

Nine Learnings & Some Predictions for the Air Monitoring Community

Tim Dye

NINE LEARNINGS

1



Need monitoring?

Do you really need to monitor?

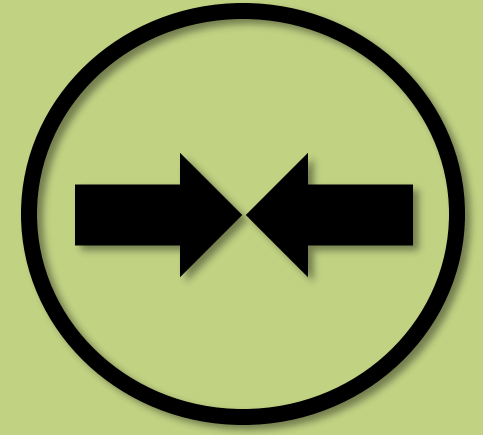
If you had the ideal data now, what would you do next?

Need Monitoring?



Latinos United for a New America
Bay Air Center (BAAQMD)

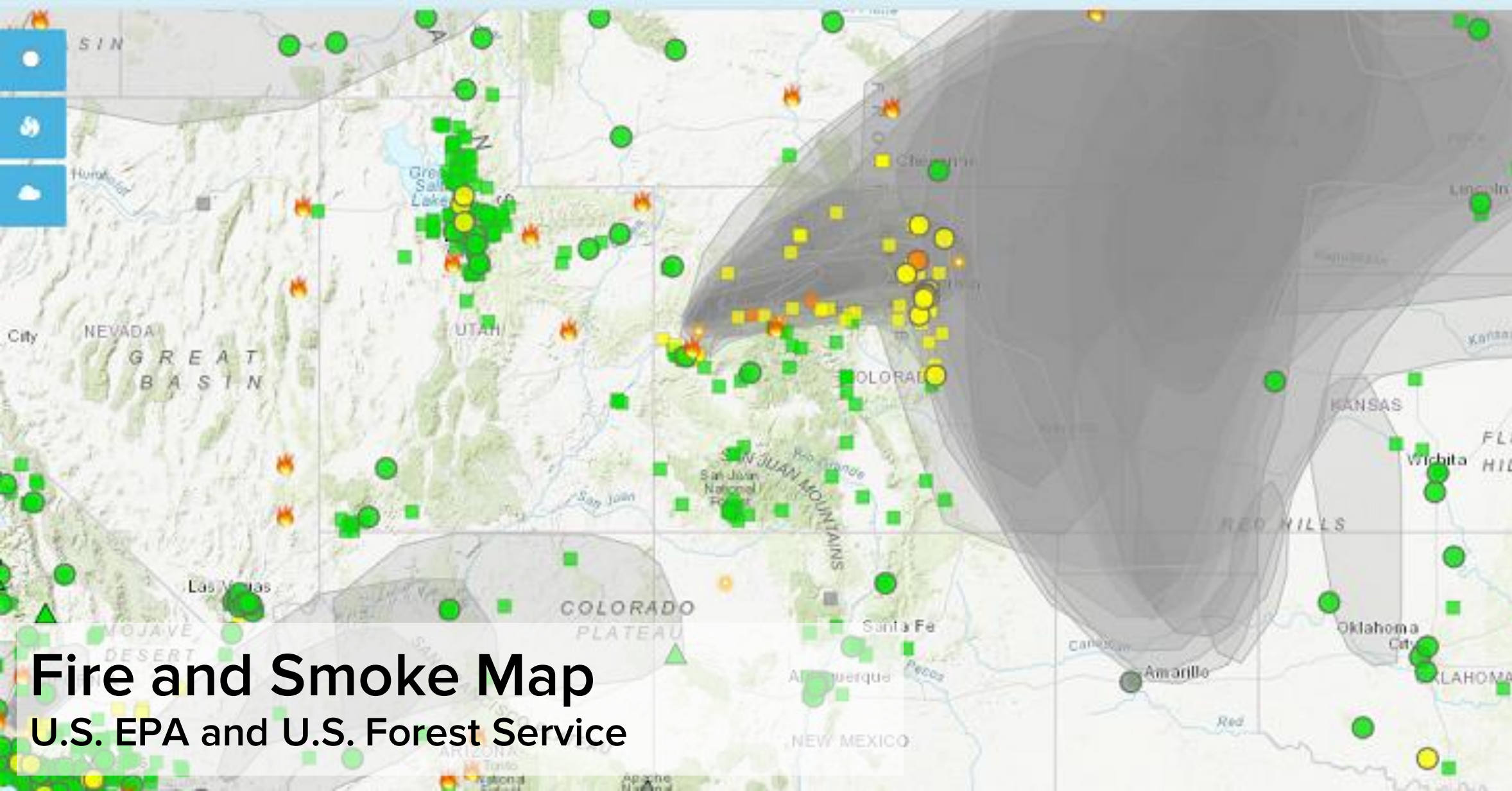
2



Matchmaking required

In advance, match the device and its performance with the objectives, analysis, and outcomes you're seeking.

Notice: The Sensor Data Pilot adds a new layer of air quality data from low-cost sensors. Learn more [here](#).



Fire and Smoke Map
U.S. EPA and U.S. Forest Service

Matchmaking required

3



Plan or fail

Plan, plan, and plan.....and don't buy anything without a plan in place.



**Community Health Aligning
Revitalization Resilience &
Sustainability - CHARRS**
AQEarth Project (NIEHS)

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Collocate

Comparing your device to an accepted reference is fundamental to building confidence and trust in your devices, operations, and resulting data. Collocation greatly increases the usefulness of the air monitoring data and opens up more applications.



Brightline Defense
Bay Air Center (BAAQMD)

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20/80 Rule

Spend less than 20% of your budget on hardware/software.

Invest more than 80% of your budget on people, training, operations, data analysis, and communications.



Increasing Community Participation in Air Pollution Mitigation in Indore, India

Building Healthy Cities – JSI (USAID)

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4X Rule

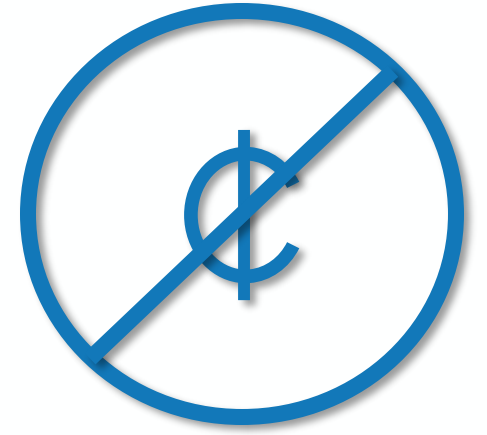
When working with groups new to air quality, plan to spend more time meeting, listening, discussing, and fully understanding. This in-depth capacity is necessary and helps improve the whole project.



All About Air Quality Bootcamp

Coalition for Clean Air (CARB)

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“Low-cost” misleads

