

LARIMER COUNTY | ENVIRONMENTAL AND SCIENCE ADVISORY BOARD

P.O. Box 1190, Fort Collins, Colorado 80522-1190, 970.498.5738, Larimer.org

The role of the Advisory Board is to advise the Board of County Commissioners and appropriate departments on environmental and science-related issues that affect Larimer County.

MINUTES

Date: November 10th, 2020

Time: 6:00 – 9:00 p.m.

Location: Virtual by Zoom

Contact: Shelley Bayard de Volo, sbayard@larimer.org or 970.498.5738

MEMBERS		STAFF		GUESTS
Rodger Ames	X	John Kefalas*	X	Water and Environmental Resources, Lynker
Daniel Beveridge	X	Shelley Bayard de Volo [¥]	X	Graeme Aggett
John Bleem	X			Ryan Spies
Jim Gerek - <i>Chair</i>	X			Bill Szafranski
David Lehman – <i>Vice-Chair</i>	X	Student Intern		Cam Wobus
Allyson Little		Cailea Eisenberg		
Kirk Longstein	X			
George Rinker	X			
Travis Rounsaville	X			
Catriona Smith	X			
Katrina Winborn-Miller	X			
Chris Wood	X			

X = present; * = Commissioner Liaison; † = Speaker; ¥ = ESAB Liaison; § = Larimer County Department of Health and Environment

Call to Order: 6:00 p.m.

1. **Amendments or additions to the agenda** – None
2. **Introduction of members, staff, and guests** – Jim noted that there were several attendees that were not observable, but present and listening into the Zoom webinar.
3. **Public Comment** – none
4. **Discussion Items**
 - Future Avoided Cost Explorer (FACE: Hazards) –Graeme Aggett introduced the project that his team is supporting for the Colorado Department of Homeland Security and Emergency Management (DHSEM) and the Colorado Water Conservation Board (CWCB). The general premise of the project involves identifying natural hazards and how they impact different sectors and comparing impact scenarios for the present and future with assumptions of climate change





and population growth. The tool was developed for the entire State, but could be scaled to the local community if it incorporated localized data. Key questions addressed were:

1. What is Colorado’s current and future risk to flood, drought, and wildfire?
2. What is the risk from these hazards based on projected population growth?
3. How does climate change affect risk?
4. What are the projected economic impacts for select sectors?
5. What are the potential savings of resilience actions on current and future risk?

The other goal is to predict the hazard risk costs to various economic sectors, as those risks change with future conditions. The economic sectors considered were:

1. buildings and bridges for flood risk;
2. rafting, skiing, cattle and crops for drought risk; and
3. suppression and buildings for wildfire risk.

The degree of risk to those sectors depends on climate change and population growth, each of which are projected to change between now and 2050. The modeling process incorporates the parameters of risk, population growth, and climate change to predict costs of damages. Population growth was applied to specific landscapes, based on land-use projections, and then the risks of flood, wildfire or drought were applied as they interacted with population growth scenarios at the land parcel scale. Climate change was incorporated as change in temperature projections and drought, which interacted with the hazard risks and population growth as it was distributed over the landscape.

Modeling results presented for Larimer County for annualized damages in 2019 dollars (millions) were:

Hazard Risk	2019 current	2050 moderate climate change with low population growth	2050 severe climate change with high population growth
Flood	13 M	27 M	60 M
Drought	2 M	10 M	12 M
Wildfire	7 M	12 M	22 M
Combined	22 M	49 M	94 M



The team then considered how the risks and costs could be mitigated through efforts to increase resiliency in our watersheds and communities. They discussed several resources like the US Army Corps of Engineers' Colorado Post-wildfire Guide. Also considering a process to identify channel migration zones, as these areas are high risk zones for fluvial hazards that are characteristic in Colorado Mountain zones. This type of modeling is not typically done in flood related risk hazard mapping.

