

National Fire and Air Quality Workshop

Smoke Management Plans



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Montana/Idaho Airshed Group

Overview of SMP Discussion

- History of Montana/Idaho SMP
- SMP Development and Agreements (MOAs)
- Role of Federal Land Management Agencies
- Current Barriers and Risks
- New Developments and Other Issues

Airshed Group History

- October 9-11, 1974:
 - International Fire Symposium held in Missoula
 - Sponsored by Tall Timbers Research and Intermountain Fire Research Council
 - Final Panel at Symposium on Air Quality
 - Head of Montana-DEQ threatened to ban ALL outdoor burning unless something done regarding smoke management in Montana
 - Group of Major burners worked together to develop a “self-regulated” program
- Fall 1978:
 - Smoke Management Program Initiated

1978 Solution:

Self-Regulating Cooperative Program

- Barriers:
 - Unregulated Open Burning
 - Networking/Communications
 - Financing
 - Different Missions and Agendas of Cooperators
- Breakthroughs:
 - Self Regulate by Major Forestry Open Burners
 - Technology (Teletype, Fax, etc.)
 - Clarification of Roles
 - In-Kind Services Donated
 - Common need to protect Air Quality while using Fire

Evolution to a Two-State Program

- 1980's:
 - Airshed Group Program run by MT DNRC
 - Fall Program Only
- 1990:
 - North Idaho joined the program
- 1999:
 - South Idaho joined the program
- 2000:
 - Spring and Summer added to SMP

SMP Revisions

- 1999:
 - Previous version of SMP
- 2000-2001:
 - Major Revision of SMP (Operating Guide)
 - Finished in August 2001
 - Signed by both state DEQs
 - Submitted for EPA certification Fall 2001
- 2002-2003:
 - Second Major Revision in 2 years!
 - Finished in January 2003
- 2003-2004:
 - New items and issues to be added to SMP

