2022 Regulatory Emissions Modeling Platform Quarterly Update

National Emissions Collaborative

November 1, 2023



Agenda

- Highlights of the Development Plan
- Update on the Communications Plan
- 2020 NEI data review tool and planned updates for 2022 EMP
- Workgroup updates including activity data requests and data review plans
- Schedule reminders
- Next steps



2022 EMP Collaborative

- Co-leads
 - Zac Adelman (LADCO), Mary Uhl (WESTAR), and Alison Eyth (EPA OAQPS)
- Communication support
 - Tom Richardson (OK DEQ), Tom Moore (Denver/NFR RAQC), Rhonda Payne (WESTAR/WRAP)
- Coordination Committee
 - 28 members from MJOs, state agencies, and US EPA staff from OAQPS, OTAQ, and CAMD
 - Monthly calls
 - Quarterly outreach webinars
- Workgroups
 - Leverage existing national emissions workgroups
 - Some 2022-specific workgroups will be needed, e.g., fires and projections



2022 EMP Development Plan

Purpose: Outline the principles and process, and to define metrics for successful collaboration by [air programs] and the U.S. EPA, to develop a national scale 2022 EMP that will provide a complete and transparent set of nationally consistent emission modeling files

Description of the 2022 Collaborative approach, organization, products, and timing



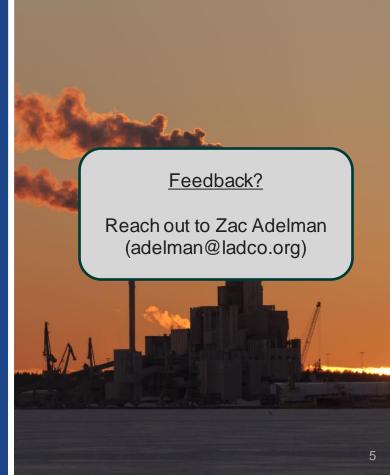
2022 EMP Development Plan

Contents

- Background and Purpose
- Collaborative Principles and Goals
- Timeline and Milestones
- Approach
- Communications
- Coordination Committee

View the Development Plan -





2022 EMP Communications Plan

Goals of Outreach

- Broaden engagement via targeted outreach to national and regional committee and workgroup meetings throughout the project lifecycle
- Augment and reinforce mainstream EMP work as communication facilitators and advocates
- Identify the uses and lifespan of the EMP, and
- Emphasize the importance of involvement in deciding EMP data to represent your jurisdiction



Emissions Topical Workgroups Outreach List

- National MOVES-Mobile Emissions Working Group
- National EGU Workgroup for both ERTAC and IPM data
- National Oil and Gas Emissions Committee (NOGEC)
- MARAMA CMV Working Group (Commercial Marine Vessels)
- National Woodheating Task Force
- NOMAD working group (Nonpoint Method Advisory)



Key Topics Covered in Initial Outreach

- Communication goals for achieving understandable results
- Uses and relevance of EMP
- Responsibilities in creating-reviewingediting EMP data
- Opportunities for data evaluation and approval, including tools, websites, databases that will be implemented
- Timeline, key milestones
- Next steps (specific to each group)



Past and Upcoming Meetings for Communications Team

October 2023

10/12/23	National Oil and Gas Emissions Workgroup	Contact: Jeff Vukovich
10/19/23	MJO MOVES Workgroup	Contact: Debbie Wilson
10/24/23	CenSARA Fall Business Meeting	Contact: Michael Vince
10/25/23	WRAP Technical Steering Committee	Contact: Rhonda Payne
10/26/23	EGU Workgroup	Contact: Serpil Kayin
10/26/23	AAPCA Emissions Inventory Committee	Contact: Morgan Dickie
10/31/23	MJO Regional Haze Collaboration Call	Contact: Mary Uhl

November 2023

11/1/23	OTC Special Topics Call	
11/6/23	Northeast El Leads call	Contact: Susan McCusker
11/13/23	WRAP Fire and Smoke Workgroup	Contact: Rhonda Payne
11/13/23	CMV Committee	Contact: <u>Debbie Wilson</u>
11/15/23	NOMAD Committee	Contact: <u>Jennifer Snyder</u>

