Data communication in the Imperial County Community Air Monitoring Network

Alexa Wilkie, MHS, MS
Tracking California

SCHOOL OF PUBLIC HEALTH
UNIVERSITY *of* WASHINGTON

COMITE CIVICO DEL VALLE, INC

TRACKING CALIFORNIA
INFORMING ACTION FOR HEALTHIER COMMUNITIES

=> **How did we engage with the community at every stage of the project in order to communicate relevant and usable data?**

Imperial County, California

- Mostly low-income Latino communities
- Disproportionate and cumulative impact of range of environmental hazards
- High rates of emergency room visits and hospitalizations for asthma among schoolchildren
- Regular exceedance of PM10 standards

What are the community needs for air monitoring data?

- Why are you concerned about air quality?
- How do you currently use air quality data and information?
- What additional air quality data and information do you need?
- What would you do with the CAMN data?
- What kind of data and information would be most useful?
- What methods of communication are preferred?
- What barriers may inhibit access to the information?

How did community provide input into design of network?

- CCV as key partner fully integrated into all decisions

- Meetings of and key informant interviews with Community Steering Committee (CSC) –

~20 local residents, community organization representatives, parents, teachers, youth advocates

Community engagement in monitor siting

- CSC prioritized communities throughout county for monitor siting

- Residents from each community involved in selection of specific sites

- Process included a one-day training for community residents on air quality and air monitor siting considerations

- Results: most monitors sited at schools

What did we learn about communicating the data?

Community wanted:

- Scientifically accurate data

- Accessible and understandable

- Actionable for the intended audience (community residents)

- Data sets available for analysis, research and advocacy

How was community engaged in data display?

- CCV provided an existing community web platform
- CSC participated in focus groups and user testing of the data displays
- Answered key questions to determine choices of metrics, visualization, interpretive text
- Identified other key issues, such disclaimer language, and potential barriers, such as color blindness

Data visualization via community site
ivan-imperial.org/air

Considerations for communication of air quality measures

- What kinds of air quality measures should be considered?

- What should the particle mass concentration be compared against?

- Is it helpful to use a health risk-based index?

Community Air-Quality Levels (CALs)

Number range	Category	Color	Health Recommendation
0-50	Low Risk	Green	It's a good time to be active outside
51-100	Moderate	Yellow	**If you are unusually sensitive to particle pollution,** reduce physical activity outdoors. Watch for symptoms like coughing or breathing problems.
101-150	Unhealthy for Sensitive Groups	Orange	**Sensitive groups*** should reduce physical activity outdoors. Watch out for symptoms like coughing, breathing problems, unusual heartbeat, or unusual fatigue.
Above 150	Unhealthy	Red	Avoid physical activity outdoors.

*Sensitive groups include children, teens, older adults, pregnant women, and people with heart, lung, or other chronic diseases

Map   Satellite

TL Waggoner Elementary School   ✕

Moderate | CAL:51

More data and info

MENU

Map   About CALs   Disclaimer   More info   Government air data   Report an air problem

