

Program Name		Summary	Participants	Website/Sources	State	Active/Inactive	Intended data use	Contact Info	Internal References	External References
California Pesticide Reporting App	Enforcement	The California Environmental Protection Agency's (EPA) Department of Pesticide Regulation (DPR) has created an app that citizens can use to report their exposure to pesticides and the app is available in English and Spanish. CASPIR, short for <i>California's System for Pesticide Incident Reporting</i> streamlines the preexisting mechanisms for reporting exposures. Once a report has been filed on the app, users are connected to their county agricultural commissioners (CACs). Using the information provided in the app by the user, CACs reference existing rules from the state's EPA regarding pesticide use to determine whether or not the situation requires intervention from state regulatory agencies.	Leader: California Environmental Protection Agency - Department of Pesticide Regulation Stakeholders: County agricultural commissioners in California	https://www.cdpr.ca.gov/docs/pressrfs/2019/062619.htm	California	Active	Regulation and enforcement	Charlotte Fadipe: 916-445-3974 Charlotte.Fadipe@cdpr.ca.gov		CSR
Engine Idling Citizen Enforcement Pilot Program	Enforcement	The D.C. Department of Energy and Environment (DOEE) maintains the Engine Idling Citizen Enforcement Pilot Program. DOEE added a feature to DC311, the city's preexisting citizen reporting app, which allows residents to document and report vehicles violating anti-idling regulations (e.g., from tour buses which are common in D.C.). With a few exceptions, motor vehicles powered by gasoline or diesel are not allowed to idle for more than three minutes while the vehicle is parked, stopped, or standing. This program is valuable because detecting and documenting such violations is very difficult for agency inspectors. Evidence for reports can include photos, location information, and videos, and violators are issued civil infraction tickets, which carry a fine of \$500 for first-time offenders.	Leader: D.C. Department of Energy and Environment Stakeholder: D.C. Office of Administrative Hearings	https://doee.dc.gov/service/engine-anti-idling-law	Washington D.C.	Active	Regulation and enforcement	Kelly Crawford Department of Energy and Environment kelly.crawford@dc.gov, (202) 724-7650	https://www.ecos.org/wp-content/uploads/2019/07/2-Engine-Idling-Technology-Presentation-2019-PDF.pdf	CSR
Imperial County Community Air Monitoring Project	Air, Environmental Justice	The Imperial County Community Air Monitoring Project was started in 2013 by the community group Tracking California, with help from a local organization Comite Civico del Valle, the University of Washington, and others with funding from the National Institutes of Environmental Health Sciences. The project connects scientists, community advocates, and local residents, and to establish a community air monitoring network (CAMN) to collect air quality data for research while providing useful information residents. Air sensors have been quality tested by the California Air Resources Board. The research aim of the project was to assess whether air quality levels from a CAMN could identify "hot spot" areas in Imperial County and improve public health outcomes. Readings from air monitors can be seen on the project's IVAN website, and many monitors are maintained by youth advocates and placed in schools. The real-time air monitoring data are being used to better understand and reduce exposures to air pollution.	Leader: Tracking California Stakeholders: Comite Civico del Valle, University of Washington, California Department of Health, California Air Resources Board, EPA Region 9	https://trackingcalifornia.org/imperial-air-project/imperial-air-project-landing	California	Active	Information	Co-Investigator: michelle.wong@trackingcalifornia.org	IVAN Map: https://www.ivan-imperial.org/air	CSR ; https://www.niehs.nih.gov/research/supported/translation/community/imperial/index.cfm
Indigenous Observation Network (ION)	Water (Surface Water), Environmental Justice	Led by the Yukon River Inter-Tribal Watershed Council in partnership with the USGS National Research Program, the Indigenous Observation Network (ION) monitors a 2,300-mile-long river system along the Yukon River through the collaboration of Indigenous governmental bodies and federal agencies. Data on water quality and permafrost is used to assess development and how climate change is affecting the ecosystem. This data is mostly gathered by tribal community volunteers, and the ION integrates traditional Indigenous knowledge along with modern scientific methods and technologies into its design. Water quality data is used for public health efforts and pollution analysis, providing a basis for governmental organizations to set water quality standards. ION's data also informs the Yukon River Watershed Plan, which is a long-term management plan for the preservation of the river basin against climate change.	Leader: Yukon River Inter-Tribal Watershed Council Stakeholder: 73 First Nations and Tribes, US Geological Survey National Research Program	https://www.citizen-science.gov/catalog/18/#	Alaska	Active	Information, Agency management	emutter@yritwc.org	data visualization: https://yukon.fieldscope.org/observations	CSR
