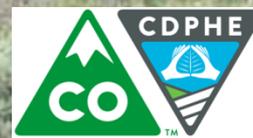


# Colorado Prescribed Fire Smoke Management Program

Presentation to the  
Western Colorado Regional Air Quality Collaboration  
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Air Pollution Control Division

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**COLORADO**  
Department of Public  
Health & Environment

# What is...

- **A Smoke Management Program (SMP)?**
  - **Procedures & requirements for regulating & managing smoke from prescribed fires.**
- **Prescribed Fire (Rx fire)?**
  - **“Fire that is intentionally used for grassland or forest management, including vegetative, habitat or fuel management, regardless of whether the fire is ignited by natural or human means.” (Reg. 9)**

# What is...

- **Smoke Management?**
  - **Defined in Air Quality Control Commission Regulation No. 9 as:**
    - **“Use of techniques to**
      - **reduce smoke emissions,**
      - **dilute smoke,**
      - **identification and reduction of the impact of smoke on smoke-sensitive areas,**
      - **monitoring and evaluation of smoke impacts from individual and collective burns, and**
      - **coordination among land managers for these purposes.”**

Good smoke dispersion and  
little public smoke impact



Heavy smoke impacts at  
residences and potential for  
health issues



# Colorado Smoke Management Program

- **Began in 1990 as MOU with Federal and State land managers; largely voluntary**
- **Use of prescribed fire, especially broadcast, grew during 1990's**
- **In response, Colorado legislature passed laws (1999 & 2001) requiring more formal development of the SMP (CRS 25-7-106(7) & (8))**
  - **SB 99-145**
  - **SB 01-214**
- **Colorado Air Quality Control Commission adopted Regulation 9 (“Open Burning, Prescribed Fire, and Permitting”) in January 2002**

Colorado's Smoke Management Program is designed to reduce smoke impacts and maintain public health, welfare and visibility. It does not directly address safety or forest health.



# Regulation No. 9, Example Components

- **Permittees shall use “best smoke management” practices**
- **In granting permits and designing permit conditions, the Air Division must consider a number of factors “necessary to protect public health and welfare.”**
- **The permit must show it will:**
  - **“protect scenic and/or important vistas and visibility in Class I areas,**
  - **minimize the impacts of emissions and smoke and**
  - **not cause a violation of any ambient air quality standards.”**

# **Regulation No. 9**

## **Implementation Components**

- **Issuance of permits with appropriate conditions**
- **Site inspections to burn projects and visits to field offices across the state**
- **Communications and outreach including stakeholder meetings & newsletters**
- **Compliance assistance and enforcement**
- **Activity and emission inventory tracking**
- **Comprehensive web presence**
- **Fees (self-supporting program per CRS 25-7-106(7)(a))**

