2012, they funded 17 projects at 6 million. And on average over the last 15 years, they funded – they've had about \$5 million a year per tribe.

#### Slide 14: DOI New Energy Frontier Initiative

Garrit Voggesser: Let's go to the next slide. There's also an initiative by the Department of Interior called the New Energy Frontier initiative. I won't belabor the point but essentially the goal is to increase the amount of renewable energy on public and tribal lands. You can see, though, the overall funding for DOI and BIA. It's an average of about 6 million for the last couple of years. And their request this year is for 6 million as well.

# Slide 15: Some Final Thoughts

Garrit Voggesser: Let's go to the next slide. Just some final thoughts. As I mentioned, tribal funding for climate adaptation and support from the federal agencies is a trust responsibility. I think, Kathy very effectively pointed out that — pointed out that we need to think creatively when seeking funding. She gave the example of the ANA grant that the Swinomish use. Many of the sources you're going to find to fund your climate efforts may not be something you traditionally think of as a natural resource management or climate funding grant.

Next, climate change doesn't obey jurisdictional boundaries or borders and neither should the strategies and partnerships. Partnerships are critical. You need to reach out to the states, to

localities, to universities, to NGOs, to leverage support and technical expertise that you may need to, you know, develop your climate adaptation plans.

And then finally, by reaching out to those partners, you're going to find ways to leverage resources. You may have a \$30,000 grant and USGS may be willing to kick in another \$15,000 to help you. And that's a good way to, you know, augment the amount of money you have for climate adaptation.

# Slide 16: For More Information

Garrit Voggesser: And the next slide is just the concluding slide. If you need any additional information from us, Kathy right, there's our contact info.

Neelam Patel: Thank you, Garrit and Kathy. And I apologize for skipping over the conservation slide. But hopefully the audience will be able to use that and some of the messages from Tracy Horst's presentation on working with utilities to plan out how they can get money to implement climate programs.

# **Poll Question #3**

Neelam Patel: So I'm going to go to our next poll question which reads aside from funding sources, what type of assistance would be most helpful for tribes? And we would like the tribes on the line to select one response, technical assistance, one and one support, dedicated climate staff at the tribal level, scientific expertise and climate change projections, and lastly was learning from peers, from others. You could select one.

And if we can show those results.

Thank you. And it looks like what would be most useful is dedicated climate staff closely followed by technical assistance. And I'm hoping that some of the example that Kathy pointed out in the last presentation provide good resources for technical assistance along with the resources listed in tribe.

# **Tribal Approaches to Adapt to Climate Change Impacts**

Neelam Patel: We'd like to now move to the next presentation which will be by Lesley Jantarasami. And I would just like to know if everyone can see her slides. Are you able to...

Wendy Jaglom: It's not actually seeing them.

Neelam Patel: You're not, OK. Then if – Wendy, if you could please present her slides?

Wendy Jaglom: Sure.

Neelam Patel: OK, great. And I want to turn it over to Lesley.

Slide 1: Tribal Approaches to Adapt to Climate Change Impacts

Lesley Jantarasami: Hi, everyone. I'm Lesley Jantarasami. I am from U.S. EPA's Climate Change Division which is a sister division to Neelam. And I'm here today just to give a brief introduction to tribal approaches to planning for and adapting to climate change.

Because we want to spend most of our time hearing from Jeff on how the United Nations has purged adaptation, I purposely won't be going into much detail on the topics or concepts introduced. But I hope that these slides can be used as a reference for you to go back through after this webcast and follow some of the web links that I provided and include for more information about any of the topics that interest you or that you have questions about.

Slide 2: What is Adaptation?

Lesley Jantarasami: So starting off on the same page, when we talk about adaptation, we're defining as preparing for the projected changes in climate.

Slide 3: Adaptation Planning Process

Lesley Jantarasami: And for the next slide, every tribe will have unique needs and approaches to preparing for climate change. There can't be a one size fits all planning process. I've listed five broad steps here but they're just one example of an approach your tribal government could take. And the steps can vary depending on the resources and goals that each tribe has for their adaptation planning process.

And the next slide, I'm going to briefly introduce each of the steps. But I first wanted to draw your attention to the key resources listed at the bottom of the slide where you can go for more information. And so on the right hand side is the preparing for climate change guidebook that was written jointly by the Climate Impacts Group at the University of Washington and government of King County Washington and a non-profit group ICLEI Local Governments for Sustainability. So although this guidebook is a few years old it's still an excellent resource. And it provides a lot of detail on the individual steps of an adaptation planning process. It includes a few more than what I've listed here but it's still a great resource.