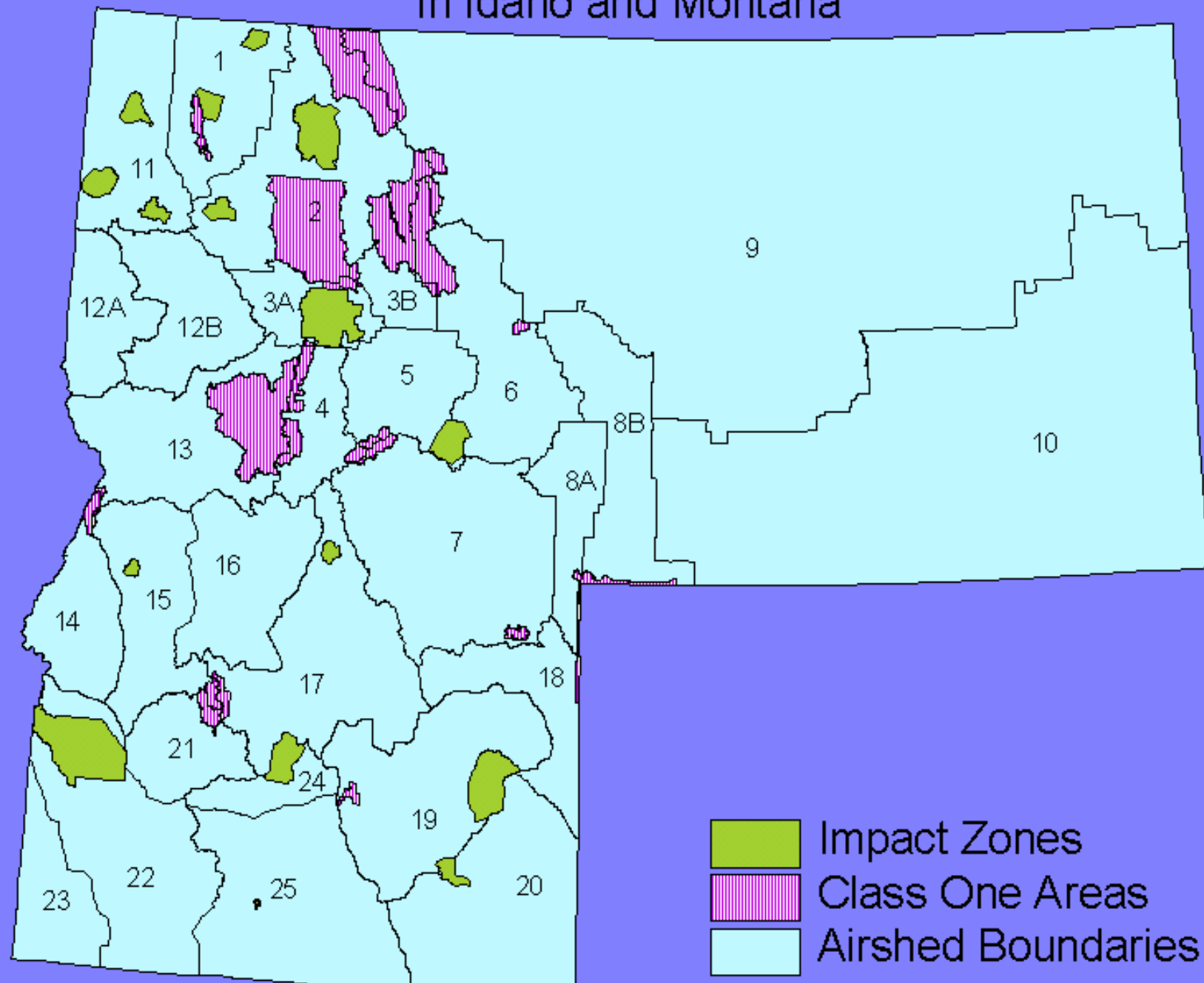
Structure of Montana/Idaho SMP

- Section I – Introduction & Purpose of SMP
- Section II – Abbreviations and Definitions
- Section III – Montana/Idaho SMP
- Section IV – Memorandum of Agreements
- Section V – Appendices

Differences Between Idaho and Montana

- Montana:
 - Issues Air Quality Permits
 - SMP part of SIP
 - Mandatory Compliance with SMP
 - EPA Region 8
- Idaho:
 - No permits
 - SMP not part of SIP
 - “Voluntary” Compliance with SMP
 - EPA Region 10