Louisiana Bucket Brigade	Air, Environmental Justice	This Louisiana based non-profit organization that uses grassroots action to hold the petrochemical industry and government accountable for the true costs of and unequal exposure to pollution through environmental justice and grass roots community organization. The organization provides support in the areas of media, air monitoring, organizing, cartography, accident research and report writing. This organization seeks to amplify the voices of already existing community action groups by providing them with training and by connecting them to other advocacy groups and governmental agencies which may be able to assist further (ex. connecting them to EarthJustice for legal representation). LABB manages the iWitness Pollution Map in partnership with the Gulf Monitoring Consortium (GMC). This map is a repository of eyewitness reports and photos of pollution in the Gulf Region from affected citizens, NGO's, government agencies, and the parties responsible for the pollution.	Leader: Louisiana Bucket Brigade Stakeholders: Louisiana Department of Environmental Quality, Gulf Monitoring Consortium	https://labucketbrigade.org/	Louisiana	Active	Information, Agency management	Louisiana Bucket Brigade: (504) 484-3433 info@labucketbrigade.org	iWitness Map: https://labucketbrigade.org/pollution-tools-resources/iwitness-pollution-map/	https://www.nationalgeographic.org/article/real-world-geography-louisiana-bucket-brigade/ ; https://www.scientificamerican.com/citizen-science/louisiana-bucket-brigade/
Navajo Nation methane monitoring	Air, Environmental Justice	Activists from the Diné (Navajo) community use infrared cameras on Navajo Nation land to track environmental harms from methane released by the oil and gas industry. On this location, methane emissions are 65% higher than the national average due to oil and gas production. More broadly, the federal government partially relies upon activists to using infrared cameras improve public understanding of the scope of air pollution near fossil fuel sites all around the country to help better regulate the industry and improve quality of life for people near these sites.	Leaders: Members of the Navajo Nation	https://nexusmedianews.com/methane-is-leaking-over-native-grounds/?utm_medium=email	Navajo Nation (Arizona, New Mexico)	Active	Information, Regulation and enforcement		https://subscriber.politicopro.com/article/eenews/2021/12/23/ej-communities-could-monitor-industry-methane-under-epa-rule-284184 ; https://nmpoliticalreport.com/2021/11/04/activists-are-hopeful-that-epa-proposed-methane-regulations-will-reduce-emissions/ ; https://grist.org/health/low-cost-sensors-are-helping-communities-find-gaps-in-air-quality-data/	

Owning Our Air: The West Oakland Community Action Plan	Air, Environmental Justice	In 2018, West Oakland was selected as the first Bay Area community to develop a community air plan under AB617 — legislation which encourages utilizing community engagement efforts to resolve local air pollution issues. The West Oakland Environmental Indicator Project co-lead these efforts and produced a community action plan called "Owning Our Air," drafted with input from resident steering committees and Bay Area Air Quality Management District. The plan emphasizes participatory research being a factor in future decision-making, and it set out a long list of actions to be taken by many different agencies and other actors to improve air quality.	Leaders: Bay Area Air Quality Management District and West Oakland Environmental Indicators Project	https://www.baaqmd.gov/community-health-protection-program/west-oakland-community-action-plan	California	Inactive	Agency management	Joshua Abraham (Senior Staff Specialist, Community Engagement and Policy): 415.749.8408 jabraham@baaqmd.gov	Presentation slides: https://www.baaqmd.gov/~media/files/ab617-community-health/west-oakland/2020_1101_wo_annual_report_slide_deck-pdf.pdf?la=en ; Video about the project: https://3c28205454f51dc5873c044855d014b61dca2de7a8e9ba3edee01c2.rackcdn.com/BAAQMD_WOEIP_Annual_Report_diff.mp4	https://abc7news.com/west-oakland-air-pollution-black-and-latino-residents-abc-equity-report-bay-area-quality/11058102/
The Local Environmental Observer (LEO) Network	Climate Change	The LEO Network is an international network of citizen participants and topic experts who document significant, unusual or unprecedented environmental events in users' communities because of climate change through a combination of traditional knowledge and modern technology and science. Such events could include changes in plant seasonality, weather patterns, flooding and drought. Photos of the events are posted along with any other relevant documentation for others to review. The purpose of the project is to better understand environmental change to aid in adaptation for communities. Originally begun in Alaska with a focus on tribal environmental resilience, the program has since expanded to include other nations, such as Mexico and Canada.	Leader: Alaska Native Tribal Health Consortium Stakeholders: Environmental Protection Agency, Department of Interior Bureau of Ocean Energy Management	https://anthc.org/what-we-do/community-environment-and-health/leo-network/	Alaska	Active	Information	Alaska Native Tribal Health Consortium: (907) 563-2662, anthcwebsite@anthc.org ceh@anthc.org	LEO Network map: https://leonetwork.org/en/#lat=63.6120999294029&lng=-132.45117187500003&zoom=7&showing=2E086A9B-6A59-489B-AAFC-33F0115AC241 ; https://www.alaskapublic.org/2017/09/01/climate-change-and-the-leo-network-in-alaska/ ;	https://www.fnha.ca/about/news-and-events/news/local-environmental-observer-network-in-bc-spring-2022-update ; https://www.alaskapublic.org/2017/09/01/climate-change-and-the-leo-network-in-alaska/
