

Enclosure 3
Comments Received

June 24, 2016



ADEQ
AIR QUALITY DIVISION
16 JUN 24 AM 9:40

Ms. Heidi Haggerty
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Dear Ms. Haggerty:

The Maricopa Association of Governments (MAG) is pleased to submit comments on the May 31, 2016 Arizona Department of Environmental Quality (ADEQ) 2015 Ozone NAAQS Boundary Recommendation Draft Report. We appreciate that the Draft Report includes as the first recommendation that the current Maricopa ozone boundary will not need to be expanded if the Queen Valley or Tonto National Monument monitors do not violate the 2015 ozone standard based upon future ozone design values. This recommendation aligns with MAG's comment that monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation, since the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at the monitors.

Additional comments in support of not expanding the current Maricopa ozone boundary at this time are attached to this letter. We look forward to working cooperatively with the Arizona Department of Environmental Quality in our efforts to improve air quality. If you have any questions on our comments, please do not hesitate to contact Lindy Bauer at (602) 254-6300.

Sincerely,

Dennis Smith
Executive Director

MAG Comments on the May 31, 2016
Arizona Department of Environmental Quality (ADEQ)
2015 Ozone NAAQS Boundary Recommendation Draft Report

1. On page 31, the ADEQ “recommends four data-contingent 2015 Ozone NAAQS nonattainment area boundaries for the Phoenix area.” The first boundary listed by ADEQ recommends that the nonattainment area boundary for the 2015 ozone standard remain the same as the current nonattainment area boundary for the 2008 ozone standard, if neither the Queen Valley monitor in Pinal County or the Tonto National Monument monitor in Gila County violate the 2015 ozone standard based upon future ozone design values. This first recommendation is consistent with MAG Regional Council action taken on April 27, 2016, approving that a letter be sent to ADEQ requesting that the Maricopa ozone boundary not be expanded at this time, since the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at the monitors. The May 3, 2016 letter to ADEQ also stated that monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation. A copy of the May 3, 2016 letter to ADEQ is attached to these comments.
2. On page 36, ADEQ discusses the long-term and short-term downward trends in ozone concentrations at the Queen Valley and Tonto National Monument monitors in support of retaining the existing Maricopa ozone nonattainment area as the recommended boundary for the 2015 ozone standard. In addition to the information presented by ADEQ on this page, the following information provides additional evidence as to why the Maricopa ozone nonattainment area boundary should not be expanded at this time:
 - A. Preliminary exceedances of the 2015 ozone standard at the Queen Valley and Tonto National Monument monitors in the 2016 ozone season may in some cases be the result of exceptional events caused by wildfires and stratospheric intrusions of ozone.

Located north and east of the Queen Valley and Tonto National Monument monitors, the Juniper fire burned in the Tonto National Forest from mid-May to mid-June 2016. Satellite photos show smoke from the Juniper fire blowing towards the Queen Valley and Tonto National Monument monitors on multiple dates. Exceedances of the 2015 ozone standard occurred at the Queen Valley and Tonto National Monument monitors in late May and early June when the Juniper fire was most active, making it possible that the Juniper fire contributed to these recorded ozone exceedances. Additionally, the exceedance on April 24, 2016 at the Queen Valley monitor may have been influenced by stratospheric intrusion of ozone, as indicated by weather conditions during the exceedance. Exclusion of exceedances during this period as exceptional events will lower the ozone design values at these monitors and may result in the Queen Valley and Tonto National Monument monitors meeting the 2015 ozone standard with data from the 2016 ozone season, making expansion of the Maricopa ozone nonattainment area boundary unnecessary.

- B. Preliminary 2016 ozone concentrations at the Queen Valley monitor were recorded while the monitor was operating with a consistent bias towards recording higher ozone concentrations than may have actually occurred.

ADEQ staff has indicated that ozone calibration trend data at the Queen Valley monitor was consistently biased upward by 2.5 to 3 percent through early June of the 2016 ozone season. This could result in the Queen Valley monitor recording ozone concentrations that are approximately 0.002 parts per million (ppm) higher than they actually were. This is not an insignificant value, given that some of the preliminary 2016 exceedances recorded at the Queen Valley monitor are only 0.001 to 0.002 ppm higher than the 2015 ozone standard. Additionally, a 0.002 ppm difference in 2016 ozone concentrations may determine whether the monitor meets or violates the standard with 2014-2016 ozone concentration data. Monitor concentrations during this period (approximately April - June 5, 2016) at the Queen Valley monitor should be critically evaluated given the known high bias of the recorded ozone concentrations and may be an over-representation of actual ozone concentrations at the monitor.

- C. The Queen Valley and Tonto National Monument monitors are located in or very near the Tonto National Forest, making these monitors subject to high levels of background ozone.

EPA's white paper¹ on background ozone acknowledges that background ozone concentrations are known to be highest in the rural areas of the intermountain west, including locations such as the Tonto National Monument monitor situated in the middle of the Tonto National Forest, and the Queen Valley monitor located on the edge of the Tonto National Forest. These areas are particularly subject to increases in ozone from natural sources such as vegetation, wildfires, and stratospheric intrusions, along with ozone from interstate and international transport. EPA's white paper estimates that in 2017, 67% of the ozone concentration at the Queen Valley monitor and 64% of the ozone concentration at the Tonto National Monument monitor will be due to background ozone. This in contrast to the current Maricopa nonattainment area, where the estimated contribution of background ozone in 2017 is 52%. Since background ozone concentrations are uncontrollable, expanding the Maricopa nonattainment area to include the rural Tonto National Monument and Queen Valley monitors will provide no clear benefit in reducing background ozone concentrations or in meeting the 2015 ozone standard at these monitors.

¹ *Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone. White Paper for Discussion.* U.S. Environmental Protection Agency. December 30, 2015.

May 3, 2016

Mr. Misael Cabrera, Director
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Dear Mr. Cabrera:

The Maricopa Association of Governments (MAG) has appreciated the opportunity to participate in the Arizona Department of Environmental Quality (ADEQ) stakeholder meetings on the 2015 Ozone Standard Boundary Designations. On April 27, 2016, the MAG Regional Council took action to approve sending a letter to ADEQ requesting that the Maricopa ozone boundary not be expanded at this time, since the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at the monitors. Monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation.

On April 14, 2016, ADEQ conducted a stakeholder meeting and proposed an expansion of the Maricopa eight-hour ozone nonattainment area to include portions of Pinal County and Gila County. Based upon 2013-2015 monitor data, the Queen Valley monitor in Pinal County and the Tonto National Monument monitor in Gila County are at 0.071 parts per million compared to the 2015 ozone standard of 0.070 parts per million. The data for the Tonto monitor excludes an exceedance caused by a wildfire exceptional event in 2015. On February 29, 2016, MAG staff provided information to ADEQ showing a downward trend in the concentrations at both monitors from 2001-2015 (see attachment).

In accordance with the Clean Air Act, states are required to submit their area designation recommendations by October 1, 2016 to the Environmental Protection Agency (EPA) based upon 2013-2015 data. By October 1, 2017, EPA will finalize the designations based upon 2014-2016 data. For this reason, EPA encourages states to review and consider preliminary 2016 air quality data in their designation recommendations. This is stated on page 4 of the EPA memorandum, Area Designations for the 2015 Ozone National Ambient Air Quality Standards dated February 25, 2016.

If the Maricopa eight-hour ozone nonattainment area is expanded as ADEQ is proposing, there will be tighter controls on business and industry in the new area and transportation conformity requirements will apply. These requirements could have a negative impact on economic development in Pinal County.

Again, MAG is requesting that the Maricopa ozone boundary not be expanded at this time, since the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at the monitors. Monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation.

We look forward to working cooperatively with the Arizona Department of Environmental Quality in our continuing efforts to improve air quality. If you have any questions, please do not hesitate to contact Lindy Bauer or me at (602) 254-6300.

Sincerely,

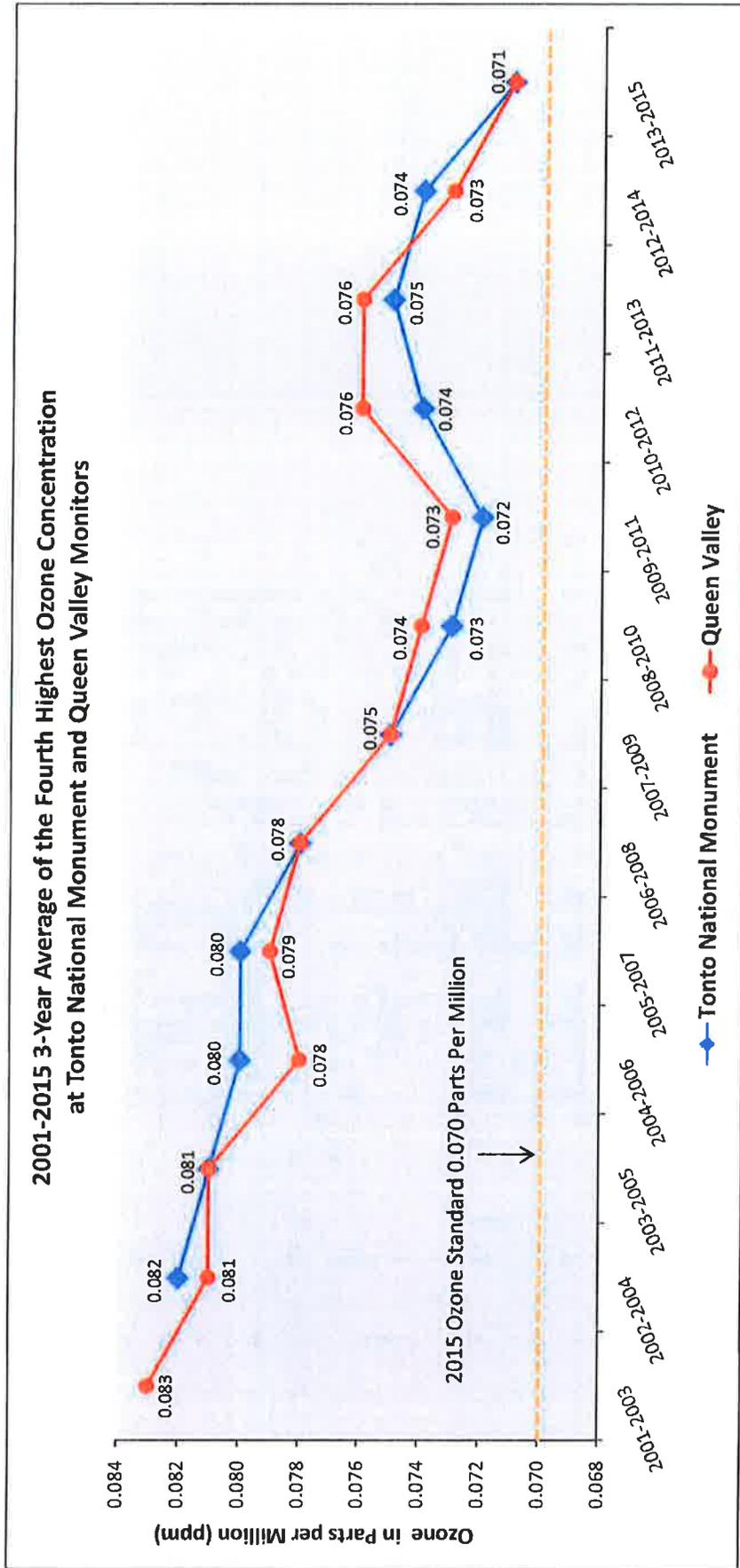


Dennis Smith
Executive Director

cc: MAG Regional Council
Greg Stanley, Pinal County
Irene Higgs, Sun Corridor Metropolitan Planning Organization
Ken Hall, Central Arizona Governments
Timothy Franquist, Arizona Department of Environmental Quality

Monitor	2001-2015 FOURTH HIGHEST OZONE CONCENTRATIONS (parts per million)														
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Tonto National Monument	0.083	0.081	0.084	0.084	0.084	0.081	0.076	0.078	0.072	0.070	0.076	0.078	0.072	0.072	0.070
Queen Valley	0.079	0.083	0.087	0.073	0.084	0.079	0.076	0.080	0.070	0.072	0.078	0.078	0.073	0.068	0.074

Monitor	2001-2015 3-YEAR AVERAGE OF THE FOURTH HIGHEST OZONE CONCENTRATIONS (parts per million)														
	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015		
Tonto National Monument	0.083	0.081	0.082	0.081	0.080	0.078	0.075	0.073	0.072	0.074	0.075	0.074	0.071		
Queen Valley	0.083	0.081	0.081	0.078	0.079	0.078	0.075	0.074	0.073	0.076	0.076	0.073	0.071		



Data Source: U.S. EPA Air Data (<http://www3.epa.gov/airdata>) accessed on April 26, 2016.

