

Development and Implementation of a Regional Tribal Engagement Strategy

Ashley Isham: Good afternoon from the U.S. Fish and Wildlife Service's National Conservation Training Center in Shepherdstown, West Virginia. My name is Ashley Fortune Isham. I would like to welcome you to today's webinar.

This webinar series is held in partnership with the U.S. Geological Survey National Climate Change and Wildlife Science Center or NCCWSC. This is in Reston, Virginia.

The NCCWSC Climate Change, Science and Management webinar series highlights their sponsored science projects related to climate change impacts and adaptation.

It aims to increase awareness and inform participants like you about potential and predicted climate change impacts on fish and wildlife. I'd like to welcome Dr. Shawn Carter to introduce today's speaker. Shawn.

Shawn Carter: Thanks, Ashley. Today it's my pleasure to introduce April Taylor. She's a sustainability scientist with the Chickasaw Nation and a member of the South Central Climate Science Center in Norman, Oklahoma. Which by the way, was recently awarded the Department of Interior Environmental Achievement Award.

April connects 68 tribes to climate scientists in Oklahoma, New Mexico, Texas and Louisiana. She also builds staff capacity and climate vulnerability and adaptation planning. She works with tribal education programs to develop opportunities for tribal students in climate science fields.

She's had speaking engagements with multiple tribal councils and working groups. She holds degrees from Texas A&M and the University of South Carolina. She's a Chickasaw citizen with a family tradition of Native American grafted pecan trees and she gains inspiration by helping the tribes manage and plan for future impacts of climate change.

Today, she's going to be talking about her work in developing and implementing tribal engagement strategies. Thank you for joining us, April and I'll hand it over to you.

April Taylor: OK. Thank so much for that. I'm just going to go ahead and just dive right in and get started. A little bit on my position. The way I explain my position is: it includes three things.

One, matchmaking of the tribal staff and so I'm out engaging with the tribal staff on a regular basis and with the climate scientists or climate researchers. Here, at the Climate Science Center, we're very involved with the climate science and researchers that are working in various fields.

I'm that matchmaker that connects the two groups together to go after projects or to work on projects.

The second thing is, we work towards building tribal capacity by providing trainings or bringing in trainings for tribal staff, for vulnerability assessments and climate adaptation planning. I'll talk a little bit about that today.

Then the third aspect, as Shawn said, we do a lot of tribal youth programs as well. We're out doing activities and science and things with tribal youth as well.

I first wanted to talk briefly about the Climate Science Centers. There are eight Climate Science Centers in the U.S. and this is a map of their regions. The South Central Climate Science Center is there in blue.

The stars indicate the host university and then the circles are the consortium members of each Climate Science Center. We're hosted at the University of Oklahoma here in Norman, Oklahoma.

As you can see, the Climate Science Centers have what we call fuzzy boundaries. We're very much encouraged to work across our regions. Drought is not just a South Central thing. There are definitely things that we work together across these jurisdictions.

As I mentioned, on the consortium side, the University of Oklahoma is our host and then we have Texas Tech, Oklahoma State, and Louisiana State. We also have Chickasaw Nation and Choctaw Nation of Oklahoma. Then we also have the NOAA Geophysical Fluid Dynamics Lab out of Princeton that does a lot of the climate modelling.

This figure here shows how many of the climate organizations partner and work together. The Climate Science Center is in the yellow box and really shows how we work directly with the climate scientists, and then relay that to other organizations that may use the climate science or transfer that information in a way that the end users can use that climate science.

Then there's also a feedback from those end users and partners on what climate science is needed from the climate scientists.

In our South Central Climate Science Center region, we have 68 tribes and this is a map showing our tribal jurisdictions in our region. As you can see there are many areas that it's very difficult to work in Oklahoma, for example, without working with the tribes. This is a map showing those tribes.

Right now, we are the only Climate Science Center with sovereign tribal nations on the consortium. The Northeast Climate Science Center has a tribal college, the Menominee Tribal College. We are the only Climate Science Center at this time that has two full-time tribal liaisons. I started in June of 2012, and Kim Merryman started in June of 2014. Kim primarily is working with our New Mexico tribes.

In 2014, we published our tribal engagement strategy. It is a USGS Circular 1396. You can Google this and find this online. There's a lot involved in this tribal engagement strategy. It's a really good resource to starting your tribal engagement strategy.

This slide here explains our approach. As you can see on the axis, as you go across in time, and resources that you devote to your tribal engagement, you're increasing your tribal capacity and your tribal involvement as you go.

