



FREQUENTLY ASKED QUESTIONS ABOUT AIR QUALITY (AQ) & PURPLE AIR SENSORS

As ambassadors, we want you to feel confident talking about our air quality (AQ) issues and Clean Air Methow. These FAQ's are drawn from our conversations out in the community, as well as a 2020-21 survey about our local purple air sensor network. Please note that our website and Facebook page are an excellent resource and always a good place to send people looking for more info. Additional resources are listed at the bottom of the document.

Generally, we hope you can shape answers to communicate the following basic message to people:

Because of wildfire smoke, necessary forest prescription burns, the predominance of woodstoves and outdoor burning and climate change, it is more important than ever to protect our airshed and your health and there are several ways to do so.

1) What are the top things I can do to improve air quality?

- a. Don't burn yard waste or follow best practices if you must (check for AQ burn ban; dry piles on a day with 3-7 mph light breeze; always attend with water!).
- b. Find an alternative to heating your home with wood or follow best practices (EPA certified stove; clean chimney; dry wood; small, hot fires; never burn when air is stagnant).
- c. Learn more about "Smoke-readiness" and encourage others and your representatives to do so.
- d. Take our ambassador pledge and talk about AQ with your friends and neighbors! A clean airshed for the Methow will take cultural and behavioral change.

2) Isn't our air quality fine except for wildfire smoke?

- a. Gosh, we wish. Maybe we can get there!
- b. Air quality is a year-round issue in the Methow. Twisp and Winthrop have some of the worst AQ in the state in winter due to smoky woodstoves and weather inversions.
- c. Spring and Fall bring localized smoke exposures with outdoor burning and prescription burning that is critical for forest health and to prevent catastrophic wildfire.
- d. PM2.5 (particulate matter 2.5 microns in size or smaller) is our predominant pollutant of concern and is created by incomplete combustion. Our major source is smoke from burning.

3) Should I be doing anything to protect myself during wildfire smoke? YES!

- a. Try to limit outdoor activity when AQ is unhealthy and wear an N95 or KN95 mask when outdoors or in your car.
- b. Clean your indoor air with an HEPA air purifier, a box fan filter, and/or upgrade your filter to MERV13 in your HVAC system.
 - i. Clean Air Methow administers an air purifier distribution program for those who cannot afford to purchase.

- c. Tend to your mental health and wellbeing and that of your neighbors and friends during prolonged smoke episodes. Check in on a friend of a neighbor!
- d. Use Clean Air Methow www.cleanairmethow.org and our Facebook (FB) page as a resource.

4) So, you're a Clean Air Ambassador with a purple air sensor... Tell me about these PurpleAir sensors and the data they generate??

- a. **How should I look at purple air data?**
 - i. On your computer: We recommend looking at purple air data through www.cleanairmethow.org; or www.airnow.gov (smoke and fire map); or www.purpleair.com.
 - ii. On your phone: Use the Methow Air app or AirNow.gov app
- b. **What do the purple air sensors measure?** Sensors measure tiny particles (such as from smoke and dust) and bounce a laser off them. The light is bent and detected as the size and number of particles in the air. We focus on the data reported for PM2.5, tiny particles in smoke that can be inhaled deep into the lungs.
- c. **Why are the AQ numbers for purple air sensors sometimes different than what I see on other websites?**
Several reasons...
 - i. Different particle counts. Purple air sensors are inexpensive technology and not as sophisticated as the two nephelometer monitors that WA Department of Ecology maintains in Winthrop and Twisp.
 - ii. Different time-averaging. Purple air sensors report data in real-time while data is often reported as a 24-h average elsewhere.
 - iii. Different air quality! The AQ at the Winthrop library where the Ecology monitor is located is frequently completely different than Mazama or up the Chewuch. That's why we have the Clean Air Ambassador Network.

5) I want to learn more...

- Clean Air Methow homepage: www.cleanairmethow.org
- EPA's air quality homepage: www.airnow.gov
- Washington State Resources:
 - Dept of Ecology: www.ecology.wa.gov/Air-Climate/Air-quality
 - Dept. of Health: www.doh.wa.gov/CommunityandEnvironment/AirQuality
- Methow Air App: <https://apps.apple.com/us/app/methow-air/id1003393522>
- Wildfire Ready Neighbors: <https://wildfireready.dnr.wa.gov/>

Pages to Follow/Like:

- Clean Air Methow: <https://www.facebook.com/methowvalleycleanair>
- Purple Air Users Group: <https://www.facebook.com/groups/purpleair>
- Methow Valley Fire Information Group on Facebook