Note: The June 20, 2015 exceedance of 0.079 ppm at the Tonto monitor is excluded from the data as an exceptional event caused by the Lake Fire in San Bernardino County, California



June 30, 2016

Timothy Franquist Jr., Director
Air Division
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Via e-mail and First Class Mail

Re: Proposed 2015 Ozone Boundary Recommendation

Dear Mr. Franquist,

We appreciate the opportunity to comment on the 2015 Ozone National Ambient Air Quality Standard (NAAQS) Boundary Recommendation draft proposed by ADEQ on May 31, 2016.

This constitutes comment on behalf of Pinal County concerning ADEQ's recommendation to include a portion of Pinal County in the Phoenix area nonattainment boundary with respect to a designation under the 2015 8-hour ozone NAAQS. The recommendation proposes to include within the nonattainment boundary the communities of Apache Junction, Gold Canyon, San Tan Valley, Queen Creek, and Queen Valley. Queen Valley, where the ozone monitor of concern is located, is a small desert community of approximately 800 people and contributes little to ozone formation as the local emissions are limited to automobile use by local residents. Pinal County offers the following with regard to the portion of the recommended boundary within Pinal County.

Local Area Impacts

An ozone nonattainment designation for the area will slow economic development and could potentially increase vehicle travel into the metropolitan area. Pinal County is focused on region-wide economic development projects which will provide local work locations for residents. Slowing this development process with a nonattainment designation will in the long term result in less local jobs for residents and enhance the need for residents to travel further for employment opportunities, thereby increasing vehicle emissions.

Emissions Inventory

Emission data referenced in the draft boundary recommendation do not quantify precursor emissions generated within the Pinal County portion of the recommended nonattainment boundary. Rather, county-wide emissions appear to have been used in the analysis. In early 2016 Pinal County provided ADEQ with a 2014 emission inventory for NOx and VOC which accounted for permitted sources (actual annual emission >1 ton/yr) within the Pinal portion of the proposed boundary. Within the area NOx emissions amount to approximately 12 tons/yr and VOC emissions amount to approximately 186 tons/yr. These emissions constitute a small fraction of the overall estimated emissions in the Phoenix Metropolitan area. Emissions estimates from the 2011 NEI, used in the analysis, are a useful tool to use as part of the five factor analysis. However, if more local



P I N A L • C O U N T Y
wide open opportunity

emissions estimates are available, especially as it pertains to large contributing sources (i.e. mobile), then the local emissions estimates should be used. The Maricopa Association of Governments has done extensive ozone modeling for the region and part of that modeling effort includes quantifying local mobile emissions, including down to a finer spatial resolution than the NEI. Therefore the MAG mobile emissions modeling should be incorporated into the five factor analysis rather than the more coarse NEI emissions in order to clearly demonstrate contribution from the proposed nonattainment area in Pinal County.

The draft recommendation does not adequately consider the current “level of control of emissions sources”, a component of emissions and emissions related data in the 5 factor analysis. Vehicle emissions in the proposed nonattainment boundary are currently controlled to the same level as those in the nearby Phoenix ozone nonattainment area. The Area A designation imposes vehicle emission testing, reformulated fuels, mandatory travel reduction for major employers, and summertime open burning restrictions. The San Tan Valley/Queen Creek area, generally south of the Germann Road alignment, is predominately residential in nature which results in tailpipe emissions. Considering the emission inventory referenced in the draft recommendation illustrates that mobile sources are the predominant source of NOx precursor emissions, including the San Tan Valley/Queen Creek area in in the nonattainment boundary would not yield any emission reductions from these sources; and, as explained above, could actually prevent or slow reductions in emissions from these sources. Pinal County believes the draft recommendation does not adequately address these regulatory programs in the weight-of-evidence evaluation.

Ambient data and Meteorological analysis

We believe a portion of the proposed nonattainment area can meet the 2015 ozone NAAQS. Ozone data collected from 2004 through 2010 at Combs School (San Tan Valley) show the area met the 2015 standard during all years of operation with a margin of 7ppb in 2010. Considering that the general ozone trend at the Combs site was decreasing over time, just as many others in the Maricopa and Pinal monitoring networks, one can project that the area would continue to meet the 2015 NAAQS today. From a health perspective, a nonattainment designation for this area would offer no additional protection to the residents of the area. This information should be considered in the analysis and documentation.

The draft recommendation compared Queen Valley ozone concentrations on the 10 highest days (2013-2015) to local wind direction during the period from 10:00 A.M. to 5:00 P.M., essentially creating a pollution rose. The result of the analysis shows that maximum concentrations occur when the winds are from the west-northwest indicating that ozone transport on these days does not originate from San Tan Valley located southwest of Queen Valley. Rather, the transport of ozone generally moves along the U.S. 60 alignment from the greater Phoenix area. This information appears to conflict with the conclusion that the San Tan Valley/Queen Creek area contributes to nonattainment at the Queen Valley ozone monitor.

The draft recommendation relies on HYSPLIT back trajectories to demonstrate air parcel movement from areas of Pinal County toward the Queen Valley monitoring site. HYSPLIT trajectories do not quantify the magnitude of emissions contribution, only the movement of air parcels. In cases where parcels travel through the Pinal portion of the proposed nonattainment area, the preceding hours also traveled through the Phoenix Metropolitan area. Back trajectories analysis must be used in conjunction with precursor emissions data to establish that an area contributes to measured concentrations at a monitor.



PINAL • COUNTY
wide open opportunity

Analytical Approach

The 5 factor analysis is described in EPA guidance as a weight-of-evidence approach. The draft recommendation does not clearly describe how evaluation of the various factors led to a conclusion that the Pinal County portion of the proposed nonattainment boundary contributes to ozone nonattainment. Pinal County believes additional documentation of the weight-of-evidence approach is needed.

Pinal County concludes, based upon emissions data provided and the relatively small population, that the San Tan Valley/Queen Creek area alone does not generate emissions capable of causing an ozone NAAQS exceedance at Queen Valley. The evaluation should identify all contributors to the Queen Valley exceedances and proportion the result to the San Tan Valley/Queen Creek area in order to provide stakeholders with a clear indication of the area's contribution.

Should you wish to discuss these comments in greater detail, please call me at (520)866-6929.

Sincerely,

Mike Sundblom
Director
Pinal County Air Quality Control

June 29, 2016

Mr. Misael Cabrera, Director
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

RECEIVED
JUL 1 2016

Dear Mr. Cabrera:

The Sun Corridor Metropolitan Planning Organization (MPO) is writing this letter in support of the letter sent to Arizona Department of Environmental Quality (ADEQ) on May 3, 2016 from the Maricopa Association of Governments (MAG), requesting that the Maricopa ozone boundary not be expanded at this time, since the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at the monitors. Monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation.

The Sun Corridor Metropolitan Planning Organization (MPO) has appreciated the opportunity to participate in the ADEQ 2015 Ozone Standard Boundary Designations stakeholder meetings. At the stakeholder meeting held on April 14, 2016, ADEQ proposed an expansion of the Maricopa eight-hour ozone nonattainment area to include portions of Pinal County and Gila County. Based upon 2013-2015 monitor data, the Queen Valley monitor in Pinal County and the Tonto National Monument monitor in Gila County are at 0.071 parts per million compared to the 2015 ozone standard of 0.070 parts per million. The data for the Tonto monitor excludes an exceedance caused by a wildfire exceptional event in 2015.

In accordance with the Clean Air Act, states are required to submit their area designation recommendations by October 1, 2016 to the Environmental Protection Agency (EPA) based upon 2013- 2015 data. By October 1, 2017, EPA will finalize the designations based upon 2014-2016 data. For this reason, EPA encourages states to review and consider preliminary 2016 air quality data in their designation recommendations. This is stated on page 4 of the EPA memorandum, Area Designations for the 2015 Ozone National Ambient Air Quality Standards dated February 25, 2016.



If the Maricopa eight-hour ozone nonattainment area is expanded as ADEQ is proposing, there will be tighter controls on business and industry in the new area and transportation conformity requirements will apply. These requirements could have a negative impact on economic development in Pinal County.

Again, the Sun Corridor MPO is requesting that the Maricopa ozone boundary not be expanded at this time, since the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at the monitors. Monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation.

We look forward to partnering and working cooperatively with the ADEQ in our continuing efforts to improve air quality. If you have any questions, please do not hesitate to contact me at (520) 705-5143.

Sincerely,

A handwritten signature in blue ink that reads "Irene Higgs".

Irene Higgs
Executive Director

Cc: Dennis Smith, Maricopa Association of Governments
Greg Stanley, Pinal County
Ken Hall, Central Arizona governments



Central Yavapai Metropolitan Planning Organization

1971 Commerce Center Circle, Ste. E
 Prescott, AZ 86301
 Phone: 928-442-5730
 Fax: 928-442-5736
www.cympo.org

June 20, 2016

Mr. Misael Cabrera, Director
 Arizona Department of Environmental Quality
 1110 West Washington Street
 Phoenix, Arizona 85007

Dear Mr. Cabrera:

The Central Yavapai Metropolitan Planning Organization (CYMPO) has appreciated the opportunity to participate in the Arizona Department of Environmental Quality (ADEQ) stakeholder meetings on the 2015 Ozone Standard Boundary Designations. On June 15, 2016, the CYMPO Executive Board took action to approve sending a letter to ADEQ, and in support of the Maricopa Association of Government's (MAG) request, that the ozone boundaries across the state not be expanded at this time.

In accordance with the Clean Air Act, states are required to submit their area designation recommendations by October 1, 2016 to the Environmental Protection Agency (EPA) based upon 2013- 2015 data. By October 1, 2017, EPA will finalize the designations based upon 2014-2016 data. For this reason, EPA encourages states to review and consider preliminary 2016 air quality data in their designation recommendations. This is stated on page 4 of the EPA memorandum, Area Designations for the 2015 Ozone National Ambient Air Quality Standards dated February 25, 2016.

The specific data previously provided to you by MAG in their letter dated May 3, 2016 shows that the Queen Valley and Tonto National Monument monitors only slightly exceed the standard and there is a downward trend at those monitors. Although the CYMPO region is currently shown to be just beneath the EPA threshold of 0.070 at a level of 0.069, the CYMPO Executive Board believes that the monitor data from the 2016 ozone season should be evaluated across the state first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation.

The CYMPO Executive Board agrees with the MAG Regional Council that if the ozone nonattainment area is expanded as ADEQ is proposing, there will be tighter controls on business and industry in those newly designated non-attainment areas. As a result, transportation conformity requirements will also apply in regions of the state where it may not actually be necessary if the most current data is utilized. These requirements could have a negative impact on economic development in the State of Arizona.

In summary, the CYMPO Executive Board is requesting that monitor data from the 2016 ozone season should be evaluated first to determine if the monitors have met the standard or if it is necessary to revise the boundary recommendation.

Sincerely,

A handwritten signature in black ink, appearing to read "Craig L. Brown". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Craig L. Brown
CYMPO Board Chairman
Yavapai County Supervisor – District 4

Attachment

114TH CONGRESS
2D SESSION

H. R. 4775

To facilitate efficient State implementation of ground-level ozone standards,
and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 17, 2016

Mr. OLSON (for himself, Mr. FLORES, Mr. SCALISE, Mr. LATTA, Mr. MCCARTHY, and Mr. CUELLAR) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To facilitate efficient State implementation of ground-level
ozone standards, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Ozone Standards Im-
5 plementation Act of 2016”.

6 **SEC. 2. FACILITATING STATE IMPLEMENTATION OF EXIST-**
7 **ING OZONE STANDARDS.**

8 (a) DESIGNATIONS.—

9 (1) DESIGNATION SUBMISSION.—Not later than
10 October 26, 2024, notwithstanding the deadline

1 specified in paragraph (1)(A) of section 107(d) of
2 the Clean Air Act (42 U.S.C. 7407(d)), the Gov-
3 ernor of each State shall designate in accordance
4 with such section 107(d) all areas (or portions there-
5 of) of the Governor's State as attainment, nonattain-
6 ment, or unclassifiable with respect to the 2015
7 ozone standards.