Basically, if you start on the left-hand side, the way we started was a lot of introductory meetings and outreach to tribal staff. Introducing ourselves, creating that relationship, letting them know who we are and what we have to offer, and getting feedback from them.

Then we started doing a lot of tribal youth programs, going out to festivals, after-school programs, youth camps, and things like that. Really spending time and developing these relationships and commitment to the native youth, and building our capacity of next generation of tribal staff.

The next piece is building the tribal staff capacity in climate-related areas. That goes in parallel to our engagement with the researchers and building their capacity in how to work in a new country and how to develop these relationships.

Currently, these numbers in red show, from years one through three, the numbers of how many of these types of activities we've been doing. We've done over 17 youth activities. We had over 16 classes. I think we're up to 22 or 23 classes we've done.

We're starting to really ramp up some of our working in Indian country efforts. We've had one class and one webinar at this time. Then the idea is then to start working on the co-production of the climate science projects, and really considering the tribes as equal partners in developing the climate science projects and tools from the get-go.

Currently, we have three projects that we have funded. Some of those have wrapped up and there are results available. The end goal really is about the tribe independently being able to do their own climate research projects and integrating the climate science into their various tribal plans. Whether that's their water plan, hazard mitigation plan, transportation plans, or whatever type of plans that they are working on.

I'm going to go in and give a few examples of the types of things from each of these different categories. I mentioned the introductory meetings. The purpose of that is to introduce your staff to the tribal groups and organizations. You'd be really surprised how many various groups there are out there and organizations that the tribal staff get together.

This has grown over time, and we've been able to continue to evolve at a regional level and at the national level. As you can see, we've continued to increase the number of groups and outreach that we've been involved in. We've had some really good opportunities over the years to do this type of activity.

The second piece is the tribal youth programs. Really, this is about developing the relationships with the tribe and building their capacity of their next generation of tribal staff and promoting native scientists in climate-related fields and diversifying climate science areas.

Some examples of that: the Eight Northern Indian Pueblos Council has a summer camp where they have...each of the 23 tribes send high school students to it. In year two, several of our CSC staff spent a day at the camp talking about drought and doing a soil infiltration activity.

We really consider this the type of activity that we're trying to build upon. It's inter-tribal, it's regional, and it's a real good quality time with the students. We have developed our strategies where we don't focus on so much of the activities where you only get 20 seconds with the student, or you have a lot of students that pass through.

We'd much rather do a full experience or a full day where several hours with a group of students and really have them walk away with something learned from it.

This is a couple of pictures from there at the Indian Art School in Santa Fe, and the students doing their soil infiltration activities. This was just a really bright group of high schoolers.

We started out talking about what is drought and some of the activity and stuff, but by the end of the day they just really got it. It was really cool to see that transformation and that interest of how drought impacts their community.

Another example is, we've done the preconference for the Indian Education Summit here in Oklahoma, and this is Indian educators. Basically we did a day with the teachers. We called it Weather and Climate Scientists in Action Tour.

They got to tour the National Weather Center. We shared lots of resources with them, gave away some kits and things for them to take back to their classrooms. This is another type of activity that we try to focus on. We had 22 Indian educators that day.

This is a couple pictures from us that day. We had a native scientist come in and talk about her work and her research, and the teachers got to engage with her. We've considered things like skyping in with native scientists to classrooms and things like that.

For our youth activities for the first three years, we've had over 17 activities. We've engaged with over 700 youth, and we've really had over 1,200 contact hours with them. That continues to grow in that interest and our capacity.

We've developed a whole list of youth activities that we have purchased and we go out and do on a regular basis. We're gearing up for the summer, and looking forward to another year of our youth activities.

I also, and I'll talk about that, too. You'll see here that I have interns and different REU youth students which are undergraduate research students that work with me as well. That's been a really cool opportunity to work with the college age as well.

Now, moving on to building the tribal capacity or our trainings. One thing I want to say is by offering a training is one key way to develop that relationship with the tribal staff.

You're providing them with something, but you're also interacting with them for a significant amount of time and learning about what they're dealing with or what their need is and what kind of technical assistance they're needing help with.

We've had, like I said, over, I think, 23 trainings at this point. Then in year four we really started thinking about what is our strategy long term? What trainings do we want to be offering? Starting to start thinking towards a curriculum or a certification. Take this first, take this second, type of thing and breaking it down into pieces that they can work with.

I'm just going to talk about a couple of those trainings. One of the types of trainings we have done is what we call the Environmental Problem Solving with GIS. We had lots of partners with this, and lots of leveraging, the Oklahoma Science Center, the BOR, BIA, Tribal GIS, Choctaw Nation.

