Western Regional Air Partnership (WRAP) Air Quality Program Update

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WRAP website (www.wrapair2.org)

New Mexico AQB

North Dakota DoH

Oregon DEQ

South Dakota DENR

Utah DEQ

Washington DoE

Wyoming DEQ



WRAP Air Quality Program Manager, Western States Air Resources (WESTAR) Council

WRAP Organization

- Virtual organization formed in 1997 as successor to Grand Canyon Visibility Transport Commission historically staffed by National Tribal Environmental Council and Western Governors' Association.
- Supported Regional Haze technical, planning, and policy work 1999 2009.
- WRAP Charter amended in late 2009, to focus on technical and planning support for "one-atmosphere" western regional air issues – Regional Haze, Ozone, PM, Nitrogen Deposition, Mercury.
- WRAP moved to be administratively supported by the Western States Air Resources (WESTAR) Council in October 2013.
- Charter amendments to accommodate move to WESTAR administrative support were approved by a vote of WRAP members in July 2014.
- Currently funded by states, EPA, NPS, BLM, and industry for interconnected series of western regional technical projects supporting air quality planning across the West.
- Additional projects and funding organizations continue to be developed, framed in context of the WRAP Strategic Plan. Work plan for 2016-20 in development by Steering Committee and working groups.

WRAP Members – November 2015

Alaska DEC Pueblo of Acoma Arizona DEQ Campo Kumeyaay Nation Confederated Salish, Pend d'Oreille, and Kootenai Tribes California ARB Confederated Tribes of the Umatilla Indian Reservation Colorado CDPHE Hawaii DoH Fort Belknap Indian Community Idaho DEQ Hopi Tribe Montana DEQ Hualapai Tribe Nevada DEP

Kashia Band of Pomo Indians of Stewarts Point Rancheria

Lone Pine Paiute-Shoshone Reservation Nez Perce Tribe Northern Cheyenne Tribe Ohkay Owingeh Pueblo Orutsararmiut Native Council (ONC) Pechanga Band of Luiseno Indians Pyramid Lake Paiute Tribe **Quinault Indian Nation** Shoshone-Bannock Tribes

Pueblo of Zuni

Maricopa County Air Quality Department Pima County DEQ Pinal County AQCD Bay Area Air Quality Management District Butte County Air Quality Mgmt. Dist. Great Basin Unified APCD Imperial Co. Air Pollution Control Dist.

Mojave Desert AQMD

Monterey Bay Unified APCD

North Coast Unified AQMD

Northern Sonoma County APCD

Placer County Air Pollution Control District

Sacramento AQMD

San Diego County APCD

San Luis Obispo County APCD

Santa Barbara County APCD

Tehama County APCD

Yolo-Solano Air Quality Mgmt. District

Denver/Northern Front Range Regional Air Quality Council

Clark County Dept. of Air Qual. & Env. Mgmt.

Air Quality Mgmt. Div., Washoe Cnty. Health District

Lane Regional Air Protection Agency Northwest Clean Air Agency

Olympic Region Clean Air Agency

Puget Sound Clean Air Agency

Southwest Clean Air Agency

Spokane Regional Clean Air Agency

Yakima Regional Clean Air Agency

Greater San Juan Basin 2014 Gas Production

Bureau of Land Management U.S. Forest Service **Environmental Protection Agency**

National Park Service

Fish & Wildlife Service

WRAP Fire Emissions/ Air Quality Impacts Studies



WRAP fets DEASCO₃ Welcome to the WRAP Fire Emissions Tracking System (FETS). Map of Current Fire Activity in WRAP Region Resources Deterministic & Empirical Assessment of Smoke's Contribution to Ozone Methods **Project** State and Tribal Smoke Manager Contacts The WRAP's Fire Emissions Tracking System (FETS) is a web-enabled database for planned and unplanned fire events. It is The DEASCO₃ project, funded by the Joint Fire Sciences Program (JFSP), has produced analytical results and a dynamic and accessible technical intended as a planning tool for daily smoke management coordination, and retrospective analyses such as emission inventories and regional haze air quality planning tasks. tool that enables Federal Land Managers (FLMs) to participate more fully in ozone air quality planning efforts. Complex technical analyses of a series of well-chosen historic Case Study events have been made accessible using instructive tables, charts, and maps that describe how and to News and Events what extent fires contribute to ambient ozone concentrations. Nineteen (19) Case Studies were developed to characterize the relationship of October 2012 FETS Project call. Details.. emissions from fire to ozone concentrations across a broad range of circumstances (e.g., geographic locations, fuel conditions, time of year, fire types, and contributions to elevated background levels and levels in excess of the current and proposed Ozone NAAQS). This suite of Case August 2011 FETS Project call. Details.. Studies characterizes situations analogous to those that FLMs may face with current conditions and in the future. The online tools allow FLMs to May 2011 FETS Project call. Details.. survey, review, and grab the technical results and findings of the most analogous Case Studies, and/or generate new Case Studies, to effectively contribute to the state and EPA processes of SIP development, declaration of Exceptional Events, non-attainment area designations, establishing March 2011 FETS Project call. Details. background levels of ozone, and others. **PMDETAIL** January 18, 2011: NEI Support Tools Webinar 2. Deta 1. Fire Planning for FLMs – when it is time to plan for an upcoming burn or burn season; December 2010 FETS Project call. Details.. 2. State Implementation Plan (SIP) development - nonattainment area designations, design days for planning, establishing background levels of ozone, and other air quality management program issues; and older events... 3. Evaluation and declaration of Exceptional Events. Copyright 2007 Start using DEASCO₃ Tools and Data Particulate Matter Deterministic & Empirical Tagging & Assessment of Impacts on Levels

The 3-year PMDETAIL project, funded by the Joint Fire Sciences Program (JFSP), will quantify the impact of prescribed and other fire sources on

particulate matter (characterized as PM2.5 and PM10) levels across the continental U.S. It will also develop new fire emissions inventories and

computational modules for chemical transport models to simulate the atmospheric transformations of these emissions. The resulting models

(CAMx and PMCAMx) and inventories will be evaluated against field measurements for 2002, 2008, and 2011. CAMx is a publicly available

chemical transport model (CTM) used for regulatory purposes, while PMCAMx is its research version developed by the CMU team. We will

Assessment of Smoke's Contribution to Ozone (DEASCO3).