8 (2) DESIGNATION PROMULGATION.—Not later
9 than October 26, 2025, notwithstanding the deadline
10 specified in paragraph (1)(B) of section 107(d) of
11 the Clean Air Act (42 U.S.C. 7407(d)), the Adminis-
12 trator shall promulgate final designations under
13 such section 107(d) for all areas in all States with
14 respect to the 2015 ozone standards, including any
15 modifications to the designations submitted under
16 paragraph (1).

17 (3) STATE IMPLEMENTATION PLANS.—Not
18 later than October 26, 2026, notwithstanding the
19 deadline specified in section 110(a)(1) of the Clean
20 Air Act (42 U.S.C. 7410(a)(1)), each State shall
21 submit the plan required by such section 110(a)(1)
22 for the 2015 ozone standards.

23 (b) CERTAIN PRECONSTRUCTION PERMITS.—

1 (1) IN GENERAL.—The 2015 ozone standards
2 shall not apply to the review and disposition of a
3 preconstruction permit application if—

4 (A) the Administrator or the State, local,
5 or tribal permitting authority, as applicable, de-
6 termines the application to be complete on or
7 before the date of promulgation of the final des-
8 ignation of the area involved under subsection
9 (a)(2); or

10 (B) the Administrator or the State, local,
11 or tribal permitting authority, as applicable,
12 publishes a public notice of a preliminary deter-
13 mination or draft permit for the application be-
14 fore the date that is 60 days after the date of
15 promulgation of the final designation of the
16 area involved under subsection (a)(2).

17 (2) RULES OF CONSTRUCTION.—Nothing in
18 this section shall be construed to—

19 (A) eliminate the obligation of a
20 preconstruction permit applicant to install best
21 available control technology and lowest achiev-
22 able emission rate technology, as applicable; or

23 (B) limit the authority of a State, local, or
24 tribal permitting authority to impose more
25 stringent emissions requirements pursuant to

1 State, local, or tribal law than national ambient
2 air quality standards.

3 **SEC. 3. FACILITATING STATE IMPLEMENTATION OF NA-**
4 **TIONAL AMBIENT AIR QUALITY STANDARDS.**

5 (a) **TIMELINE FOR REVIEW OF NATIONAL AMBIENT**
6 **AIR QUALITY STANDARDS.—**

7 (1) **10-YEAR CYCLE FOR ALL CRITERIA AIR**
8 **POLLUTANTS.—**Paragraphs (1) and (2)(B) of sec-
9 tion 109(d) of the Clean Air Act (42 U.S.C.
10 7409(d)) are amended by striking “five-year inter-
11 vals” each place it appears and inserting “10-year
12 intervals”.

13 (2) **CYCLE FOR NEXT REVIEW OF OZONE CRI-**
14 **TERIA AND STANDARDS.—**Notwithstanding section
15 109(d) of the Clean Air Act (42 U.S.C. 7409(d)),
16 the Administrator shall not—

17 (A) complete, before October 26, 2025, any
18 review of the criteria for ozone published under
19 section 108 of such Act (42 U.S.C. 7408) or
20 the national ambient air quality standard for
21 ozone promulgated under section 109 of such
22 Act (42 U.S.C. 7409); or

23 (B) propose, before such date, any revi-
24 sions to such criteria or standard.

1 (b) CONSIDERATION OF TECHNOLOGICAL FEASI-
2 BILITY.—Section 109(b)(1) of the Clean Air Act (42
3 U.S.C. 7409(b)(1)) is amended by inserting after the first
4 sentence the following: “If the Administrator, in consulta-
5 tion with the independent scientific review committee ap-
6 pointed under subsection (d), finds that a range of levels
7 of air quality for an air pollutant are requisite to protect
8 public health with an adequate margin of safety, as de-
9 scribed in the preceding sentence, the Administrator may
10 consider, as a secondary consideration, likely technological
11 feasibility in establishing and revising the national pri-
12 mary ambient air quality standard for such pollutant.”.

13 (c) CONSIDERATION OF ADVERSE PUBLIC HEALTH,
14 WELFARE, SOCIAL, ECONOMIC, OR ENERGY EFFECTS.—
15 Section 109(d)(2) of the Clean Air Act (42 U.S.C.
16 7409(d)(2)) is amended by adding at the end the fol-
17 lowing:

18 “(D) Prior to establishing or revising a national am-
19 bient air quality standard, the Administrator shall re-
20 quest, and such committee shall provide, advice under sub-
21 paragraph (C)(iv) regarding any adverse public health,
22 welfare, social, economic, or energy effects which may re-
23 sult from various strategies for attainment and mainte-
24 nance of such national ambient air quality standard.”.

1 (d) TIMELY ISSUANCE OF IMPLEMENTING REGULA-
2 TIONS AND GUIDANCE.—Section 109 of the Clean Air Act
3 (42 U.S.C. 7409) is amended by adding at the end the
4 following:

5 “(e) TIMELY ISSUANCE OF IMPLEMENTING REGULA-
6 TIONS AND GUIDANCE.—

7 “(1) IN GENERAL.—In publishing any final rule
8 establishing or revising a national ambient air qual-
9 ity standard, the Administrator shall, as the Admin-
10 istrator determines necessary to assist States, per-
11 mitting authorities, and permit applicants, concu-
12 rently publish regulations and guidance for imple-
13 menting the standard, including information relating
14 to submission and consideration of a preconstruction
15 permit application under the new or revised stand-
16 ard.

17 “(2) APPLICABILITY OF STANDARD TO
18 PRECONSTRUCTION PERMITTING.—If the Adminis-
19 trator fails to publish final regulations and guidance
20 that include information relating to submission and
21 consideration of a preconstruction permit application
22 under a new or revised national ambient air quality
23 standard concurrently with such standard, then such
24 standard shall not apply to the review and disposi-
25 tion of a preconstruction permit application until the

1 Administrator has published such final regulations
2 and guidance.

3 “(3) RULES OF CONSTRUCTION.—

4 “(A) Nothing in this subsection shall be
5 construed to preclude the Administrator from
6 issuing regulations and guidance to assist
7 States, permitting authorities, and permit appli-
8 cants in implementing a national ambient air
9 quality standard subsequent to publishing regu-
10 lations and guidance for such standard under
11 paragraph (1).

12 “(B) Nothing in this subsection shall be
13 construed to eliminate the obligation of a
14 preconstruction permit applicant to install best
15 available control technology and lowest achiev-
16 able emission rate technology, as applicable.

17 “(C) Nothing in this subsection shall be
18 construed to limit the authority of a State,
19 local, or tribal permitting authority to impose
20 more stringent emissions requirements pursu-
21 ant to State, local, or tribal law than national
22 ambient air quality standards.

23 “(4) DEFINITIONS.—In this subsection:

1 “(A) The term ‘best available control tech-
2 nology’ has the meaning given to that term in
3 section 169(3).

4 “(B) The term ‘lowest achievable emission
5 rate’ has the meaning given to that term in sec-
6 tion 171(3).

7 “(C) The term ‘preconstruction permit’—

8 “(i) means a permit that is required
9 under part C or D for the construction or
10 modification of a major emitting facility or
11 major stationary source; and

12 “(ii) includes any such permit issued
13 by the Environmental Protection Agency
14 or a State, local, or tribal permitting au-
15 thority.”.

16 (e) CONTINGENCY MEASURES FOR EXTREME OZONE
17 NONATTAINMENT AREAS.—Section 172(c)(9) of the Clean
18 Air Act (42 U.S.C. 7502(c)(9)) is amended by adding at
19 the end the following: “Notwithstanding the preceding
20 sentences and any other provision of this Act, such meas-
21 ures shall not be required for any nonattainment area for
22 ozone classified as an Extreme Area.”.

23 (f) PLAN SUBMISSIONS AND REQUIREMENTS FOR
24 OZONE NONATTAINMENT AREAS.—Section 182 of the
25 Clean Air Act (42 U.S.C. 7511a) is amended—

1 (1) in subsection (b)(1)(A)(ii)(III), by inserting
2 “and economic feasibility” after “technological
3 achievability”;

4 (2) in subsection (c)(2)(B)(ii), by inserting
5 “and economic feasibility” after “technological
6 achievability”; and

7 (3) in paragraph (5) of subsection (e), by strik-
8 ing “, if the State demonstrates to the satisfaction
9 of the Administrator that—” and all that follows
10 through the end of the paragraph and inserting a
11 period.

12 (g) PLAN REVISIONS FOR MILESTONES FOR PARTIC-
13 ULATE MATTER NONATTAINMENT AREAS.—Section
14 189(c)(1) of the Clean Air Act (42 U.S.C. 7513a(c)(1))
15 is amended by inserting “, which take into account techno-
16 logical achievability and economic feasibility,” before “and
17 which demonstrate reasonable further progress”.

18 (h) EXCEPTIONAL EVENTS.—Section 319(b)(1)(B)
19 of the Clean Air Act (42 U.S.C. 7619(b)(1)(B)) is amend-
20 ed—

21 (1) in clause (i)—

22 (A) by striking “(i) stagnation of air
23 masses or” and inserting “(i)(I) ordinarily oc-
24 ccurring stagnation of air masses or (II)”; and

25 (B) by inserting “or” after the semicolon;

1 (2) by striking clause (ii); and

2 (3) by redesignating clause (iii) as clause (ii).

3 (i) REPORT ON EMISSIONS EMANATING FROM OUT-
4 SIDE THE UNITED STATES.—Not later than 24 months
5 after the date of enactment of this Act, the Administrator,
6 in consultation with States, shall submit to the Congress
7 a report on—

8 (1) the extent to which foreign sources of air
9 pollution, including emissions from sources located
10 outside North America, impact—

11 (A) designations of areas (or portions
12 thereof) as nonattainment, attainment, or
13 unclassifiable under section 107(d) of the Clean
14 Air Act (42 U.S.C. 7407(d)); and

15 (B) attainment and maintenance of na-
16 tional ambient air quality standards;

17 (2) the Environmental Protection Agency's pro-
18 cedures and timelines for disposing of petitions sub-
19 mitted pursuant to section 179B(b) of the Clean Air
20 Act (42 U.S.C. 7509a(b));

21 (3) the total number of petitions received by the
22 Agency pursuant to such section 179B(b), and for
23 each such petition the date initially submitted and
24 the date of final disposition by the Agency; and

1 (4) whether the Administrator recommends any
2 statutory changes to facilitate the more efficient re-
3 view and disposition of petitions submitted pursuant
4 to such section 179B(b).

5 **SEC. 4. DEFINITIONS.**

6 In this Act:

7 (1) ADMINISTRATOR.—The term “Adminis-
8 trator” means the Administrator of the Environ-
9 mental Protection Agency.

10 (2) BEST AVAILABLE CONTROL TECH-
11 NOLOGY.—The term “best available control tech-
12 nology” has the meaning given to that term in sec-
13 tion 169(3) of the Clean Air Act (42 U.S.C.
14 7479(3)).

15 (3) LOWEST ACHIEVABLE EMISSION RATE.—
16 The term “lowest achievable emission rate” has the
17 meaning given to that term in section 171(3) of the
18 Clean Air Act (42 U.S.C. 7501(3)).

19 (4) NATIONAL AMBIENT AIR QUALITY STAND-
20 ARD.—The term “national ambient air quality
21 standard” means a national ambient air quality
22 standard promulgated under section 109 of the
23 Clean Air Act (42 U.S.C. 7409).