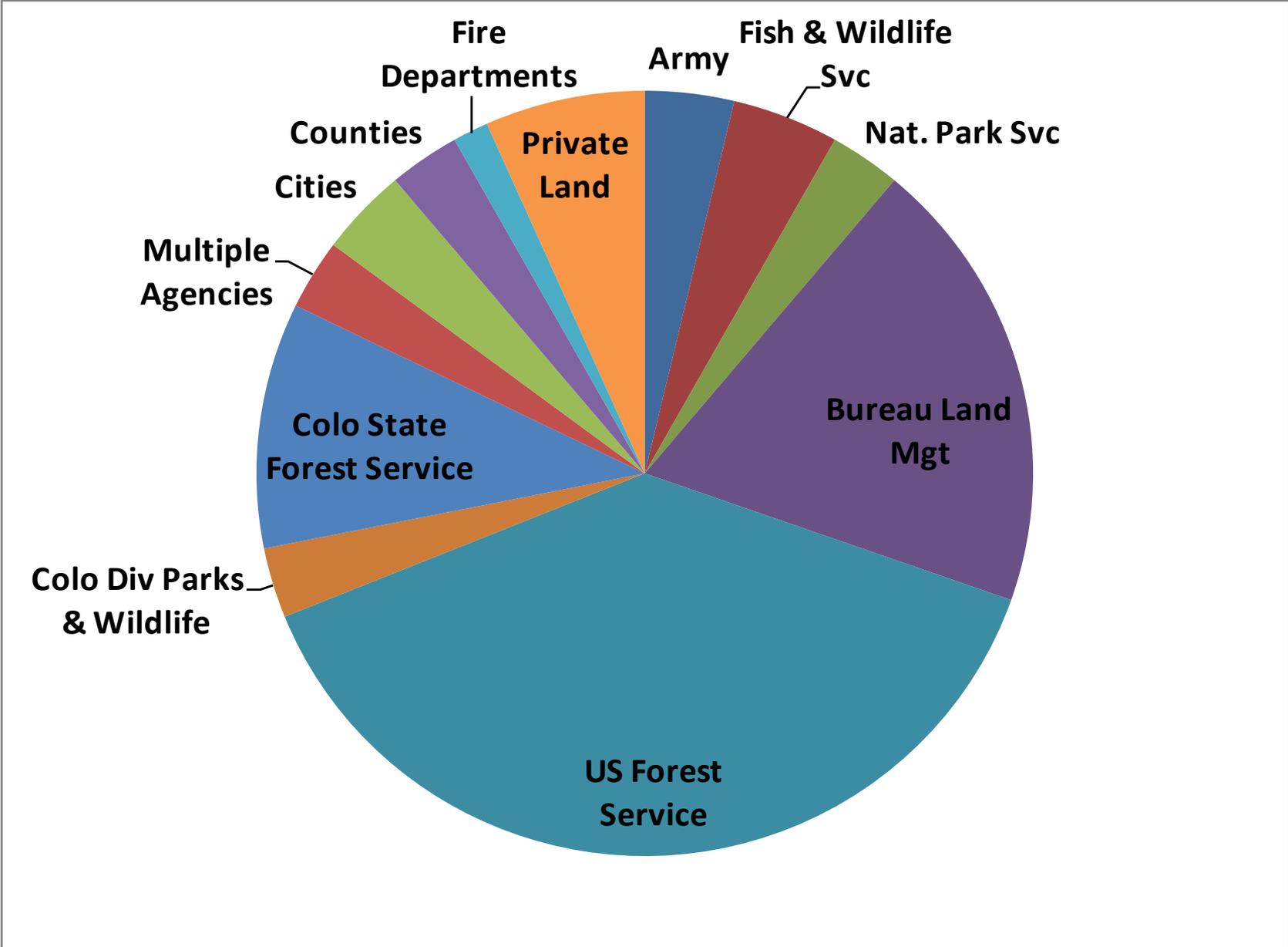
# Types of Smoke Permits

- “Open burning”
  - Homeowner-scale
  - Administered by some counties and the Air Pollution Control Division
- **“Prescribed Fire”**
  - **Generally professional-scale**
  - **Piles and broadcast**
  - **Administered by the Air Pollution Control Division**
- Exempt from permits: agriculture, small training burns, recreation, cooking

# Program Structure

- **Prescribed Fire permits needed for:**
  - **Piles: 50 or more piles per year OR big machine piles**
  - **Broadcast: 10 or more acres grass OR 5 or more acres shrub land or forest**
- **Permits valid for calendar year**
- **Condition inputs:**
  - **Standard or non-standard**
  - **Require good decisions, not good luck**
  - **Evolve based on outcomes & shared learning**
- **Give burn bosses some latitude**

# 2011 Smoke Permits by Agency



# Smoke Complaints

- Vast majority go the fire's dispatchers, a few to local health officials, and rarely to APCD
- Air Pollution Control Division calls the burn boss to ask, usually first



