Clean Air Act Task Force Meeting March 13, 2003

Impacts of Changes to the Federal New Source Review Permit Program

Overview of Remarks

- Air Program Basics, including brief summary on purpose of NSR program and reasons for changes
- What do states have to do?
- What's at Stake for Wisconsin?
- What Happens Next?
- What is in the rule changes?

Air Program Basics

Attainment Area

- Meets AQ Standard
- Major Source = 250 TPY
- PSD/NSR
- BACT Control Required
- Protect from violation (increment)

Nonattainment Area

- Violates AQ Standards
- Major Source = 25 TPY
- NSR
- Offsets - New Sources
- SIP drives emissions down
- LAER Control Required

PSD = Prevention of Significant Deterioration

NSR = New Source Review

SIP = State Implementation Plan

BACT = Best Available Control Technology

LAER = Lowest Achievable Emission Rate

What do states have to do?

- Two kinds of NSR : Delegated and SIP approved states
- New Rules Effective in Delegated States 3/3/03

psd_status_june02.pdf

What do states have to do?

- SIP approved states have 3 years to implement changes
- Wisconsin is SIP approved
- These states have 3 implementation options:
  - (1) Adopt all changes
  - (2) Adopt none of the changes
  - (3) Adopt some of the changes

What do states have to do?

- Rule changes are 700 pages, integrated copy not published
- No implementation guidance exists
- Minimal Training Available
- STAPPA/ALAPCO working on alternative rule approach for SIP approved states

What's at Stake for Wisconsin?

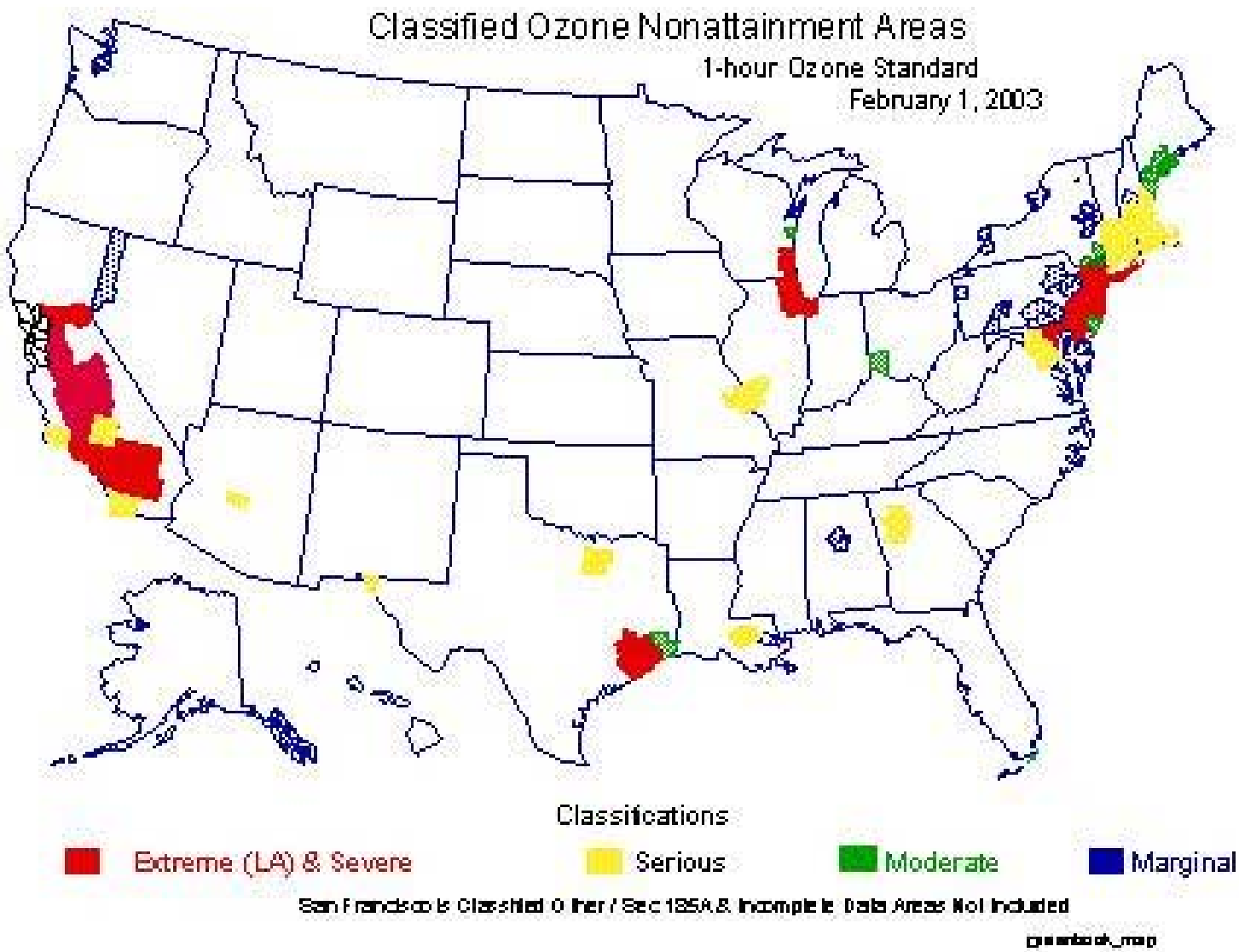
- WI is NOT meeting Ozone standards
- WI appears to be meeting Fine Particulate standards
- WI may contribute to other state's fine particulate problems
- Final NSR changes will likely increase transported emissions to WI from other states

