

# Agriculture Fire Tracking

- What's available now?
  - Burn Permits (Usually exist only where there is an AQ problem – not in every state or tribal land.
  - Emissions Inventories from some states.
- What's needed?
  - Burn Information identifying crop, number of acres burned, days and times of burns by county (ideally would like lat./long.).
  - Central agency to collect data.
  - Better Methods for estimating fire sizes.
  - Explore use of Remote Sensing
  - Determination of seasonality of burns for different crops.
  - Peer review of all data.

# Ag Fire Tracking Cont'd

## Obstacles?

- (1) Regulatory exemptions of agriculture.
- (2) Variability of responsible parties in each state (down to county levels) for overseeing agricultural processes and populations.
- (3) Definition of agricultural burning (different for different agencies)
- (4) Data – spotty and inconsistent (define data collection agency).

## 12-Month Action Items

- (1) Determine methods of gap analysis.
- (2) Determine “how good” is the existing information.
- (3) Determine “how good” does the information need to be.
- (4) Examine Iowa’s Burn Ban and Enforcement Actions as well as programs in the San Joaquin Valley (CA), and the states of Washington and Oregon
- (5) Determine protocol for Quality Control objectives for future work.

## 24-Month Action Items

- (1) Single fire depiction for modeling runs
- (2) Improve FOFEM’s default values for fuel loading.
- (3) Identify and assess computer models that are currently available and the pro’s and con’s of using those models.

# Agricultural Fire Emission Factor Development

What's available now?

- (1) AP-42 Factors
- (2) Emissions Inventories from some states.
- (3) USDA National Agricultural Statistics
- (4) Crop Calendars

What's needed?

- (1) Field studies to collaborate crop residue information in different parts of the U.S.
- (2) Data on fuel consumption by crop type.
- (3) Moisture data of crop residue.
- (4) Assessment of pre-harvest or post-harvest burns by crop.
- (5) Data on crop rotations.
- (6) Education of State/County Agriculture Commissioners on importance of collecting data.

# Ag Fire Emission Factor Development Cont'd

## Obstacles?

- (1) Confidentiality protection of USDA data at “county” levels.
- (2) Variability of responsible parties in each state (down to county levels) for overseeing agricultural processes and populations.
- (3) Money and manpower.
- (4) Low Priority for some states/tribes.

## 12-Month Action Items

- (1) Determine methods of gap analysis.
- (2) Determine “how good” is the existing information.
- (3) Determine “how good” does the information need to be.

## 24-Month Action Items

- (1) Field studies on crop residue.
- (2) Identify alternatives to burning (WRAP + others).
  - a. Biomass fuels
  - b. Mobile Field Sanitizer (used in Oregon in 60s and 70s)
- (3) Identify statistical methodologies conducive to better emission factor Development (if any).