



Prescribed Fire on Private Lands Workshop

Air Quality and Smoke Management

Humor

Speeches are like the horns on a steer. There's a point here and a point there, but in between it's mostly bull.

Air District Staff

- Kelle Schroeder, Air Pollution Control Officer
- Bill Sandman, Deputy Air Pollution Control Officer
- Scott Van Dyke, Air Pollution Control Specialist
- Roberta Shields, Air and Agricultural Technician

Tuolumne County Air Pollution Control District Primary Objectives

- Attain and Maintain the Ambient Air Quality Standards
- Provide Clean Air for the Citizens of Tuolumne County
- Prioritize and Adopt Rules and Regulations based on Best Possible Scientific and Economic Information
- Provide Public and Business Assistance in a Service Oriented Manner

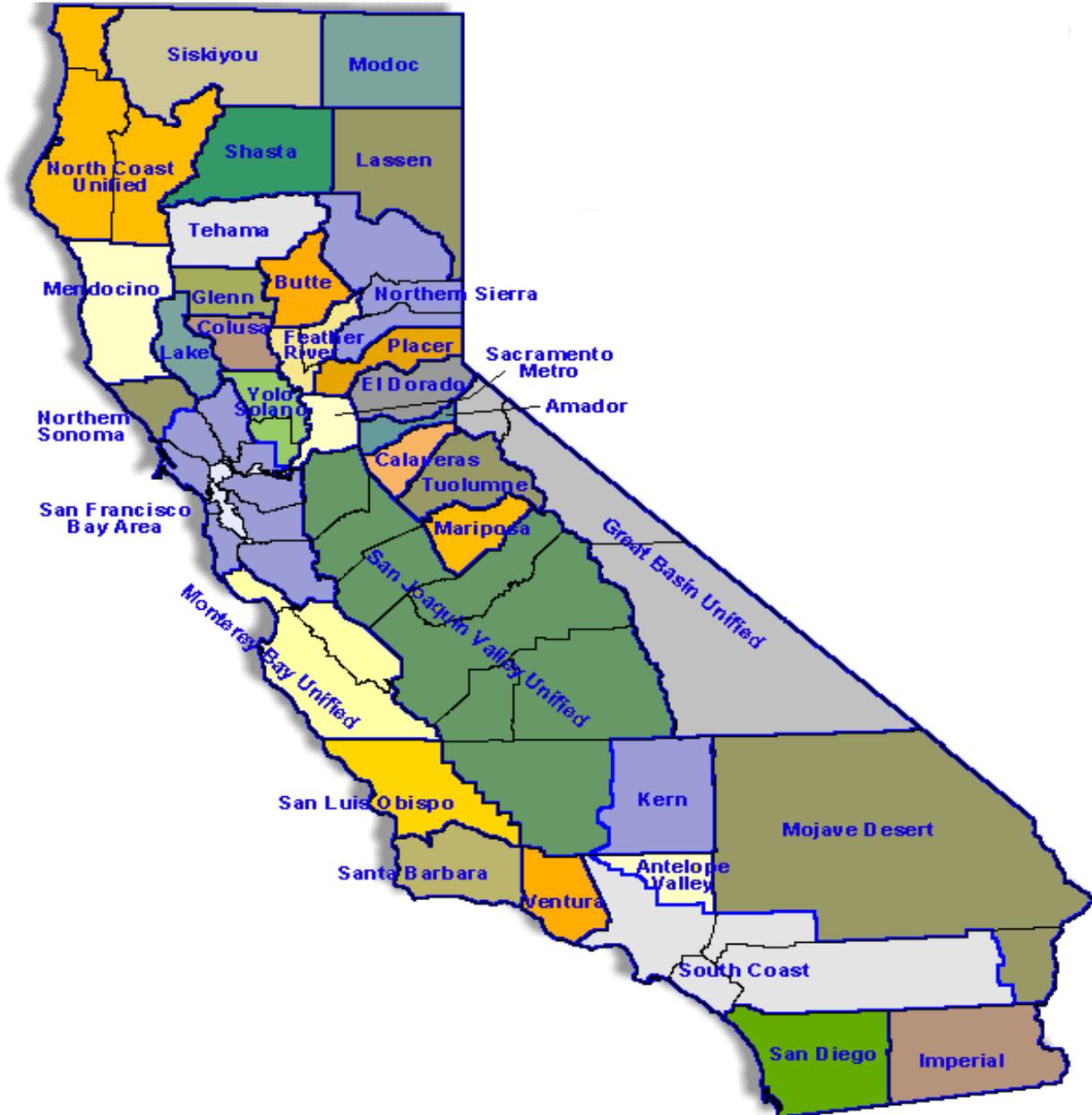
Air Quality Regulatory Framework (The Pyramid)