Airshed Boundaries, Impact Zones and Class 1 Areas in Idaho and Montana



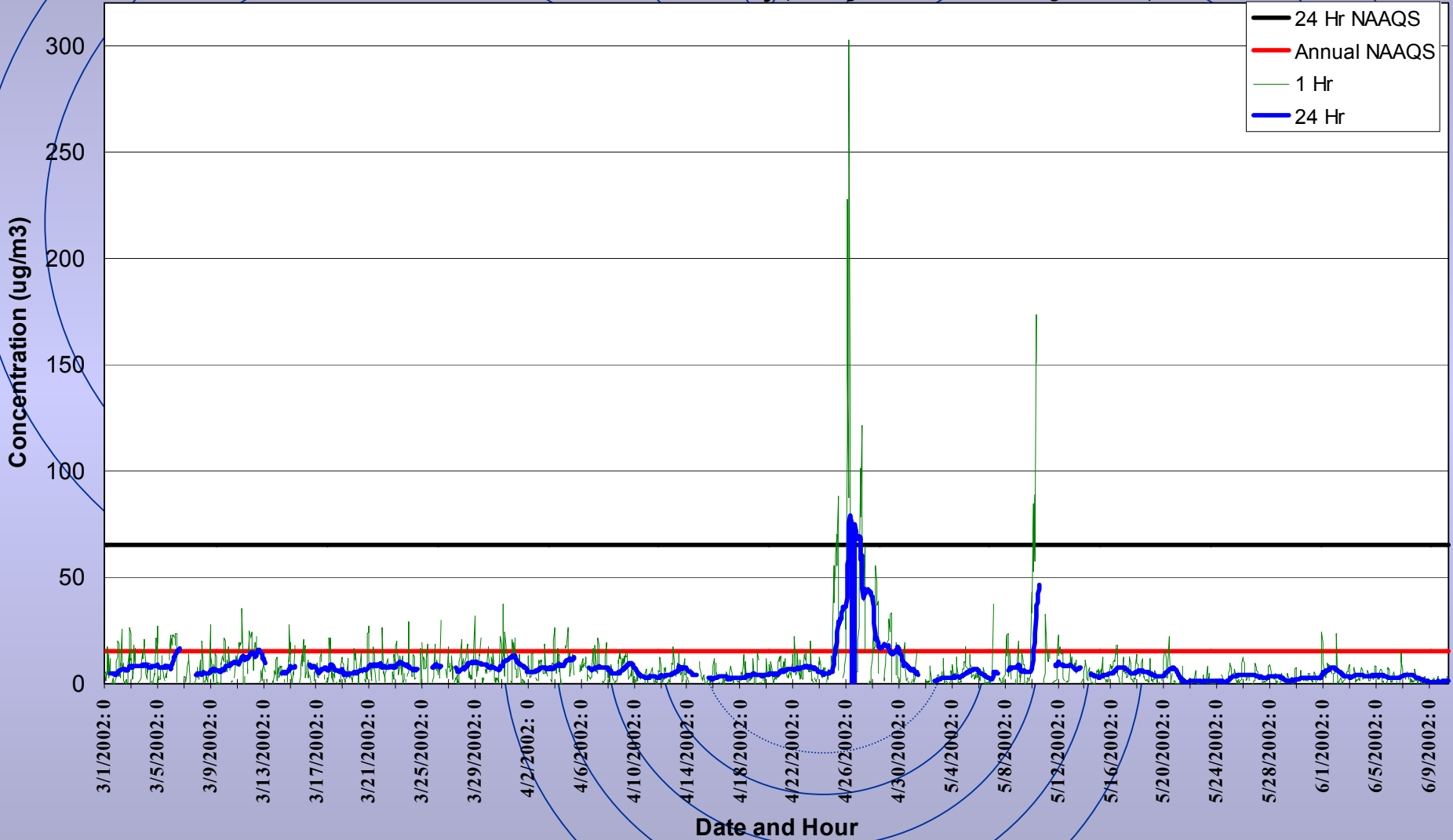
FLMs Role in SMP Development/Review

- USFS Region 1 and 4
 - Largest Open burner in Idaho
 - Plum Creek Timber Company Largest in Montana
- FLMs must be “at the table” during development
 - Reviews and Provides Input to SMP
 - In-depth participation in Idaho/Montana
- Burning will only get more difficult
 - PM-2.5
 - Regional Haze Rule
 - Enhanced Smoke Management