What's at Stake for Wisconsin?

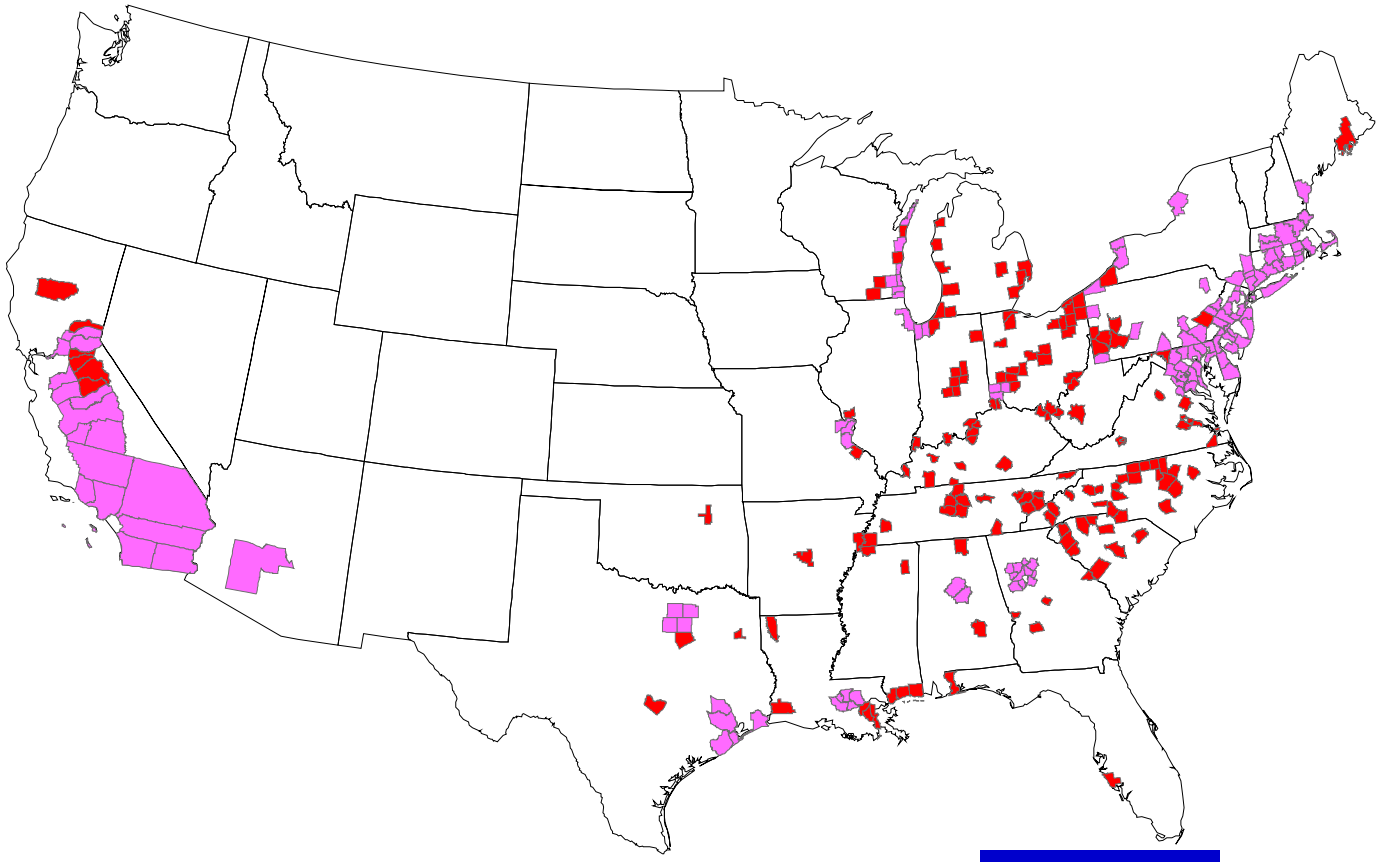
- Further emission reductions in Nonattainment areas (at least 3 % per year)
- In 2008, penalty on each major VOC source of $5,000 per ton of tons > than 80% baseline
- If greater than 140 ppb in 2007, offsets increase to 1.5 to 1

