## Christopher Estes, Legal Session Moderator

Slide 1:

Thank all of you for attending. Eric, thanks for introducing us and giving us some background. Aaron, that was an outstanding presentation of a global overview of drought. You focused on topics that are really important to the Instream Flow Council (IFC), and I assume all workshop participants. Collectively, legal, institutional public involvement, and scientific/technical elements must be addressed to mitigate negative impacts of drought to instream flows and water levels and achieve positive conservation outcomes related to flow and water level considerations. Conservation is defined by the IFC and many in this room as protection, restoration, and enhancement.

Slide 2

How many people in the audience and panel attended FLOW 2015 in Portland, Oregon? Oh, maybe, I should say, how many didn't? Okay, well that's good to know.

Now I will give an overview on how this and other workshop sessions will function. We're recording all dialogue and our speakers will, within a few months after the workshop, have an opportunity to refine, and finalize their PowerPoints based on what they also heard at the workshop. They will also have an opportunity to edit a draft transcript of their dialogue. Both the final versions of the PowerPoints and companion dialogue will be posted on the IFC website similar to the FLOW 2018 products posted. Some of the final presentations posted may be expanded depending on whether the current allotted time constraints prevented a speaker from sharing additional information during the workshop.

Back to FLOW 2015. If you go to the Instream Flow Council website (<a href="www.instreamflowcouncil.org">www.instreamflowcouncil.org</a>), which I'm sure many of you visited to register for this workshop, you can locate a portal to all of the final FLOW 2015 workshop PowerPoint presentations, accompanying dialogue, and other workshop products (<a href="https://www.instreamflowcouncil.org/conferences-flow-2015-workshop-materials/">https://www.instreamflowcouncil.org/conferences-flow-2015-workshop-materials/</a>). Similar FLOW 2018 workshop products will be posted products within approximately four or more months.

Regarding this opening Legal Session, each speaker has been allotted up to 25 minutes for their individual presentations. Then, depending where we are in the session timeline after a presentation is completed, we may or may not have time for answering a question. A break will be provided midway between 9:55 AM to 10:15 AM. After all Legal Session panel speakers have completed their presentations, we'll convene with a closing half-hour audience/panel facilitated questions and answers session from 11:10 AM to 11:45 AM. Lunch will be at noon.

So, you may want to take notes during each presentation, because most of the questions will probably have to be addressed after all of presentations in the session are completed. In the Q&A session, please speak directly into the microphone, be sure to tell us who you are, and your affiliation.

Before I continue, I want to apologize to Andrew Purkey, who will be the first speaker, because we didn't include him in the printed version of the workshop program. He is included in the online program.

Slide 4

FLOW 2015 focused on all elements associated with the hydrologic cycle required to address uncertainties for conserving adequate amounts of instream flows and water levels under legal, institutional, public involvement, and science topic areas. And, about that time, and soon after, the U.S., Canada and the world were collectively experiencing challenges posed by drought based hydrologic cycles. Although IFC addressed the entire hydrologic cycle for FLOW 2015, we decided we should begin investigating whether to look at how to better zoom down and focus on drought related mitigation. As Eric mentioned, the Association of Fish and Wildlife Agencies (AFWA), and a whole bunch of other folks also began encouraging IFC to focus on drought for its next global workshop post the FLOW 2015 workshop. By 2016, drought continued to be widespread in many locations at the same time globally. People, as a whole, were more familiar with and began to collectively focus on drought, than on other elements of the hydrologic cycle during prior periods when drought conditions were experienced on a more limited regional and localized basis. In fact, during 2016, the U.S. government added drought as a natural hazard category (e.g. like hurricanes, earthquakes, wildfires, etc.), opening up new opportunities for federal funding sources that were previously limited to other categories of recognized natural hazards

(https://obamawhitehouse.archives.gov/the-press-

office/2016/03/21/presidential-memorandum-building-national-capabilities-long-term-drought). A National Drought Action Plan was adopted and implemented by the U.S

(https://obamawhitehouse.archives.gov/sites/default/files/docs/drought\_resilie nce\_action\_plan\_2016\_final.pdf). This plan, its history, and status may be discussed further by some of our speakers

(https://www.drought.gov/drought/resources/national-drought-resilience-partnership).

Slide 5

The challenge posed to IFC was -- how do you tackle the hydro-illogic cycle to add and integrate consideration of flows and water levels needed by fish, wildlife, and habitat into mitigation actions for drought?

As a result of a combination of these factors, IFC came up with this FLOW 2018 drought theme concept in late 2016.

Slide 6

Soon after, extreme hydrologic flood and precipitation events were also occurring more frequently, and in more locations, too. So now, we had a combination of drought and other extreme of extreme high precipitation cycle hydrologic events and yet another version of the hydro-illogic cycle to address. The two hydro-illogic cycles go together. Whether we're focusing on only one versus the other often depends upon where we are temporally and spatially, another symptom and challenge posed by these hydro-illogic cycles. That reminds to emphasize the importance of integrating all of these varying hydrologic conditions, both normal and extreme. The bottom line is one should always take into consideration all hydrologic variability associated with both normal and extreme event hydrologic cycles to effectively mitigate for them proactively.

So, during the workshop, we will have presentations describing how you can more effectively mitigate for these extreme hydrologic conditions, and at the same time, make sure that you're aware of the challenges that have to be addressed.

Slide 7

This first session is primarily focused on legal related components of all those elements I summarized. And, the goal is make sure that you have a better understanding of actions that you can take to effectively mitigate negative drought and other extreme hydrologic event impacts to fish, wildlife, and habitat. The IFC also wants to remind you it is important to make sure you're looking at both flowing water bodies (instream flow related) and lentic, or lakelike, and reservoir-type water bodies (water level related) and integrating them where applicable. Also, please remember, we want presenters and the audience to look at how flow and water level variability impacts fish, wildlife, and habitats.

In summary, this is the toolbox; and there's a lot of tools (legal, institutional, science/technical, and public involvement) in there to address drought. But, just because you have a toolbox doesn't mean you know how to use all of them, or a combination of them. Hopefully this first session will give you an idea from a legal perspective, that'll be followed by other sessions that'll correspond.

Another reminder, I'm only going to give a brief introduction for each of the panel speakers. There are more extensive details, in terms of their bio, in your programs. I recommend you look at the program to have a better understanding of how experienced, and how much talent they all have, including background in the various topic areas we're going to talk about.

The first Legal Session speaker is Andrew Purkey. Andrew is the Director of the National Fish and Wildlife Foundation's Western Water Program. And, he's been with the National Fish and Wildlife Foundation since 2003. He's been working since 2012 as the Program Director of the Columbia Basin Water Transactions Programs. And, now I'll hand it off to you, Andrew.