- U.S. EPA is federal oversight agency for states and local air districts (via federal Clean Air Act)

- CARB is state oversight air agency (California Clean Air Act)

- Local Air Districts
 - Implement federal, state, and local programs. Not responsible for regulating mobile sources
 - Responsible for regulating all open burning

California Air Districts



Criteria Pollutants

- Definition: Pollutants for which the State and federal governments have established health-based ambient air quality standards:
 - Ozone (O₃)
 - Nitrogen Dioxide (NO₂)
 - Particulate Matter (PM₁₀ & 2.5)
 - Carbon Monoxide (CO)
 - Sulfur Dioxide (SO₂)

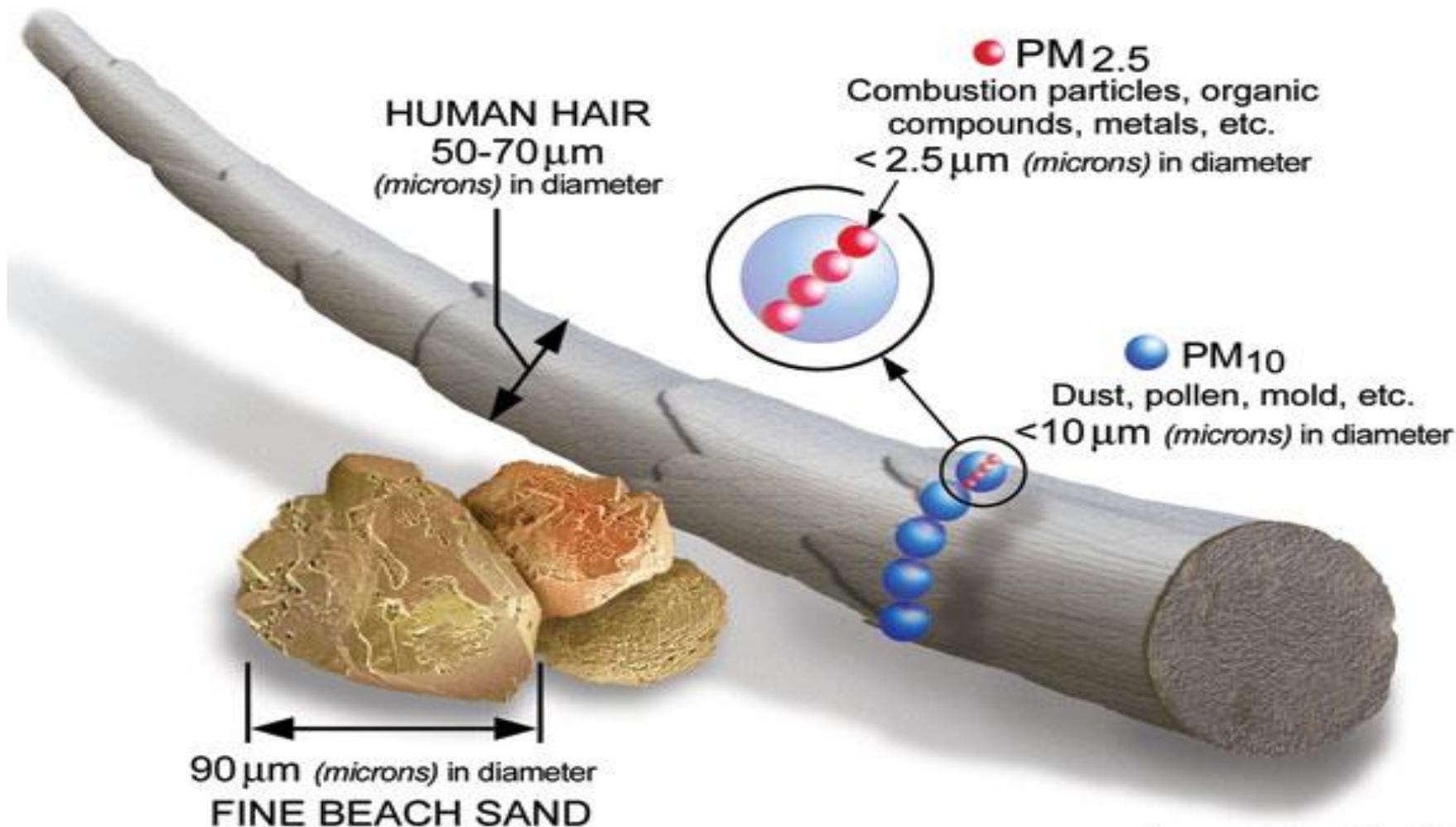
Ozone (O₃)

