

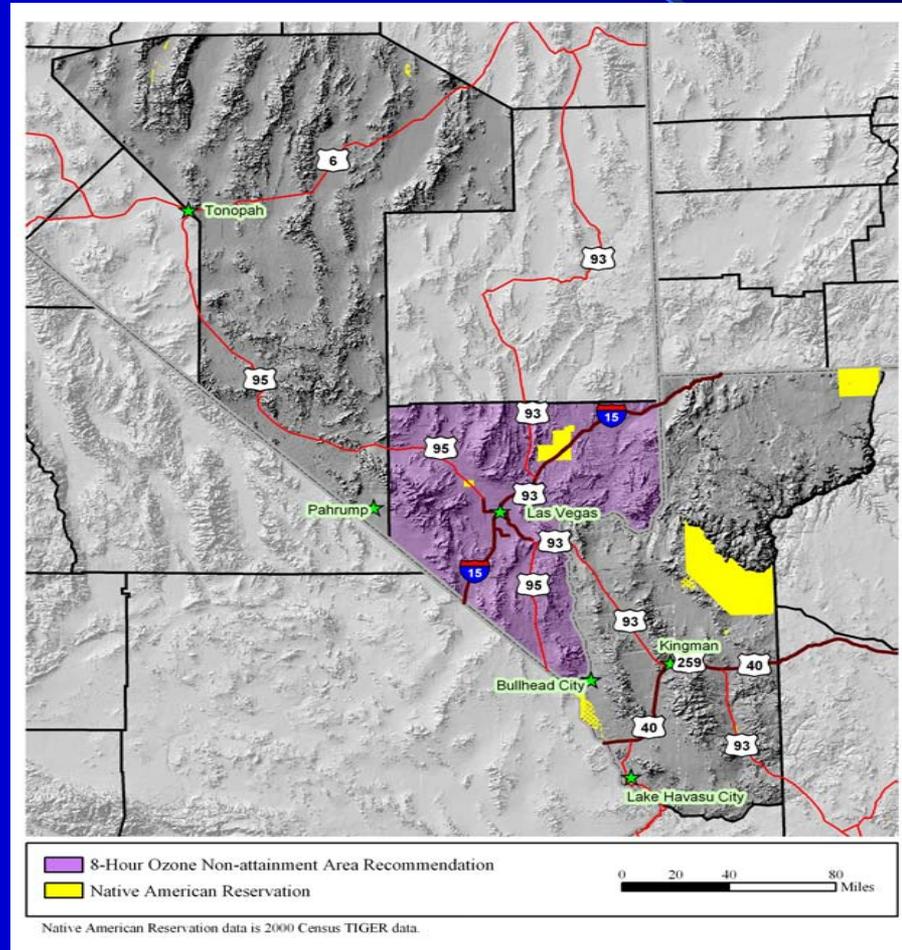
Ozone Non-Attainment Clark County, Nevada

**Nonattainment Area Boundary
Recommendation For the 8-Hour Ozone
Standard**

Background

- April 30, 2004 Final Designation Rule for 8-Hour Ozone NAAQS
- Effective Date of Designation was June 15, 2004
- Governor requested delay of Effective Date
- EPA granted deferral of Effective Date to September 13, 2004

Default Designation Area



Requested Designation Area

NDEP and Arizona requested exclusion of Nye and Mohave Counties by the U.S EPA, leaving Clark County as the Designated Area due to:

Location of the violation (Las Vegas Valley)

Separation distances

Location of sources of ozone precursor emissions

Physical barriers to transport (mountain ranges)

Meteorology and prevailing wind patterns



Purpose of Deferral of the Effective Date

- Due to the late finding of nonattainment the State did not have sufficient time to recommend appropriate boundary for Clark County
- EPA believes that the Eleven Factor Analysis may support different boundary recommendation than the one submitted by the State on April 12, 2004
- A short deferral provides time for the analysis

What Did We Do?

