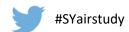
San Ysidro Air Study



Supporting Community-Led Air Monitoring

"Making the invisible visible"

The San Ysidro Air Study is a collaboration between community, government, and academia to collect neighborhood air pollution data using advanced low-cost technology. This partnership is critical to the success of the project. Through citizen science and civic participation, residents act as decision makers.

The Concern

Nestled between three major freeways and in immediate proximity to the world's busiest border crossing, San Ysidro is a small community in the southern part of San Diego. There are no regulatory air monitors in San Ysidro, and residents complain that government air monitoring is not adequately measuring air quality in their community. As a result, not enough is known about the day-to-day exposures that residents experience from air pollution.



The Community

Of its 30,000 residents, 70% are Hispanic, 30% do not speak English well or at all, and 54% have less than a high school education. The median household income is 28% less than for San Diego County and 24% less than for California as a whole.

The San Ysidro Community Air Study

The study began in January 2016 with extensive outreach through community workshops to learn about residents' air quality concerns and their ideas on where they would like to locate air monitors. In August 2016, the first air monitor was installed in the community. In June 2017, the collaboration launched a community website with real-time air data. Residents now have access to detailed air quality data on 5 air contaminants from a network of 13 community air monitors.





The Local Partner: Casa Familiar

Casa Familiar, a San Ysidro-based non-profit organization, has long advocated for social and environmental justice. It provides services to the community on health, arts, education, immigration, housing, and job training. This study supports Casa's mission by providing open data to inform efforts to reduce air pollution.

Check San Ysidro Air Quality at http://syairstudy.org/

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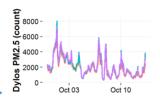


The Community Steering Committee

To work closely with the study team, 12 San Ysidro residents volunteer to participate as members in the Community Steering Committee (CSC). The CSC serves as community experts and the liaisons between the residents and study team. Their knowledge of the community and guidance is essential to the study's success. The image to the left is a CSC member providing a study update to residents at a community meeting.

The Technical Advisory Group

To ensure scientific rigor a technical advisory group (TAG) was established to provide input on data quality. TAG members include: San Diego County, San Diego Air Pollution Control District, San Diego Association of Governments, California Air Resources Board, California Department of Transportation.





Engagement and Partnership



Participatory Democracy



Research to Action



Climate & Public Health Equity



The Study Framework

The study process differed from how government typically conducts air monitoring. The partners worked together to decide where to place the monitors. Their shared commitment to action and equity are a key part of their efforts to improve public health, achieve sustainability, and model participatory democracy.

The California-Mexico Border

The San Ysidro Study was modeled after the Imperial Study operated by Comite Civico Del Valle. The two studies have combined efforts to strengthen the voices of border residents, provide data on border pollution, and provide a framework for other community monitoring projects in California. The San Ysidro and Imperial Valley air data can be found on IVAN air (https://ivan-imperial.org/air).



POLLUTION BURDEN CalEnviroScreen VULNERABILITY

CalEnviroScreen

CalEnviroScreen is a mapping tool developed by OEHHA that identifies California communities with high pollution burdens and vulnerabilities. The State of California is using the tool to help prioritize funding for disadvantaged communities. The San Ysidro and Imperial air studies are framing how data on neighborhood-level air pollution might be integrated into CalEnviroScreen: https://oehha.ca.gov/calenviroscreen

The Study Team Partners

The California Environmental Protection Agency and the Office of Environmental Health Hazard Assessment (OEHHA) provide scientific expertise and support for logistics and other activities. The project was made possible by a grant from OEHHA. The University of Washington and San Diego State University provide both equipment and technical guidance. Casa Familiar leads community outreach.

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