TL WAGGONER ELEMENTARY SCHOOL
Imperial

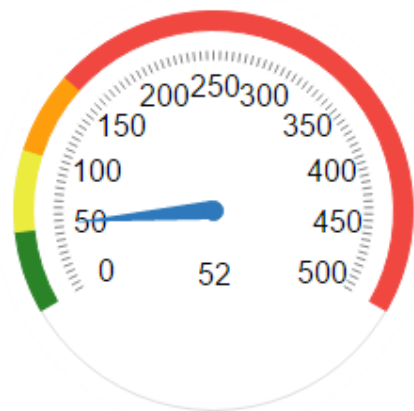Tuesday, October 18, 2016 at 08:22 PM
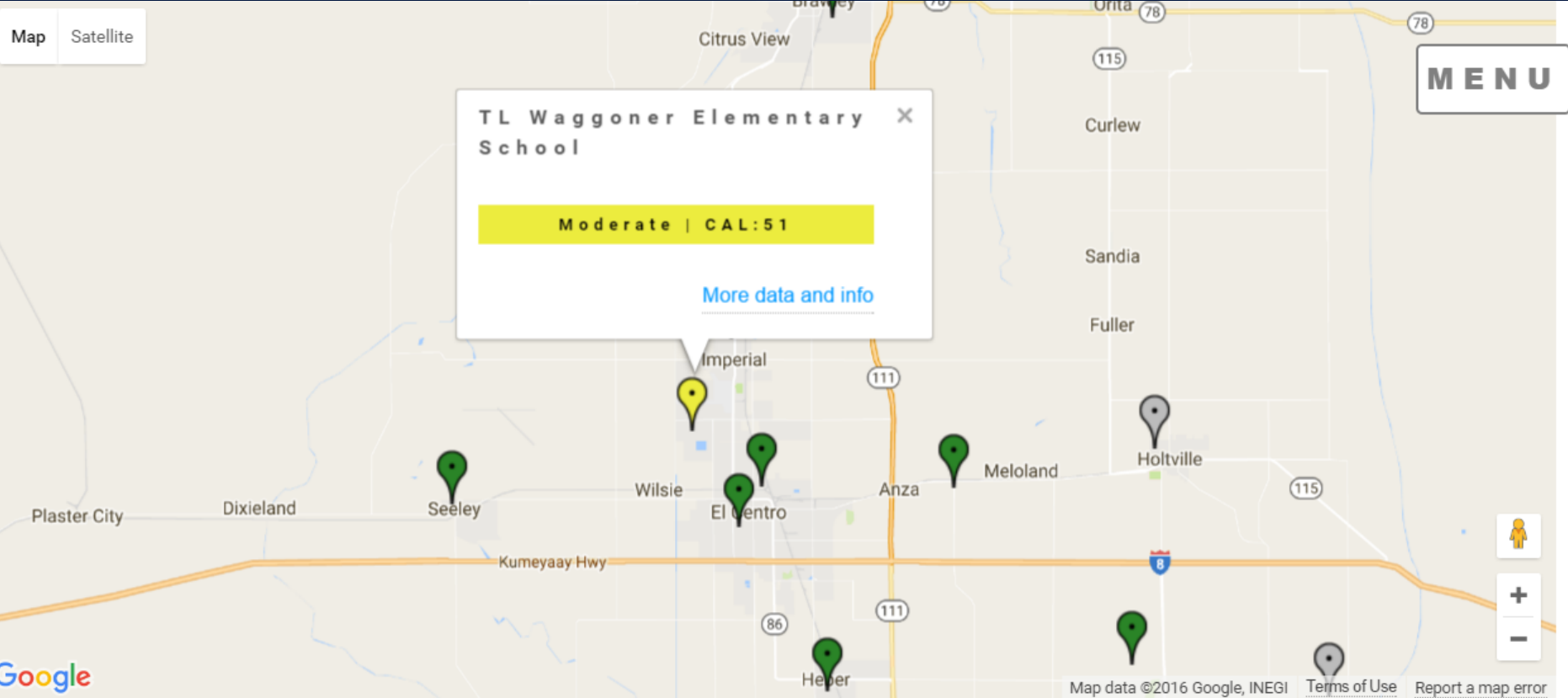
The current air quality at this monitor is

52

Moderate

Health recommendations: If you are unusually sensitive to particle pollution, reduce physical activity outdoors. Watch for symptoms like coughing or breathing problems.

GOVERNMENT AIR DATA

Air quality data for Imperial County currently reported by government regulatory air monitors are available at www.imperialvalleyair.org and www.co.imperial.ca.us/AirPollution.

Data reported by IVAN Air Monitoring and by government monitors should both be used to better understand air quality levels near you. There are differences in how these data are collected, such as the locations monitored, the equipment used, and pollutants measured. Therefore, differences in reported air data are expected. When considering how to best protect your health, we recommended you consider multiple sources of air quality data and follow the most health protective recommendations.

Visit the Air Monitoring FAQs for more information about how our data compares with government data.

REPORT AN AIR PROBLEM

If you are experiencing an emergency, call 9-1-1.

Step 1. Report to Imperial County Air Pollution Control District.