**DAQEM contracted Desert
Research Institute to conduct an
“Eleven Factor Analysis” for
Clark County**

The Eleven Factors

1. **Emissions and air quality in adjacent areas (including adjacent C/MSAs),**
2. **Population density and degree of urbanization including commercial development (significant difference from surrounding areas),**
3. **Monitoring data representing ozone concentrations in local areas and larger areas (urban or regional scale),**
4. **Location of emission sources (emission sources and nearby receptors should generally be included in the same nonattainment area),**
5. **Traffic and commuting patterns,**

The Eleven Factors

6. **Expected growth (including extent, pattern and rate of growth),**
7. **Meteorology (weather/transport patterns),**
8. **Geography/topography (mountain ranges or other air basin boundaries),**
9. **Jurisdictional boundaries (e.g., counties, air districts, existing 1-hour nonattainment areas, Reservations, etc.),**
10. **Level of control of emission sources,**
11. **Regional emission reductions (e.g., NO_x SIP call or other enforceable regional strategies).**

Status Of Eleven Factor Analysis

- DRI completed a draft analysis report
- Draft analysis report forwarded to the Ozone Working Group for comments
- Draft Report discussed with OWG on July 27, 2004

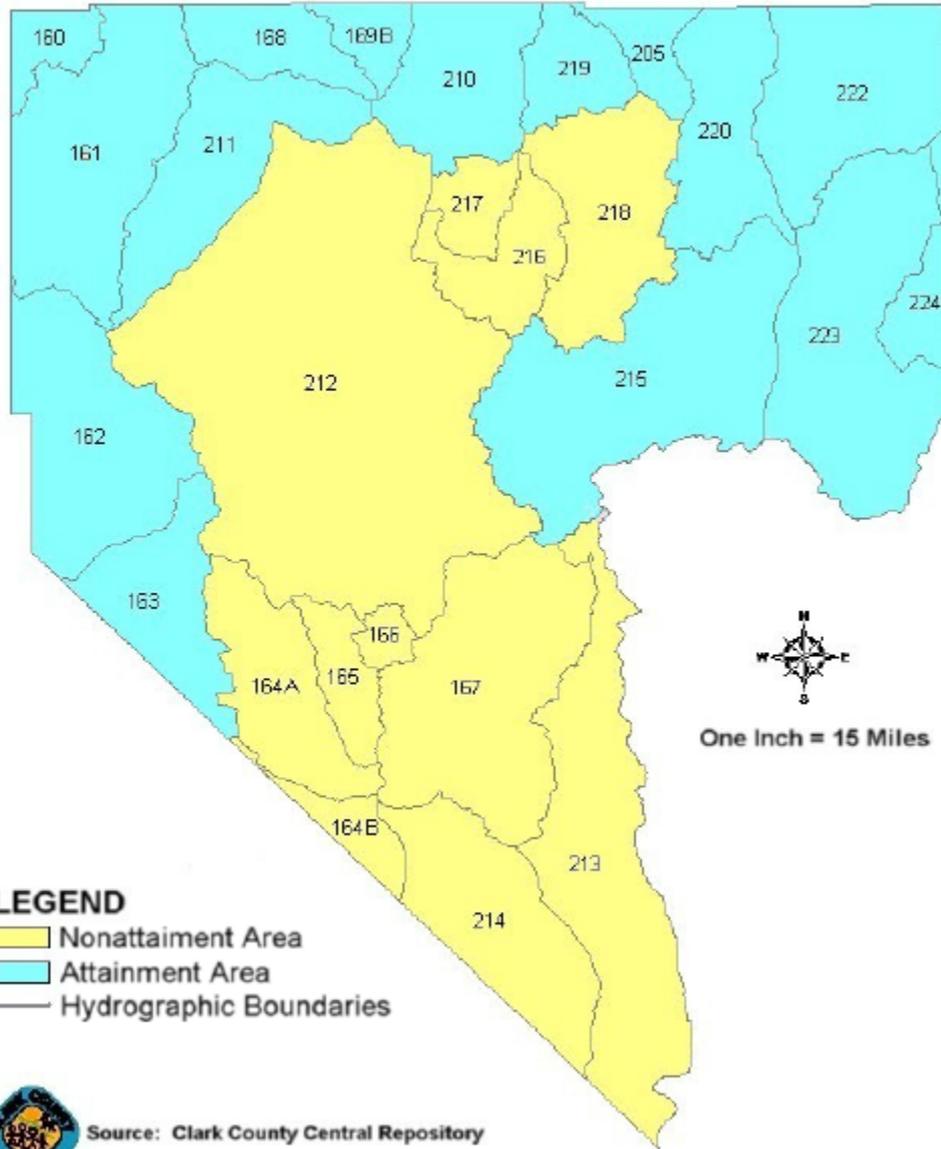
Status Of Eleven Factor Analysis

- In response to comments, DAQEM and DRI staff made extensive edits to draft document
- Final Report submitted to State on July 30, 2004
- EPA received document from State on August 4, 2004 as scheduled

11-Factor Analysis Findings

- The recommended nonattainment area is smaller than the boundary of Clark County.
- Recommended boundary meets the boundary definition in the Clean Air Act
- Addresses the criteria identified in U.S. EPA's March 2000 guidance.

Recommended 8-Hour Ozone NAAQS Nonattainment Area



Ivanpah Valley - 164A, 164B, 165, and 166

- The Ivanpah Valley should be included in the nonattainment area due to mobile source emissions along the I-15 corridor and emissions from major point sources
- Prevailing wind direction and high O₃ readings at Jean is evidence of transport from southern California through Ivanpah

Eldorado Valley – 167

- The Eldorado Valley should be included in the nonattainment area due to emissions from the Eldorado Energy power plant, and transport from the Mohave power plant
- The Mohave tracer study indicates transport from and through the Eldorado Valley to the Las Vegas Valley

Las Vegas Valley - 212

- The Las Vegas Valley must be included because it contains most of the emissions, the highest O₃ concentrations, evidence of local O₃ generation, and the major population exposure