What we did is we had two two-day trainings. One was here in Norman in August of 2014, and then we had another one in November in Albuquerque, and talk about a class that filled up really quickly and met its capacity.

What was really cool about this one, is that it was one of our first ones where we had such a diverse audience. We had tribal staff from so many different departments, not just the environmental departments. We've had tribes from all across the United States that came in for this and paid for their travel to come up for these trainings and things like that. It's really cool.

I just want to mention that since this has happened, BIA has a gotten climate GIS coordinator, Margaret Herzog. If you don't know who that is, I'd be more than willing to pass along that contact information. She is a good contact for tribal GIS and climate change.

These are a couple pictures from those trainings. As you can see they're very full. The one on the left is from our Norman, Oklahoma training here at the Climate Science Center. Then the one on the right is from SIPI at the Tribal College in Albuquerque. It's been really cool to see the turnout for some of these trainings.

Another type of training that we've done is...and both these trainings, the GIS trainings and the grant writing trainings were specifically asked of us. This is a grant writing training, so I was asked specifically for this. We've been doing a series of grant writing trainings.

We partnered again, with several partners on this. We've partnered with our Oklahoma EPSCoR, which is an NSF large grant. We've partnered with EPA Region 9 and our OU Center for Program Development and Enrichment, which is full of our grant writing staff here at OU.

We've had several workshops and it's been very successful. What's been really cool about these trainings is we've been able to do a lot of role-playing and engagement, where they actually have to practice the skills that they're learning.

They have to talk to the partners and figure out how they might partner and what the benefit of that is. They might talk to different types of scientists. What's the challenges of that? Partnering with them, with scientists, or talking to a program officer.

One of the things that we found is that many of the tribal staff are very used to their...they may be used to only one type of grant or one type of funding mechanism. With climate change, it's so diverse and there's so many different agencies and opportunities out there.

This is a challenging aspect of developing your funding strategy and how to move forward to fund your entire climate adaptation plan or the different pieces. That's something that many of the staff are challenged with.

Here's a couple of pictures from the Dallas training in New Mexico. We had 50 tribal staff in the room, and it was very full. We tagged this onto the Tribal Summit for EPA Region 9, and before we even got our booth space set up, people were coming by and had heard about the grant writing training.

[laughs] They were scaring me because I was like, "Oh my goodness, this is going to be a big thing. Are we ready for it?" It was really cool to see that interest in our trainings.

This is the summary from our first three years. We had nine trainings on the first three years. Like I said, we're now up to 22. We've had great turnout and lots of contact hours through all the trainings we've hosted over the last few years.

Then the third thing I want to talk about briefly is the importance of educating your researchers on how to develop these relationships in Indian country. They're making sure that they're doing ethical research practices and considering how their research is impacting the tribal communities.

Sometimes those things here are how do you develop that relationship? How do you integrate tribal traditional knowledge, or TK, or cultural resources? Learning about tribal IRBs, or institutional review boards, and things like that.

We also did a webinar and brought in Kyle White to talk about some of this. We also brought in Larry Koewn to do a training.

Now what we've done is we're developing a "Working in Indian Country" guidebook for researchers. We are very close to having that finished and available. Then we will be piloting our Working in Indian Country research and working towards a strategy on how we want to offer this moving forward.

As I said, in year three we hosted. As an example, there's this book called "Working in Indian Country" by Larry Koewn. We brought him in. We had probably 20 people.

What was really interesting is we had a very diverse group of FEMA people, US Forest people, all sorts of partners and things, as well, in the room, along with the researchers. We're continuing to work and build on these types of activities, as well.

The other aspect that I wanted to talk about is, I wanted to talk about an example of a project where we have partnered with tribes. The name of the project I want to talk about is called Impacts of Climate Change on Flows in the Red River Basin.

The Red River Basin, as you can see here in the image, crosses many tribal jurisdictions from its origin in New Mexico, all the way down into the Mississippi and Louisiana.

There are 15 tribes that this crosses, and then we also partnered with the University of Oklahoma, and NOAA's Geophysical Dynamics Lab, and consultants. We really considered this the type of scale and regional type of projects that we look for, and partnerships.

Basically, one of the big themes of this is now the Chickasaw Nation and the Choctaw Nation has and is using the best available tools. For example, the Army Corp of Engineers RiverWare Model. They also have access and are using the best available downscaling data for their water plan.