Call (442) 265-1800 as soon as you notice a problem with air quality. Their website lists what information to provide in order to support their investigations. It also describes what to expect when you submit a complaint.

Step 2. Report on IVAN.

After contacting the APCD, we recommend that you also submit a record of the problem here on IVAN Imperial, including a note that APCD has been contacted. This ensures that the Environmental Justice Task Force is aware of the complaint and that the complaint is documented on the IVAN Imperial website.

Data Communication Methods

- **Website**
- **Alert systems**
- **Air quality flag programs** - at schools
- **Data requests**
- **Presentations**
- **Printed material** – flyers, fact sheets, etc.

IVAN Air Monitoring

Poor air quality can harm your health. Take action to reduce your exposure to air pollutants. Use the list or map to view current air quality levels at your nearest air monitor. Sign up to receive alerts when the air quality near you is unhealthy. Scroll down to learn more.

LIST OF MONITORS

MAP OF MONITORS

GET AIR QUALITY ALERTS
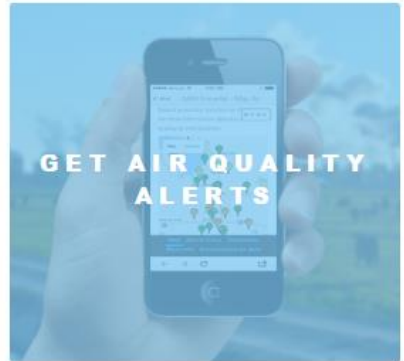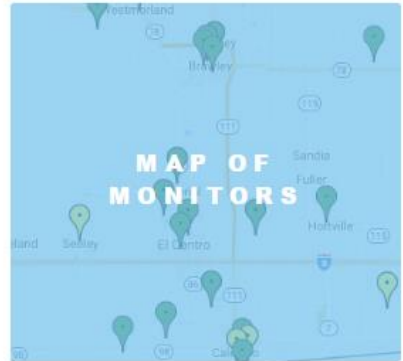
ABOUT THE NETWORK

IVAN Air Monitoring is a network of 40 air monitors located throughout Imperial County. These monitors measure current levels of particulate matter air pollution (PM2.5 and PM10). The air quality measurements are displayed on this website.

IVAN Air Monitoring   About the network   Disclaimer   More info   Government air data   Report an air problem

Data communication: school flags

Additional outreach and dissemination

Air pollution monitor unveiled at Brawley Union High School

May 30, 2015 | Karina Lopez | *Imperial Valley Press*

BRAWLEY — It is no secret Imperial County residents have their share of medical issues that can stem from air pollutants.

The county has the highest asthma-related hospitalization rate in the state and is often the focus of studies as a result of that statistic.

In an effort to bring awareness and hopefully change to the issue of air pollution in Imperial County, local residents formed a community steering committee to try and tackle the pollution crisis.

The result of this community-led effort is the installation of 40 new air pollution monitors throughout the county.

The first of these monitors was placed and unveiled at Brawley Union High School here Friday morning.

"As parents and families, we want accurate, readily available information about our air quality so we can protect ourselves," said Luis Olmedo, executive director of Comité Cívico del Valle. "This network of monitors will contribute to existing air quality monitoring efforts by providing detailed data at the local level that families and city and school officials need to develop action plans for the community, both in helping avoid exposure on days when the air quality is particularly hazardous and in identifying long-term strategies to improve public health."

The installation is part of a four-year, $2 million study funded by the National Institutes of Health and undertaken through a collaboration between the local organization Comité Cívico del Valle, the Public Health Institute's California Environmental Health

Data communication involved substantial engagement and leadership by community members at every stage

- Identify community needs / priorities at outset
- Community involvement and leadership in designing and building network
- Community involvement and leadership in communicating data from network
- Training in scientific concepts as needed

Guidebook for Developing a Community Air Monitoring Network

Steps, Lessons, and Recommendations from the Imperial County Community Air Monitoring Project

Tracking California
Comite Civico del Valle
University of Washington

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Community Participants

Air Monitor Hosts

Technical Workgroup

Equipment loans/colocations
- CA Air Resources Board
- Imperial Irrigation District
- US EPA

Community Steering Committee
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