

LARIMER COUNTY | ENGINEERING

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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: October 12, 2021

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	Boulder County
Daniel Beveridge	X	Shelley Bayard de Volo [¥]	X	Bill Hayes, Air Quality Program Coordinator
John Bleem	X	Heidi Pruess [§]	X	
Jim Gerek - Chair	X			
Ted Hendrickx				
David Lehman – Vice-Chair	X			
Allyson Little	X			
Kirk Longstein	X			
Kaitlin Rainsberger	X			
George Rinker	X			
Travis Rounsaville	X			
Shelby Sommer	X			
Catriona Smith				
Katrina Winborn-Miller	X			
Chris Wood	X			

X = present; * = Commissioner Liaison; † = Speaker; ¥ = ESAB Liaison; § = Environmental and Sustainability Program

Call to Order: 6:18 p.m.

1. **Amendments or additions to the agenda** – Order was adjusted to assist speaker.
2. **Introduction of members, staff, and guests** – The members introduced themselves
3. **Public Comment** – No public comment.
4. **Discussion Items**
 - Boulder County Air Quality Monitoring Program – Rodger introduced Bill Hayes, from Boulder County. Bill presented on the County's air quality monitoring program which includes monitors for Volatile Organic Compounds (VOCs). He described the air quality pollutant concerns for the Front Range (VOCs, Particulates, and ozone) and the health im-





pacts that those pollutants have on the environment and people. In particular, VOCs can cause cancer, damage nervous system and organs, irritate airways. Small particulates (PM_{2.5}) can enter the blood stream through the lungs and harm all major organs. Wild-fire smoke contains primarily particulates, but also carbon monoxide and other air toxins. Those with upper respiratory diseases (asthma, COPD) are at high risk, but also children and the elderly. Ground-level ozone also can cause several health issues, especially in vulnerable populations. High levels of ozone also impact the environment, and it contributes to climate warming, which cycles back to contribute to ozone production.

Bill explained how Ozone is produced from the precursors (VOCs and NO_x) that primarily come from vehicles, but also a variety of industrial sources. There is also a lot of debate on how much ozone, and its precursors come from out of State, and out of the region. The Front Range has been out of attainment for ozone, so addressing the question of the source for pollutants is critical to address mitigation strategies. Bill discussed the EPA standards for Ozone levels and non-attainment status. Our region is currently in the "Moderate" status but is trending toward "serious". Bill spoke about the impact that wild-fire smoke has on the values reported from monitors and the impact on the trend data. There is debate about excluding those "flagged" events as exceptional, however, wildfires and the smoke they produce are no longer considered exceptional and rather are a regular component of our regional airshed.

Bill talked about the State Implementation Plan (SIP), which provides direction to meet EPA standards in air quality. The ozone non-attainment region was recently expanded in Weld County to include the northern part of the County up to the Wyoming border, which improves the ability for success of the SIP. This is important because industry, including oil and gas development, within the attainment area are subject air quality mitigation requirements outlined in the SIP.

Boulder County, in 2017, set up an air quality monitoring station at the Boulder Reservoir. The station monitors NO_x, VOCs and methane. The station is co-located with the State's ozone monitor and it also tracks weather. The weather monitoring includes wind direction, which is important when paired with pollutant data for identifying pollutant sources. Data from 2017-2018 showed that the VOCs collected at the monitor had the highest probability of originating from areas east of Boulder County, specifically Weld County around Platteville. Differentiating VOCs between oil and gas sources and vehicle sources were accomplished using chemical signatures (*iso*-Pentane/*n*-Pentane ratio), which differ between the two sources. From this analysis, they found that the sources of VOCs were mixed, with contribution from oil and gas sources occurring mostly during the day.

They also worked with researchers at the Colorado State University Atmospheric Science Center, who conducted a source apportionment study. They were able to attribute VOC emissions to oil and gas producing regions and determined that surface ozone at the Boulder Reservoir is heavily influenced by regionally produced oil and gas emissions. They also determined that high ozone days at Boulder Reservoir result from locally sourced ozone precursors and not wildfire smoke events. Lastly, it's important to consider the fact that production of ozone is NO_x limited, so mitigation strategies must consider sources of NO_x as well as sources of VOCs.