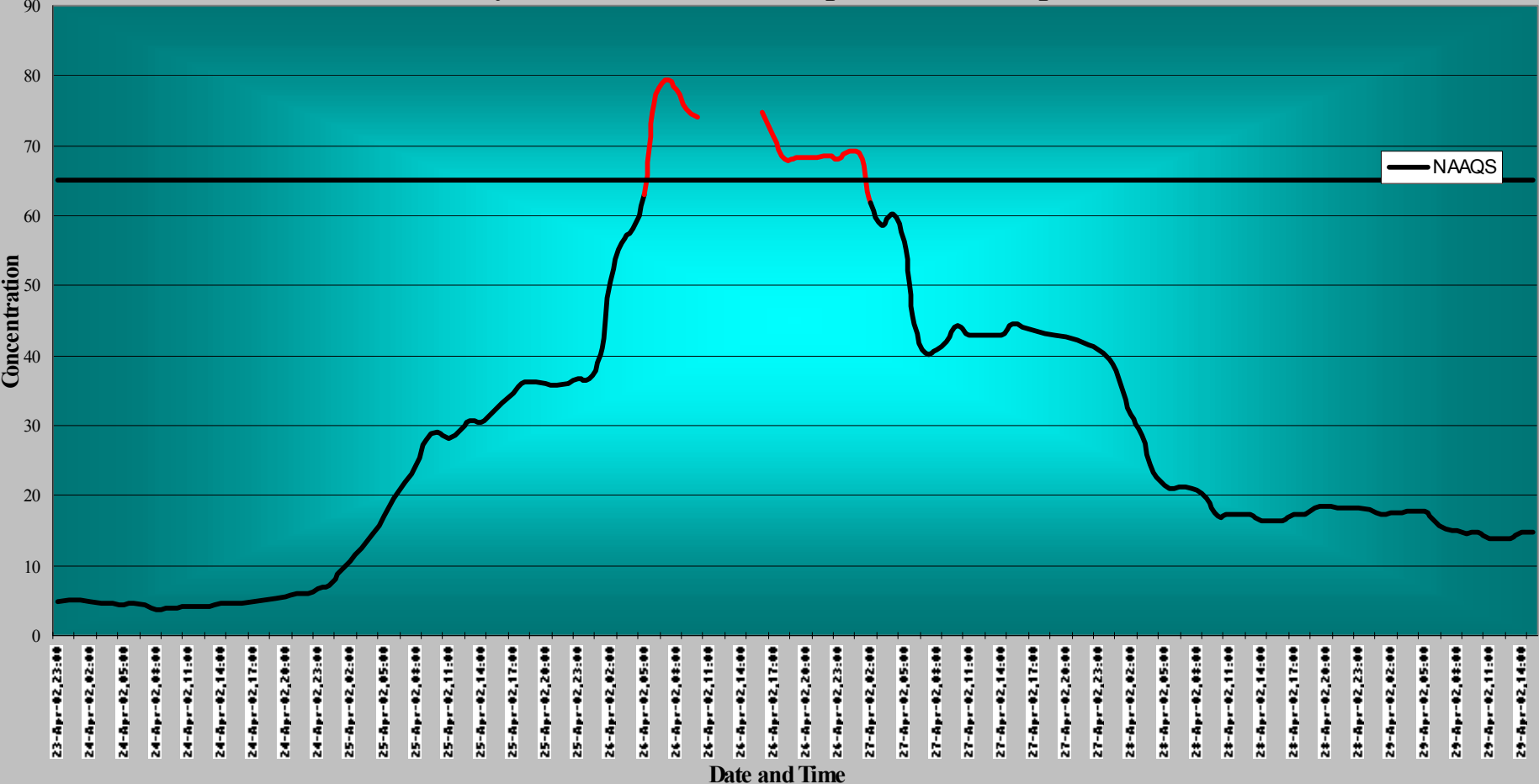
Current Barriers and Risks

- Emissions Tracking:
 - Smoke Abatement Techniques (BACT)
 - WRAP Enhanced Smoke Management
 - Regional Haze Rule
- Cumulative Impacts of Fire:
 - Rx Fire
 - Wildland Fire Use (WFU)
 - Wildland Fire
- Wildland-Urban Interface (WUI)
- Agricultural vs. Silvicultural

2002 PM2.5 Concentrations for Idaho City (During Prescribed Burning Season)



Idaho City PM2.5 Concentrations April 23, 2002 - April 29, 2002



New Developments

- Emissions Tracking:
 - FASTRACS/RAZU
 - BlueSky and BRAINS
- Wildland Fire Use (WFUs)
 - Prescribed Fire Use
 - Not in SMP yet, but in next revision
 - Current Monitoring Unit Forecasts/Restrictions
- Multi-Day Burn Policy
 - Difficult to integrate into SMP
 - Active Ignition vs. Smoldering Phase