Communications Plan for Winter 2023-24 Outreach

- Build communications materials to be shared January-February 2024
- Summarize inputs EPA has received from SLTs by emission sector as of Dec. 31
- Status of tools for data sharing and review (wiki, evaluation & review tools)
- Purpose of April review window
- Key milestones for Feb-Mar-Apr 2024 timeframe
- Advertise date of next EMP quarterly full progress report meeting



Data review for 2020 and 2022

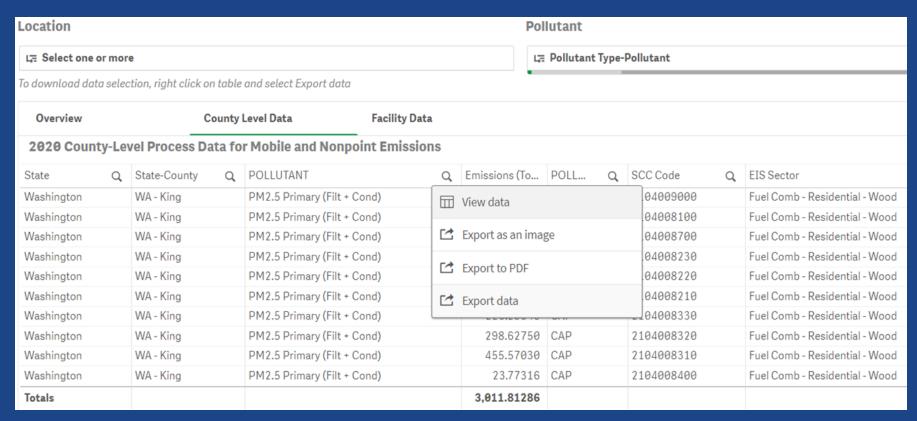
- The <u>2020 NEI Data Retrieval Tool</u> allows users to view and download data from the 2020 NEI at the SCC- and county-level for onroad, nonroad, and nonpoint sources, and at the facility-level for point sources.
- Data from the 2022v1 EMP will be ported into this tool, enabling targeted review of emissions for this effort.
- We are considering options for how to collect and track comments on the 2022 EMP.



Example use of the 2020 NEI Data Retrieval Tool

Location				Pollutant					
∟≅ Select one or mor	e		L _F	រភ្ភៈ Pollutant Type-Pollutant					
To download data selection, right click on table and select Export data									
Overview	County Level Data Facility Data								
2020 County-Level Process Data for Mobile and Nonpoint Emissions									
State Q	State-County Q	POLLUTANT	Emissions (To	POLL Q	SCC Code Q	EIS Sector			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	204.22710	CAP	2104009000	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	374.77710	CAP	2104008100	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	418.12060	CAP	2104008700	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	233.20000	CAP	2104008230	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	307.74590	CAP	2104008220	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	469.48080	CAP	2104008210	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	226.29040	CAP	2104008330	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	298.62750	CAP	2104008320	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	455.57030	CAP	2104008310	Fuel Comb - Residential - Wood			
Washington	WA - King	PM2.5 Primary (Filt + Cond)	23.77316	CAP	2104008400	Fuel Comb - Residential - Wood			
Totals			3,011.81286						

Example use of the 2020 NEI Data Retrieval Tool



Live Demo of 2020 NEI Data Retrieval Tool

Stay tuned for the demo...



Onroad and Nonroad Update

- Preparing onroad emissions requires activity data and MOVES emission factors
- 2022 Vehicle Miles Traveled (VMT) activity data
 - Data have been submitted by nine states
 - For any other agencies that wish to provide VMT, it is needed by the end of 2023

Schedule

- Activity data will be finalized and MOVES4 run in January
- Onroad and nonroad emissions will be computed by February, 2024
- Once available, data will be shared with MOVES
 MJO workgroup