- Ozone (O₃): formed from the photo-chemical reaction of nitrogen oxides and reactive organic gases
- Ozone causes a number of respiratory ailments, including reduced lung functions
- The only air quality standard Tuolumne County is nonattainment for – due mainly to transport from upwind urban areas

Particulate Matter (PM10 & PM2.5)

- Classified as a group of solid particles and liquid droplets
- Sources of PM are dust from unpaved roads; agricultural and mining operations; prescribed and residential burning; and, other combustion sources
- Particulate matter is the most visible constituent of smoke

Particulate Matter (PM10 & PM2.5)



Government Humor



I like Tom. He doesn't do a lot of work around here. He shows zero initiative. He's not a team player. He's never wanted to go that extra mile. Tom is exactly what I'm looking for in a government employee.

FUNNY QUOTES ON MEMEPHOTO.COM



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Air Pollution Control District Major Programs

- **Stationary Source Permit Program**
- Federal Air Pollution Programs
- State Air Pollution Programs
- **Smoke Management Program (Title 17 / Reg III)**
- Compliance Assistance
- Complaint Response
- Grant Programs

Pacific Ultrapower



Gasoline Dispensing Facility



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More Government Humor



GOVERNMENT

IF YOU THINK THE PROBLEMS WE CREATE ARE BAD,
JUST WAIT UNTIL YOU SEE OUR SOLUTIONS.

Smoke Management Program



Applicable Definitions

Open Burning: Combustion of vegetation outdoors where the product of combustion is not directed through a flue (TuoCo APCD Rule 300.J)

Agricultural Burning: Open outdoor fires used in ag operations for the growing of crops and raising of fowl/animals, or fires used in wildland vegetation and forest management (CCR Title 17 §80101)

Prescribed Burning: Planned application of fire to vegetation to achieve a specific objective(s) on lands selected in advance, or by natural or accidental ignition. (CCR Title 17 §80101)

Open Burning (Non-agricultural)

- California Health and Safety Code separates agricultural burning from non-agricultural burning
- Examples of non-ag burning include backyard/residential burning and land development clearing burning
- Burn permits are required in TuoCo for all non-ag burning except residential burning.

Open Burning (Agricultural)

- Agricultural burning includes any prescribed fires on public or private lands
- Agricultural burning is regulated under Title 17 of the CCR
- Fire fighter training and suppression activities are not regulated by the TuoCo Air District

Open Burning Requirements

- For all open burning, the burning of anything other than vegetation is prohibited
- Burning is required only on CARB declared burn days, with very limited exceptions
- Vegetation must be burned on the property where it was grown
- For ag burning projects greater than 10 acres or emitting in excess of one ton of PM requires a Smoke Management Plan

Extreme Kayaking



Public and Private Land Managers Regulated by the District

- U.S. Forest Service, Stanislaus NF
- Yosemite National Park
- Cal Fire
- California State Parks
- Bureau of Land Management
- Hetch Hetchy Water and Power
- Don Pedro Recreation Agency
- Sierra Pacific Industries
- Private Landowners

Prescribed Fire



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Prescribed Fire



Not a Prescribed Fire



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Takeaways

- Open burning is a necessity for rural counties with severe fuel loading and the potential for large scale wildfires
- Emissions from open burning can be hazardous to your health
- Air Districts are regulatory agencies, but are also here to help in achieving your burning goals
- Burn permits are issued for all burning except residential

Questions?