What's at Stake for Wisconsin?

- Definition of Major Source changes to 10 TPY from 25 TPY
- Imposition of highway sanctions (restrictions of highway $ or increased offsets of 2 to 1)
- Continued negative health &welfare impacts like asthma, lung ailments and crop damage


Classified Ozone Nonattainment Areas
1-hour Ozone Standard
February 1, 2003
Classifications
Extreme (LA) & Severe
Serious
Moderate
Marginal
San Francisco is Classified Other / Sec 185A & Incomplete Data Areas Not Included

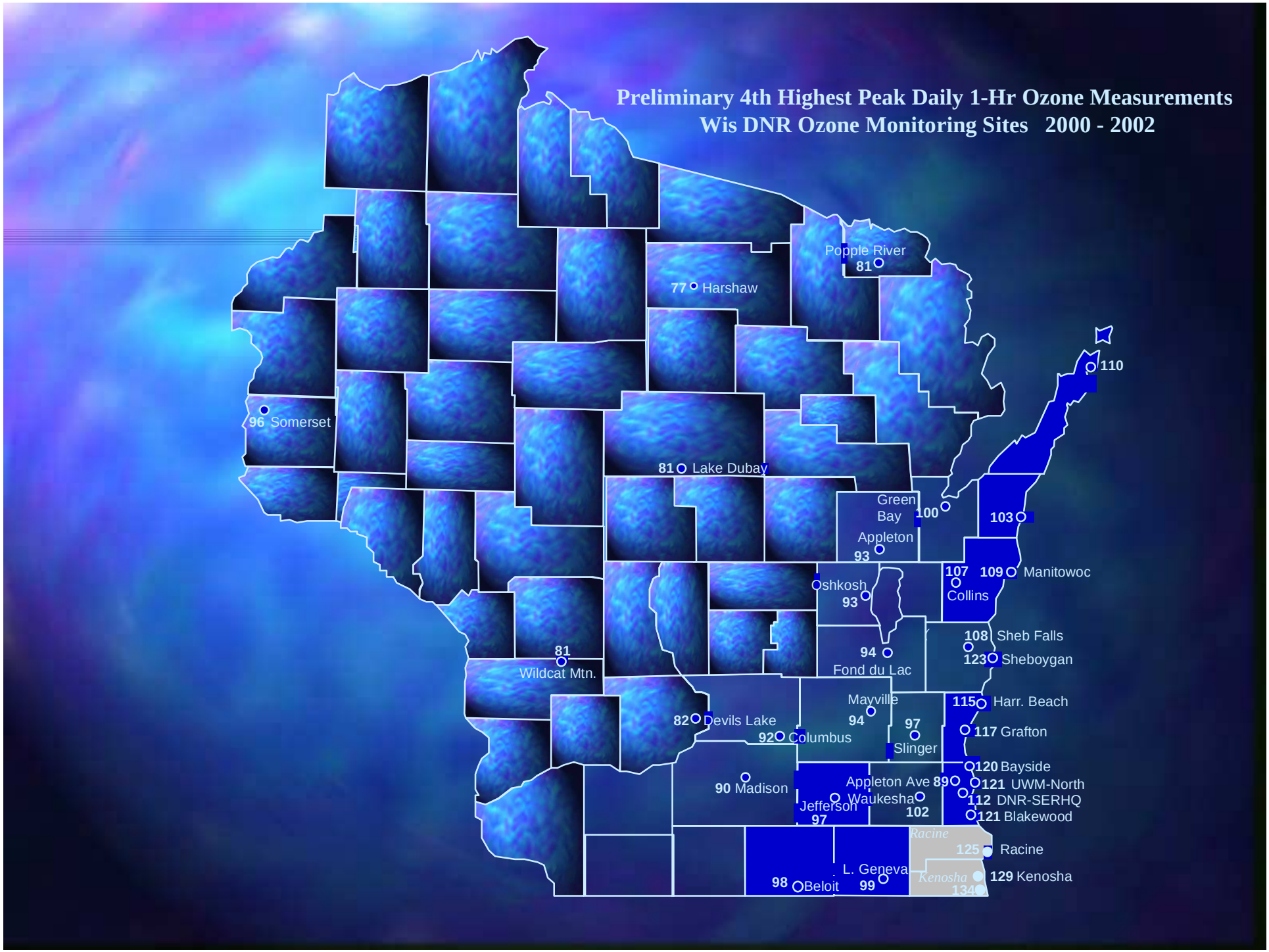
Counties violating the 8-hr ozone NAAQS
1999-2001