# Questions?

**Website:**

<https://www.colorado.gov/pacific/cdphe/smoke-management-permits>

**Contact:**

**Pat McLaughlin**

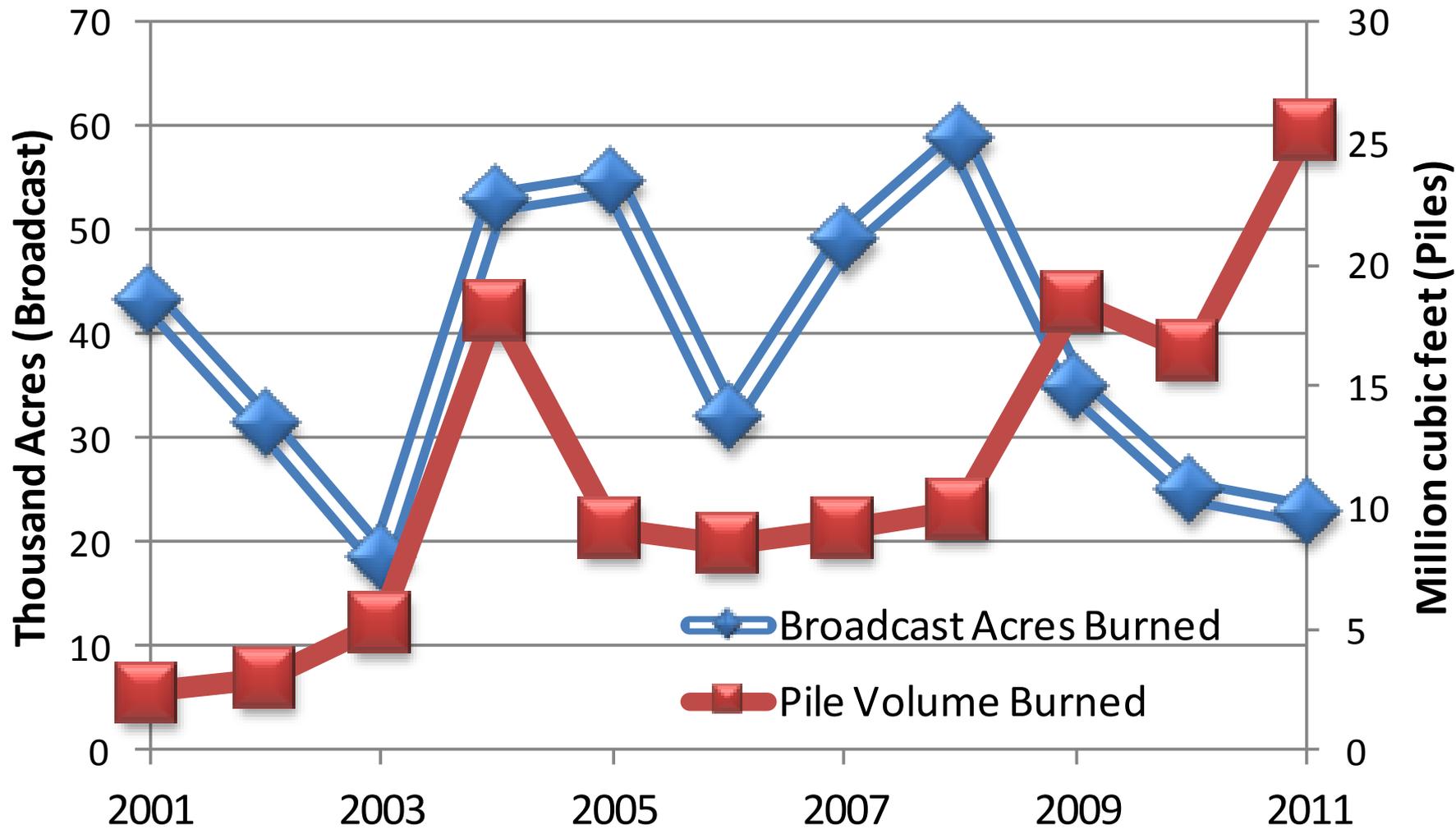
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# Prescribed Fire in Colorado



# Causes of Challenges

- Capacity/resources, particularly for the burners
- Weather limits opportunities for burning
- Prescribed fire has economies of scale
- Constrained Federal budgets
- Conditions can be layered, and may include burners own requirements
- WUI is pricey and can be difficult to get public acceptance
- Smoke behavior is complex, hard to predict; Experience counts, models need work