

Kansas City Area Ozone Designation Process Meeting

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MISSOURI
DEPARTMENT OF
NATURAL RESOURCES



Presentation Overview

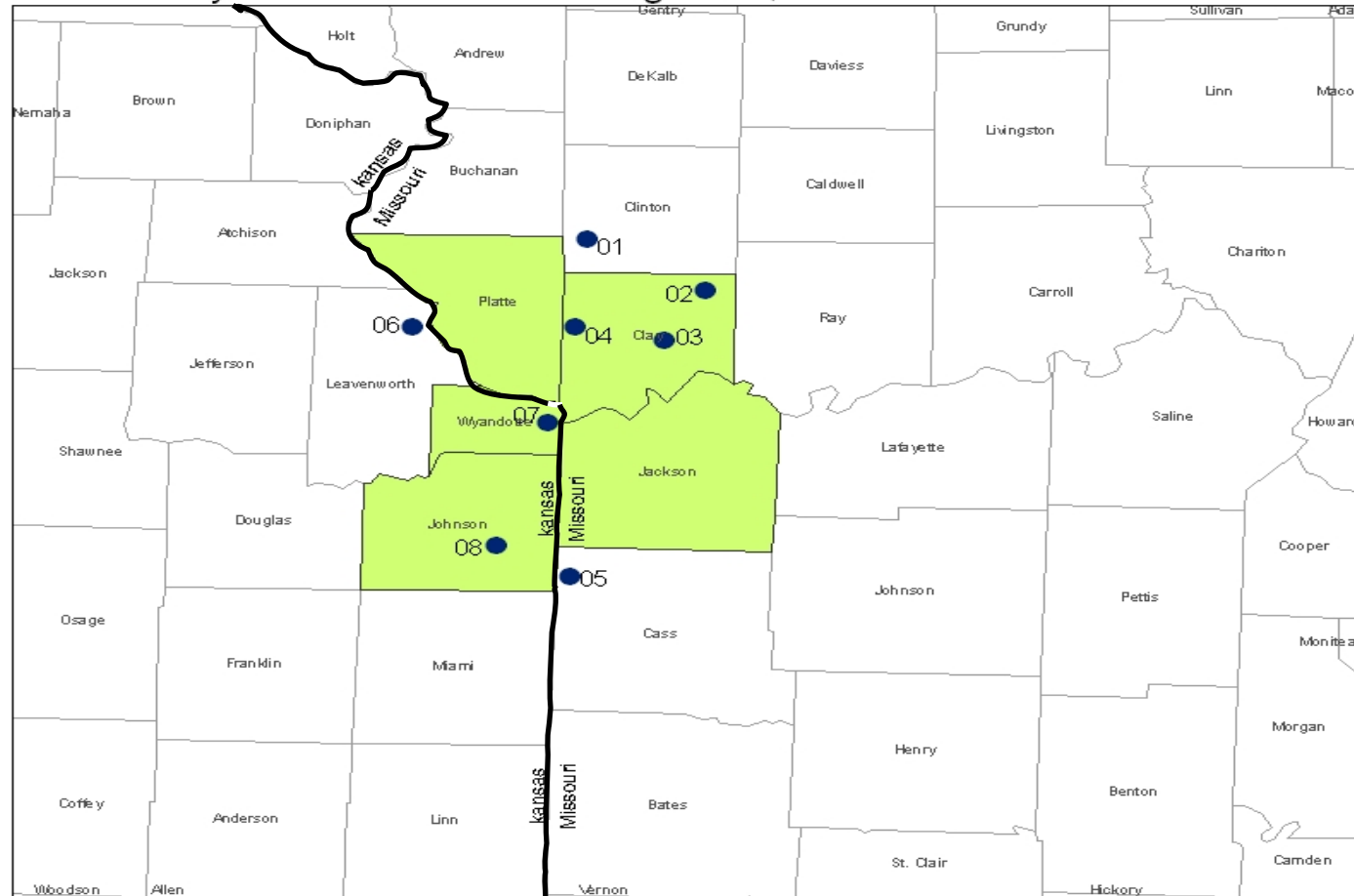
- Current Ozone Status/Maintenance Area
- New Ozone Standard
- Designation Process
- Local Stakeholder Involvement

