## **Questions and Answers**

Emma Zinsmeister: So, thank you to all of our presenters, I think we have a few minutes left to take some questions. And for any questions that we don't have time to get to, we will provide answers in writing that we'll post to the Website along with the presentations and the audio file.

So Lauren if you want to take off with the questions.

Lauren Pederson: My first question is for Joel. Is there a presentation or information that is available for the healthcare sector to start to adapt to the public health concerns due to climate change?

Joel Scheraga: That's a great question and unequivocally the answer is yes. There has been a lot of excellent work that's been done by the public health community itself to look at number one, the potential impacts of climate change on public health. But number two also proactive interventions that states and local communities can take, as a quicker side not surprisingly since climate change tends to exacerbate problems that already exist due to other socio-economic stressors.

Many of the things that you would do to adapt to climate change are actually enhancement to existing public health interventions. Now I promise I'll post online, as Emma said, the key references you might want to look at. But just to what your interest, number one, in 2000 EPA released the first major assessment of climate change on human health along with recommendations that can be used.

That can be found on the Website for the U.S. global change research program which is www.climatescience.gov and you'll find it under publications. Number two, again just to give you a sense where some of these major resources are, there is a book that the World Health Organization released just a few years ago which EPA actually sponsored. That talks about risk and responses to climate change.

Number three, it's not all being done at the federal level. Several states already have adaptation strategies that explicitly talk about human health, and I'll give you one example. But just cause I personally was involved in it, the state of Maryland is about to release its revised climate change adaptation strategy. And it has an entire chapter on human health that I was looking up to help author, and it contains very detailed recommendations for the state on how they can deal with the health impacts.

Number four if you go to the CDC Website, they have a climate change page with information on potential interventions. So again that's just to wet your interest, the resources are there and we'll post these references for you on the Website.

Lauren Pederson: Great, thanks Joel, and then another question for you. Could you provide an example on climate change and management of invasive species?

Joel Scheraga: Great question. I appreciate that question because we didn't get the chance to talk about it today, but climate change can in fact exacerbate the problems posed by invasive species. When invasive species are introduced for other reasons, for example on ships coming into the great lakes region, climate change can create an ecological environment over which these invasive species can either begin to survive or in fact spread.

And as I said, this is an issue of concern in places like Chicago which is very concerned about it. I'll give you a short but hopefully a very helpful response. In 2009 EPA released a major report focused explicitly on the implications of climate change for invasive species, and the report laid out management practices that could be implemented to account for the exacerbation of the problem by climate change.

And I would note that this report in the spirit of some of what David said, this report was developed in partnership with regional and state resource managers who are already dealing with invasive species. And we worked with them to understand how those management practices could be augmented to account for climate change, and again we'll post that on the Website. So, its not one specific management example but there's a whole report there and we'll get it to you.

Lauren Pederson: Great thanks Joel, and then this next question is for you David. Are there statistics available for approximate percentages within the general population of how many people fall into the individualist Communitarian or a Hierarchists Egalitarian category? And how by knowing such information or studies help us to communicate climate change related issues. And do you know if these percentages are trending or changing?

David Ropiek: There are no generalities with cultural cognition because it depends on the issue. There're people who could be really libertarian on some things and really communitarian on the other end of that continuum on others, so it depends on the issue. So there is no single general truth. There're great statistics on a number of issues at the Website that I posted in my slides which is www.culturalcognition.net, just one word.

The point I would make is this, I hoped to help you understand that the argument over whether climate change is real or not is being waged with the weapons of the facts, but it's about something much deeper. So just trying to wage it with the facts, one form of this communication is insufficient. And having a sense from your local community where they land on that sort of a way of thinking will help you have a more successful and less contentious relationship in the part of your community that has the extreme believers and the extreme deniers.

Because the extremes are coming from something other than the facts and just arguing it based on the facts is going to get you nowhere. But in terms of specific details, I would look to culturalcognition.net, and in answer to the second part of your question, the current issues of the day certainly change what's important to us.

So I've written in several blogs recently that, the more threatened people feel by an uncertain future like the economy, the more tribal, if you will is what I call it, the more cultural cognition will matter because the more we need tribe to keep us safe. So that can make it a stronger motivator, we certainly saw that in the recent vote.

But the most important point is to think about that perspective in the relationships you're trying to nurture with better risk communication so that you can achieve the kind of adaptation you're after.

Lauren Pederson: OK, great. Thank you for that, that response. And then the next question is for Brendan and you presented outstanding metrics in your presentation. And this attendee wanted to know how you came up with the likelihood and consequence numbers that were assigned in the planning metrics.

Brendan Reed: So like I sort of mentioned, we sat down – for the likelihood factor, we sat down with a local researcher (Dan Cain) at University of California San Diego scripts institute who is involved in the IPCC and everything. And we kind of just went through and tried to score the likelihood of some of these impacts. Again it was informed by the San Diego foundation's focus 2050 study which had been a much larger collaborative effort between multiple research institutions in the area.

And then for the consequence side, that was really more scored by staff but it really had to do with, what does vulnerability mean to our own city operations and our community services et cetera? So again due to our budget constraints, we had to take more of our, if you will, almost a qualitative approach to it. And we're – I think the last thing I just would mention is that, our stakeholders were fairly comfortable with that.

And part of that was because in implementing an adaptation plan, part of that is you'd be going back and reassessing what the best available data is. What are you assumptions and are they still holding true. So they did see it as sort of a long-term, continual improvement process.

Lauren Pederson: I have one more questions lined up for Brendan. How much staff time and resources did Chula Vista commit to this effort? And how long did it take from start to adaptation?

Brendan Reed: Well, we started the process, we had our first climate change working group meeting in December of 2009 and we presented or the climate change working group, presented their recommendations to council on October 7th. So I have about 10 months there, and as far as staff time, we – just sort of estimating, we held a working group meeting about every three weeks and the meetings themselves were two hours long and there was probably another two hours of prep time and sort of post meeting debrief work.

So it was definitely not a – it wasn't a small amount of time. We again, really leveraged our resources from ICLEI as well as someone from the San Diego foundation who helped do a lot of the initial research. And all of that I just would want to say is all of this information is available on the city of Chula Vista's Website under our clean Web portal, there's a link to what, on our homepage.

So feel free to use the information that we gathered, it might shorten another local jurisdiction, local jurisdiction's process, hopefully.

Emma Zinsmeister: Thank you Brendan and we're happy to post the link to that Website with the questions and answers so, folks can get to that information as well. Thank you to everyone for participating today, if there're any questions that you didn't to, we will post those answers in writing. And I encourage all the participants too as you exit out of our Webcast today to participate in the optional feedbacks survey and give us your thoughts on what we can cover here at EPA in future Webcasts.

And what tools and resources would be helpful for you in implementing your adaptation efforts. We will be holding the second session of this Webcast series on December 15th where we'll get into more detail on the processes of planning, adaptation strategies and actually working towards implementation. And we will have state and local speakers to share their experiences as case studies. So we hope that you will join us then.

Thank you again and thanks to our speakers for your time and your wonderful presentations.

Operator: This concludes today's conference call, you may now disconnect.

**END**