This is a figure from the results, here, showing the changes in the flows within the watershed under an RCP 8.5, which is basically the emission scenario. As you can see, many of these yellow circles indicate that those flows are going to be decreasing from current values, and so much lower flows are potentially in much of the area of the Red River Basin.

Some success stories. We recently finished up, as of the end of December, a grant where we worked with the Choctaw Nation and the NCTC, which is the National Conservation Training Center that Ashley mentioned.

We hosted a couple of their vulnerability assessment trainings, and for the first time, offered those for our tribal audience. We've also partnered with OU's Regional and City Planning Department and are working with five tribes to do tribal vulnerability assessments.

Another key thing that I'm going to talk a little bit more about in a second is that, based off of my position and our work here at the South Central Climate Science Center, BIA is providing funding for the other Climate Science Centers in the Nation to get tribal liaison positions.

The Desert LCC and the Southern Rockies LCC have been very involved in developing their tribal committees and having tribal representation on their various stakeholder groups and their activities. I hear about it all the time.

When I hit the door at different tribal meetings, more and more tribes are including climate science or climate projects in their grants and are interested in partnering.

Next, I want to talk just a little bit about these new tribal liaison positions. Basically, they've asked the CSC, the Climate Science Center, to contribute to the orientation of these new tribal liaisons.

We will include our other Climate Science Centers and their tribal activities, as well. Introducing them to who are the CSCs and what types of things have already been done in the various regions.

And sort of develop a level playing field, as I would describe it. We're trying to bring them all up to the same level so that we all can work together and partner, as well. The purpose is to provide some kind of coordination between the Climate Science Centers and what we can offer for tribes in our regions and nationally.

Next, I just put in a couple upcoming activities. I was just talking to Ashley a little bit before this call, before the webinar started. We have six native interns here at the Climate Science Center. Two just started on Monday, so we're pretty excited about that.

We have some climate 101 trainings that we'll be doing in Louisiana and New Mexico this year. We'll be at the "To Bridge a Gap" Conference, which is a tribal cultural resource staff conference. We're going to do a session there.

We're doing a tribal student conference on climate change. We're going to rotate between the three tribal colleges in Oklahoma each year. We'll have our first one this year at the College of the Muscogee Nation in Oklahoma.

We're also working on our pilot training for our Working in Indian Country for Researchers this year. We also have 6 Chickasaw Nation drought workshops and two master students that we're working on who will feed into the Chickasaw Nation's drought plan that we're working on.

We also have a Climate Youth Camp at NCTC coming up in July. We also have other youth camps that we work with, for example, the Jones Academy, which is a Choctaw school in Southeastern Oklahoma, and their STEM Camp.

That's some examples of the types of things we have coming up. This is my contact information and Kim Merryman's contact. Her email just changed, and so I meant to put that in there, but feel free to email me and I can definitely put you in touch with Kim.

That's all I have. I think Ashley's going to take over and lead any questions?

Ashley: Yes. Excellent job, April, thank you very much. One just came in. It's from Bradley. It says, "I'm interested in knowing how one might go about collecting traditional wisdom practices to incorporate in any sustainability initiatives."

April: That depends on the tribe. Every tribe is different in how they...if they're interested in that type of thing and whether they want to share that.

My advice on that is definitely considering tribal IRB approval is an obvious first step for learning about does the tribe have an IRB or a process of approval for those types of things, or if they need to go through the regional IHS, which is the Indian Health Service IRB, and those types of things.

There's a lot of different approaches out there on how to, whether that's integrating it into an already established method in Indian country on how to collect traditional knowledge and to protect that knowledge.

Also, a lot of rules about whether you can publish that, or get approval for publishing, or sharing that knowledge, or presenting on it. There are a lot of things like that to consider.

Menominee Nation also just posted. There are a lot of guidebooks out there, as well, and resources for considering traditional knowledge in climate change initiatives. I'm assuming that was Chris or Marie that posted that resource there in the chat box.

Feel free to email me if you have any specific questions related to that. I definitely can point you in a good direction.

Ashley: The next question comes from Allison and it says, "Thanks, April. I wonder if you have any outputs, reports, articles, or anything along those lines from the Red River Basin Project that you'd be willing to share? It looks like a great project."

April: Allison, yes, I can definitely send you the end of the project report. We'll also have some factsheets and things hopefully here soon. Definitely I'd love to share that with you, and I'll make sure I send you a copy.

Ashley: I'm reading something, also, from the Nation. It says, "Guidelines for Considering Traditional Knowledges, TKs, in Climate Change Initiatives is a publication intended to be an informational resource for tribes, agencies, and organizations across the United States, interested in understanding TKs in the context of climate change."