1997 EPA Ozone Standard

- Primary and secondary standards both set at 80 parts per billion, (ppb)
 - Uses an 8-hour averaging time
 - Three years of data needed to determine status
 - Fourth highest value for each year averaged to calculate design value
 - In compliance up to 84 ppb
- More recent science shows 1997 standard not adequate to protect public health

Kansas City Monitoring Locations

Kansas City Area Ozone Monitoring Sites, 2007



- Missouri**
- 01 Trimble
 - 02 Watkins Mill State Park
 - 03 Liberty
 - 04 Rocky Creek
 - 05 RG-South
- Kansas**
- 06 US Penitentiary
 - 07 JFK-Core
 - 08 Heritage Park



Department of Natural Resources
 Division of Environmental Quality
 Air Pollution Control Program
 (Prepared by Patricia Mallico 6/1/2007)

Legend

- Ozone Monitoring Sites
- Maintenance Area

0 12.5 25 50 Miles



Missouri's Actions for Ozone in the Kansas City Area

- 8-hour Maintenance Area
 - New maintenance plan submitted in June 2007
 - Included phased contingency measures and associated triggers
 - Approved by EPA in October 2007
- 2005-07 violations at three monitors
 - Liberty (87)
 - Rocky Creek (87)
 - Trimble (85)

Missouri's Response to Violation of Ozone Standard

- Phase One of Maintenance Plan Triggered
 - Heavy-Duty Diesel Idle Reduction Measure
 - Early Implementation of CAIR Reductions
 - Continue implementation of voluntary measures
- Phase Two dependent on 2008 & 2009 ozone season values

Kansas's Recent Actions for Ozone in Kansas City

- 8-hour Maintenance Area
 - New maintenance plan submitted in May 2007
 - Approved by EPA in October 2007
- 2007 was the first ozone season under new plan
- Design values indicated violation likely
 - 2007 trigger values at or below 85 ppb at two monitors