Other Mobile Sources Update

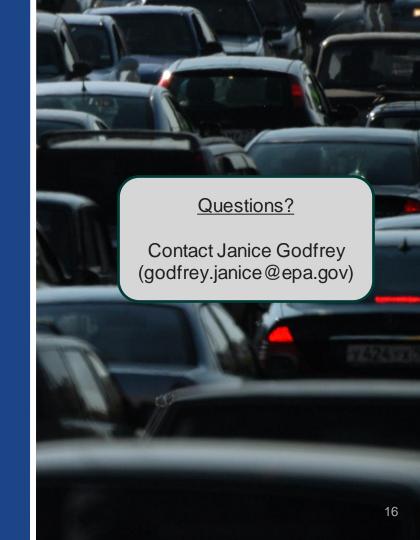
- Commerical Marine Vessels
 - EPA is requesting 2022 activity data
 - Once AIS data are available, hourly C1C2 and C3 emissions will be computed

Locomotives

- Work to begin soon
- Will be based on 2020 NEI with updates from readily available data sources

Aircraft

- Inventories will be computed for approx. top
 50 busiest airports
- Other airport inventories will be adjusted from 2020 based on activity changes



Collaborative Fires Workgroup

- Includes wildland, prescribed, and agricultural burn emissions
- Python SMARTFIRE2 used for daily acres burned
- Bluesky Pipeline (BSP) used for daily emissions
- Draft 2022 inventory created by EPA and shared with SLTs/MJOs/others (by Nov. 17, 2023)
- Fire activity data requested from SLTs/ others (now through December 8,2023)
- Workgroup kickoff meeting (early December)
- Feedback on draft inventory due early January
- Updated 2022 inventory generated and shared (by March 2024)
- 2022v1 fire inventory finalized (Spring 2024)



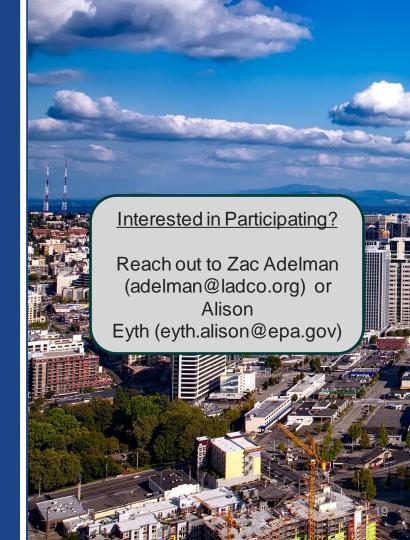
2022 Oil and Gas Update

- Starting to prepare activity data (Nov-Dec 2023)
 - Contractor may contact SLTs individually with questions/requests
 - County activity will be made available for review (~Jan 2024)
- Oil and Gas Tool 2020NEI version with slight modifications to be used to compute emissions
- Draft emissions available (~Feb 2024)
- SLT/MJO/stakeholder review (Feb-April 2024)
- Oil and Gas point source information available (Jan-Feb 2024)
- Abandoned well emissions to be estimated outside of Tool (Feb 2024)
- Year 2022 inventory finalized (Spring 2024)



Projections Workgroup Update

- Kickoff call on October 4
 - Next call: November 1 (today)
 - 40+ people in the workgroup
- Organizing into 5 Task Forces
 - EGUs, Other Point, Nonpoint, Mobile, Oil & Gas
- Collect projection information by source/sector
- Propose and decide on review methods
- Conduct reviews
- Identify alternative projection approaches
- Draft recommendations on projection approaches for 2022 EMP
- Timing: TBD



LADCO Inventory Review Webinar

- When: Monday November 13 @ 2:00
 Eastern
- Who: Mark Janssen (Emissions Director)
- What: Walk through how LADCO is working with member agencies to review the 2022
 EMP

Agenda:

- How LADCO prioritized the emissions sectors and sources to review
- Approach for engaging with member states in the review
- Analysis products used for the review
- Timeline of the review
- Expected outcomes