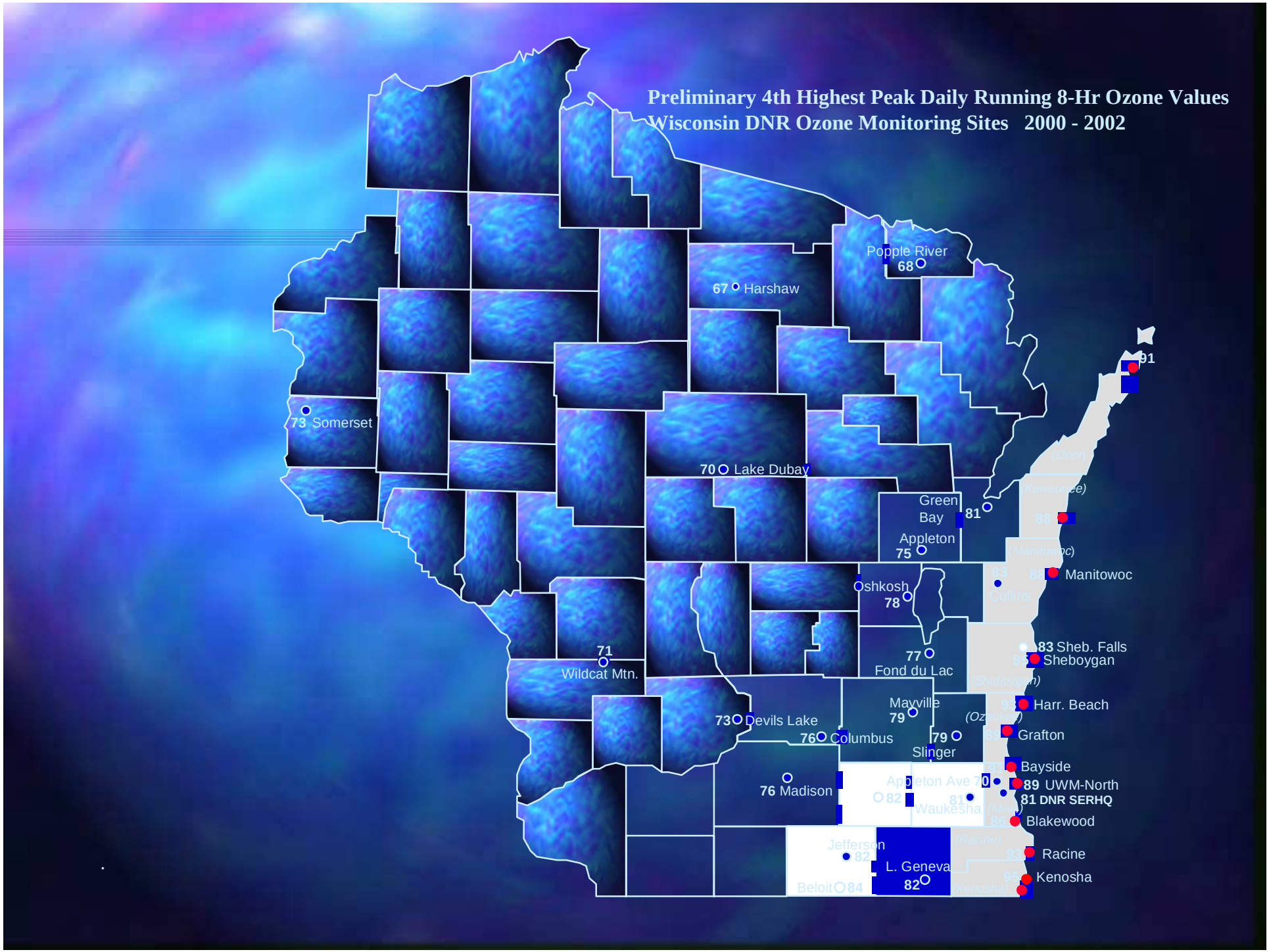


There Are a Total of 291 Counties Violating the 8-hour Ozone Standard Using 1999-2001 Data

155 of Those Counties Are Designated Attainment for the 1-hour Standard

136 of Those Counties Are Designated Nonattainment for the 1-hour Standard


Preliminary 4th Highest Peak Daily 1-Hr Ozone Measurements
Wis DNR Ozone Monitoring Sites 2000 - 2002
Popple River
81
77 Harshaw
110
96 Somerset
81 Lake Dubay
Green Bay
100
103
Appleton
93
107
109 Manitowoc
Collins
Oshkosh
93
108 Sheb Falls
123 Sheboygan
81
Wildcat Mtn.
94
Fond du Lac
Mayville
94
115 Harr. Beach
82 Devils Lake
92 Columbus
97
Slinger
117 Grafton
120 Bayside
90 Madison
Appleton Ave
89
121 UWM-North
Waukesha
102
112 DNR-SERHQ
Jefferson
97
121 Blakewood
Racine
125 Racine
L. Geneva
99
Kenosha
129 Kenosha
98 Beloit
134


Preliminary 4th Highest Peak Daily Running 8-Hr Ozone Values
Wisconsin DNR Ozone Monitoring Sites 2000 - 2002
Popple River
68
67 Harshaw
91
73 Somerset
70 Lake Dubay
(Door)
(Kewaunee)
Green Bay
81
88
Appleton
75
(Manitowoc)
Manitowoc
Oshkosh
78
Collins
83 Sheb. Falls
Sheboygan
71
Wildcat Mtn.
77
Fond du Lac
(Sheboygan)
Mayville
79
Harr. Beach
(Ozaukee)
73 Devils Lake
76 Columbus
79
Slinger
Grafton
Bayside
Appleton Ave
70
89 UWM-North
81 DNR SERHQ
76 Madison
82
81
Waukesha
(Milw.)
Blakewood
(Racine)
Jefferson
82
Racine
L. Geneva
82
Kenosha
Beloit
84
(Kenosha)

What happens next?

