



air pollution control district
SANTA BARBARA COUNTY

LOW-COST SENSORS UPDATE

Board of Directors Santa Barbara County Air Pollution Control District

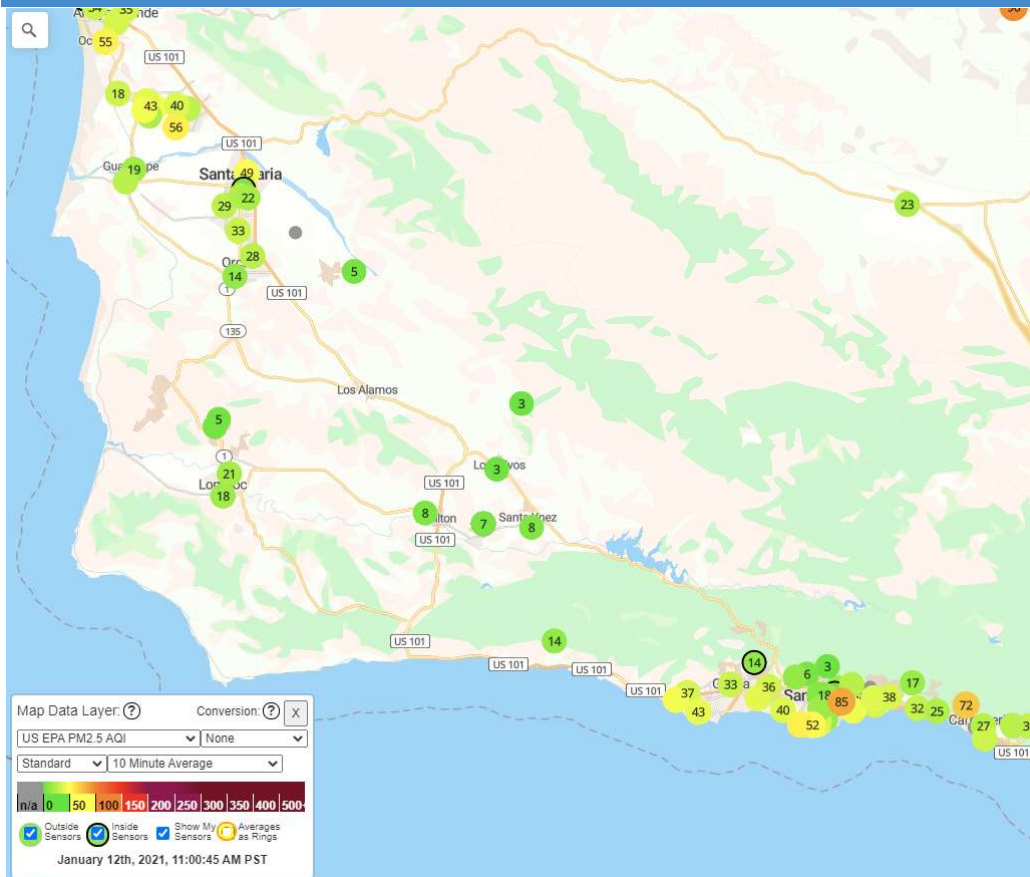
Our Mission: To protect the people and the environment
of Santa Barbara County from the effects of air pollution.

Aeron Arlin Genet
Director / APCO

Desmond Ho / Air Quality Specialist
January 21, 2021



BACKGROUND



- Important education tool
- Interest in low-cost sensor and local air quality conditions due to increasing wildfire frequency
- Provide air quality trends in areas without established air quality monitors