And then on the left is an adaptation's plan template that ITEP uses in their training course for adaptation planning. And this is something that Ann Marie spoke earlier about. And it's available

upon request from Sue Wotkyns at ITEP who's the Climate Program Manager. And her e-mail address is here on the slide.

So ideally everyone, who would have the benefit of taking one ITEP's training courses on adaptation. And then use the template. But even on its own, I think, it's a helpful starting place for tribal government thinking about writing an adaptation plan.

# Slide 4: Build and maintain support to prepare for climate change

Lesley Jantarasami: So for the next slide, just starting off on the – on this one example of an adaptation planning process, it's important to first get the support of your tribal council and leadership for doing this effort. Engaging the wider tribal community during the planning process is also key for getting people to understanding why taking action is important and to help ensure the long term success of the plan.

One suggestion for building and maintaining support of tribal leadership and the community is to communicate the benefits of being proactive and preparing for climate change. So some key messages are that tribes are often on the frontlines for impacts from climate change. And part because of their dependence on a specific geographic area for livelihood such as Ann Marie talked about earlier. And that proactive planning and action can also have benefits today in terms of reducing costs in the long run. And then also to help address extremes in climate and whether that occurred today but are also expected to become more likely in the future.

### Slide 5: Scope projected climate impacts on programs and planning areas

Lesley Jantarasami: The next slide is the fifth step. Now that you have support for moving forward for creating an adaptation plan, the next step is to identify and scope and types of climate change impacts that are projected to occur in your region of the country and to consider which of your programs and planning areas may be affected. So I've listed various examples taken from peer reviewed scientific literature on how climate change may impact some example areas of health, economy and the infrastructure, housing, and natural resources.

And at the end of the slides here, I've included – or in the end of my presentation, I've included a lot of website links to many more sources of scientific information on climate change impacts.

#### Slide 6: Assess vulnerability and risk

Lesley Jantarasami: So the next slide, once you've identified these projected impacts that are relevant for your tribes. The next step would be to conduct vulnerability and risk assessments to figure out how susceptible your programs and planning areas are to any negative consequence to climate change.

So I've listed some examples of questions to ask yourself. But there are other resources available that can specifically tell you how to go about conducting vulnerability assessment and a risk assessment in the context of climate change. So the Preparing for Climate Change Guidebook that I highlighted earlier is one of these resources but I've also listed many more at the end of this presentation.

And so I also wanted to mention that how comprehensive you are for these steps of doing vulnerability and risk assessment, this can and it will vary depending on the resources available in your tribes and how detailed your tribal leadership wants the plan to be and the goals for the plan.

# Slide 7: Set goals and implement plan

Lesley Jantarasami: And then the final step involves – go to the next slide – identifying and setting goals and action for how your tribal prepare for climate change. And then writing these all down in a plan that talks about how it will be implemented to achieve your goals. So implementing the plan not only involves just doing the work but it also involves monitoring and measuring progress towards your preparedness goals, as well as regularly revisiting and modifying the plan as necessary as new science becomes available and/or as the priorities and needs of your tribe change.

# Slides 8-10:

Lesley Jantarasami: So the next few slides are for the more – for more information. These are the links that I talked about earlier. I'm not going to read them out to you but hopefully this can serve as a resource that you can refer back to. There are two slides here. And then finally, at the end is my contact information if you have more questions or want to get in touch about any of these. I'd be happy to talk to you. Thanks so much.

Neelam Patel: Great, Lesley, thank you for that excellent overview.

# **Poll Question #4**

Neelam Patel: What I would like to do now is ask a poll question to get a sense of the tribal participants' level of experience or familiarity to this climate change adaptation planning. And so once you see that poll question on the screen, if you can take a moment to answer that.

And if we could see the results from that.

Thank you. It looks like we have the same response – same response that we did when we are talking about climate mitigation which is considered taking steps but have not taken these steps for the lack of resources. And, again, I hope that today's presentation are giving ideas on how other tribes have been able to implement their program.

# **A Climate Change Focused Organization**

Neelam Patel: So up to this point today, you've heard about two different planning frameworks, one from mitigation projects and one for adaptation projects. We've had Gila River talk about an integrated approach for climate mitigation through their recycling program. Tracy Horst talked about developing kind of a specific energy efficiency program to reduce emissions. And now we have Jeff Mears from the Oneida Nation in Wisconsin talking about an integrated approach to climate adaptation. And talking about not only as planning – the planning process but also has reflections on the way they've been able to integrate this into some of their programs.

