

LARIMER COUNTY | ENVIRONMENTAL AND SCIENCE ADVISORY BOARD

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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: June 11th, 2019

Time: 6:00 – 9:00 p.m.

Location: Larimer County Courthouse Office Building, Carter Lake Meeting Room, 200 West Oak St
Fort Collins, Colorado

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

MEMBERS		STAFF		GUESTS
Richard Alper		John Kefalas*	X	Larimer County Board of Health
Daniel Beveridge	X	Shelley Bayard de Volo [¥]	X	
Rich Conant	X			Jennifer Lee
Jim Gerek - <i>Chair</i>	X			
Michael Jones				Colorado Health Institute
Evelyn King	X			Karam Ahmad [‡]
David Lehman – <i>Vice-Chair</i>	X			Chrissy Esposito [‡]
Allyson Little	X			Sara Schmitt
Kirk Longstein	X			
George Rinker	X			
Katrina Winborn-Miller	X			
Chris Wood				

X = present; * = commissioner Liaison; ‡ = speaker; ¥ = ESAB Liaison; § = Larimer County Department of Health and Environment

Call to Order: 6:05 p.m.

- 1. Amendments or additions to the agenda** – Removed Oil and Gas taskforce and Climate Action Plan process updates from agenda
- 2. Introduction of members, staff and guests** – All present introduced themselves
- 3. Public Comment** - none
- 4. Discussion Items**
 - a. Health Impact with Climate Change** – Chrissy and Karam began their talk explaining their work at the Colorado Health Institute. Their work involves the use of geospatial analysis to study geographic variation in climate related public health impacts. They noted that climate change will impact every Coloradoan, but how





much depends on who you are and where you live. People living in the wildland-urban interface (WUI) might experience more air quality impacts associated with smoke from wildfires as compared to those living in urban areas. Economies that rely on water, like beer production, might be impacted as the cost of water increases as a result of drought. Consistently higher temperatures, over longer durations, will impact vulnerable populations – dehydration impacts on those with kidney disease and air quality impacts on those with lung diseases.

The CHI publishes a Health and Climate Index that focuses on seven Colorado regions. Larimer County falls within the Front Range Region, along with 10 other counties. The HCI ranks the Regions 0-10 on their vulnerability to the impacts of climate change, with higher scores indicating lower vulnerability. The index is based on 24 variables, which are sorted into three categories (1) **Exposure** to climate-related natural hazards; (2) **Sensitive Populations**; (3) **Readiness** to address climate change, as demonstrated by government action and public perception.

Results from data collected in 2017 indicate the Front Range region is least vulnerable in Exposure (7.5) and Sensitive Populations (6.8), but vulnerable in Readiness (4.5). The low Readiness score resulted from the fact that no Front Range county had local public health priority plans focused on clean air or clean water.

Following the presentation there was discussion regarding the indices. Lori Hodges pointed out that the County published a 2016 Hazard Mitigation Plan (<https://www.larimer.org/sites/default/files/larimer-hmp.pdf>) that discusses predicted and realized climate change impacts in the Southwest U.S, including Colorado. The group noted that it would be useful to have the CHI for just Larimer County - Chrissy and Karam said they would make that available.

- b. **Comprehensive Plan** – The Planning department provided the ESAB a spreadsheet of the comments provided by the ESAB members on the Comprehensive Plan. Jim and David went through those comments and pulled out the top 17 for discussion tonight. The primary topic areas included issues of water quality and quantity, proper use and presentation based on statistics, and the importance of noting the participation of the County’s Boards and Commissions in the development of the Plan. After discussion, the only topic(s) that gained clear consensus among those present was the appropriate use and presentation of data based on statistics. Because of the length of the discussion, there was not adequate time during the meeting to completely draft a comment memo to the Planning Department on this subject.

Jim asked for a motion to support he, David and Shelley drafting a consensus memo from the ESAB the next day and submitting it. Daniel moved, and Kirk seconded. All present were in favor of the motion.

5. **Approval of Minutes** – Evelyn moved to approve the May minutes, and Ally seconded the motion. The minutes were approved by acclamation.



6. Updates and Round Table –

- a. 5G cell tower networks – potential health impacts - David Lehman presented his review of cell phone/5G Towers as a threat to human health, with a focus on statistics, epidemiology, and avoidance. David explained the context and use of statistics in medical research, highlighting the importance of having the understanding that association does not equal causation. One needs to be careful drawing conclusions from studies based only on associations. Another pitfall are studies that engage in data dredging for significant p-values, without a priori hypothesis development. Better study designs involve randomized, double-blind placebo-controlled experiments, but that gold standard cannot always be used. Drawing conclusions based on P-values alone is not enough as it does not provide information like effect size and confidence in estimates. Thus, using 95% confidence intervals, measures of variance, funnel plots for meta-analysis, and Bayesian inference provide better information and result in more robust conclusions.

David's noted the current literature does not support the conclusion of health impacts from 5G cell towers, however, that conclusion is because most studies have been poorly designed.

Jim asked whether the ESAB should continue to take up this issue? John noted that the update to the land use code will address all communication towers, but the primary regulator for communications is the FCC. The Planning Commission will take up the matter June 19th with potential adoption on July 17th.

- b. Environmental Stewardship Awards – Shelley provided a quick summary of the awards ceremony held on June 10. As usual the awardees were very pleased, and there was positive press around the awards. Jim thanked those involved in the awards process, and reminded ESAB members to be on the lookout for potential 2020 nominees.
- c. Oil & Gas Task Force – Jim noted that the ESAB's nominee – Richard Alper – had been formally appointed by the BoCC and that the group's meetings would be beginning soon. The ESAB can expect updates on progress at future meetings.
- d. Climate Action Plan – Lori Hodges has been asked to facilitate a County staff team on this subject. Because of their interest (and to represent ESAB) Kirk and Katrina have been invited to participate on this staff team. The ESAB can expect updates on progress at future meetings.

7. **Notations to the Issue Index** – the issue index will be updated for tonight's discussion.

8. **Agenda Topics for Future Meetings** – Adam Palmer will come speak on Eagle County's Climate Action Plan.

9. **Adjourn** – Rich moved to adjourn the meeting with Ally seconding. All were in favor and the meeting was adjourned at 9:00 PM.