2022 EMP Schedule Check-In

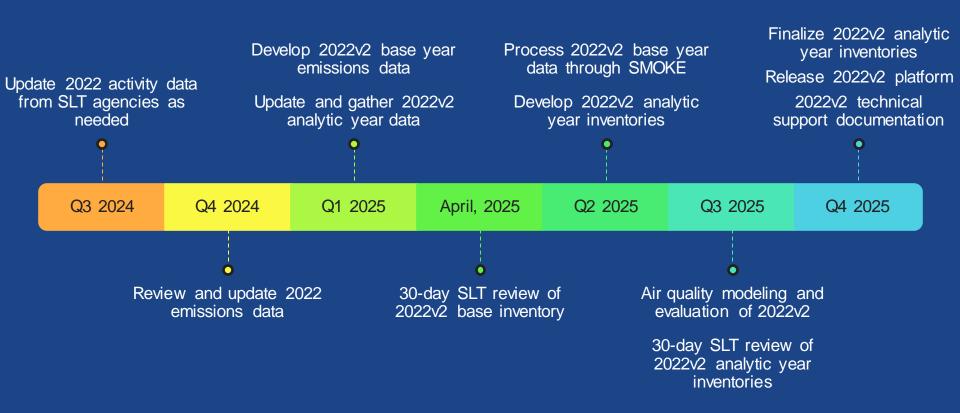
- Any data to be used in 2022v1 base year emissions are needed no later than mid-January 2024
 - Comments on 2020 nonpoint
 - 2022 point sources into EIS
 - 2022 VMT
 - 2022 fire activity data (by Dec. 8)
- Base year 2022 emissions review for all sectors will be in April 2024



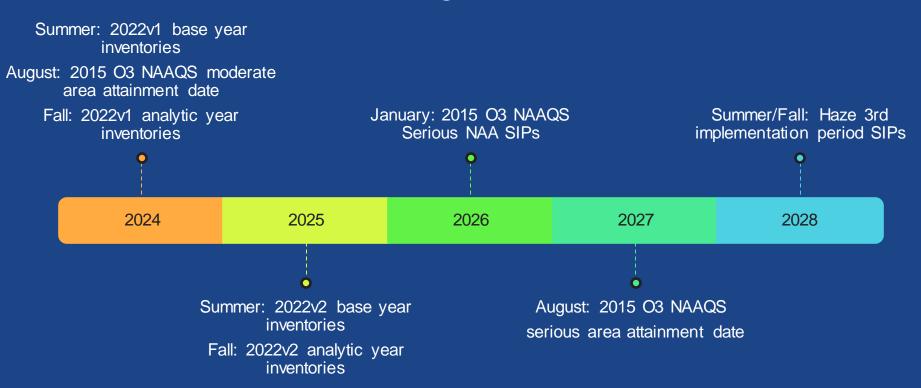
Timeline for 2022v1 Platform Development



Timeline for 2022v2 Platform Development

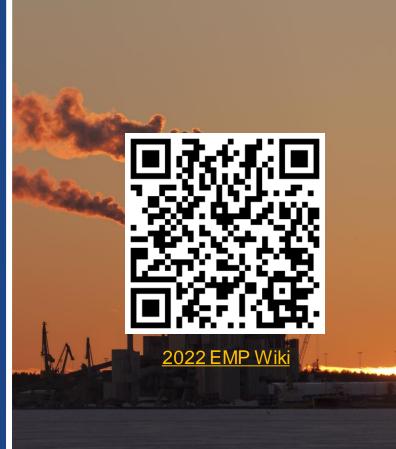


2022 Platforms and Planning Timelines



Stay Informed

- 2022EMP Wiki at Intermountain West Data Warehouse (IWDW)
- Quarterly outreach calls
 - 1st Wednesday in August, November,
 February, and May at 2PM Eastern
- Attend workgroup meetings
 - MOVES MJO, EGU, NOMAD, NOGEC, projections, fires, ...
- Participate in data reviews



Next Steps

- S/L/T agencies can:
 - Submit 2022 point source data
 - Provide activity data for fires and VMT
 - Participate in workgroup meetings
 - Work with other inventory contacts in your region to review the data
 - Look at 2020 NEI data for anomalies, especially for nonpoint sources
- Workgroups will proceed with reviewing data and compiling recommendations for U.S. EPA
- Next quarterly outreach call: February 7, 2023 @ 2:00 Eastern