Boulder County's goal has been to have robust data to present to the Colorado Air Quality Control Commission (AQCC) to strengthen oil and gas regulations. They also use their data for public messaging on air quality status, to provide comments to EPA, and inform policy.



Boulder County also informs their community on opportunities for public comment on State initiatives.

Bill then took some questions from the board including costs for the program. Equipment initially costs \$120K and implementing the program costs \$50K/yr. Bill noted that their program and equipment is on the higher end of costs. There are other monitors (Canary, Purple Air) that cost a lot less and can provide good trend data if used appropriately. David asked how persistent VOCs are in the air. Bill noted that once the source of VOCs are removed, they dissipate quickly, but there are always biogenic sources of VOCs that remain. Commissioner Kefalas requested the slides from tonight's presentation and asked about whether Bill's group has had much communication with Larimer County Public Health? He noted that he had not, due to Covid over the past year and a half., but he has spoken with Lea Schneider and looks forward to collaborating more with Larimer County. Lastly, Bill was asked about monitoring methane emissions, and Bill noted that the Boulder Reservoir monitor does track and measure methane emissions. Heidi Pruess asked what Bill's recommendation would be for Larimer County in terms of taking steps toward more monitoring. He recommended that goals need to be established first so that the County can develop the technology and data collection strategy to meet those goals. Also, if the goals are to compare data across the region, then it's important to consider using monitors that collect the same data types so one is comparing "apples to apples".

- Regional Air Quality Monitoring – Rodger followed up after the presentation. He discussed the importance that the County determine their goals in terms of monitoring so they know what kind of monitors they should be purchasing and placing out in the community. He reiterated that there is expertise on the board that could help identify whether some of the lower cost monitors could be effective for some of the County's monitoring objectives. He noted that with Boulder, because of the data they have in hand they have a lot of power in terms of being able to work with the State on air quality planning. They can say definitively that their non-attainment is coming from factors outside of the County and beyond their control. Right now, Larimer County does not have that ability. One thing the ESAB can do is to inform the County on what is the value of having that kind of information at their disposal. The County needs to decide on their monitoring objectives and the ESAB can help support that process. He proposed that perhaps the ESAB could draft recommendations on the various monitors and what kinds of data that provide, and the kinds of monitoring objectives they can support. Commissioner Kefalas noted that the BoCC has directed staff to review the Boulder study as well as meet with the Towns of Erie and Longmont to learn about their programs. The community has voiced that they want to see continuous air quality monitoring in Larimer County. Monday Nov. 1st, at their request, the BoCC will hear from staff at Community Planning and Health on the air quality and monitoring topic. Jim noted that after that worksession, the ESAB could then step up and develop recommendations and start to participate on supporting staff and the BoCC on the matter. Rodger offered to take the lead on the matter, and it might be something to revisit at the November meeting.
- Memo on Regional Transportation Planning - Kirk led this discussion. The goal of the sub-committee has been to draft a memo that would be approved by the ESAB. The goals set forth in the memo lay out strategies and recommendations for the County on developing an electric vehicle (EV) infrastructure plan. There are opportunities for grants coming from the Federal and State governments of which the County can take advantage. As



well, Colorado Senate Bill 260 directs the Colorado Dept. of Transportation (CDOT) to improve and modernize transportation infrastructure, in part to prepare for increased use of electric vehicles. The County has representation on the North Front Range Metropolitan Planning Organization (NFRMPO). Transportation projects proposals funded through the NFRMPO are required to conduct greenhouse gas (GHG) monitoring. The County has an opportunity to take an active role in proposing EV infrastructure, but also in developing public transit and regional transportation opportunities. The County is also updating its land-use code right now and proposing language in the building codes that new development be "EV ready". Kirk and Rodger proposed that they would like to see the board get behind recommending that the County develop a dedicated staff team or a task force that would focus on transportation and EV infrastructure.