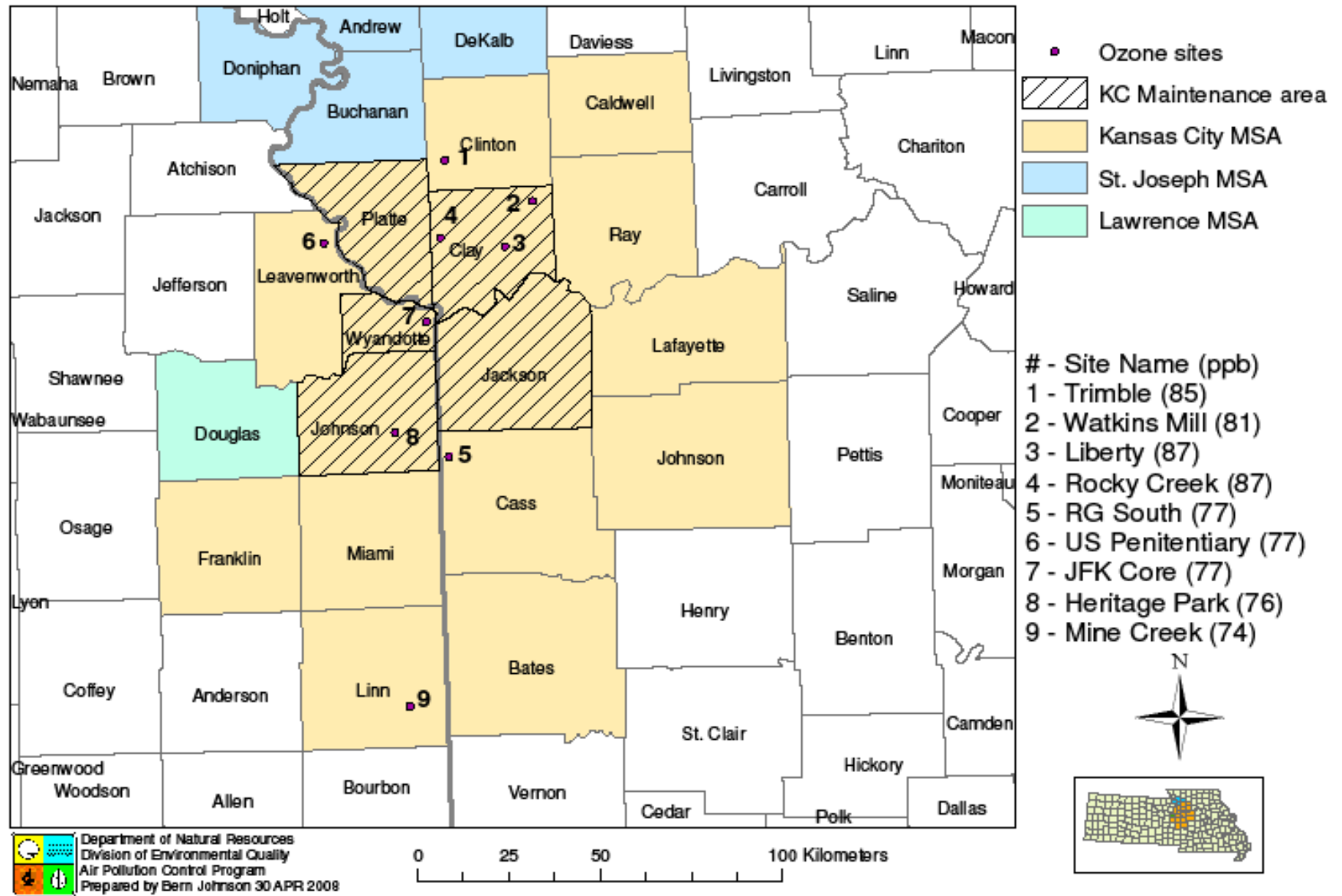
Kansas Response to Violations

- 2007 Maintenance Plan Contingency Measures Triggered
- Phase One of Maintenance Plan Triggered
 - Heavy-Duty Diesel Idle Reduction Regulation
 - NOx Emissions Reduction Rule – Sources > 1000 tons
 - Continue implementation of voluntary measures
- Phase Two dependent on 2008 & 2009 ozone season values

EPA's New Ozone Standard

- Primary standard – 75 ppb
- Secondary standard – 75 ppb
- No rounding
- Area meets the new standard if design value is less than or equal to 75 ppb

2008 Kansas City Ozone Sites and 05-07 Design Values



2005 – 2007 Monitor Design Values

| <i>KANSAS CITY</i> | 05-07 |
|---------------------------------------|--------------|
| Liberty, MO (Clay Co.) | 87 |
| Watkins Mill, MO (Clay Co.) | 81 |
| Rocky Creek, MO (Clay Co.) | 87 |
| Richards Gebaur South, MO (Cass Co.) | 77 |
| Trimble, MO (Clinton Co.) | 85 |
| JFK – Kansas City, KS (Wyandotte Co.) | 77 |
| Heritage Park, KS (Johnson Co.) | 76 |
| US Penitentiary, KS (Leavenworth Co.) | 77 |
| Mine Creek, KS (Linn Co.) | 74 |