The Peñuelas Project: Air Monitoring in Puerto Rico	Air, Environmental Justice	The Tallaboa/Encarnación community in Peñuelas, Puerto Rico partnered with the EPA and is using EPA's Air Sensor Toolbox for Citizen Scientists to provide the community with the tools to begin an environmental monitoring study of air quality in the area. This study can potentially help improve air quality for residents in the community who are suffering from the impacts of air pollution.	Leaders: EPA & local community	https://19january2017snapshot.epa.gov/sites/production/files/2016-04/documents/citizen_science_air_monitoring_in_puerto_rico_fact_sheet.pdf	Puerto Rico	Active	Agency management	Citizen science coordinator Patricia Sheridan: sheridan.patricia@epa.gov	https://19january2017snapshot.epa.gov/sites/production/files/2016-04/documents/citizen_science_air_monitoring_in_puerto_rico_fact_sheet.pdf ;	https://www.researchgate.net/publication/321190882_Low_Cost_Air_Quality_Sensor_Deployment_and_Citizen_Science_The_Penuelas_Project
The Sand Sentinel Program	Enforcement	The goal of the Sand Sentinel Program is to create an easier way to collect and file reports on suspected permit violations by frac sand mining companies. In partnership with University of Wisconsin-Eau Claire, many local residents received PurpleAir sensors and training on how to collect data on mining activities and associated particulate matter pollution. The information collected in this project is displayed on the Wisconsin Department of Natural Resources' website that collects information on air monitoring. Training events have been held by Public Lab, a national organization, for concerned citizens who have been impacted by fracking are educated on the laws surrounding permitted mining activities and how to report violations. Using the tools and resources that this program provides, citizens can more actively report suspected violations to the Wisconsin DNR, which will then investigate the claims of potential permit non-compliance.	Leader: Concerned Chippewa Citizens Stakeholders: Wisconsin Department of Natural Resources, University of Wisconsin-Eau Claire, Public Lab	https://publiclab.org/wiki/the-sand-sentinel-program	Wisconsin	Active	Regulation and enforcement	Pat Popple 715-723-6398 stevie@publiclab.org	https://wisair.wordpress.com/frac-sand-sentinel/	https://cypost.org/uwec-research-team-analyzes-frac-sand-minings-possible-effects-on-health/ ; CSR, https://obamawhitehouse.archives.gov/blog/2013/06/26/west-oakland-environmental-indicators-project-citizen-engagement-measure-and-improve ;
West Oakland Environmental Indicators Project	Air, Environmental Justice	This local citizen-led organization seeks to address air pollution problems originating in the community, from the port of Oakland and other sources. It seeks to promote environmental justice in the area by building relationships between impacted residents, city officials, and other local stakeholders. The group educates local community members through classes on environmental topics. The group launched the Oakland Shoreline Leadership Academy in 2021 in an effort to give West Oakland residents a voice in shoreline planning. Students in the community help conduct asset mapping, develop a community engagement plan and co-develop improvement projects on the shoreline, and the organization's work aids residents in understanding how their lives are impacted by political, social, and natural forces.	Leader: West Oakland Environmental Indicators Project Stakeholder: Bay Area Air Quality Management District	https://woeip.org/	California	Active	Information	Margaret Gordon, (Co-director), Office Contact: (510) 257-5640 info@woeip.org	https://oaklandside.org/2022/03/25/west-oakland-environmental-group-sues-to-stop-proposed-port-gravel-facility/ ;	https://abc7news.com/west-oakland-air-pollution-black-and-latino-residents-abc-equity-report-bay-area-quality/11058102/ ;
White Earth Nation Thriving Earth Exchange Project	Water (Surface Water), Environmental Justice	The White Earth Reservation, which is in northern Minnesota, monitors the water quality of its many lakes. White Earth performs a broad suite of measurements and tests related to and designed to ensure safe rice harvesting, fisheries and recreational use. This data can also be used to measure the effect of agriculture operations (including fertilizer run-off), power plants, and septic systems. Due to some of the lakes' accessibility, many of the collection methods can be done with remote-sensing data.	Leader: White Earth Nation	https://thrivingearthexchange.org/tex2013-102/	Minnesota	Active	Information	ThrivingEarthExchange@agu.org; Advisory Board: https://thrivingearthexchange.org/team/		