- 13 states, including Wisconsin, are suing EPA on the new regulations
- NYC and San Francisco suing
- Environmentalist and American Lung Association suing

What Happens Next?

- STAPPA/ALAPCO working on alternative rule approach
- Air Management Staff will work closely with stakeholders in revising state's new source permit rules
- State will seek an environmentally protective approach with improved flexibility for industry

What is in the "Final" Rule Changes

- Applicability Test
  - Setting Historical Baseline
  - Projecting Future Emissions
- Plant-wide Applicability Limits
- Clean Unit Test
- Pollution Control Projects

Applicability Test

- Baseline Actual Emissions
  - Greatest 24 month period in previous 10 years (5 for utilities)
  - Pollutant Specific
- Sources can "cherry-pick" highest baselines
- Allows much bigger baselines -Vs. most recent 2 year average

Applicability Tests

- Projected Actual Emissions
  - Available now to utilities
  - Onerous record keeping
  - Has only been used one time in Wisconsin - not popular with utilities.
  - Allows for much smaller amount of future emissions
  - Net Result - emissions increases “too small to trigger NSR”

Baseline Actual Example

Year	VOC Emission
1993	750 tpy
1994	850 tpy
1995	950 tpy
1996	800 tpy
1997	60 tpy
1998	65 tpy
1999	80 tpy
2000	90 tpy
2001	95 tpy
2002	85 tpy

- Old Rule Actual Emissions = 90
- New Rule = 900
- If 1996 rule forces reduction new rule = 92.5

Applicability Test Example (Old)

Modification at Plant ABC

Assumptions: Existing Major Source, Attainment Area, Plant ABC began operations in 2000, PTE = 300 TPY

Year	VOC Emissions
2001	125 tpy
2002	135 tpy
2003	155 tpy projected
2004	155 tpy projected
2005	160 tpy projected
2006	160 tpy projected
2007	165 tpy projected

Current rule

Past actual (130) Vs. future potential (300)

Proposed Increase = 170 tpy

Modification subject to PSD

Applicability Test Example (New)

Modification at Plant ABC

Assumptions: Existing Major Source, Attainment Area, Plant ABC began operations in 2000, PTE = 300 TPY

Year	VOC Emissions
2001	125 tpy
2002	135 tpy
2003	155 tpy projected
2004	155 tpy projected
2005	160 tpy projected
2006	160 tpy projected
2007	165 tpy projected

New rule

Past actual (130) Vs. projected actual (165)

Proposed Increase = 35 tpy

Modification not subject to PSD

Plant-wide Applicability Limits (PALs)

- Establish emission caps for facility plantwide for 10 years
- Specific for each pollutant
- Anything goes as long as facility remains below cap
- Benefits dirty facilities
- Can be renewed

PALS

- Attractive to those with large existing emissions
- Can reward "dirty" facilities
- In final EPA rules, PALS do NOT decline over time
- Problematic where areas exceed AQ standards and emissions must be reduced

Clean Unit Test

- Designation valid 10 years
- Track 1
  - Automatic if unit goes through BACT/LAER which requires control
- Track 2
  - Granted through SIP permit process
  - Comparable to BACT/LAER

Clean Unit Test

- Popular for sources that have reduced emissions
- Allows facilities to continue emissions increases with no added controls up to potential to emit
- May exacerbate or create violations of air quality standards

Pollution Control Projects

- Codifies existing policy
- Excludes "environmental beneficial projects" from NSR
- List of qualifying projects or approved on case-by-case basis
- Notice & Go for listed projects
- Tracking of impact a concern

Expected Impacts

- Tons of Pollution in Wisconsin in 2002 that were prevented from going into the air due to PSD/NSR Regulations:
- Nitrogen Oxides- 990 Tons
- PM_{10} - 992 Tons
- Volatile Organic Compounds - 809 Tons