24 (5) PRECONSTRUCTION PERMIT.—The term
25 “preconstruction permit”—

1 (A) means a permit that is required under
2 part C or D of title I of the Clean Air Act (42
3 U.S.C. 7470 et seq.) for the construction or
4 modification of a major emitting facility or
5 major stationary source; and

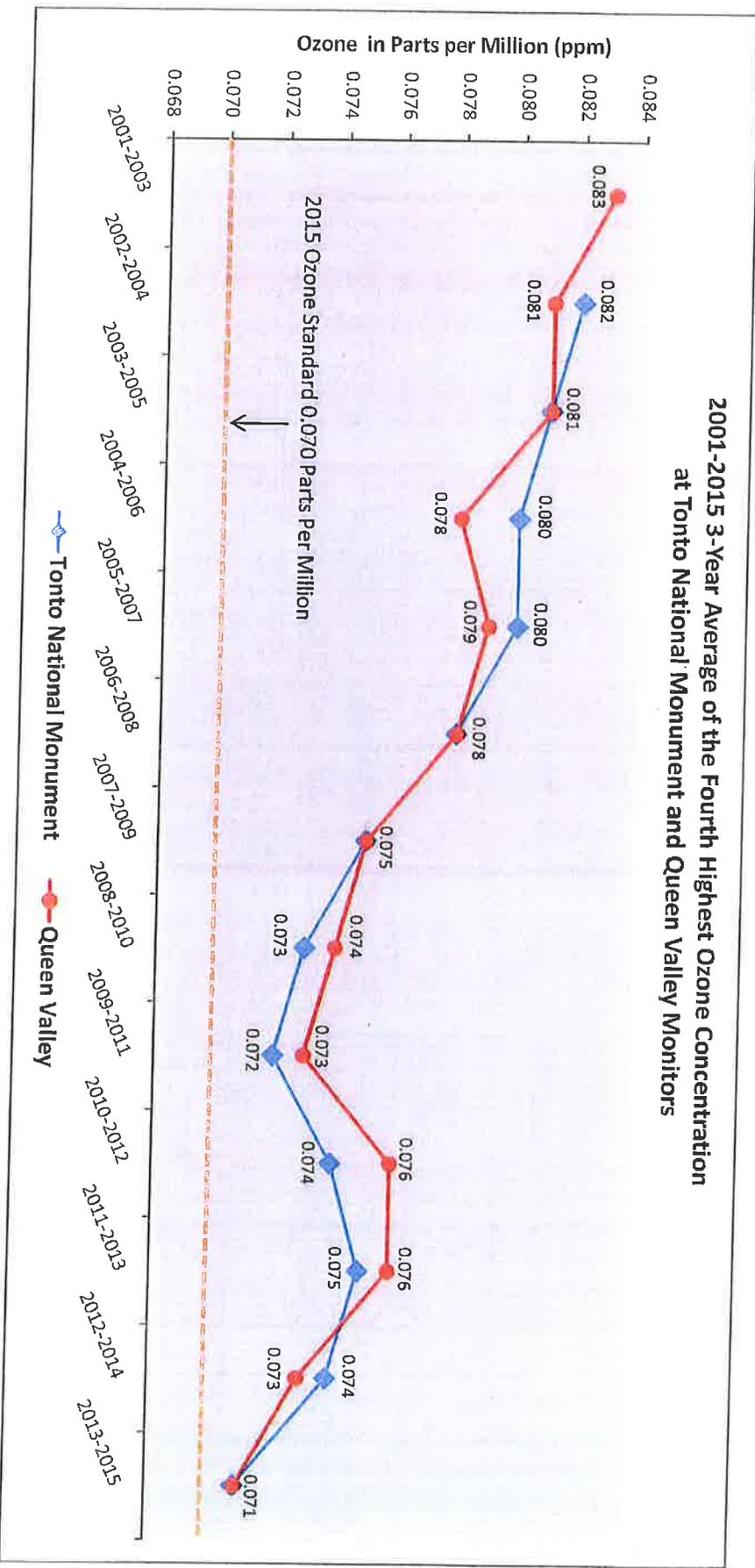
6 (B) includes any such permit issued by the
7 Environmental Protection Agency or a State,
8 local, or tribal permitting authority.

9 (6) 2015 OZONE STANDARDS.—The term “2015
10 ozone standards” means the national ambient air
11 quality standards for ozone published in the Federal
12 Register on October 26, 2015 (80 Fed. Reg. 65292).

○

Monitor	2001-2015 FOURTH HIGHEST OZONE CONCENTRATIONS (parts per million)														
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Tonto National Monument	0.087	0.084	0.077	0.084	0.081	0.076	0.078	0.072	0.070	0.076	0.078	0.072	0.072	0.072	0.070
Queen Valley	0.079	0.083	0.087	0.073	0.084	0.079	0.080	0.080	0.070	0.072	0.078	0.078	0.073	0.068	0.074

Monitor	2001-2015 3-YEAR AVERAGE OF THE FOURTH HIGHEST OZONE CONCENTRATIONS (parts per million)														
	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015		
Tonto National Monument	0.082	0.081	0.080	0.080	0.079	0.078	0.075	0.074	0.073	0.074	0.075	0.074	0.071		
Queen Valley	0.083	0.081	0.078	0.079	0.078	0.075	0.074	0.073	0.073	0.074	0.075	0.073	0.071		



Data Source: U.S. EPA Air Data (<http://www3.epa.gov/airdata>) accessed on April 26, 2016.
 Note: The June 20, 2015 exceedance of 0.079 ppm at the Tonto monitor is excluded from the data as an exceptional event caused by the Lake Fire in San Bernardino County, California

359690



July 1, 2016

VIA Haggerty.Heidi@azdeq.gov

Ms. Heidi Haggerty
Air Quality Division, State Implementation Plan Section
Arizona Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007

Re: 2015 Ozone NAAQS Boundary Recommendation Draft Report

The Arizona Chamber of Commerce and Industry (“Arizona Chamber”) appreciates the opportunity to comment on the Arizona Department of Environmental Quality (“ADEQ”) 2015 Ozone NAAQS Boundary Recommendation Draft Report (“2015 Ozone Boundary Draft Report”).

Like ADEQ, the Arizona Chamber continues to oppose the EPA’s Final Rule revising to 70 parts per billion (“70 ppb”) the National Ambient Air Quality Standard (“NAAQS”) for ozone. We are grateful to Arizona Attorney General Mark Brnovich for immediately filing a lawsuit in October 2015 challenging the validity of the standard. We recognize that while this lawsuit is currently moving forward, ADEQ must still proceed in accordance with the implementation timeframes set forth under the Clean Air Act (“CAA”) in order to prevent arbitrary implementation of nonattainment designations and boundaries by the EPA. Therefore, while maintaining our objections to the 70 ppb standard, we are supportive of nonattainment boundaries that are established reasonably and as compactly as possible to achieve the regulatory requirements, as supported by available data. Upon review and apt consideration of the submitted public comments, we encourage the State to re-evaluate its recommendations to ensure the nonattainment designations appropriately reflect the most succinct boundaries.

Furthermore, we appreciate that ADEQ hosted multiple stakeholder meetings for the general public. We are especially grateful that ADEQ held an additional meeting in Yuma, thereby allowing our Yuma members the ability to participate in the development of these designation recommendations. ADEQ continues to be accessible and responsive to all Arizonans, and while it may not be apparent to those who did not participate in the public stakeholder meetings, the 2015 Ozone Boundary Draft Report truly reflects ADEQ’s consideration of the discussions that occurred at those meetings.

For the aforementioned reasons, even though the Arizona Chamber continues to oppose the EPA’s 70 ppb standard, we support reasonable boundary designations for Arizona.



3200 N. Central Ave. | Suite 1125
Phoenix, AZ 85012

www.azchamber.com

P: 602.248.9172 | F: 602.248.2484

A handwritten signature in black ink, appearing to read "Glenn Hamer". The signature is stylized and cursive.

Glenn Hamer
President and C.E.O.
Arizona Chamber of Commerce and Industry



SALT RIVER PROJECT
P.O. Box 52025
Phoenix, AZ 85072-2025
(602) 236-5262
Fax (602) 236-6690
Kelly.Barr@srpnet.com

KELLY J. BARR, ESQ
Senior Director
Environmental Management
and Chief Sustainability and
Compliance Executive

Submitted via hand delivery

July 1, 2016

Misael Cabrera, Director
Arizona Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007

RE: SRP Comments on ADEQ's 2015 Ozone NAAQS Boundary Recommendation Draft Report

Dear Mr. Cabrera:

Salt River Project Agricultural Improvement and Power District ("SRP") appreciates the opportunity to comment on the Arizona Department of Environmental Quality's ("ADEQ") 2015 Ozone National Ambient Air Quality Standards ("NAAQS") Boundary Recommendation Draft Report ("Draft Report").

SRP is a political subdivision of the State of Arizona that provides retail electric services to more than 1 million residential, commercial, industrial, agricultural, and mining customers in Arizona. As a vertically integrated utility, SRP provides generation, transmission and distribution services, as well as metering and billing services. With the majority of SRP's customers and business operations located in, or nearby, areas impacted by the boundary recommendations, particularly the recommendations for the proposed Maricopa-Pinal Nonattainment Area boundary, SRP has a clear and significant interest in this pending action. As a result, SRP provides the following comments on the Draft Report.

I. Background

On February 25, 2016, the U.S. Environmental Protection Agency ("EPA") issued guidance on the area designation process for the 2015 ozone NAAQS ("EPA Guidance")¹. The EPA Guidance details the factors EPA intends to evaluate in making final nonattainment area boundary decisions for the 2015 ozone NAAQS and recommends that states consider these same factors

¹ *Area Designations for the 2015 Ozone National Ambient Air Quality Standards*, Memorandum from Janet G. McCabe, Acting Assistant Administrator, to Regional Administrators, Regions 1-10 (February 25, 2016).

in making their recommendations to the EPA. The five factors listed in the EPA Guidance include:

1. air quality data,
2. emissions and emissions-related data,
3. meteorological data,
4. geography/topography, and
5. jurisdictional boundaries.

In the Draft Report, ADEQ applies the EPA's five factors in developing their weight of evidence analysis and their resulting recommended nonattainment areas. Recognizing that EPA will use 2014-2016 data to support final designations for the 2015 standard, ADEQ identifies four separate nonattainment boundary options for the Phoenix area, and recommends selection of the final boundaries be delayed until 2016 data is available for area monitors. More specifically, ADEQ recommends that final boundaries be contingent on the future design values for two monitors that are in close proximity to, but are currently located outside of, the area encompassed by the 2008 Phoenix-Mesa Ozone Nonattainment Area Boundary. These monitors are the Tonto National Monument ozone monitor located in Gila County and the Queen Valley ozone monitor located in Pinal County.

Available 2013-2015 design values indicate these two monitors exceed the 2015 ozone NAAQS. For the Tonto National Monument monitor, ADEQ concludes that the existing Maricopa County sources are the primary contributor to the ozone exceedances at the monitor. As a result, if future design values indicate this monitor exceeds the 2015 ozone NAAQS, ADEQ recommends extending the existing 2008 Phoenix-Mesa Ozone Nonattainment Area boundary to include a small portion of Gila County to capture the Tonto National Monument monitor. For the Queen Valley monitor, if future design values indicate this monitor exceeds the 2015 ozone NAAQS, ADEQ concludes that the existing 2008 Phoenix-Mesa Ozone Nonattainment Area boundary be expanded to include both the Queen Valley monitor and San Tan Valley.

SRP's comments below focus on ADEQ's analysis and recommendations related to the draft boundary designations that are contingent on the future design values at the Queen Valley Monitor.

II. ADEQ's Proposed Boundary Expansion into the San Tan Valley Extends Too Far

SRP has reviewed ADEQ's five-factor analysis and understands why consideration was given to San Tan Valley as a contributor to the ozone exceedances at the Queen Valley monitor given its location between the existing Phoenix-Mesa Nonattainment Area boundary and the Queen Valley monitor. However, there would be limited additional environmental benefit to including San Tan Valley in an ozone nonattainment area. San Tan Valley is a residential area where the

primary source of ozone precursors is local vehicle traffic. There are no industrial sources that emit more than 1 ton per year of nitrogen oxides ("NO_x") or volatile organic compounds ("VOC"). As a result, there would be very few emission sources, if any, that local regulatory agencies would be able to further control. The Phoenix metropolitan area, which includes San Tan Valley, already has a number of programs in place to minimize ozone forming pollution from mobile sources. These programs include a vehicle inspection and maintenance program and a cleaner burning gasoline program that establishes requirements for summertime and wintertime gasoline blends and requires gasoline fuel to meet the specifications for California Air Resources Board Phase 2 reformulated fuel. Other standards for mobile sources, including emissions and fuel economy standards, are all regulated at the federal level and are independent from nonattainment designations. Further, a significant proportion of the ozone measured in the area can be attributed to background ozone.²

Given the limited benefits that would be realized by including the San Tan Valley in the nonattainment area, SRP encourages ADEQ to take a more detailed look at the boundary recommendations involving this area. SRP review of data included in ADEQ's Draft Report and the five factor analysis suggested in the EPA Guidance, supports establishment of the nonattainment boundary that more closely aligns with the boundaries of the San Tan Valley census designated place ("CDP").