- This area will be the major focus of emission reduction activities

Colorado River Valley - 213

- The Colorado River Valley should be included in the nonattainment area due to emissions from the Mohave power plant
- The Mohave tracer study indicates transport from the power plant to the Las Vegas Valley

Paiute Valley - 214

- The Paiute Valley should be included in the nonattainment area due to transport from the Mohave power plant
- The Mohave tracer study indicates transport from the power plant to the Las Vegas Valley

Apex Valley – 216 & 217

- The Apex Valley should be included in the nonattainment area due to emissions from point sources and mobile source emissions along the I-15 corridor
- There is transport from the Las Vegas Valley to Apex Valley and from the Reid Gardner power station to Apex Valley
- Apex Valley had exceedences of the 8-Hour Ozone NAAQS in 2002, 2003, and 2004

Apex Valley (continued)

- Due to the close proximity to the Las Vegas Valley, emission from major point sources and mobile source emissions along the I-15 corridor may impact the Las Vegas Valley with wind shifts

218 – (Moapa Valley)

- Hydrographic area 218, located in the Moapa Valley, should be included in the nonattainment area due to emissions from the Reid Gardner power plant and mobile source emissions along the I-15 corridor
- Due to the close proximity to the Las Vegas Valley and because there are no geographic barriers adjoining Apex Valley, transport emissions from major point sources and mobile source emissions along the I-15 corridor may impact a southwest portion of hydrographic area 218

Hydrographic Areas Excluded From Nonattainment Boundary

- Hydrographic Areas excluded from the nonattainment area include:
 - Pahrump Valley – 162 & 163
 - Indian Springs – 160, 161, 168, 169B, & 211
 - Moapa Valley – 205, 210, 219, & 220 (but not including 218)
 - Black Mountain – 215
 - Virgin River Valley – 222
 - Jumbo Peak Area – 223 & 224

Basis For Exclusion

- They are sparsely populated, less than 2% of the total County population
- There is lack of evidence that these areas will impact the recommended nonattainment area
- There are insignificant point and mobile source emissions
- Geographic and topographic features separate these areas from the recommended nonattainment area

Basis For Exclusion (continued)

- Owing to regional O₃ levels measured at Mesquite, northeastern basins beyond those designated are excluded from the nonattainment area

Jurisdictional Exclusions

The Clark County recommendations are not applicable to the Las Vegas Paiute Tribal Community, and the Moapa Band of the Paiute Tribal Land (Not within Clark County's Jurisdiction)

QUESTIONS?