Timeline for Implementation

| <u>Milestone</u> | <u>Date</u> |
|---|---|
| EPA Administrator signed final rule | March 12, 2008 |
| Effective Day of final rule (60 days following the publication in the Federal Register) | June 2008 |
| State provide recommendations on designations to EPA | March 2009 (based on 2005-2007 monitoring data) |
| Final Designations by EPA | March 2010 |
| Effective Date of Designations | Summer 2010 |
| SIPs Due | Summer 2013 |
| Attainment Dates | 2013-2030 depending on severity of problem |

EPA's Guidance for 2008 Ozone Standard

- New EPA guidance for determining area designations expected in late 2008
 - EPA Region VII has told us that the guidance will likely be “similar” to previous guidance for 2003 designation
- EPA will release new implementation rules/requirements in next few years

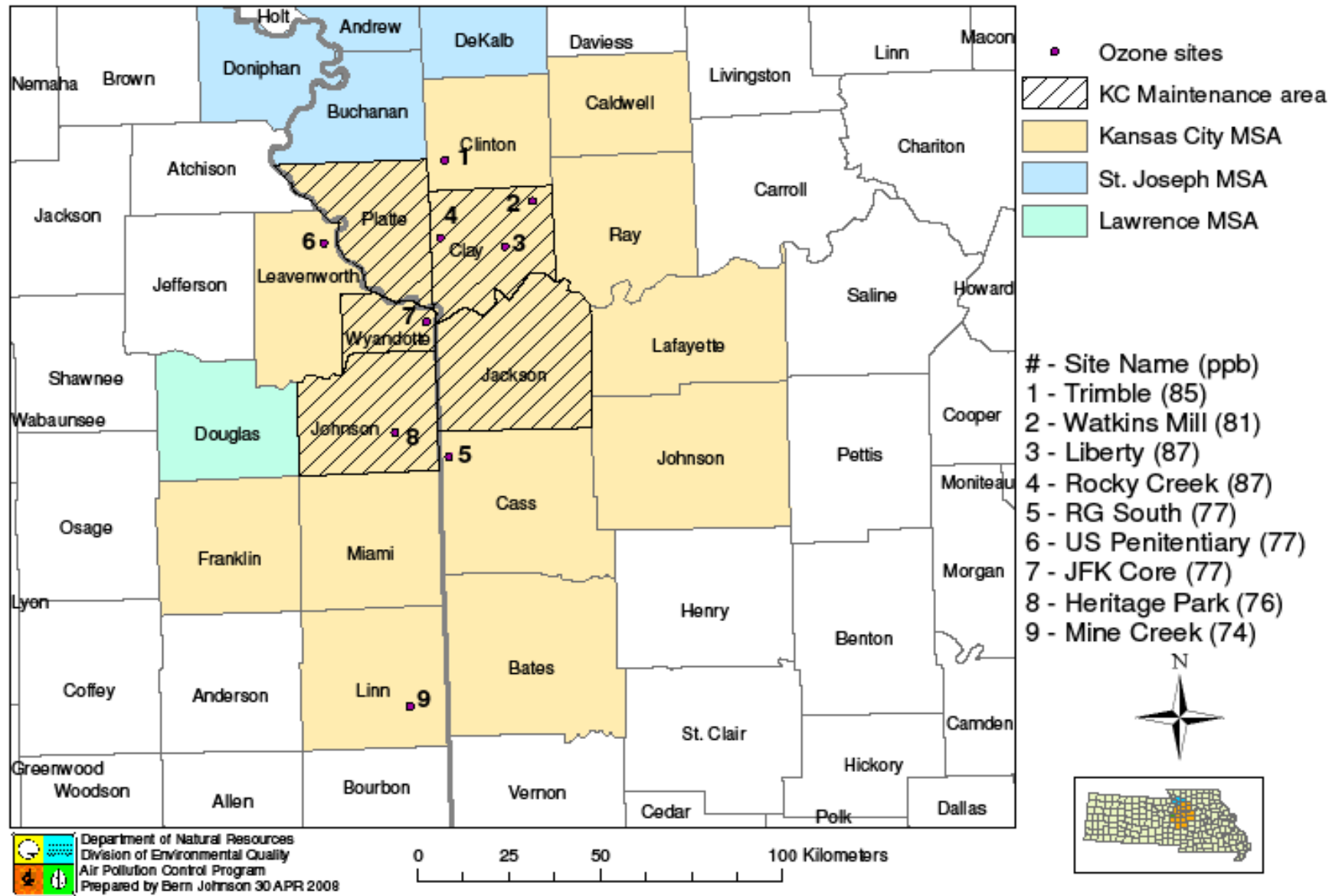
EPA's Previous Guidance for Boundary Recommendation