ADEQ's proposed expansion of the nonattainment area boundary in Pinal County extends beyond the San Tan Valley CDP boundaries by approximately 4 miles to the west and 2 miles to the east. For the purpose of these comments, the section of the recommended nonattainment area expansion encompassed by the 4-mile-wide area to the west of the San Tan Valley CDP is referred to as "Area A" and the section of the recommended nonattainment area expansion encompassed by the 2-mile-wide area to the east of the San Tan Valley CDP is referred to as "Area B" (See Figure 1).³ The additional VOC or NO_x emissions that would be captured by extending the nonattainment boundary beyond the San Tan Valley CDP is insignificant.

As identified in the Draft Report, there is not a single industrial source located in either Area A or Area B that emit more than 1 ton per year of NO_x or VOC emissions. While 1 ton per year is the bottom threshold ADEQ used for including Pinal County point sources in the evaluation⁴, there are very few industrial sources in these areas that emit any quantity of NO_x or VOC

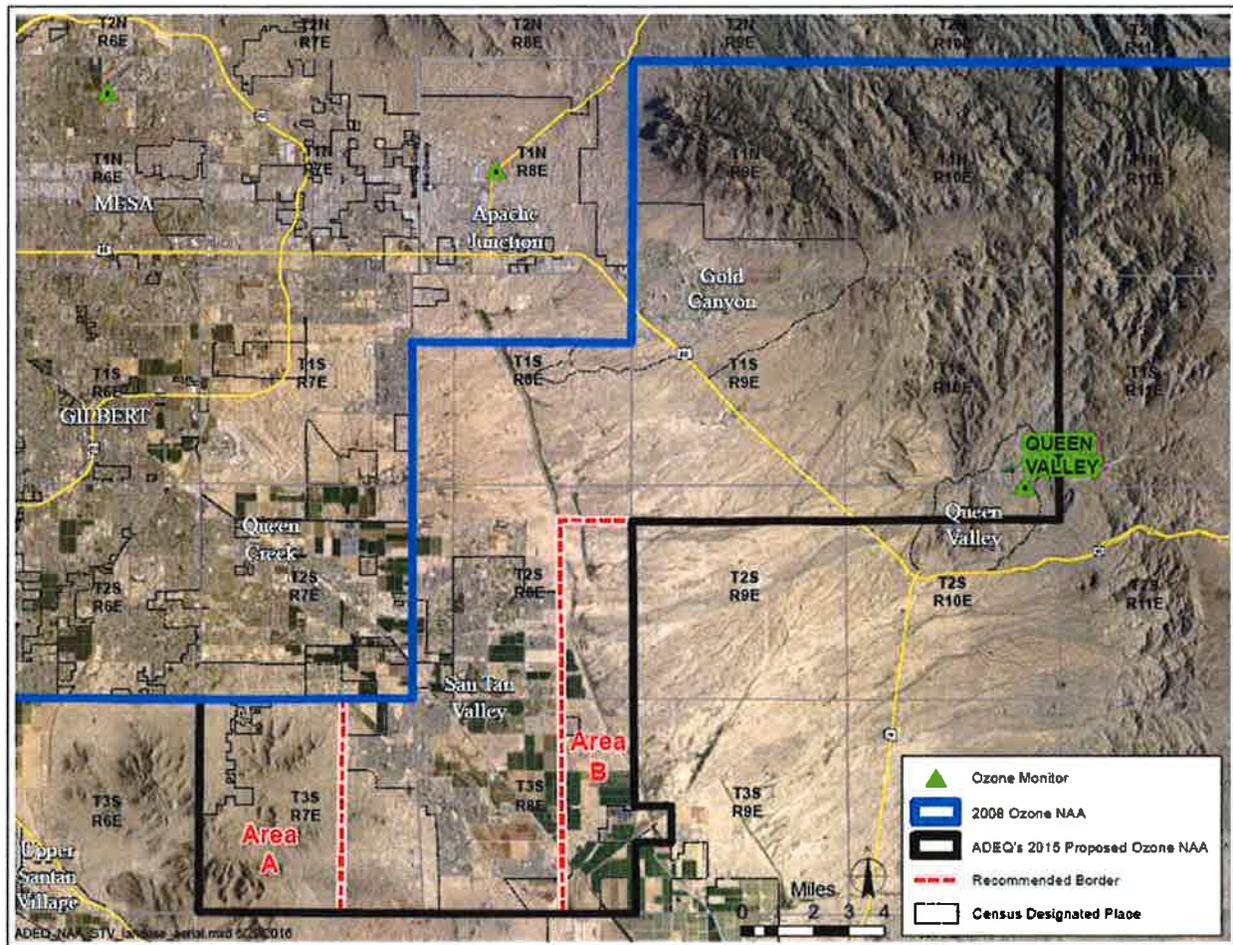
² The largest contributor to the ozone exceedances is background ozone. Per EPA's December 30, 2015, whitepaper on background ozone, only 25% of the ozone concentrations in Pinal County are attributed to in-state manmade sources, based on 2017 project design values. <https://www.epa.gov/sites/production/files/2016-03/documents/whitepaper-bgo3-final.pdf>

³ References to Area A and Area B are for purposes of these comments only and are unrelated to Area A and Area B as defined under Arizona Revised Statute 49-541.

⁴ ADEQ's analysis of point sources in Pinal County is based on permitted sources and Pinal County permitting threshold is 1 ton per year.

emissions. As seen in the satellite imagery in Figure 1, the majority of the land in both Area A and Area B is either undeveloped or is being used for agricultural purposes.

Figure 1. Proposed 2015 Pinal County Ozone Nonattainment Boundary Satellite Image

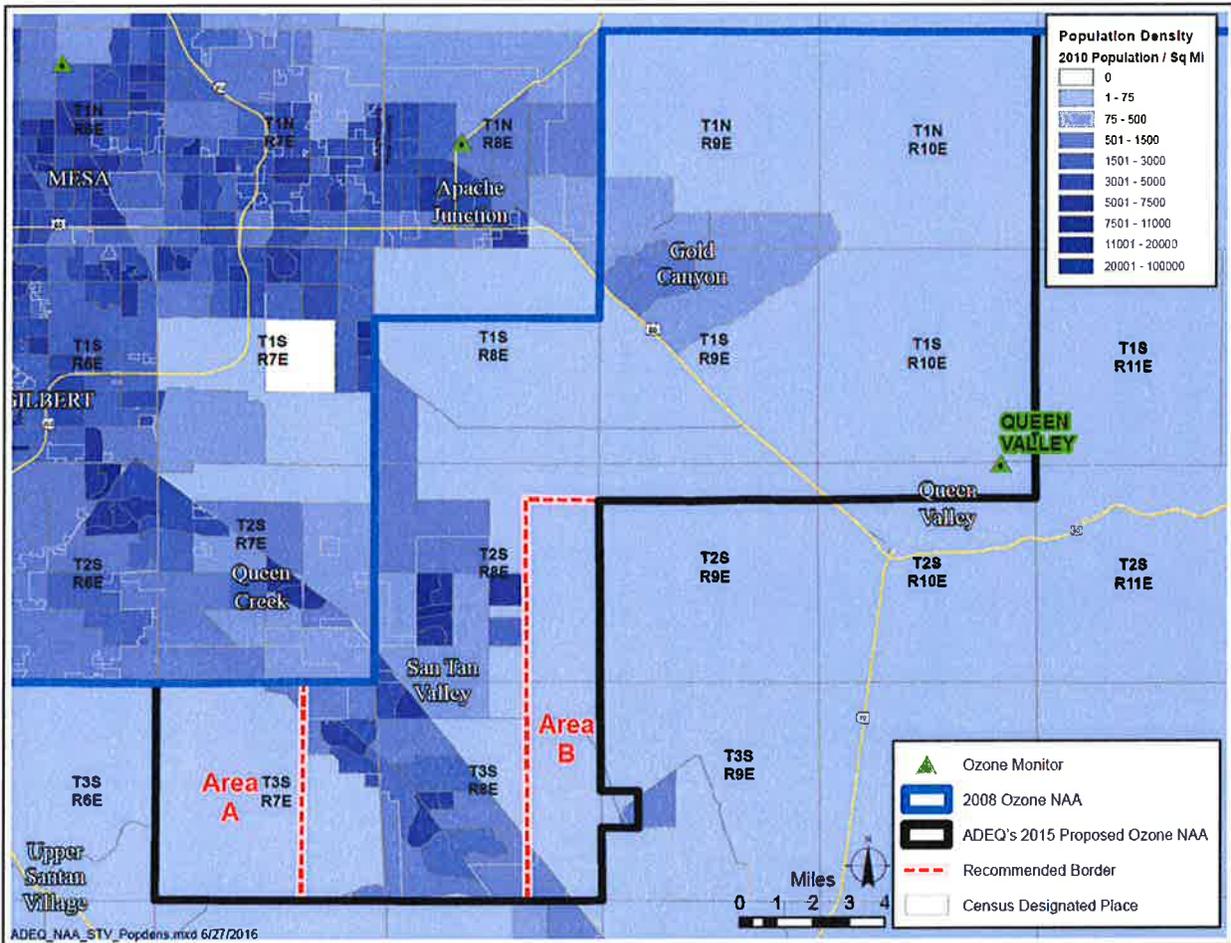


Similarly, the emissions-related data for Area A and Area B, primarily population and vehicle traffic, demonstrates an absence of any significant NO_x and VOC emissions sources that would be contributing to ozone exceedances at the Queen Valley monitor. As previously stated, the land in both Area A and Area B is largely either undeveloped or is being used for agricultural purposes. This is consistent with the 2010 census-based population density for the areas (see Figure 2). Based on 2010 census data, the total population for Area A and Area B is approximately 2,300 and 730, respectively⁵. This population is trivial compared to the 2010 San Tan Valley CDP population of 81,321 or the 2010 population of the Phoenix-Scottsdale-Mesa

⁵ Population values based on 2010 census tract data. Census tracts do not align exactly with the boundaries of Area A and Area B. Therefore, values are estimated by summing the census tracts where 30% or more of the census tract area falls within the Area A and Area B boundaries.

Core Based Statistical Area (CBSA) of 4,192,887. Excluding the population in both Area A and Area B from ADEQ's recommended nonattainment boundary would have no impact on the percentage of the population captured – either option would contain approximately 94% of the Phoenix-Scottsdale-Mesa CBSA population.