Laboratory Pilot Test Results for Biomass Burning Markers from IMPROVE Filters, Memo PDF and Data PDF

Project Documents

leverage and significant extend emission inventory development and CAMx modeling from an ongoing JFSP study, Deterministic and Empirical

WRAP Oil & Gas **Emissions / Air Quality** Impacts Studies

http://www.wrapair2.org/emissions.aspx

National Oil and Gas Work Group Summit Meeting - November 2014

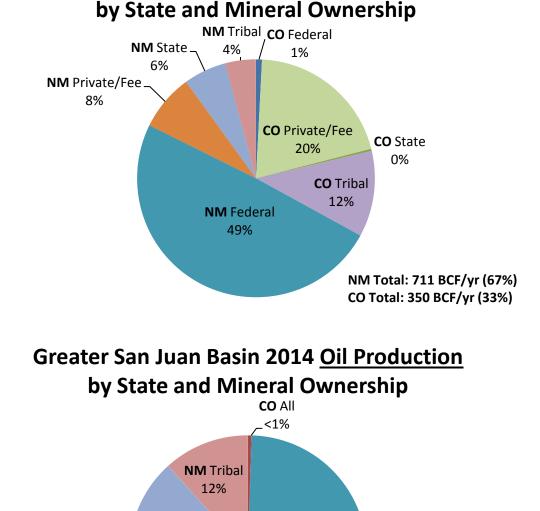
Air Quality Regulations pertaining to Oil and Gas (Univ. of Colorado Law School, Getches-Wilkinson Center for Natural Resources, Energy, and the Environment – March 6, 2015) (this link leaves the WRAP website)

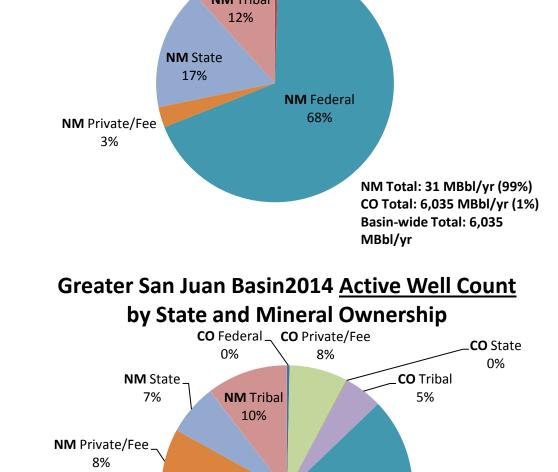
WRAP Regional O&G Emission Inventory Pneumatic Pump Data (March 27, 2015)

Memo on WRAP Phase III oil and gas speciation profiles and organic gas profile data August 27, 2015)

Drill Rig 1-hour NO₂ Collaborative Study

San Juan & Permian Basins' O&G 2014 **Emission Inventory Project**

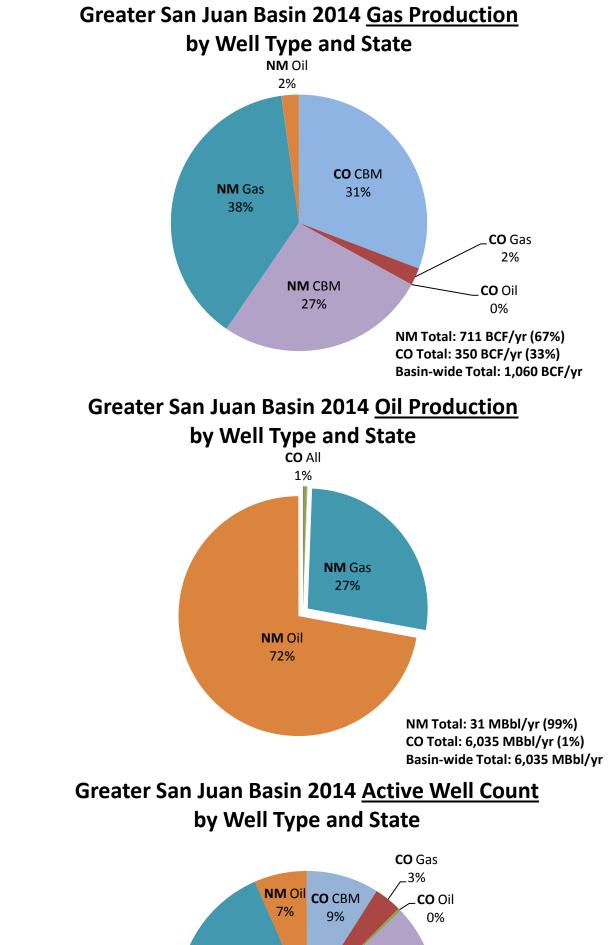




NM Total: 21,676 wells (87%

Basin-wide Total: 24,870 wells

CO Total: 3,194 wells (13%)



61%

NM Total: 21,676 wells (87%)

Basin-wide Total: 24,870 wells