So I'd like to turn it over to Jeff.

Jeff Mears: OK, thank you very much. I have my presentation up now, is it available?

Wendy Jaglom: No, we're not actually seeing it. Could you select "Screen Clean" from the dropdown menu?

Did you get a pop-up box from GoToWebinar?

Jeff Mears: Yes, I got it.

Wendy Jaglom: Great.

Jeff Mears: Is it up now?

Wendy Jaglom: Perfect.

Neelam Patel: Yes, it is.

Slide 1: A Climate Change Focused Organization

Jeff Mears: OK, thank you very much. Again, my name is Jeff Mears. I'm the Environmental Area Manager for the Oneida Tribe of Indians of Wisconsin. I'm also Oneida Tribal member. And I've been in the Environmental Division for 18-1/2 years now.

And I just want to say what I'm trying to do here is give a different, maybe, broader perspective of tribes as modern governments providing services. And a lot of the stuff that we've done and Lesley did a great job of covering that Oneida is also going.

Slide 2: Overview

Jeff Mears: OK. This is the general overview then of the presentation I'm going to go. Just that reminder all the time that there are four forms of government, local, state, federal, and tribal. So let's talk about a little bit about the tribal governments and what we face unique challenges and provided these governmental services.

Slide 3: Three communities of Oneida

Jeff Mears: This is who we are, the three communities of Oneida. We are originally from New York. There's now distinct Oneida Tribes in New York, in Canada, in the Thames, and in Oneida Wisconsin.

#### Slide 4: Oneida

Jeff Mears: This is us in Wisconsin. Then we're in the northeast corner just outside of Green Bay, Wisconsin. You could see the size of our reservation. We have population wise – you heard Choctaw had some 200,000 members. We have about 16,000 members nationwide. About 6,200 live on or near the reservation. The multi-jurisdictional issues to – just the reminder of perhaps educate some of our federal agencies and share with the tribes some of the things that we face. It's easy to say the work of the local governments but it's often confrontational. In Oneida specifically, we've had law suits against the tribe – against some of the programs that we've started. Not that I'm right to start those programs but the law suits actually go to try to deestablish the reservation.

In 1985, both counties sued us to de-establish it basically get rid of the Oneida reservation but a federal court ruling did uphold our right to exist, upheld our treaty, but these are the kind of things that trust based that normally most governments don't base. So the regulatory efforts are – it's very difficult for tribes to move the same way that other governments do.

#### Slide 5: Oneida

Jeff Mears: So this is – this is Oneida. You see in the slide here a lot of link I talked about is infrastructure, what we need to protect. This is our internal infrastructure. The upper left is our health center. The upper right is our police department. The bottom two photos then is our elementary school or tertiary school. All of these programs that we have developed are basically since 1994 when we started gaming. That provided us our base revenue like property tax for another form of government.

# Slide 6: Oneida Economy Pictures

Jeff Mears: But what oftentimes people don't consider with tribes is that we also – we also have the economy. So this just outlines that we have an economy. And all of these businesses that you see here are on the reservations. They lease lands from the Oneida Tribe. Very important for us to have an economy besides the environment and have set coexistence that we work on all the time.

I'm trying to advance the slide. Is there an issue then with advancing the slide?

Wendy Jaglom: You should be able to click or hit the arrow key.

#### Slide 7: Environmental, Health & Safety Division

Jeff Mears: OK, there we go, thanks. It has worked now. This is just the organizational chart for environmental health and safety. And it's a lot on there but I just want to demonstrate, I guess, that we're in a lot of different areas. We have a lot of employees, diversity of our programs. Our funding sources like a lot of tribes are EPA, BIA, Indian Health Service and Tribal Funding. We have 37 employees. Twenty-nine of those are Oneida Tribal members or other tribes. But Oneida has a total – we have 2,916 employees. And we have a professional educated experienced staff throughout the organization.

#### Slide 8: Climate Change

Jeff Mears: This is the basic "global warming is unequivocal" climate change. So basically this is the science. And we only doubt as political and not scientific. I hope to show later on that we're passed the point of having to explain science change anymore.