Title 17 CCR Smoke Management Guidelines

Requires each air district to adopt a Smoke Management Program which includes:

- Submittal of Smoke Management Plans (>10 acres)
- Issuance of Burning Permits
- Authorization of daily burning by air district based on air quality; met conditions; type, amount, and location of veg to be burned; and consideration of smoke impacts to general public and sensitive receptors
- Provide alternative methods of information reporting (PFIRS)

Smoke Management Plan Elements

- Contact Information
- Project Specific Information; i.e. vegetation, fuels, duration of burn, and acceptable criteria for burning
- Project Location or map of project
- Landowner / Burner Information
- Preparer's Statement
- Reporting Methodology
- Identification of Smoke Sensitive Areas



Tuolumne County Air Pollution Control District Smoke Management Plan

Permittee Name: _____ Date: _____

Project Name: _____

Check () one of the following as a result of the information listed above or other pertinent information:

	Less than 1 ton of Particulate Matter (PM10) emissions and/or less than 10 acres in size, applicant must complete and comply with an Air District Burn Permit.
	Between 1 ton and 10 tons of PM10 emissions and/or between 10 and 100 acres complete sections 1, 2, 3, and 5 of the Smoke Management Plan.
	Over 10 tons of PM10 emissions and/or 100 acres complete sections 1-5 of the Smoke Management Plan and over 250 acres, complete sections 1-6.
	Regardless of size or PM10 emissions, if smoke has the potential to impact a smoke sensitive area, complete those sections of the Smoke Management Plan identified by the Air District.

Those Sections checked () are to be completed and submitted as the Smoke Management Plan to the Tuolumne County APCD for review.