John asked what the current situation is within the County regarding EVs? Kirk noted that infrastructure planning is through Community Development. Commissioner Kefalas noted that the development standards in the approved updated land-use code include details for commercial parking lots (1 EV space for every 30 spaces). The BoCC felt this was not strong enough and Planning is coming back with updated standards in November. Commissioner Kefalas will forward to Shelley an email from Commissioner Stephens that she received on best practices for EV infrastructure. Shelley will forward that on to the ESAB. Commissioner Kefalas noted that in terms of County public facilities, the BoCC is in favor of improving and expanding the EV infrastructure. He is aware that the grants are out there, but the County has not been prepared to apply for them and he anticipates that Heidi P can assist with that. In terms of the County Fleet, two hybrid Ford F-150 trucks were recently added to the fleet at The Ranch. They are also looking at adding EV and hybrids as regular fleet vehicles are replaced. Kirk noted that Estes Park took advantage of one of the grants to contract the Brendle Group to develop an EV Road Map, and the County could do the same. Also in the memo, Rodger summarizes a white paper that describes how many EV charging stations Larimer County needs to have to meet the GHG road Map from the State of Colorado. It's important that as the CSLC develops it includes steps that align the County with the State's GHG Roadmap. John then asked whether this memo is duplicative with steps that the CSLC might be already taking? Taking in the future? How do the timelines fit? Heidi P. noted that the ESAB should not wait. The CSLC community outreach process is to identify new and existing steps that can be integrated into actionable steps within the CSLC action plan. Kirk noted that the point of bringing up SB 260 and the Transportation Improvement Planning (TIP) process is to highlight the fact that the planning cycle is 3-4 years out, so to have recommendations to go into that planning process they need to happen now, which does not align with the CSLC timeline. Shelby noted that this is a really a very quickly moving space and there will be another round of grants for technical assistance in developing road maps for rural communities. There are a number of prongs in terms of what is in the road map and anyone of those is a process in and of itself. Rodger echoed Shelby's comments. He noted Charge Ahead Colorado, which has two grant rounds a year and he is not sure if the County is plugged into that opportunity. Kirk noted that Charge Ahead Colorado has a grant opportunity for private developers for up to \$9K for EV infrastructure, so as the BoCC discusses the requirements they want in the land-use code they should realize the opportunities that are available to developers. Commissioner Kefalas did know about that opportunity. Jim asked who would be the appropriate end user, point of contact, for this memo? Technically the ESAB has not been asked for such a deliverable. The Commissioner has been involved;



Heidi P has been involved. Commissioner Kefalas noted that the memo can be sent to him, but also because it involves the land-use code, it should also be directed to Laurie Kadrich. She could forward this onto Community Planning staff, and with the BoCC encouragement the Facilities director Ken Cooper, and Heidi Vilhauser, the Fleet Manager. Linda Hoffman should also be included.

The conversations continued and focused on planning for shovel ready projects that the County could do. Shelby noted that thinking about pilot projects is important as well because it can facilitate adoption of EVs in fleets like the Sheriff's, who are often hesitant. Kirk asked if they need to submit a memo? Form a group? John noted that setting up a collaborative group might be effective in lieu of a memo. Heidi said that she thought that taking both steps was important, and the memo could help get things started, and to get a team together. Commissioner Kefalas wants the memo to be shared, and to move forward appropriately with County Staff. The Board then discussed how to move the memo forward. Mention of also including Lorenda Volker since she directs Facilities and Fleet. Edits should emphasize the timeliness of the opportunities, they should be in the spirit of cooperation, and be clear that the ESAB not looking to direct County staff but rather be a cooperator and resource. Jim asked if the board was ready to approve the memo in concept, assuming there would be some edits discussed tonight? John said that there are still a lot of moving parts, and the memo is not fully prepared to approve in concept. Travis agreed. There was further discussion on that point. Kirk and Rodger agreed to make the edits and bring the draft memo back to the ESAB at the November meeting for a final vote.