#### Slide 9: Overview

Jeff Mears: This is a definition of climate change adaptation to be some key things I heard discussed earlier like minimize impacts and reduce vulnerability. And basically for tribes, this is our survival plan. This is how we're going to survive into the future. It's not to cause people a panic but certainly we need a sense of urgency as we move forward.

# Slide 10: Climate Change -- Wisconsin

Jeff Mears: Given some examples in Wisconsin, we're going to face looking at either some of the models from the EPA and others from that IPCC. Looking at hotter summers days above 97 degrees, you know, which will mean more air conditioning which will produce more ozone – produce more asthma attacks.

When we talk about heat — I'll use the example of the 2003 European heat wave. Because of the northern France, Germany, similar clients to what Wisconsin have, this was 11 days and it got hot but it got in the upper 80s, mid 90, not crazy type Phoenix heat. But, yes, over the 11 day period, 50,000 died. You can compare that to the 2005 for Hurricane Katrina, 1,300 people died. But the European heat wave, you heard very little about. The point is that heat kills. It's the most dangerous thing we face. It killed the most people more than tsunamis, more than hurricanes, more than anything else.

#### Slide 11: Climate Change -- Wisconsin

Jeff Mears: Precipitation then in Wisconsin, we're looking at wetter winters, dryer summers. It looks like it balances out annually but it's the difference in how we're going to get those bad precipitation. Heavier storms, more rain in shorter periods of time and what can happen then. We have a good example in Wisconsin in 1993 where the Milwaukee wastewater treatment plant was overrun with flood waters. Four hundred thousand people sick from cryptosporidium. I mean, that was still the biggest outbreak ever. But local heavy rainstorm, sewers are not designed for the rainstorms that climate change predicts.

# Slide 12-14: Photographs of Impacts

Jeff Mears: This is a picture here in June of 2012, this year from Duluth, Minnesota. Duluth, Minnesota – again, this was not a tsunami, not a hurricane, not a super storm. They had about 10 inches of rain over the 24 hours. The governor of Minnesota toured the area and Duluth and he describes this horrific. The damage you've seen, again, just heavy rains.

Again, Duluth, Minnesota, this is a seal that was in a middle of an intersection. It was washed out of the zoo in Duluth and several animals actually drowned. Again, heavy rains, the damage that they can do.

This was 200 miles from Duluth in Neillsville, Wisconsin. A section of this railroad washed out. Three vehicles drove into this crevasse that was formed and three people died. Again, just from

heavy rains. This is something that we're facing. Now, we've seen examples of it now and we anticipate more in the future. Why we concern an Oneida wide? What do we have to do about it?

# Slide 15: Aerial Photograph of Oneida's Wastewater Treatment Plant

Jeff Mears: This is Oneida's wastewater treatment plant. The design, again, without the past that was used 100-year flood plains, for example. But climate change is a new normal. So we have to make sure it's part of our adaptation is to make sure this plant is secure.

# Slide 16: Aerial Photograph of Turtle-Shaped Building

Jeff Mears: This is another reason we need to be concerned with our infrastructure. This is an interchange and you can see the nice things as Oneida was sat at the table of the Department of Transportation designed as a turtle. On the left is where our casino located at, Casino Hotel. And the right is the Green Bay Airport, Austin Straubel Airport. So you can imagine with the heavy rain event if this road is washed out, the impact on our economy would just be tremendous. That's why we need to adapt this but we need to make sure infrastructure can withstand the predictions of climate change.

# Slide 17: Climate Change Focus

Jeff Mears: So, to focus the organization, strategically align the organizational climate change. And that's very key. We talked about the federal budget, but the tribal budgets are facing the same thing. No increases. No new hires. So this is no cost thing using an existing fact. And I used for an example with Balanced Scorecard model.

#### Slide 18: Balance Scorecard

Jeff Mears: The Balanced Scorecard, you know, I don't – you know, I don't want to promote this exact tool for using but this is how we used it. We implemented this in 2005 and it's supposed to balance between the financial measures and non-financial performance measures. But the important part to me was that the organization did not hire anyone new, the assigned existing staff. They were managers for the Balanced Scorecard. The entire organization had as much strategic plans using this Balanced Scorecard model.

# Slide 19: What this is not

Jeff Mears: There's the one size fits all but this is just one example of what it can give us and a reminder what this is not. It's not about prevention we need to adapt. And this is not short terms, not a fix and get back to normal. This is the new normal.