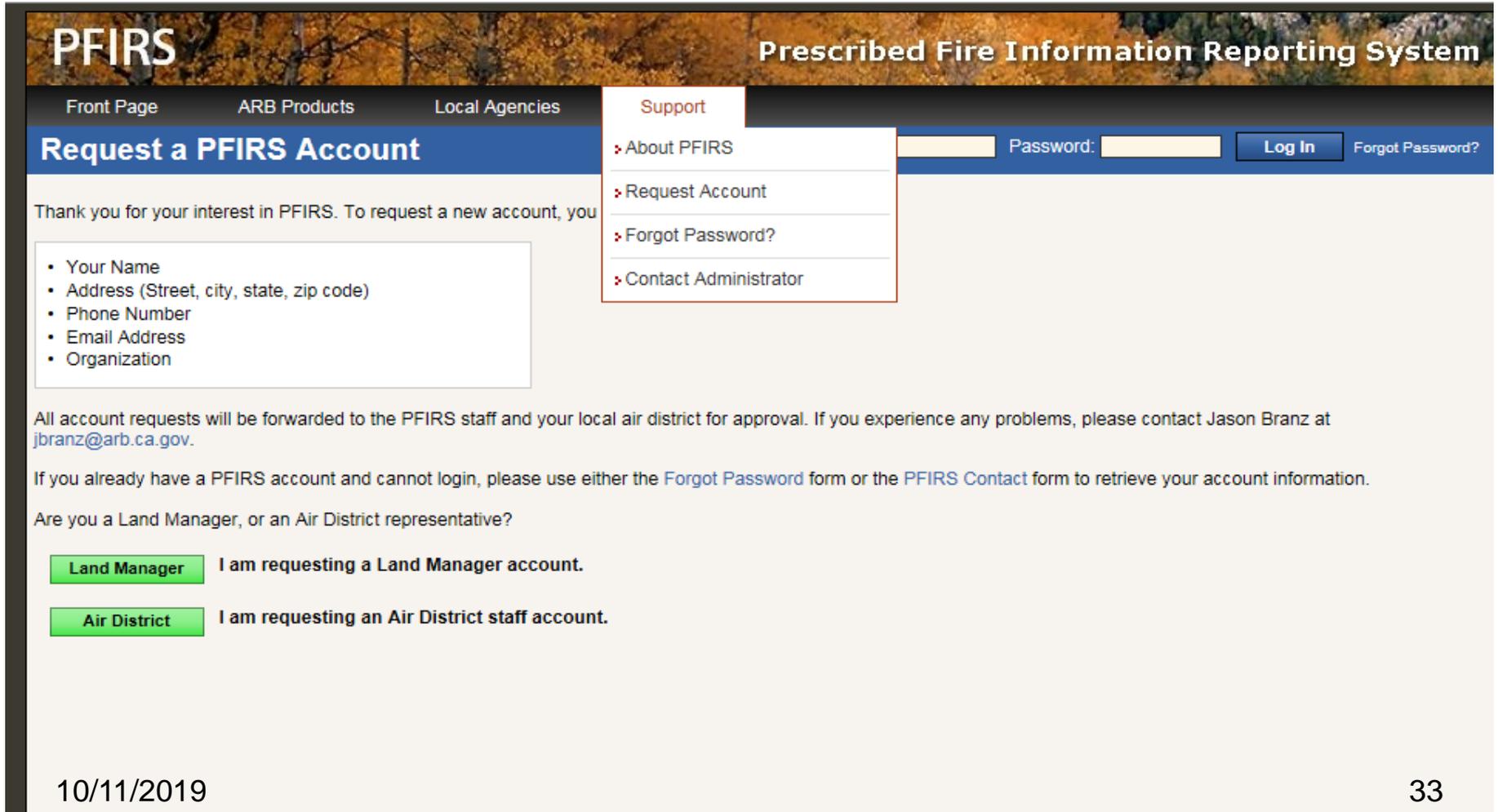
	Section 1 – GENERAL INFORMATION AND APPROVALS
	Section 2 – PROJECT SPECIFIC INFORMATION
	Section 3 – PUBLIC NOTIFICATION AND ALTERNATIVES
	Section 4 – SMOKE DISPERSAL SURVEILLANCE AND MONITORING
	Section 5 – DAILY AUTHORIZATION REQUEST AND INFORMATION REPORTING FORM
	Section 6 – AIR DISTRICT PROJECT POST BURN FORM

Prescribed Fire Information and Reporting System (PFIRS)

PFIRS is a communication tool:

- Allows land managers and burners to submit Smoke Management Plans on-line
- Provides interactive mapping including air monitoring, wildfire smoke mapping, burn day info, and forecasting out to 96 hours
- Air districts can review and approve SMPs and ignition requests on-line
- PFIRS is not for everyone

Request a PFIRS Account



PFIRS Prescribed Fire Information Reporting System

Front Page ARB Products Local Agencies **Support**

Request a PFIRS Account

Thank you for your interest in PFIRS. To request a new account, you

- Your Name
- Address (Street, city, state, zip code)
- Phone Number
- Email Address
- Organization

All account requests will be forwarded to the PFIRS staff and your local air district for approval. If you experience any problems, please contact Jason Branz at jbranz@arb.ca.gov.

If you already have a PFIRS account and cannot login, please use either the [Forgot Password](#) form or the [PFIRS Contact](#) form to retrieve your account information.

Are you a Land Manager, or an Air District representative?

Land Manager I am requesting a Land Manager account.

Air District I am requesting an Air District staff account.

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ARB Products within PFIRS

PFIRS
Prescribed Fire Information Reporting System

Front Page
ARB Products
Local Agencies

Current Ignitions
Username: Password: [Log In](#) [Forgot Password?](#)

View Ignitions By:
> Controlled Burn Notices
> Sacramento Valley Allocation
> Fire Information Map

