GAO Report:
Update and Feedback

EPA - OAR - OAQPS

Air Quality Assessment Division

Ambient Air Monitoring Group

November 2021

Purpose

- This briefing is intended to:
    1. Refresh your memory on the Government Accountability Office (GAO) report *GAO-21-38, Air Pollution: Opportunities to Better Sustain and Modernize the National Air Quality Monitoring System.*

    2. Provide an update on activities to fulfill our commitment.

    3. Gather feedback.

GAO Findings

- The GAO report highlights the fact that "…the ambient air monitoring system is a national asset that provides standardized information for implementing the Clean Air Act and protecting public health."

- The GAO identified challenges which are rooted in:
  - Aging infrastructure;
  - Flat or declining grants (considering inflation);
  - Inconsistencies in EPA oversight and in state and local agency management practices; and
  - Competing priorities between required work, national and local issues, emerging technology, and growing informational needs.

Nov. 2020

Recommendation #1

Asset Management

- GAO suggests that EPA "…in consultation with state and local air agencies, should develop, make public, and implement an asset management framework for consistently sustaining the national ambient air quality monitoring system."

- GAO details successful state management practices, and points at the need to identify the resources needed for sustenance, to manage infrastructure risks, and to target resources to provide the greatest value.

The EPA provided a general time frame for actions in addressing the asset management recommendation:

- FY21/22: Engage stakeholders to discuss asset management. Outcomes include:
  - Defining asset management principles and objectives.
  - ID opportunities to include, improve, and otherwise report asset management metrics.
  - Identify common, implementable practices to address infrastructure risk.
  - Discuss resource needs.

- FY22/23: Based on engagement feedback, work with partners to:
  - Develop the plan to manage resource allocations.
  - Work to identify additional resource needs for sustaining ambient air monitoring networks.
  - Make the plan publicly available on the Ambient Monitoring Technology Information Center website (https://www.epa.gov/amtic)

- FY24/25: Assist state, local and tribal air agencies in reviewing their networks, leveraging the 5-year network assessment and investing in their networks.
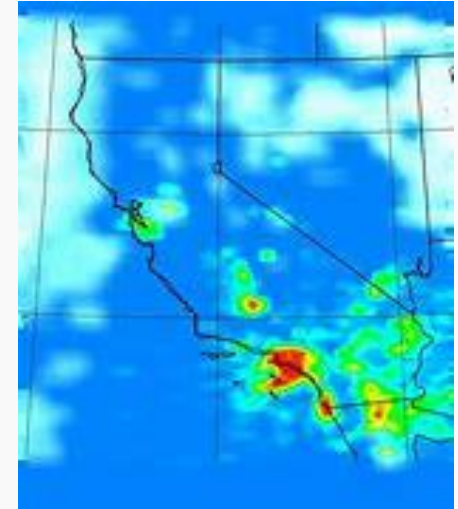
Recommendation #2

Modernization

- GAO suggests that EPA "…in consultation with state and local air agencies, and other relevant federal agencies, should develop and make public an air quality monitoring modernization plan to better meet the information needs of air quality managers, researchers, and the public."

- GAO further suggests the plan consider "…leading practices, including establishing priorities and roles, assessing risks to success, identifying the resources needed to achieve goals, and measuring and evaluating progress."

Modernization

- Per GAO, what are the additional informational needs embedded in the need for modernization?
  - Local-scale, real-time air quality data
  - Levels of air toxics in the air
  - Persistent and complex pollution (e.g., wildfires)
  - Using low-cost sensors and satellite data

EPA Response: Modernization

- The EPA generally agrees that the national networks should maintain a level of modernity and focus.

- EPA recognizes that a "modern" network should:
  - Leverage advanced and/or appropriate technology;
  - Has high levels of hardware and software availability, reliability, and serviceability;
  - Have high certainty in data quality; and
  - Increase/maximize potential to meet informational needs of the air quality community and the public.

- Modernization will only be achieved through collaboration amongst EPA, state, local, tribal, and other federal partners.

- EPA made it clear that modernization will require additional resources.

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EPA Response: Modernization (cont.)

The EPA provided a general time frame for actions in addressing the modernization recommendation:

- FY21/22: Engage stakeholders, using existing documentation and assessments to inform discussions on modernization. Outcomes will include potential objectives and priorities as well as identification of the necessary resources to fulfill them.

- FY22/23: Based on engagement feedback, work with partners to create a strategic plan for ambient air quality monitoring that addresses modernization and the increasing informational needs of the air quality community and the public.
  - EPA will make the plan publicly available on the Ambient Monitoring Technology Information Center website (https://www.epa.gov/amtic)
  - Stakeholders will discuss options to pursue funding opportunities.

- FY24/25: Assist state, local and tribal air agencies in reviewing their networks, leveraging the 5-year network assessment and investing in their networks.

What's Happening?

- American Rescue Plan!
  - Arrival of funds and the need to plan expenditure took priority.
  - GAO concepts are present in the ARP funds usage.

- Engagement on asset management
  - Spoke to MJOs and individual agencies
  - Looking at existing frameworks to leverage data
  - Drafting materials for stakeholder response

- Engagement on modernization
  - Received feedback that it will be complicated
  - Some stakeholders suggest working in smaller groups to generate discussion and gather feedback.
  - Build Back Better??

Asset Management Framework

- Many states have a variety of asset management tools in place.

- EPA is in the position of trying to create a national standard for asset management.
  - Create a framework that will allow for full adoption and success
  - Define what it is, it's metrics, and how we could collect data.
  - We need to show its usefulness at local/state, region, and national levels.

- Consider Region 4 approach
  - Asset reporting is part of grant terms and condition
  - Concurrent with AMNP with flexibility in "how" data are reported
  - Useful in region and air agency dialogue on network planning and operations, budgeting, and case by case issues.

Wrap-up

- Approach for sharing a proposal for feedback
  - Something similar to notice and comment actions or certain Technical Assistance Documents?
  - Use MJOs?
  - Other options?

- Initial thoughts or concerns?