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SENSORS

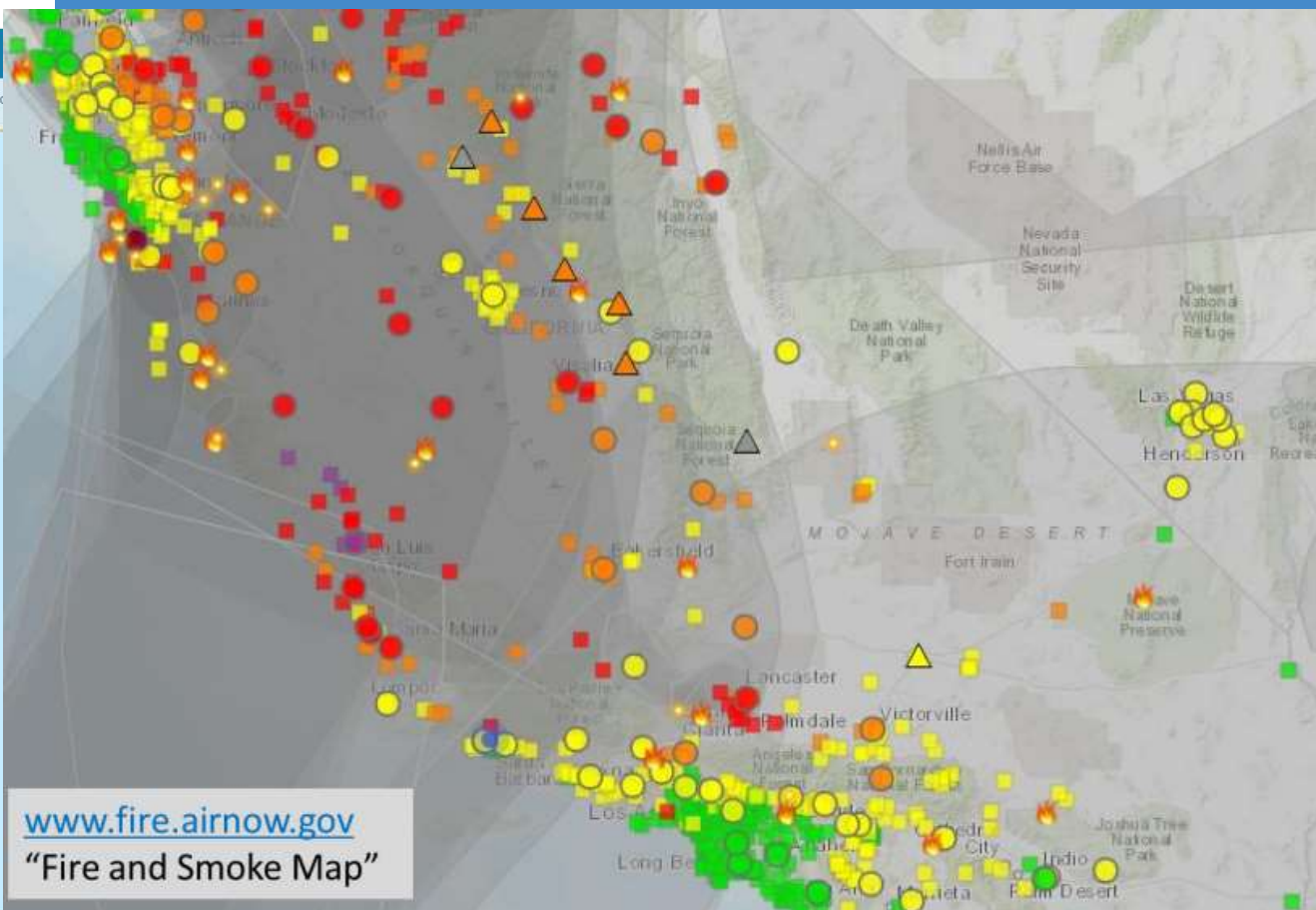


PurpleAir Sensor: Cuyama Elementary



Clarity Sensor: Goleta Monitoring Station

EPA FIRE AND SMOKE MAP



■ Incorporates:

● - Permanent monitors

▲ - Temporary monitors

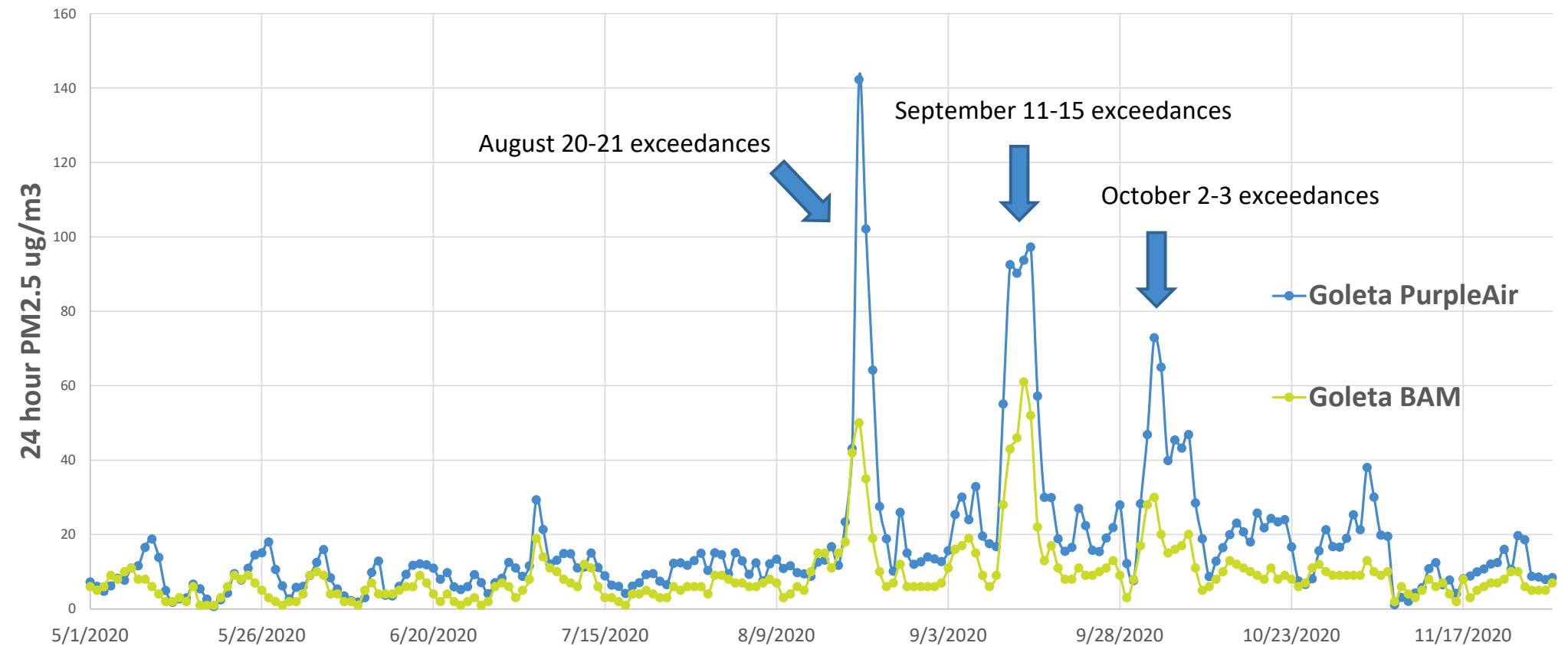
■ - PurpleAir sensors

■ Regional correction factors for PurpleAir

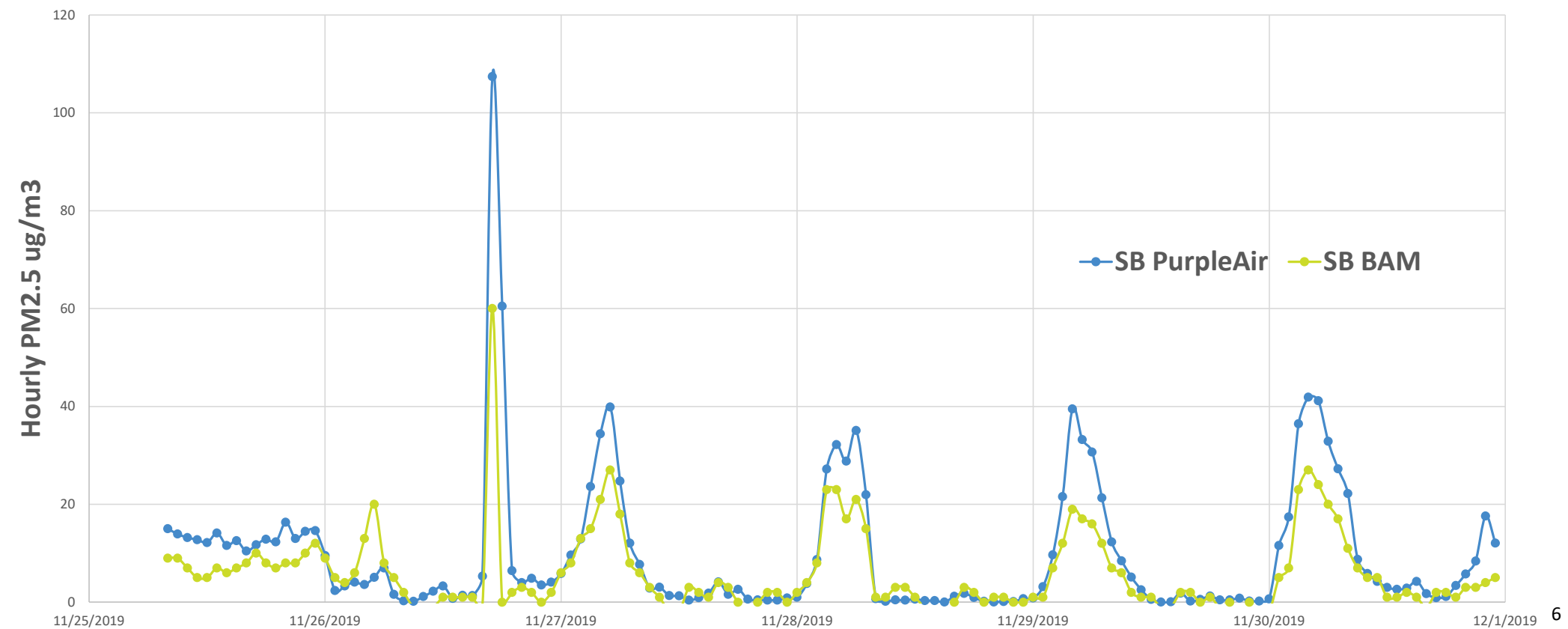


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GOLETA PURPLEAIR VS. BAM



CAVE FIRE (NOV 2019) PURPLEAIR DATA

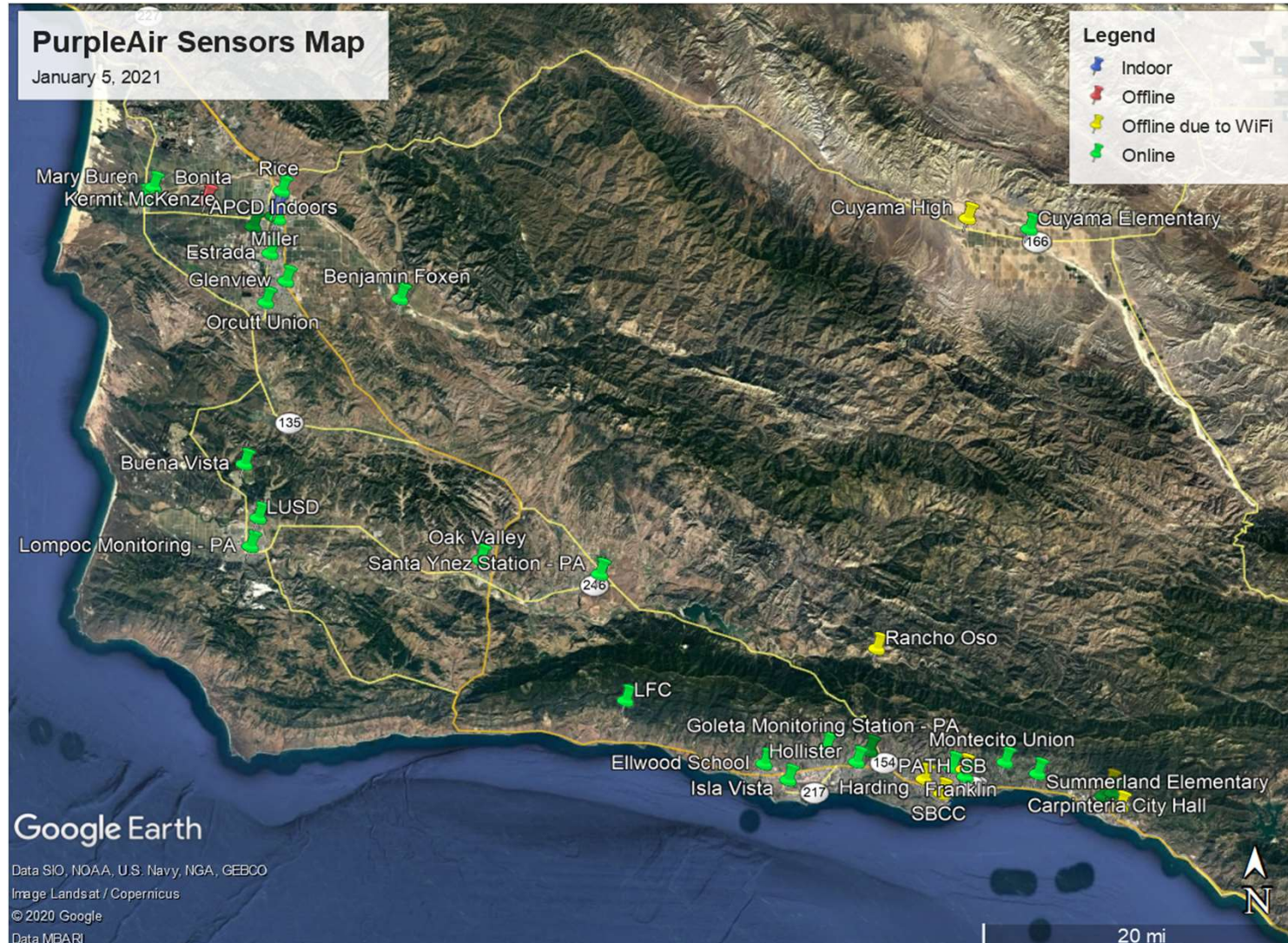


PurpleAir Sensors Map

January 5, 2021

Legend

- Indoor
- Offline
- Offline due to WiFi
- Online



- 38 sensors deployed around the County
- Provides neighborhood air quality trends
- Challenges:
 - Agreement
 - WiFi
 - Maintenance



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PROPOSED AGREEMENT AMENDMENT

Two minor changes:

- **Liability clause:** staff recommends the removal of the monetary liability clause as staff works with site host to find a safe and secure location for the sensors
- **Duration of agreement:** staff recommends the replacement of the six-month agreement with an indefinite agreement until either party terminates with a 30-day notice



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MOVING FORWARD



- District will continue to use PurpleAir sensors to provide air quality trends
- PurpleAir sensors can serve as back-up information
- Continue to work with schools, public organizations, and other community partners



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RECOMMENDATIONS

- Receive this update
- Approve the attached amended “Agreement for Low-Cost Air Quality Sensor”
- Delegate authority to the Air Pollution Control Officer to make minor updates to the Agreement subject to concurrence by District Counsel, Risk Management, and Auditor Controller



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CONTACT INFORMATION

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