Figure 2: Proposed 2015 Pinal County Ozone Nonattainment Boundary Population Density

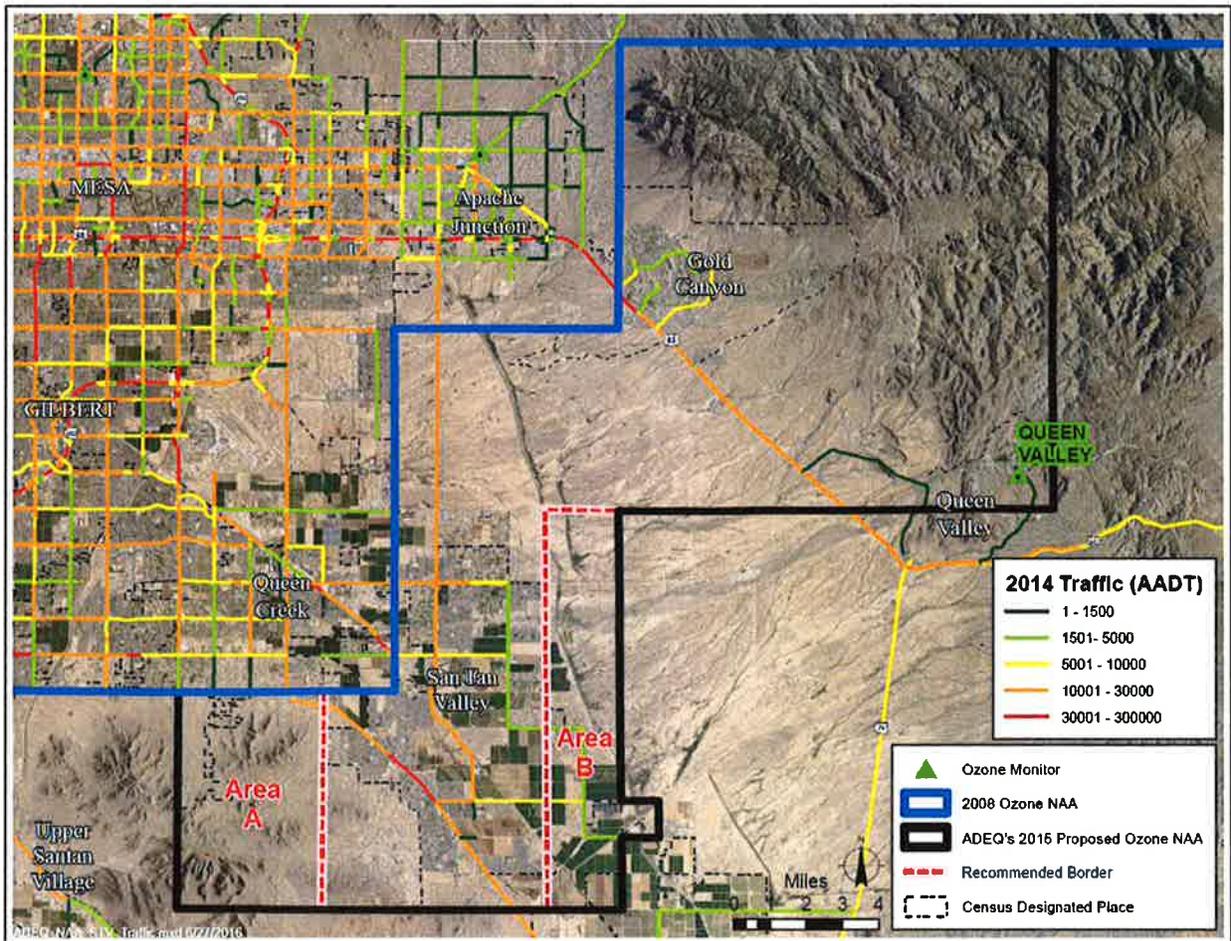


The additional vehicle traffic that would be included in the nonattainment area by capturing Area A and Area B is likewise insignificant (see Figure 3). Based on the graphical representation of vehicle traffic contained in the Draft Report, and using the upper ends of the ranges provided, it is conservatively estimated that 30,000 annual vehicle miles traveled (VMT) is captured in Area A and 35,000 annual VMT is captured in Area B⁶. Compared to the

⁶ VMT value for Area A is based on 30,000 average annual daily traffic (AADT) for a 1 mile long road segment. VMT value for Area B is based on 10,000 AADT for a 1 mile long road segment and 5,000 AADT for a 5 mile long road segment.

31,334,133,501 total annual VMT captured in ADEQ's recommended 2015 ozone nonattainment boundary, the VMT included in Area A and Area B is 0.0002% of the total VMT captured. Excluding the VMT in both Area A and Area B from ADEQ's recommended nonattainment boundary results again has no impact on the percentage of VMT captured – either options would capture 89% of the annual VMT in entire Phoenix-Scottsdale-Mesa CBSA.

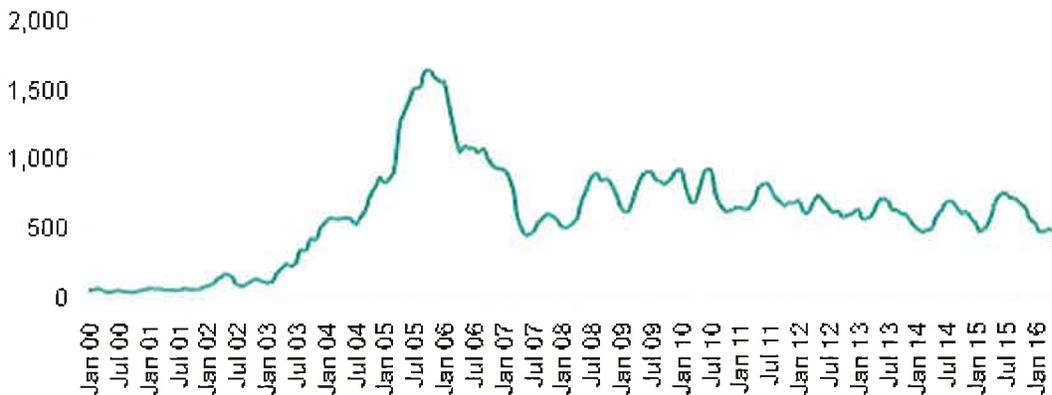
Figure 3. Proposed 2015 Pinal County Ozone Nonattainment Boundary - 2014 Traffic



The EPA Guidance recommends that states can review trends in population growth and patterns of residential and commercial development when evaluating the location of sources that may contribute to ozone concentrations in a given nonattainment area. When evaluating these trends, the data similarly demonstrates that it is not appropriate to include Area A and Area B in the recommended nonattainment area because there is little to no population growth or patterns of residential and commercial development in Area A or B.

In the Draft Report, ADEQ evaluates population growth for the affected areas but only does so using trends based on 2000 and 2010 census data. However, the population growth identified by the census data is not representative of current trends. Between 2000 and 2006, San Tan Valley, experienced exponential population growth due to an overall housing boom in the Phoenix metropolitan area. The population growth for San Tan Valley identified in the Draft Report (i.e., going from a non-CDP to a CDP with a population of 81,321) likely occurred in its majority during this period. In 2007, the Phoenix area housing market crashed and population growth in San Tan Valley slowed significantly. Since 2007, home sales have stabilized with no significant new growth occurring (see Figure 4). Currently, there are still several housing developments in San Tan Valley that remain unfinished since 2007.

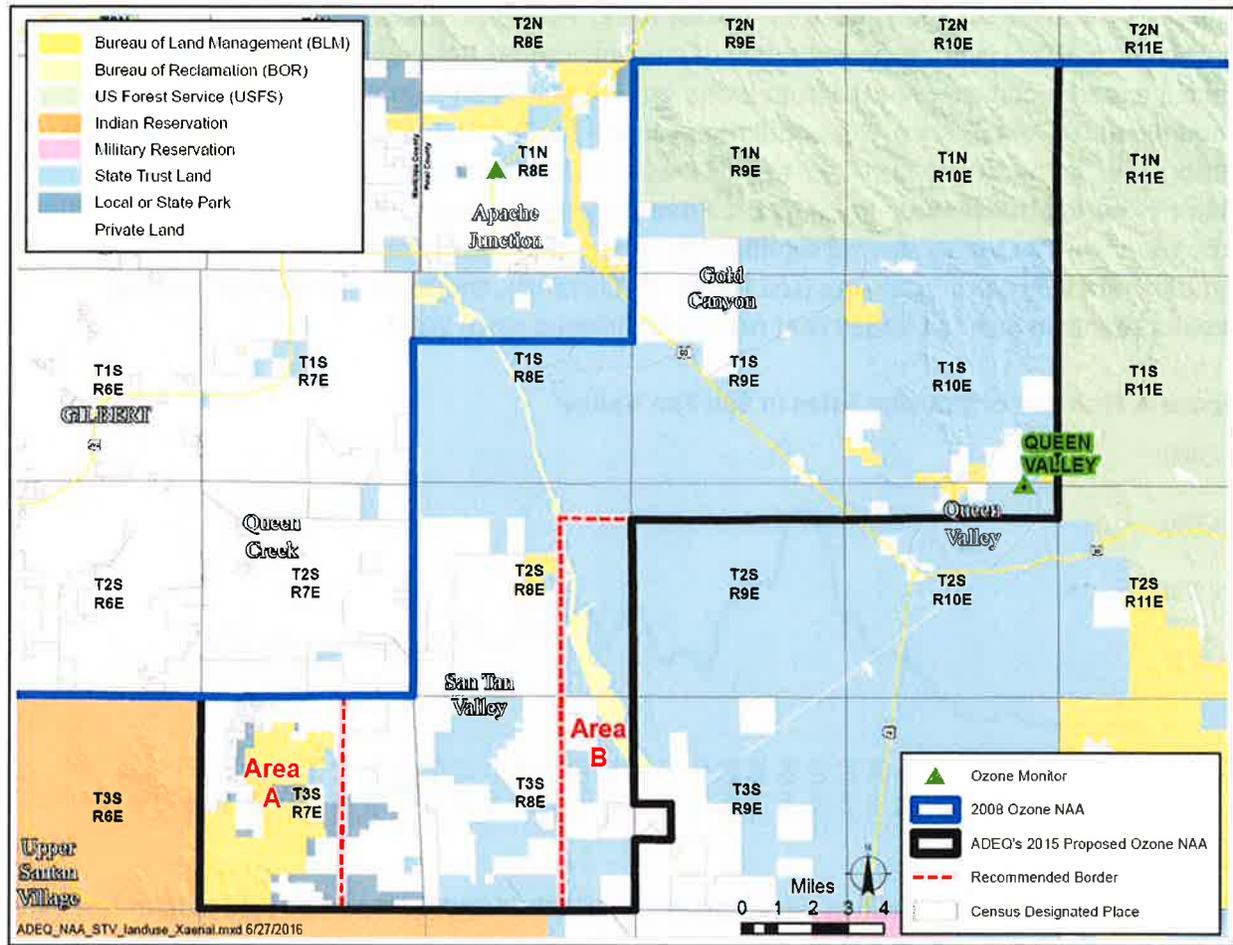
Figure 4. Number of Housing Sales in San Tan Valley⁷



Based on the unfinished housing developments and other undeveloped private land in San Tan Valley, it is expected that additional population growth in the area will likely occur within the boundaries of the San Tan Valley CDP. Outside of the boundaries of the San Tan Valley CDP, the land encompassed in Area A and Area B is largely either State Trust Land or land owned by the Bureau of Land Management or the Bureau of Reclamation which cannot be developed for private use under its current classification (See Figure 5).

⁷ http://www.trulia.com/real_estate/San_Tan_Valley-Arizona/market-trends/

Figure 5. Proposed 2015 Ozone Nonattainment Boundary Land Use



III. ADEQ Appropriately Excludes Other Neighboring Towns from the Recommended Nonattainment Area Boundary

In ADEQ's proposed Maricopa-Pinal nonattainment area boundary, ADEQ excludes other neighboring Pinal County towns beyond San Tan Valley. SRP supports ADEQ's conclusion that these neighboring towns are not contributing to the ozone exceedances at the Queen Valley monitor. The closest adjacent towns, Coolidge and Florence, have very small populations. As indicated in the Draft Report, the 2010 population for Coolidge and Florence are 11,825 and 25,536, respectively. And, of the 25,536 people in Florence, 9,349 of them are prisoners⁸ that do not drive and are a minimal source of local emissions. Additionally, as included in the Draft

⁸ Based on 2014 Arizona Department of Corrections data for Eyman and Florence prison complexes:
https://corrections.az.gov/sites/default/files/DAILY_COUNT/Dec2014/12082014_daily_count.pdf

Report, the wind patterns on days of historic exceedances at the Queen Valley monitor primarily come from the west and do not pass through Coolidge or Florence.

IV. Revisions to ADEQ's Recommended Maricopa-Pinal Nonattainment Area

Based on the comments contained herein, SRP encourages ADEQ to revise the contingent nonattainment boundary recommendations related to the Queen Valley monitor to exclude Area A and Area B and align more closely with the San Tan Valley CDP. Specifically, SRP recommends that the ADEQ make the following revisions to the Pinal County section of the proposed nonattainment area boundary:

- T3S, R7E: Exclude Sections 3-10, 15-22, and 27-34
- T2S, R8E: Exclude Sections 11-14, 23-26, and 35-36
- T3S, R8E: Exclude Sections 1-2, 11-14, 23-26, and 35-36
- T3S, R9E: Exclude Section 19

If you have questions or need additional information regarding these comments, please contact me at kelly.barr@srpnet.com or (602) 236-5262.

