# **CAC Minutes**

## For the meeting of February 16, 2017

CAC MEMBERS IN ATTENDANCE: Hunter Causey, Mike Cowan, Joshua Baile, Loretta Pineta,

Paul Aldretti, Gary Martinez, Rich Newton

CAC MEMBERS ABSENT: John Stafford, Bethany Gravell, Genny Klein

**Guests:** Tim Flynn

Denver Water Staff: Katie Knoll, Heather Stauffer

#### **Opening Remarks, Public Comments, Agenda and Minutes:**

No comments from members of the public

Minutes approved as amended

#### **Denver Water Update:**

Provided in written format to all members.

#### **High Line Canal Conservancy Presentation:**

Suzanna Fry Jones of the High Line Canal Conservancy Group spoke to the CAC about the work the conservancy group is doing to preserve the future of the High Line Canal. It is the goal of the conservancy to preserve and enhance the High Line Canal's 71 meandering miles as a cherished greenway that connects people to nature and binds varied communities together from the foothills to the plains. The High Line Canal winds through 11 jurisdictions and is 71 miles long. The Canal hosts over 500,000 users annually with nearly 350,000 residents living within one mile of the Canal. There is a total of 800 acres that connects 73 green spaces ranging from State Parks to pocket parks. This makes the High Line Canal an important piece of the community. The Canal also loses about 70% of the water that's put through it, prompting a need for a plan for how to preserve it. The High Line Canal Planning Initiative is a regional planning initiative for the 71 mile corridor. (Broken into two phases. Phase 1: public outreach and vision planning ended in January 2017. Phase 2: Comprehensive Master Planning and Outreach is set to begin this year.) The conservancy is looking at replacing the raw water from Denver Water with storm water. Phase 2 planning beginning in 2017 and continuing through 2018 includes framework planning, zone plans, landscape design guidelines, and trail and maintenance standards. Suzanna also gave a rundown of funding: 35% comes from jurisdictions, 17% from GOCO, 17% from the Gates Family Foundation, 14% from Arapahoe County 14% from Denver Water and 3% from private donations.

#### **Denver Water and Climate Change:**

Laurna Kaatz explained that climate change models are getting much better, increasing in sophistication, and becoming more complex and useful. The moderate climate change scenario is a warming of 4-7 degrees. Climate change is one output of global warming. But climate change as a whole is weather processing and long-term trends changing over time. Laurna is in charge of the application of climate

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change for Denver Water planning. Denver Water started the climate change program in 2008. Laurna was the first person in the nation to be hired by a water utility to help with climate change modeling.

Laurna explained that in 2002 there were unprecedented simultaneous natural disasters which challenged our perceptions of the future. After 2002 Denver Water moved from a deterministic planning model to an uncertain future model of planning. Denver Water now uses "what if" planning to help better understand our limitations. When Denver Water is done with the Integrated Resource Plan Laurna will take the plan and evaluate it under many different climate scenarios. In this way, Denver Water can see where the plan is vulnerable.

Laurna went over the water climate cycle, she explained as the planet warms, the warmer atmosphere holds more water. Because water vapor acts like a greenhouse gas, as the atmosphere warms and holds more water, the climate warms. Statewide we see statistically significant trends. It warmed in Colorado about 2 degrees Fahrenheit the last part of the century, in the last 10-15 years. For perspective, during the last ice age the US only changed 11 degrees.

We can observe that peak stream flow arrives about 4 weeks earlier. It's hotter so snow is melting, and it's hotter so the dust from the four corners is increasing dust on snow events. Once we get dust on snow it starts to absorb the sun's rays. Stream flow variability is increasing. Colorado has trended toward more drought conditions. More heat waves and fewer cold waves.

Laurna and her team also look at historical climate data which shows multiple paleodroughts more severe and sustained than observed droughts. Laurna explained that we need to understand what happened in the past and what it means for our future.

In summary, Colorado's annual temperature is getting warmer, heat waves are becoming more frequent, and the frost-free season is becoming longer. Snowmelt is occurring earlier, which is causing peak runoff to happen earlier. Dust events are becoming more frequent, vegetation is becoming more stressed, and forest fires are increasing. What this means for Denver Water is that if the climate warms about 5 degrees, as predicted, Denver Water stands to lose about 20% of its supply.

So, where are we going from here? Laurna explained that building responsibility to the conversation is important; the more we can do to mitigate our footprint the less we will have to do. We maintain a dual science and planning focus for our climate adaptation program. In the 2018 IRP we will mainstream climate adaptation and long-range thinking as well as strategic planning. We're also working on informing our customers about climate change and acting as thefirst messenger on climate and water.

#### **CAC Business:**

Josh Baile would like feedback from CAC members about the 2017 schedule. Heather Stauffer will provide the CAC with the schedule and the list of topics the CAC chose in 2016.