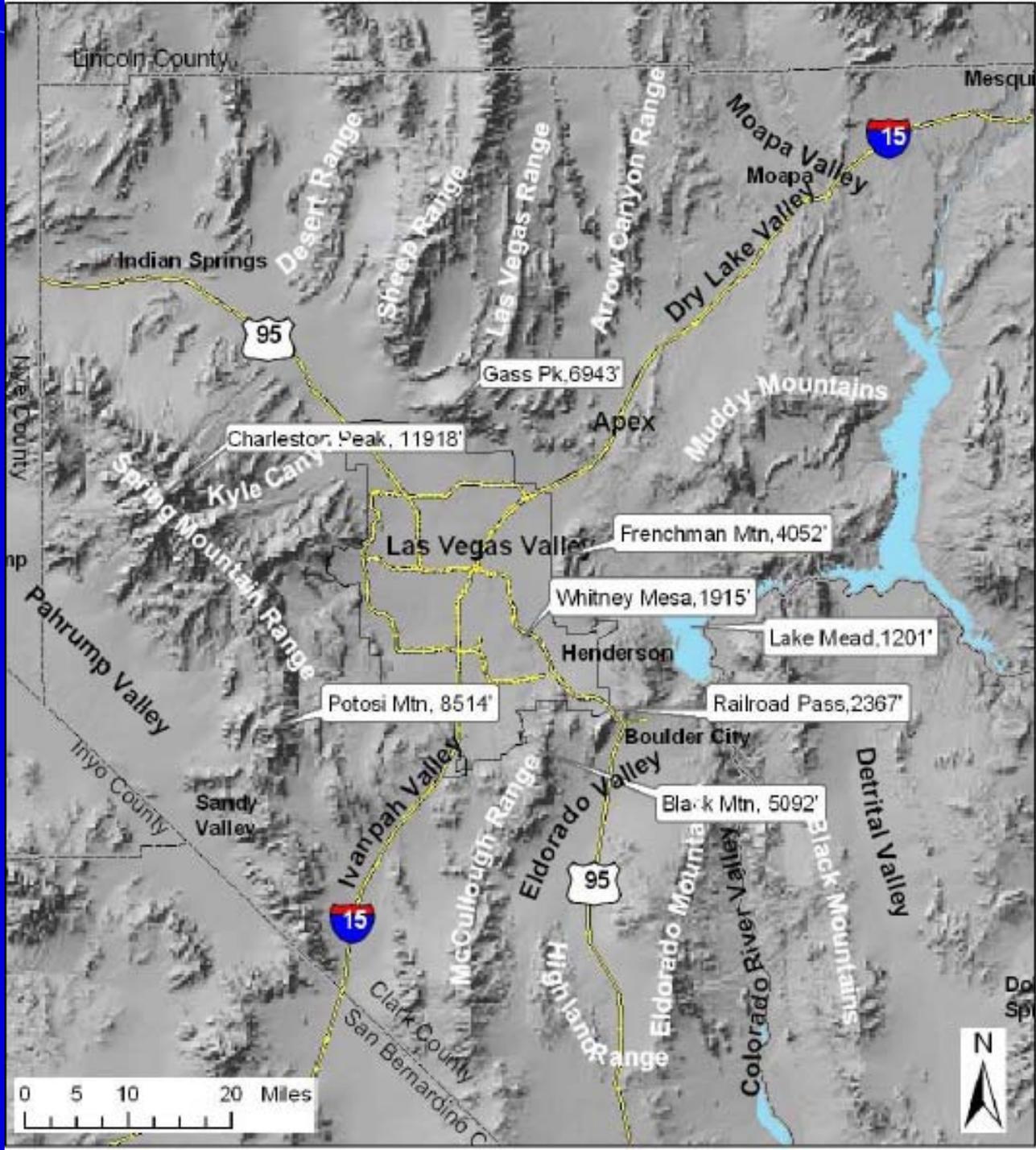
Please contact:

**The Department of
Air**

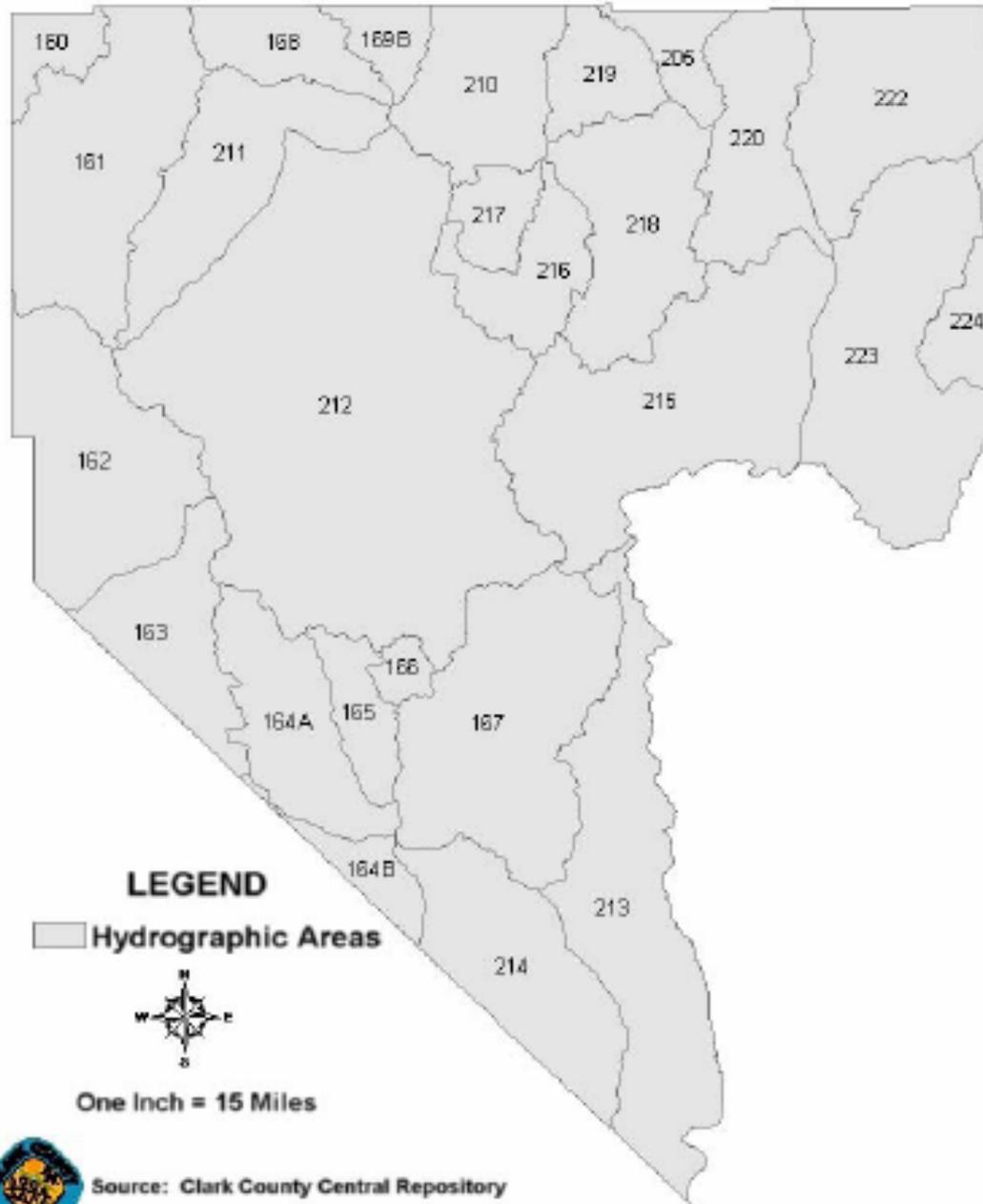
**Quality and Environmental
Management (DAQEM):**

(702) 455-5942

Clark County Relief Map



Hydrographic Areas in Clark County



Tracer Study Results