Sincerely,



Kelly J. Barr

cc: Tim Franquist, ADEQ (via email)
Marina Mejia, ADEQ (via email)
Heidi Haggerty, ADEQ (via email)
File: ORG 2-1-2

359665



ARIZONA MINING ASSOCIATION

916 W. Adams, Suite 2
Phoenix, AZ 85007
(602) 266-4416

Kelly Norton, AMA President

July 1, 2016

VIA Haggerty.Heidi@azdeq.gov

Ms. Heidi Haggerty
Air Quality Division, State Implementation Plan Section
Arizona Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007

Re: 2015 Ozone NAAQS Boundary Recommendation Draft Report

The Arizona Mining Association (“AMA”) respectfully submits the following comments to the Arizona Department of Environmental Quality (“ADEQ”) in regard to its *2015 Ozone NAAQS Boundary Recommendation Draft Report* (“2015 Draft Report”).

The AMA is a non-profit corporation comprised of entities engaged in mining and mineral processing in Arizona. Its members include (but are not limited to): ASARCO LLC, BHP Copper Inc., Freeport-McMoRan Inc., Capstone – Pinto Valley, KGHM – Carlota Copper Company, Hudbay – Rosemont Project, Resolution Copper Company, Florence Copper, Inc., Energy Fuels, Peabody Energy, and Golden Vertex. The AMA is the unified voice of responsible, sustainable and safe mining in Arizona. We support educational programs that demonstrate the importance and benefits of mining to the economy and the quality of life. Our members benefit from productive relationships and alliances with government, business associations and natural resource industry groups. Through our advocacy, we help Arizona continue to be a premier location for mining investment in the U.S.

The Environmental Protection Agency (“EPA”) published on October 26, 2015 its Final Rule revising the ozone standard to a more stringent and unachievable NAAQS of 70 ppb (“2015 Ozone NAAQS”). As such, Section 107(d)(1)(A) of the Clean Air Act (“CAA”) mandates the submittal of initial designation recommendations to the EPA by Governor Ducey by October 2016. Thus, the AMA recognizes that this 2015 Draft Report has been prepared in accordance with the CAA, as well as that of A.R.S. 49-405.

The AMA is well aware of the State’s conundrum in preparing this 2015 Draft Report. After all, it continues to exploit every venue and opportunity to express to the EPA and the U.S. Congress its legitimate concerns in relation to a more stringent ozone standard. ADEQ has even assisted Senator Jeff Flake on conceptualizing and drafting numerous proactive legislative measures geared towards improving the CAA’s functionality. While the AMA appreciates all these efforts, we especially praise ADEQ and the Arizona Attorney General for their swift legal action on October 29, 2015 in response to the EPA’s Final Rule. We wholly support the State in its lawsuit challenging the EPA’s 2015 Ozone NAAQS.



ARIZONA MINING ASSOCIATION

916 W. Adams, Suite 2
Phoenix, AZ 85007
(602) 266-4416

Kelly Norton, AMA President

While the AMA shares the State's frustration, we recognize that in order to minimize federal intrusion it is imperative to move forward on this parallel track of complying with the CAA while legally challenging the new standard. Therefore, while the AMA submits the following comments to the 2015 Draft Report, we reiterate our objections to the 2015 Ozone NAAQS as verbally expressed during the stakeholder meetings and public hearings, and submitted in writing to the EPA as identified by docket numbers: EPA-HQ-OAR-2008-0699-1637; EPA-HQ-OAR-2013-0572-0090 & 0174; and EPA-HQ-OAR-2016-0097-0052.

I. Public Participation

We commend ADEQ for its transparent and inclusive process of developing the 2015 ozone boundary recommendations for Arizona. The AMA was in attendance at each of the multiple public stakeholder meetings held by ADEQ; and we appreciate that it encouraged feedback, asked for input and readily answered questions. Upon review of the 2015 Draft Report, it is apparent that the comments expressed during these meetings had been given due consideration as ADEQ prepared the boundary recommendations.

II. Attainment or Unclassifiable Areas Recommendation

The AMA supports the recommendation that most of Arizona be designated attainment/unclassifiable for the 2015 Ozone NAAQS. ADEQ's evaluation of the three most recent consecutive years (2013-2015) of certified air data thoroughly validates this recommendation.

III. Phoenix Nonattainment Area Recommendation

The AMA recognizes that the State must submit initial boundary designations based on its evaluation of the three most recent consecutive years (2013-2015) of certified air data, while the EPA will be basing its final determinations for boundary designations using air data from the 2014-2016 years. Since the Greater Phoenix Area is already in a moderate nonattainment designation for the 2008 ozone standard of 75 ppb, we support ADEQ's decision to generally rely on the 2008 ozone nonattainment area boundary as a basis for its 2015 ozone boundary recommendation.

ADEQ's original proposal for Phoenix Nonattainment Area 2015 ozone boundary expanded the 2008 boundary to include two additional monitors: Gila County's Tonto National Monument ozone monitor and Pinal County's Queen Valley ozone monitor. ADEQ explained that neither of these monitors is currently attaining the new 2015 Ozone NAAQS. However, Maricopa Association of Governments argued that it believes the 2014-2016 air data will reveal that one, the other or both of these monitors will be in attainment; thus encouraged ADEQ to present its recommendations via a "contingent-based" approach.

While the AMA generally supports ADEQ's initial designation recommendations, we propose that it remove the contingent recommendations presented in sections 1.1.1 and 1.1.2.¹ In the time since the 2015 Draft

¹ Arizona Department of Environmental Quality, 2015 Ozone NAAQS Boundary Recommendation Draft Report, pp. 4-6, (2016).



ARIZONA MINING ASSOCIATION

916 W. Adams, Suite 2
Phoenix, AZ 85007
(602) 266-4416

Kelly Norton, AMA President

Report was released for public comment, air data at the Pinal County Queen Valley ozone monitor has revealed that it is in violation of the 2014-2016 design value for the 2015 Ozone NAAQS. Therefore, the aforementioned contingent recommendations are no longer viable options.

It deeply concerns the AMA that the Gila County Tonto National Monument ozone monitor, located in the Tonto National Forest and where there has been no growth in the immediate area, is in jeopardy of being in nonattainment. However, ADEQ's analysis of back trajectories for this monitor verify that emissions impacting it are from the Phoenix area; and attributes the exceedances being triggered as a result of the strong winds from the southwest pushing the ozone plume up over the mountains to the east. Therefore, the AMA supports ADEQ's recommendation to include the immediate surrounding area of the Gila County Tonto National Monument ozone monitor.

The AMA recognizes that the San Tan Valley area has experienced the most growth in the Greater Phoenix Area over the past decade, thereby having a significant impact on the Pinal County Queen Valley ozone monitor. Furthermore, as ADEQ points out, this particular monitor is listed as a Photochemical Assessment Monitoring Stations ("PAMS") site in its network monitoring plan as it is "considered to be downwind of the source of maximum precursor emissions in the Phoenix metropolitan area" and is thereby impacted by the emissions activity of the 2008 Ozone Nonattainment Area and San Tan Valley². For these aforementioned reasons, we support ADEQ's boundary recommendations for the inclusion of the area specified around the Pinal County Queen Valley ozone monitor.

IV. Yuma Nonattainment Area Recommendation

Yuma is in an impossibly difficult position in regard to all air regulatory matters. It is a prominent gateway for domestic and international travelers migrating to and from Mexico and the vacation destination hot spots of Southern California. ADEQ notes that "approximately 95.5% of all VOCs in the county are estimated to be from biogenic emissions."³ There are very few point sources in Yuma County; and, as ADEQ states: "There is relatively little population or industry in the area, and yet concentrations at the monitor are several parts per billion higher than the standard."⁴ ADEQ points out that transport and background "clearly affects nonattainment at the Yuma monitor;"⁵ and establishes that "Yuma is not an urban area that substantially contributes to its own nonattainment."⁶ Therefore, ADEQ's recommendation to limit the boundary designation to the highest populated area, while also including the existing major and possibly impactful point sources, is very reasonable. Furthermore, it argues that establishing a larger nonattainment area "would not protect public health or the environment because there would be minimal benefits from future controls on what few emissions" exist outside the proposed boundary designation.⁷ We recognize that the State is forced to present

² Id., pp. 75-76.

³ Id., p. 79.

⁴ Id., p. 87.

⁵ Id.

⁶ Id., p. 95.

⁷ Id., p. 96.



ARIZONA MINING ASSOCIATION

916 W. Adams, Suite 2
Phoenix, AZ 85007
(602) 266-4416

Kelly Norton, AMA President

its initial designation recommendation for the area, thus the AMA supports ADEQ's recommendation for the Yuma Nonattainment Area. However, the AMA believes that it is extraordinarily irresponsible for the EPA to hold accountable an area that has absolutely zero control over the emission sources principally responsible for its nonattainment status.

The AMA recognizes that the health and welfare of the people and environment in the Yuma vicinity are at the mercy of Mexico, California, and the EPA; especially since only a mere 6% of emissions impacting the monitor are attributable to anthropogenic sources originating within Arizona.⁸ Additionally, ADEQ explains that "background and transport have proportionally increased effect on nonattainment concentrations, especially as background levels continue to increase in magnitude."⁹ Background, international and interstate transport, and vehicular emissions predominantly impact the State's ability to achieve the 2015 Ozone NAAQS; and yet, the State is required to implement control measures on areas that have very few sources within its power to control. The AMA is keenly aware that these are the State's challenges in preparing its 2015 Draft Report; and, we appreciate its judicious consideration in its recommendations.

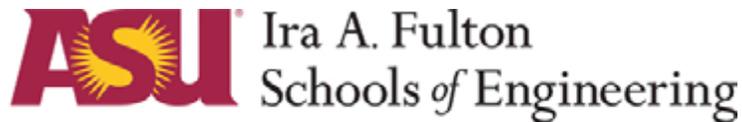
Sincerely,

A handwritten signature in black ink, appearing to read "K. Shaw Norton", is written over a horizontal line.

Kelly Shaw Norton
President,
Arizona Mining Association

⁸ Id., p. 96.

⁹ Id., p. 25.



ARIZONA STATE UNIVERSITY

School for Engineering of Matter, Transport and Energy 480-965-3291
Box 876106 FAX: 480-727-9321
Tempe, AZ 85287-6106 E-mail: semte@asu.edu

3 August 2016

Mr. Timothy Franquist

Director, Air Quality Division

Arizona Department of Environmental Quality

1110 West Washington Street

Phoenix, Arizona 85007

Dear Mr. Franquist:

It's been a pleasure to participate in the recent round of meetings concerning proposed new boundaries for nonattainment areas for ozone. I offer the following comments on Arizona Department of Environmental Quality's *2015 Ozone NAAQS Boundary Recommendation Draft Report*, Air Quality Division, 31 May 2016 proposed draft. These comments are in a separate document that accompanies this letter called "pHyde comments on O3 boundary report". I would be happy to discuss these matters with you and your staff and can be reached at 602 451 3487 or at phyde@asu.edu.

Cordially,

Peter Hyde

Adjunct Research Professor

3 August 2016

Comments on Arizona Department of Environmental Quality's 2015 Ozone NAAQS Boundary Recommendation Draft Report, Air Quality Division, 31 May 2016 proposed draft

The report clearly stated the rationale and the specific recommendations for the new ozone boundaries; and in this sense, the report is sound and defensible, as far as the subjects it covered. Two subjects that I had hoped would be discussed were not: namely, tribal nonattainment areas and the absence of much future outlook in setting the boundaries. In addition to some thoughts on control strategies, these topics will be discussed below, after a few specific statements which deserve comment.

Specifics

p. 21, 2nd paragraph: "According to CAA section 109, EPA must set *emission* standards for criteria pollutants, also known as National Ambient Air Quality Standards"

As stated, this appears to confuse air pollutant emissions with their resultant concentrations: a clearer statement would be as follows:

According to CAA section 109, EPA must set air quality standards for criteria pollutants, also known as National Ambient Air Quality Standards, and these standards are expressed as concentrations of the various air pollutants, concentrations above which the health or welfare of the populace is endangered.

p.30, Table 2-1

Comparing region-wide emissions totals has always been somewhat difficult, in spite of valiant efforts on EPA's part to standardize emission calculations. Below is a part of Table 2-1, with some additions.