#### Slide 20: Oneida Tribe of Indians

Jeff Mears: So these are all the divisions for the Oneida Tribe. We have six divisions. What we did is list it out underneath them their roles in climate change. You can talk about our health department, the increase the invasive species, heat stress, things that they need to plan for budget-wise and just for infrastructure-wise.

Community services, I listed there green jobs and training. What kind of education will our youth need for the climate change-driven economy of the future? The environmentals listed were

already worked on based on species, fisheries and a lot of different things. The point is, it's the entire organization, climate change is not an environmental issue. It doesn't belong in one department but it's throughout the entire organization.

# Slide 21: Staff Survey

Jeff Mears: One of the key things we want to do is that baseline is where we're at to start. We did a staff survey. It includes the divisions and environmental development and land management, our health center, housing authority. This is a baseline. So basically I wanted to know what do you think of climate change? Do you think it's real? Do you think we can do anything about it?

#### Slide 22: Results

Jeff Mears: And the results were – to me, they were very encouraging. We have an educated staff. I asked them how many have college degrees. But you can see basically that they understand that they can make a difference in their professional and personal lives. It's not overwhelming. Everybody felt it was real. It's just our job, now we have to provide that outreach. We have to get out there and tell them about climate change and how they can plan for it.

So climate change said in here, there's a lot of difference between tribes and other governments. It's not an environmental issue. It's about human health and social impacts. And we keep you the same thing we talked to management elected leaders, this is the new normal. And this is how we have to operate. That's what we need to focus each one of our programs and our individuals, our already educated experienced staff on climate change.

#### Slide 23: Summary

Jeff Mears: Again, tribes didn't cause climate change but we certainly have to learn how to adapt and survive in this new climate change world.

#### Slide 24: Closing Slide

Jeff Mears: So this final one – this quote I have from Oren Lyons. He's an Onondaga Turtle Clan but the tribe that we come from – we come up the Haudenosaunee in New York State. He is – he's a clan person, we've looked at him a lot and he's been speaking out in climate change for years. He spoke before the U.N. several times. And the last time I've seen Oren was in April of 2012. He was talking about the future of climate change, it's common. But now I'm talking about it being here. He's 82 years old now. And if you Google him, you'll find he's just an author. He's been around a long time. But he says, "I now tell the tribe to find high ground and good water." It's getting a little desperate when I hear – when I heard him speak over the years. But he's a long time climate change advocate.

But what I took away from that is that we need – we need to be prepared. I mean, it's not just having environmental climate change coordinators but we need lawyers to write laws, the environmental staff, lawyers, teachers, people in our administrative areas. We need experienced educated tribal people to get this – to deal with this new normal that we're going to with this climate change.

So infrastructure refers not just to the built environment for the staff, to us, the education experience. It's an ongoing effort with us. It's not going to be – again, a not a one size fits all. I have met with our elected leaders but I have not asked them to do a resolution yet. They're fully on board but they're still in the wait and see in education mode. And we're going to be looking forward in the future and what exactly we're going to do. Right now, there's a lot of information out there. We need a lot of science to make our decision.

And I think ITEP – I mean, I think they're doing a good job getting out to educating people. And we look forward to the future and see how we're going to be ready for it. So thank you very much.

Neelam Patel: Thank you, Jeff. That was great.

# **Questions and Answers**

Neelam Patel: I want to take the time to thank all of our speakers. And I hope that the audience was really able to get a sense of the stories from each one of these tribes.

And I encourage you, if you haven't already, to submit questions using the GoToMeeting question chat function. Please include the name of the speaker that you would like to ask questions for. And if there are questions for EPA, we will do our best to try to work across EPA to get answers to.

We just kind of have a few minutes left. And we're going to start by asking a few questions. The questions we don't get to, we will provide a written response to in e-mail one to two weeks following the webcast.

So what I'd like to do is – before we get in to the questions – is encourage everyone to participate in the exit survey. You should see this survey after you exit. And so I do encourage you to fill that out. It would be really helpful to us and we will share that with others at EPA who work on tribal issues.

So we'd like to start off with questions for each one of our tribal presenters. And, Wendy, from ICF will be asking the question. So, Wendy, if we could start off with one question for each one of the tribes, that would be great.

Wendy Jaglom: Sure. Thank you, Neelam. So the first question is for Sky Dawn Reed. The question is which method of public outreach and education do you think works best?