Anyone can go to the following website to view the results for all outcome scenarios

<https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e>

- State Ozone and Air quality rules – Katrina provided an update of the status of ozone impacts and non-attainment for the Front Range zone. The primary health impacts from increased levels of ozone are respiratory issues, which are currently additive for patients with Covid-19. There are two National Ambient Air Quality Standards (NAAQS) currently in effect: the 2008 75-ppb (parts per billion) standard, which needs to be met by July 2021; and the 2015 70ppb standard by August 2021. Rodger discussed how ozone is formed and how the 2020 wildfire season has impacted the formation of ozone. They showed the CDPHE and EPA maps for the monitoring sites across the front range that are listed in the 3-year average summary table. In that table, as of 7/31/2020 there were 6 sites across the Front Range with averages over the 70 PPB NAAQS. By 10/31/2020, during the wildfires, there were 10 sites, which exemplifies the impact from wildfires. The Larimer County monitoring site with 3-year average over the standard prior to the 2020 wildfires was the Fort Collins West site with 75-ppb, and that result did not change with the later readings during the wildfires.

There was discussion of the EPA removal of the wildfire effects as an “exceptional event”, but with climate change, wildfires are becoming more frequent and “normal”? The Regional Air Quality Council (RAQC) works to implement strategies to reduce air pollution, but they can only work with sources that can be controlled like stationary (buildings) and mobile (vehicles) sources, and industry sources like oil and gas - they cannot provide pollution control for wildfires. If the EPA removed the wildfires as exceptional events, several monitoring sites would be closer to meeting the 70-ppb and 75-ppb standards.

Katrina then presented graphs from the RAQC that showed where ground level ozone comes from. Oil and Gas production contributes 44% of VOCs, with vehicles and household products contributing another 35%. For NOx emissions, Oil and Gas production contributes 28% and vehicles 32%.

Katrina then presented RAQC's August 2020 meeting topic: the State Implementation Plan (SIP) is a plan that includes control measures focused on strategies to promote compliance with the EPA standard. The region is currently



in a “serious non-attainment” status. If we do not meet the Summer 2021 criteria, we move into “severe non-attainment” status, which is like that of California and Houston. The RAQC is currently preparing a SIP update to meet the serious status requirements including more control measures. The plan will involve rulemaking, regulation, and legislation to include as part of the SIP to be submitted to the EPA next year. There will be public comments opportunities.

5. **Approval of Minutes** – George moved to approve the October minutes, and Catriona seconded. The October minutes were approved by acclamation.
6. **Updates and Round Table**
 - Platte River Power Authority Integrated Resource Plan – John and Chris provided a brief update on the PRPA’s plan to meet their electricity demands in a sustainable manner. That plan includes several portfolio alternatives. John noted the preferred alternative is the P2: zero coal. That portfolio retires all coal fired generation by 2030. To meet demand, non-carbon sources are added to the portfolio through wind, solar and hydropower. They are looking for a 90% reduction in carbon sourced electricity by 2030. While the plan is available now, further communications tools are being developed by PRPA and will be shared with the ESAB when they are complete.
 - Process for 2021 Officer Elections – Jim explained how the board functions and will elect its officers at the December meeting. He ensured that anyone can be nominated and/or self-nominate. He encouraged members to consider the opportunity, if not for this upcoming election, then for the next at the end of 2021. He offered his time to discuss the role with anyone who is interested.
 - Commissioner Update – Commissioner Kefalas noted that in lieu of the typical Fall recognition event for County advisory board members that a "thank you" video was being produced and there would be small gifts provided to members. He also discussed the Climate Smart Larimer County process and the status of the report. He also noted that the Community Survey is now open, and that it includes a question on climate change. He also noted a communication he received regarding Colorado Water Conservation Board plan to augment stream flows on the Cache la Poudre River to meet the Cities of Greeley and Fort Collins water rights contracts. There is an upcoming Dec 5th medical symposium organized by Physicians for Social Responsibility involving health effects of the oil and gas industry. Lastly, the schedule for approving the 2020 Land Use Code update was discussed.
7. **Issue Index** – Members signed up to be coordinators for several issues.
8. **Agenda Topics for Future Meetings** – Next meeting is December 8th. Topics include reviewing the ESAB 2020 annual report and 2021 workplan, election of officers, and other items TBD.
9. **Adjourn** – The meeting adjourned at 8:48 PM.