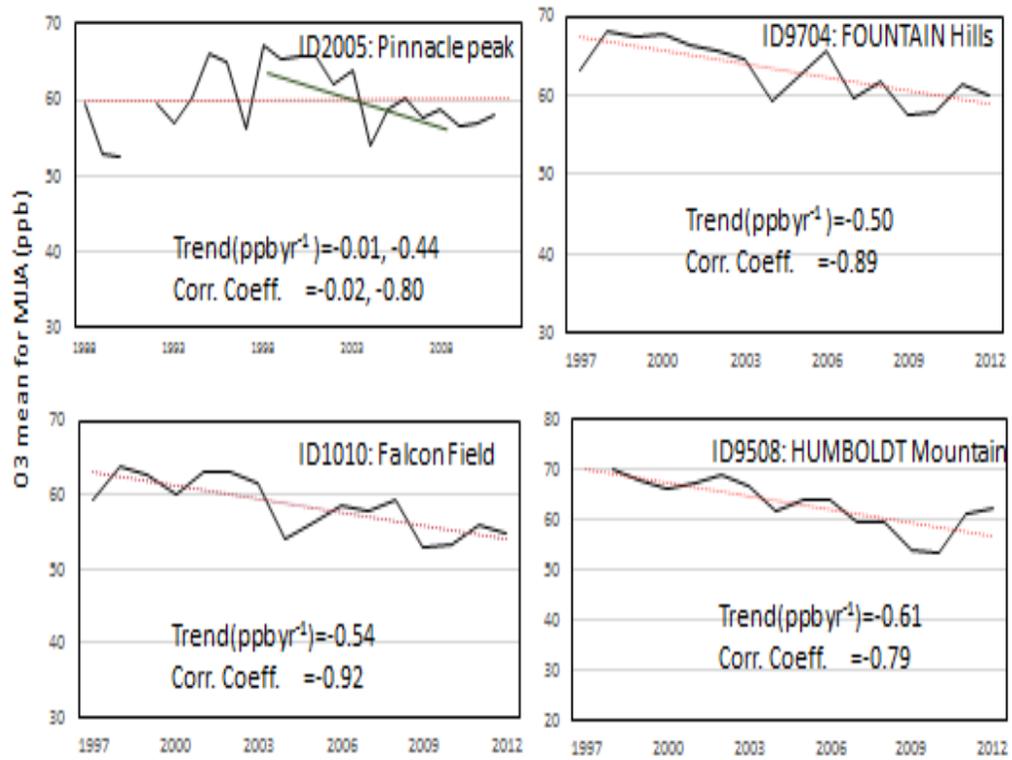
region	Nox (tpy)	VOC (tpy)	population	VOC/Nox		Nox per capita	VOC per capita
Dallas Fort Worth	178,595	307,050	6,426,214	1.72		0.028	0.048
Phoenix area	103,347	421,857	4,192,887	4.08		0.025	0.101

Noteworthy differences between the two regions are the widely divergent VOC/NOx emission ratios: 4.1 for PHX but only 1.7 for Dallas. And while the NOx emissions per capita in the two regions is the same, the VOC emissions per capita in PHX are twice that of Dallas. Differences such as these strain the credulity of scientists and general public alike.

p. 36, Figures 3-6 and 3-7: long-term ozone design value trends

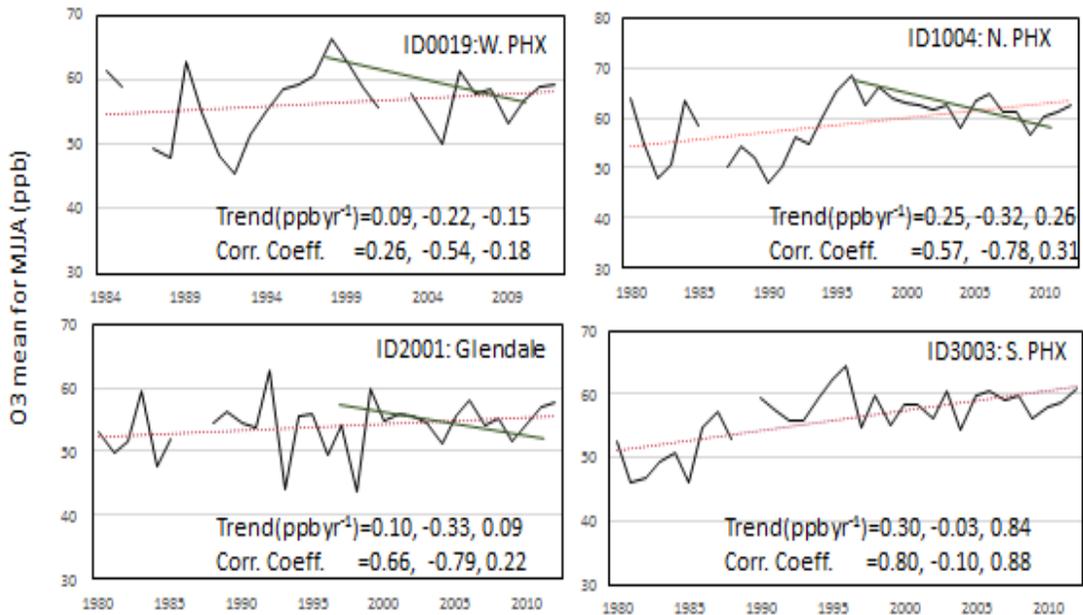
While these graphs most certainly illustrate the downward trends at the Tonto and Queen Valley ozone monitoring sites, they visually over-emphasize the trends because the y-axis does not begin at zero. This is an old trick in displaying information graphically. If these are replotted with the y-axis starting at zero, then the eye sees them as nearly flat, with only a slight downward trajectory. On the subject of trends my colleague Dr. Jialun Li put these ozone trends together recently. These trends are more robust though less regulatorily relevant than the design value trends in the May report. Each data point is the 120 day average (May, June, July, and August) of the daily maximum 8-hour ozone concentration for each calendar year. Note that while the eastern sites display downward trends, the central-city sites show the opposite. Though explanations for these discordant trends vary, the consensus invokes the greater areal extent of the Phoenix area now, in contrast to its smaller extent in the earliest years of the trend. A larger area that has had increased ozone precursor emissions in the west Valley through time translates into longer transport times as air parcels transit from far west and west through the central area and on towards the eastern fringe. Longer transport times mean that peak photochemical production hours come later in the central area, and come too late on the eastern fringe to sustain the higher concentrations measured in earlier years. This idea has not been tested and remains somewhat speculative.

Mean 8-hr maximum ozone concentration for MJJA at eastern sites



R>0.482 for 15 years R>0.349 for 30 years (p<0.05)

Mean 8-hr maximum ozone concentration for MJJA at central sites (cont')



Note: not all sites begin with the same year

R>0.482 for 15 years R>0.349 for 30 years (p<0.05)

p. 48, Table 3-6

Conspicuous by their absence are biogenic emissions of VOC, unless they've been incorporated into the "nonpoint" category. Perhaps some explanation would help here.

p. 65, Figure 3-37: Supersite summer ozone concentrations from HYSPLIT

This figure alone, considering only those eight-hour ozone concentrations in excess of 70 ppb, would strongly suggest that ozone precursor emissions occurring to the south and east of central Phoenix – including virtually all of northern Pinal County -- contribute to the elevated ozone concentrations measured at the JLG Supersite. This trajectory map is especially robust, as it consists of roughly 100 days times two years for a sample size of 200 for all concentrations. Presumably those concentrations in excess of 70 ppb outnumber the sample size of 10, in the ten highest ozone days trajectories (Figure 3-36, p. 64). Maps such as Figure 3-37 ought to be done for at least one eastern fringe site (e.g. Pinnacle Peak) and two contentious monitors of Tonto and Queen Valley.

Tribal considerations

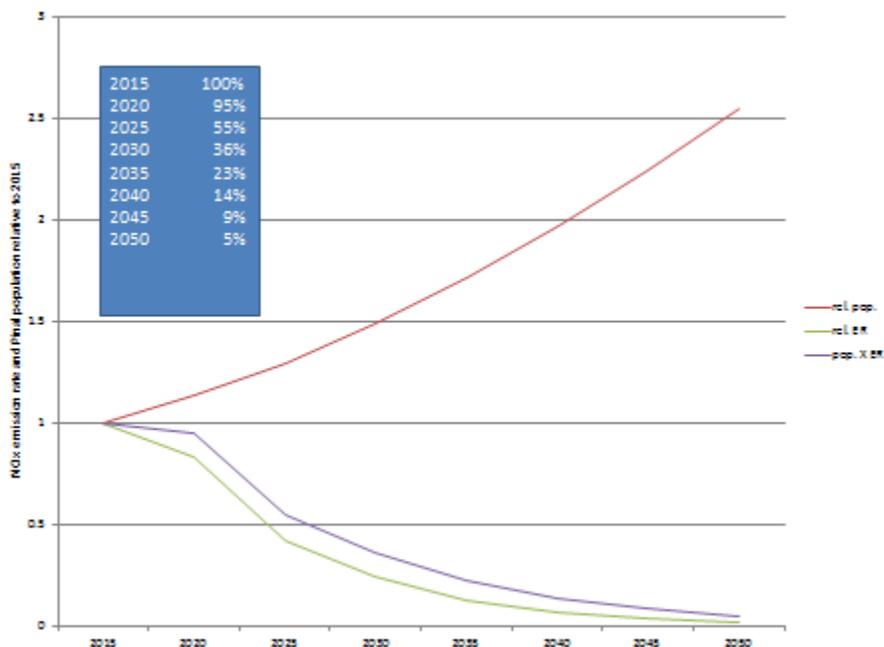
Granted that Native American Indian communities are sovereign nations and are obligated to submit to EPA their own recommendations for ozone boundaries, doesn't it make more sense, that in one urban area with three Indian communities -- Fort McDowell, Salt River Pima Maricopa, and Gila River -- all of whose lands are part and parcel of the entire Phoenix area -- there would be some discussion of tribal lands, emissions, and ozone concentrations? Furthermore, what attempts, if any, has ADEQ made to confer with the Indian communities about this subject, and, ideally, to present to EPA a unified recommendation that reflected all of the interested parties? Please give this matter some serious thought, as EPA should, for such coordination could at the least result in a more consistent boundary determination for the entire area; and, moreover, avoid conflicting boundary recommendations.

Future outlook on emissions is missing

If the newly promulgated ozone standard has a lifetime of years to a decade or two, and if the Phoenix area continues to struggle to meet this standard, then setting boundaries for a nonattainment area ought to consider future populations and emissions. The population maps and tables of Section 3.4.2.3 are limited to the years 2000 and 2010, despite the predictions for robust growth in Maricopa and Pinal Counties. For example, the chart below shows Pinal County's population more than doubling from 2015 to 2050 -- a 35 year span.



As a crude proxy for nitrogen oxides emissions from Pinal County, the following chart shows the population, overall vehicular NOx emission rate, and their product relative to the year 2015. Note that even with a decided decline in the NOx emission rate from 2015 to 2025, the increasing population counters this trend such that the product of the two (population x emission rate) remains nearly constant for 2015 – 2020 and still retains over half of its 2015 value ten years hence. The omission of future considerations in the air pollutant emission picture for the two counties is a serious one.



Sources: Arizona Department of Administration, “Arizona State and County Population Projections: 2015 – 2050, medium series” <https://population.az.gov/population-projections>, accessed May 2016

U. S. EPA, 2015, “Exhaust on-road final report, MOVES”, EPA-420-R-15-005, October

Unconventional strategies to reduce ozone precursor emissions

With most of the low-hanging fruit already picked, officials in ozone nonattainment areas face an exceptionally difficult task in designing, promoting, and obtaining new rules, regulations, or enabling legislation for additional control strategies to reduce ozone precursor emissions. To this end Phoenix area environmental officials in the Arizona Department of Environmental Quality, in the Maricopa County Air Quality Department, in the Maricopa Association of Governments, and in its member cities and towns ought to consider strategies that reduce nitrogen oxides emissions by extensive electrification of passenger vehicles, by adopting more effective energy and conservation measures in buildings, and increasing the share of wind and solar power in the

electric sector. These strategies are explained and analyzed in D. H. Loughlin, K. R. Kaufan, C. S. Lenox, and B.J. Hubbell 's 2015 paper entitled "Analysis of alternative pathways for reducing nitrogen oxide emissions", *Journal of Air and Waste Management Association*, **65** (09): 1083 – 1093. The authors are all U.S. EPA staff, in either the Office of Research and Development or in the Office of Air Quality Planning and Standards.