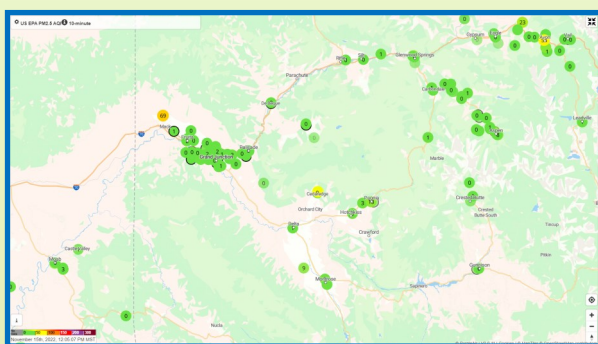


Our mission is to research the causes of Western Slope air pollution and promote improvement of air quality in Mesa County. We do this through grassroots involvement with local, state, and federal efforts to mitigate the effects of known air pollutants on humans, agriculture, and the environment.

Have you checked out the Purple Air map lately?

You can access the map at
www.citizensforcleanair.org or
www.purpleair.com.

If you play around with it a little, you'll find instructions to perform several useful tasks. Besides being able to get particulate counts, you can also see ozone levels by clicking on the top left window. You'll find a menu of op-



tions, one of which is Ozone ppb (parts per billion). Click on that and you'll see readings in the Grand Valley – and Salt Lake City. Over 70 ppb has been determined by the EPA to be unhealthy. Other countries have stricter standards (meaning lower ppb to determine the danger zone, such as 65 ppb). There are a limited number of PurpleAir ozone detectors because they are still in the experimental stage.

CCA initiated the monitoring project in the Grand Valley in the spring of 2018. After that even more monitors began to appear across the Western Slope, due in part to the efforts of the Green Team at Alpine Bank.

Installation was a big effort but keeping them serviced and repaired is an ongoing job. Thanks to **Tom Phillips, Charlie Post, Jerry Nelson and James Ayers (CMU)**, all 50-plus Purple Air monitors owned by CCA continue to report air particulates accurately in real time. If you've never explored the display map showing the readings, it's interesting to find out what the air quality is like not only here at home but also in places like Salt Lake City, Los Angeles, eastern Europe, and South Africa!

As we become more aware of the effects of smoke on humans, especially children and kids with respiratory illnesses, it becomes more important to start paying attention to indoor air quality in the classroom – and other public buildings.

In the past year, we have installed several indoor monitors inside area school buildings. These tell us what our kids are breathing, especially during smoke events like wildfires and spring and fall open burn seasons. When open burning takes place near schools in session, the effects are immediate: recesses may be cancelled and kids with asthma often end up in the nurse's office.

CCA is offering free service and repair for people in Mesa County who own PurpleAir monitors that are and are *not* part of CCA's lending program.

If you own a Purple Air monitor that is offline or malfunctioning, let us know. It may be something very simple that can be fixed over the phone. If not, we'll send one of our service team to fix it, free of charge except for parts, if needed.

Call 970-242-1054 or email citizensforcleanairgj@gmail.com

Biochar as a strategy for cleaner air!

As a follow up to last year's biochar experiment, CCA expanded our study this past growing season to include six small plots, one of them a little patch of cornfield. We repeated some things from last year, such as using the same percentages of biochar/compost mix. And some things were new: different plants including parsley, chard, red onions, and zinnias. We used one plot to find out if last year's application of biochar would serve for a second year of growing without adding more compost to replenish nutrients. We also used electronics including soil moisture and temperature sensors, and ambient air humidity/temperature sensors. These all reported real-time information to a website so we could see what was going on remotely and address any issues.

When compiled, the 2022 report will show the information we collected and will be available later this year.

We appreciated all our wonderful volunteers, farmers and land owners/managers who made this experiment possible!

And...thanks to a grant from Western Colorado Community Foundation's CORE Giving Circle, we have received



funding for next year! **If you would like to participate in planning for 2023, you are welcome to join the discussions. Please contact Karen: citizensforcleanairgj@gmail.com.**

Our goal is to someday offer an alternative to burning fields and slash piles by turning these green materials into biochar to add to our soils. Besides improving air quality, applying biochar could improve soil health by facilitating nutrient retention, water conservation and soil microbiome activity.



Photos top to bottom: Lorraine Pallas, L; Jamie Vavra, R. Jan Ferinetti, L; Martha Jones, R: Chard plant with soil temperature sensor, clockwise from top L: Frank Nemanich, Kristin Winn, Larry Seidl, Marian Dole, Sharon Sullivan, Diane Birmingham.

Please consider a gift to Citizens for Clean Air as you make your end-of-year donations. All our funds go towards keeping the PurpleAir monitors up and running, supporting our work with biochar, education, supplies etc. We are all volunteers working for a better future on behalf of the community and your support is very much appreciated!

You can donate on our website or mail a check to PO Box 101, Grand Junction, CO 81501.

Thank you, and Happy Holidays!