Sky Dawn Reed: I think I will always go back to having the one-on-one contacts, which is that door-to-door outreach which is really beneficial. As I mentioned, we didn't see the signage go up immediately after we were complete. But it did take us about, maybe, two weeks or maybe closer to a month to reach nearly 700 residents. But I think the door-to-door and the one-on-one contact really helps out a lot.

Wendy Jaglom: Great, thank you.

Sky Dawn Reed: Yes. And then I'll join...

Wendy Jaglom: Oops, sorry, go ahead.

Sky Dawn Reed: And then the only other thing is by getting – keeping it as a reminder, I think, inserting or contributing those newspaper articles to kind of provide reminders, and visual flyers and what not, that was really beneficial as well.

Wendy Jaglom: OK, thank you, Sky. So the next question is for Tracy Horst. And the question is: what is the best type of lighting to use? Are there concerns for Mercury in lighting?

Tracy Horst: I think the best type of lighting is dependent upon what you're using the lighting for. LEDs are great. LEDs are more expensive and are sometimes difficult to get a payback, so it just depends on whether you're looking for a payback or whether you're looking for good lighting.

We have transitioned and most of ours are just the new CFL lighting which is more efficient. And then there's some solar lighting that you can get for outdoors. And that allows you to remove yourself somewhat from the grid just on the outside. You'll usually still have to pay a utility company just in case something happens for a backup. But I think the best thing to do is to investigate the option of where you're putting the lighting and then talk to lighting providers in your area and they can help you out with that as well.

Wendy Jaglom: Great, thank you. The next question is for Kathy Lynn and Garrit Voggesser. So the question is, were the federal program budget increases that you discussed over an eight-year period or per year average increases?

Garrit Voggesser: Can you ask that again, please?

Wendy Jaglom: Sure. So the question is, were the federal program budget increases that you discussed over an eight-year period or per year average increases? I think this is talking about some of the numbers you present.

Garrit Voggesser: Yes. I think you're talking about the BIA, the first slide. So that was fiscal of 2000 through 2012 so that is the – that is the average increase over those years. So it's grown. Actually, over that span of years, the BIA budget has grown 8 percent versus, for example, an average of 23 percent for the interior agencies. So that's for the entire period, not per year.

Wendy Jaglom: OK, great. Thank you. And...

Neelam Patel: So because we just have a few minutes left, let's do one more question. And before you ask that question, Wendy, I would really encourage folks on the line to continue to submit questions to us because we will respond to these in writing for everyone. So if you could please continue sending questions that you might have as we're answering these, that would be great.

Wendy Jaglom: So I'll ask another question for Sky Dawn Reed. And the question is: what was the role of Gila River's Department of Community Housing? Did they contribute money to the recycling program?

Sky Dawn Reed: Housing did not contribute money. And we didn't really request funding or donations from any department at all. I think really it was just to kind of keep them in the know. And the Department of Community Housing, working with their staff, they produced a monthly newsletter as well. But just kind of creating a network of people, of folks, I think, that was beneficial most of all. But we didn't, you know, solicit donations from any particular department.

Wendy Jaglom: Thank you, Sky. And if we can do one more question for Tracy before we wrap up, that would be great?

Neelam Patel: Sure.

Wendy Jaglom: And so the question for Tracy is, how do you balance between indoor air quality and energy conservation, i.e. tightening up homes without mechanical ventilation?

Sky Dawn Reed: Ooh, that's a tough one. In older rooms, it's very difficult to be able to get them so tight that they don't breathe. And then in newer buildings, there is a fine balance there.

Working with your construction people are the best way to do it. You need to make sure that you have plenty of insulation within the facility to make sure, but you don't want to be so tight that the building itself doesn't breathe, if you will.

And the best thing I can tell you is to talk and work with your construction companies. And also your utility companies, a lot of times, will have blower door units that you can bring in and have put on a door. And it will help you identify leaks or anything like that and be able to assist you with understanding if the building is too tight or not.

Neelam Patel: OK, great. Thank you, Tracy. And thank you to all the participants and presenters for joining us. We hope you found the stories from each of the tribes useful. And we will be circulating presentations and access to recording of the webcast for you to follow up.

So, on behalf of EPA's Office of Atmospheric Programs, thank you for joining us today.

Operator: Thank you. This concludes today's conference call. Participants, you may disconnect. Presenters, hold the line.

Operator: Do you want to listen to another conference? Press one for yes or two for no.

Press one for yes or two for no.

Press one for yes or two for no.

Goodbye.