The next question comes from Jennifer. It says, "Beyond the regional scale, do you have any recommendations for working towards tribal engagement at a national scale?"

There's a second part to that question. "What groups or entities should we try to work with?"

April: Again, it's going to depend on what region you're from. At a national scale this new tribal liaison...so sort of one of the points of what we're going to try to do, is develop some coordination nationally in what we're providing and what we're offering.

What's another thing that we're trying to do here at the Climate Science Center is we've developed what we call our Tribal Curriculum Working Group. Basically, we've had over 25 people from different agencies, anywhere from NASA, EPA, or LCCs, the Corp of Engineers, NRCS.

It was really interesting to see that interest and wanting to provide and build tribal capacity in a lot of these areas. That's one of our approaches, is developing an interagency working group for our region.

Ashley: Excellent, thank you. From Monica...oh, and then as you can just see that just popped up in the chat box. They wrote, "Rising Voices is a great group for that, as well."

Our next question comes from Monica who says, "Are any Climate Science Center liaisons native tribal members?"

April: Like I said, currently there are just us two, April and Kim. We have up to nine tribal staff that are here at the South Central Climate Science Center.

The new tribal liaisons that are being hired are going to be contracted out to a tribal organization. I'm assuming that they will have a native preference, as well, so those new tribal liaisons most likely will be native. They most likely won't be tribal staff, like I am, but they'll be native, at least.

Ashley: Thank you. Then we had a question, and Shannon McNeeley had her hand raised. Shannon?

Shannon McNeeley: Hi, April, it's Shannon McNeeley from the North Central Climate Science Center in Colorado State University. Thanks for your great presentation. That was really informative.

I have a question about the new BIA sponsored tribal liaisons. I understand you guys are taking on some of the coordination, and it seems like maybe some initial training for those folks when they come on.

I was curious how you're thinking about interacting and incorporating folks from the other CSCs who have already been involved in tribal engagement. None of the other Centers have a "formal" tribal liaison yet, but they all, pretty much, have had a lot of tribal engagement activities.

Speaking for ourselves, we've already been doing a lot of training, not a lot, but some training. We've got some projects on the ground, and things like that.

I'm curious what the thinking is about bringing in folks that have already been involved in tribal engagement in those other Centers as you're bringing on these new tribal liaisons in this coordination effort.

April: Based off of some conversations with Kim Winton, who's more involved in the actual relations with the BIA and the selection committee. We have discussed that we will be inviting the other Climate Science Centers in, too.

We're offering to host the orientation here in Norman, at the Climate Science Center, and inviting in the other Climate Science Centers to bring somebody in from the other Climate Science Centers to talk about what they've done in their region, and to share those resources, as well.

Currently we'll have an initial orientation here for several days and really do a lot of discussing of what is most needed, or where they want to go and types of things, and what's priorities, and strategic planning.

What I've proposed at this time is then we would have regular calls, or meetings, and some kind of platform where we're sharing the resources with all the tribal liaisons, whether that's training materials or presentations, and talking about how we did this or how we might work together on different things.

My understanding is that Kim Winton, at the DC trip next week, was going to talk to the CSC directors a little more about what they would like to commit to it, or what they would like to share on this platform that we're going to be putting together for the coordination.

Shannon: Thanks, that sounds great. Do you have an idea of when ...I know it depends on a lot of variables, but do you guys already have a general time frame in mind for that orientation?

April: Absolutely. [laughs] On my schedule I believe we're shooting for June for that initial orientation. I have a couple of weeks that are penciled in, but nothing has been confirmed.

Basically, the deadline has passed for the tribal organizations to submit. Then there'll be cooperative agreements completed, and then they'll have 60 to 90 days, was the last thing I heard, to actually hire.

Then I think that will play into the timing of the initial orientation and when that will be planned out. On our end we are talking about bringing in a USGS detail to help with some of this coordination and the initial planning types of things. That's, broadly, what I know at this time.

Shannon: OK. Thanks.

Ashley: April, did you have any other closing comments that you'd like to make?

April: Thank you, and thank you all for the interest. Feel free to email me.

Ashley: Thank you, April. Shawn, or anybody from the NCCWSC, any closing comments, as well?

Elda Varela: Shawn had to step away early, but this is Elda Varela with NCCWSC and we just wanted to say thank you, April, that was a fantastic presentation. Thank you to everyone who joined us for the webinar today.

Ashley: I wanted to say, as the others have, thank you very much for attending. April, wonderful presentation.