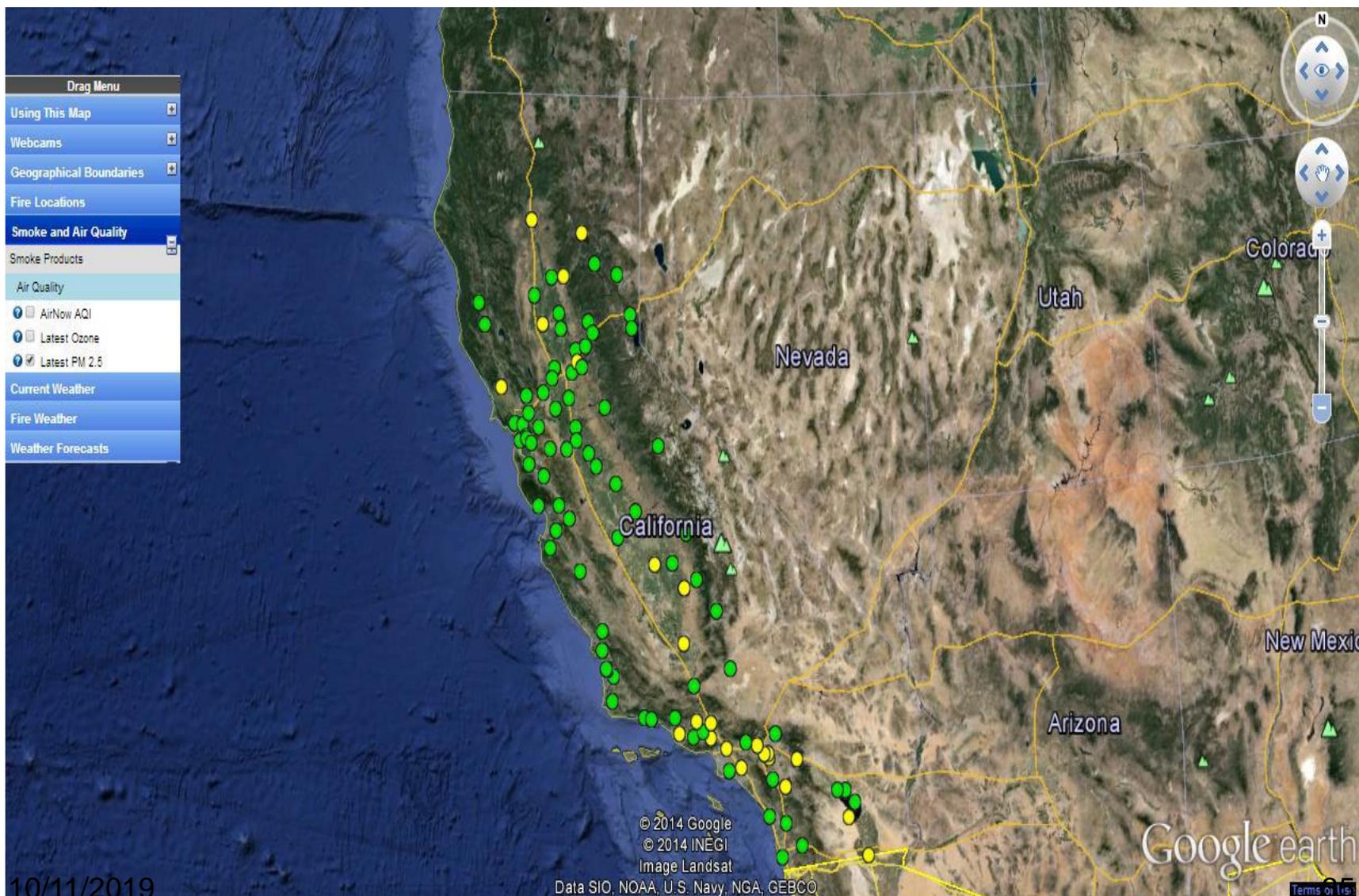
Select Start Date:
Select End Date:
View

USFWS
 CalFire
 CA Parks
 Tahoe Conservancy
 Private

42.61779143282346, -125.04638671875

 Show Air Districts
 Show Webcams

PFIRS Fire Information Map



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Terms of Use

Smoke Impacts





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Takeaways

- Smoke Management Plans are required for burn projects over 10 acres.
- Alternatives to burning should be considered
- PFIRS is a tool that can be used, but is not mandatory
- Public health is a priority for the Air District
- Rural air districts and other government agencies are stretched thin, so plan ahead

Questions?