- Test #1 – Does a monitor in the metropolitan area violate the standard?
- Test #2 – Do VOC and NO_x emission sources in each county contribute to ozone concentrations over the standard?
- The designation process is not optional; if a monitor violates the standard, then that county is designated nonattainment and other surrounding counties are also considered based on contribution

EPA's Previous Guidance for Boundary Recommendation (cont'd)

- The area determination is based on EPA's decision that includes each state's recommendation and supporting documentation
- Default Area is the Metropolitan Statistical Area (MSA)
- Area can include more or less counties
 - States must document decisions
 - Based on eleven (11) boundary determination criteria
- In Kansas City, current maintenance area is smaller than MSA

2008 Kansas City Ozone Sites and 05-07 Design Values



Eleven Boundary Criteria

- Emissions and air quality in adjacent areas
- Population density and degree of urbanization (significant difference from surrounding area)
- Ozone monitoring data in surrounding area
- Location of emission sources
- Traffic and commuting patterns
- Expected growth (extent, pattern and rate)

Eleven Boundary Criteria (cont.)

- Meteorology (weather and transport patterns)
- Geography/topography
- Jurisdictional boundaries (counties, air districts, current maintenance area)
- Level of control of emission sources
- Regional emission reductions

What is a Monitored “Violation” Area?

- Areas adjacent to current Maintenance Area where monitors have recorded ozone levels above the standard
- Indicates areas with high levels of ozone outside of current area with emission controls
- Violations make counties candidates for inclusion in nonattainment area

Opportunity for Input

- State Technical Staff reviews
 - Emission inventory data
 - Transportation/commuting data
- Also consider
 - Standard growth and contribution trends from state/national average
- Question that arises
 - Is there more appropriate “local” data for growth patterns in each county?

How You Can Contribute

- County/area specific
 - Population growth information
 - Economic growth information
 - Commuting patterns
 - Level of interconnectivity with Kansas City

For More Information

- Webpage for ozone designation process
 - <http://www.dnr.mo.gov/env/apcp/ozone/8hourdesignationprocess.htm>
 - BAR also currently developing website - (Coming soon)
<http://www.kdheks.gov/bar/index.html>
 - Information on designation process
 - Eleven boundary factors
 - Copies of presentations
 - Provides opportunity for stakeholder input
 - Future meeting announcements

Next Steps in Designation Process

- Two additional stakeholder meetings
- Next meeting expected to be mid to late July
 - Provide available technical information and update on current status of boundary designation process
- Last meeting expected to be mid September
 - Provide draft designation boundaries for areas
 - Designations proposed at that time will not necessarily be final
 - Opportunity to “pre-review” technical data and logic for recommendation
- Ultimately, EPA will make final boundary decision

Missouri Timeline for Boundary Designation Submission

- Missouri will follow normal MACC adoption process
- Public comment period
 - Comment period to start in late October
- Public hearing
 - December MACC meeting
- MACC adoption of boundary recommendations
 - February MACC meeting

Kansas Designation Process

- Will hold three joint meetings with Missouri DNR in KC
- Not required to hold official public hearing or comment period but.....
- KDHE will post draft Designation Technical Document and Recommendation on website for comment period– Probably sometime in September or October
- Will provide electronic copies of draft information to those that request

Questions/Comments?

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