- Invitation for ESAB participation on the CSLC external Task Force – Jim noted that the ESAB received an invitation for a member to sit on the CSLC external task force. He described it as like the process that the ESAB took with the Wasteshed planning and the oil and gas regulations, where a member would serve as the primary participant, but could have a sub-committee that they work with behind the scenes. He asked if any members would be interested? Kirk asked what would the deliverable of the task force be? Heidi explained that the task force would work with the consultant to ultimately help drive the community outreach to develop a strategic prioritization report that can be presented to the BoCC. That report will include the priority action items that the County should address. The make-up of the Task force includes youth and CSU students, as well as representatives from municipalities in Larimer County. There will be five evening meetings. David noted that he thought it will be hard to agree on recommended action items if the task force can't vote. Heidi noted that it would be guidance, that the task force is large, there will be break-out teams, and the goal is for the task force to ensure that the consultant process is capturing the community's voice. Commissioner Kefalas noted the report will come from the consultant, and the task force is acting as a steering committee to help facilitate the process. Kirk asked how they will decide on prioritization? Are there selection criteria for the priorities to move forward? Heidi said that the consultant and internal staff team will develop and provide guidance. Kirk asked if there is a specific role that ESAB is participating in, and does the ESAB fill a niche that the other task force members do not? Knowing that could help the ESAB designate the right person to serve. The ESAB already has a greater knowledge on the climate issues than most other task force members so the hope is that person can be somewhat of a conduit in meetings. They may also have knowledge of who is missing and should be included in the conversations. With that Kirk made a motion to nominate Shelby as the ESAB representative, and Kaitlin seconded.



Shelby said she would be happy to accept the nomination. She said she welcomes the participation, but also would like to be able to identify someone to serve as an alternate in case she cannot make a meeting. Jim noted the idea of having the lead person, and then a sub-committee team assisting that person. The motion passed with all in agreement and Jim agreed to make the appropriate notifications. There will be a standing update slot on the ESAB agenda for this in the roundtable section for the next 6 months.

5. **Approval of Minutes** – Deferred to November

6. **Updates and Round Table**

- Commissioner's Update –The Commissioner thanked the ESAB for their input on draft 1041 regulations, and noted that at their land-use hearing October 25th, the BoCC will be deliberating the update draft regulations. The most recent draft was made public last Friday, so ESAB members might want to look at that. The second item, Commissioner Kefalas attended the Colorado Wildland Fire Conference. He was able to connect with Daniel at the conference and learn more about land use planning in the Wildland Urban Interface. He shared that information with Planning and hopes to see more in the land use code in terms of incentivizing appropriate development in WUI areas. Jim asked Commissioner Kefalas to follow-up on the email requesting information on Bio-Char that he circulated to the board. Commissioner Kefalas noted that the technology was made aware to him through the Wasteshed Policy Council and with discussion of a 40% waste diversion target, and with needs for forest fuels reduction, that he thought this might be of interest to the ESAB. Jim asked for clarification of whether the Commissioner is looking for analysis and a deliverable or was it just an FYI thing? Commissioner Kefalas noted that it was just sharing information, and that the Solid Waste director, Dwayne Penny, was the person that brought this information to the BoCC, and that the BoCC is considering the technology. Jim noted that Bio-Char has many uses and he encouraged members to revisit the Commissioner's email and take a look at the website from Biochar Now (biocharnow.com).
- Wolf Reintroduction in Colorado – Jim received an email from Working Circle inviting interested persons to a series of early-November seminars. The ESAB had heard a talk from CSU wildlife researchers a few years back on how reintroductions worked in other states, and the impacts to game populations and livestock. The email from Working Circle notes that they will be having a free workshop on wolves and ranching. So, if members have interest in habitats and wildlife, they might be interested to join. All meetings will be virtual by Zoom, and if members are interested, they can request the email from Jim.
- December Meeting Planning – The December ESAB meeting will involve selecting officers for 2022. There will be an open election for Chair and Vice Chair. Because David Lehman is term limited, he will not be in position to sit as VC or Chair for 2022. So, if anyone is interested in learning more about what is involved with being Chair or VC, Jim and David would be happy to sit down and talk about it. David added that the Vice Chair position would be an apprentice type position and it would be anticipated that that person would move into the Chair position at the end of the year since Jim would be term limited by then.

7. **Issue Index** – Was updated with tonight's discussion.

8. **Agenda Topics for Future Meetings** – Next regular meeting will be November 9th, 2021.
Discussion items TBD

9. **Adjourn** –the meeting was adjourned at 8:38 PM.