WFU vs. Rx Fire

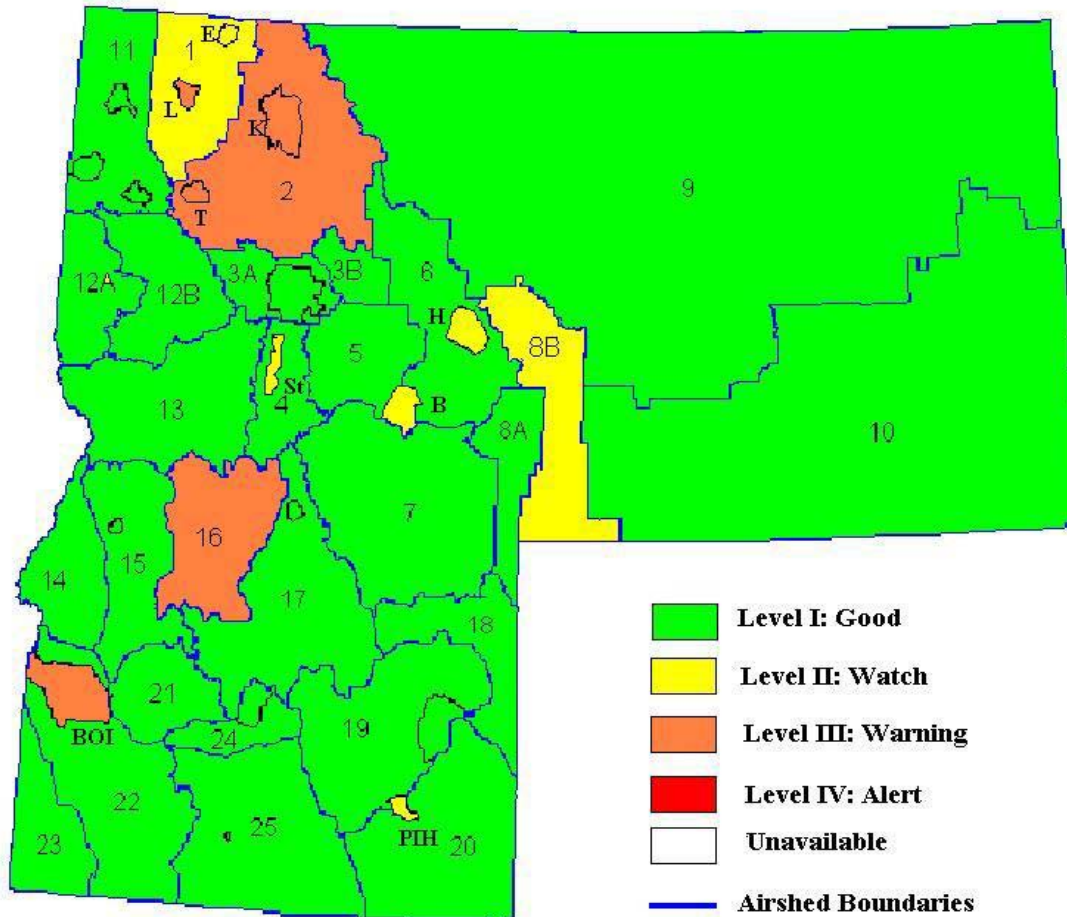
- Rx Fire:
 - Dispersion forecasts issued daily based on atmospheric dispersion and forecasted air quality
 - Restrictions typically by elevation or IZ:
 - Dispersion, air quality and proposed acreage
- WFUs:
 - Restrictions based on PM Concentrations Only!
 - Only affects Potential “New” Starts
 - Forecasts geared towards Dispersion and Potential Smoke Impacts

WFU PM-2.5 Threshold Levels

- **Level I (0-15 $\mu\text{g m}^{-3}$) – Good**
 - No restrictions on WFUs
- **Level II (15-40 $\mu\text{g m}^{-3}$) – Watch**
 - No restrictions on WFUs
 - WFUs may be limited if conditions worsen
- **Level III (40-65 $\mu\text{g m}^{-3}$) – Warning**
 - Future WFUs may be restricted due to air quality concerns
- **Level IV ($>65 \mu\text{g m}^{-3}$) – Alert**
 - WFUs will likely be restricted due to air quality concerns

Air Quality Levels for Montana and Idaho

Friday August 31st, 2001 8:00am



Impact Zone Legend

M=Missoula	S=Sandpoint
L=Libby	F=Ferman
K=Kalispell	P=Pinehurst
H=Helena	PIH=Pocatello
B=Butte	BOI=Boise
St=Stevensville	MYL=McCall
T=Thompson Falls	E=Eureka

Summary

- SMP Development Never Easy
 - Many iterations needed for Idaho/Montana
 - A never ending process
 - SMP has to be dynamic and flexible to incorporate future regulatory changes
- New Developments
 - WRAP Enhanced Smoke Management
 - Inclusion of Guidance for WFU Operations
 - Emissions Tracking essential for future compliance with NAAQS and Regional Haze

Why Successful in 1978?

- Vision
 - To Balance Fire and Air Quality
- Leadership
 - To Make it Happen
- Commitment
 - To Try Something Different

Why Successful in 2003?

- Vision
 - To Balance Fire and Air Quality
- Leadership
 - To Make it Happen
- Commitment
 - To Make the System Work