Too much focus is placed on device cost. The most important questions are: What are your needs? What does it take to get the data needed for action?

“Low-cost” misleads




**Empowering YMCA Communities to Use Data
to Increase Awareness and Reduce Exposure**
Coalition for Clean Air (EPA)

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QA Saves

Quality assurance is the bedrock of informed decision-making. The process is meticulous and resource-intensive, yet indispensable. Organizations increasingly recognize that the investment in producing quality data is not just beneficial but crucial.



170 air sensor network in Warsaw, Poland

City of Warsaw (Clean Air Fund)

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Last Things First

Last Things First. Start a project by thinking about the outcome or actions you want. Then, refine that, get more detailed and specific, and figure out how to achieve that.



The TriChapter Council of the Navajo Nation
AQEarth Project (NIEHS)

SOME PREDICTIONS



The rush to buy air sensors slows.

As more groups understand the air sensors' value (and drawbacks), they opt for better equipment with detailed planning and operational services, resulting in higher-quality data.



Actions favored over monitoring.

The complexity of air monitoring drives more focus on other, non-monitoring ways to achieve objectives.

Governments fully embrace air sensor data.

Improving QA methods and training helps produce better - quality data from air sensors. Government agencies use data in decision-making, enforcement, regulation, and planning—all important for improving long-term air quality.



Swimming in data.

Too much data to handle and costly data management usher in more open-source software solutions that address the costs and create more collaboration with those managing data.



Innovative surprises to come.

New groups and people find interesting ways to use air quality data. At times, these seem way outside the traditional norms of air quality; however, they remind us of what people can achieve.

Thanks

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