

SIP Challenges For Houston

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What I am Going to Cover

- NAAQS Review Schedule
- Reconsideration of Ozone standard
- 185 fees
- SIP Litigation

Ongoing NAAQS Reviews: Current Schedule

MILESTONE	POLLUTANT						
	Lead	NO ₂ Primary	SO ₂ Primary	Ozone	NO ₂ /SO ₂ Secondary	CO	PM
NPR	New schedule being developed	<u>Jun 26, 2009</u>	<u>Nov 16, 2009</u>	Jan 7, 2009	<u>July 12, 2011</u>	<u>Oct 28, 2010</u>	Dec. 2010
NFR	<u>Oct 15, 2008</u>	<u>Jan 22, 2010</u>	<u>Jun 2, 2010</u>	Aug 31, 2010	<u>Mar. 20, 2012</u>	<u>May 13, 2011</u>	Oct 2011

NOTE:

Underlined dates indicate court-ordered or settlement agreement deadlines.

Anticipated NAAQS Implementation Milestones

Pollutant	NAAQS Promulgation Date	Designations Effective	110(a) SIPs due (3 yrs after NAAQS promulgation)	Attainment Demonstration Due	Attainment Date
PM _{2.5} (2006)	Sept 2006	Nov 2009	Sept 2009	Nov 2012	Nov 2014/2019
Pb	Oct 2008	Nov 2010/2011 (extra time for new monitors)	Oct 2011	June 2012/2013	Nov 2015/2016
NO ₂ (primary)	Jan 2010	Feb 2012/2013 ("unclassifiable" likely for most areas)	Jan 2013	Aug 2014/2015	Feb 2017
SO ₂ (primary)	June 2010	July 2012	June 2013	Jan 2014	July 2017
Ozone	Aug 2010	Aug 2011	Aug 2013	Dec 2013	Aug 2017 (Moderate)
CO	May 2011	June 2013	May 2014	Nov 2014	May 2018
PM _{2.5} (2011)	July 2011	Aug 2013	July 2014	Aug 2016	Aug 2018/2023 ⁴

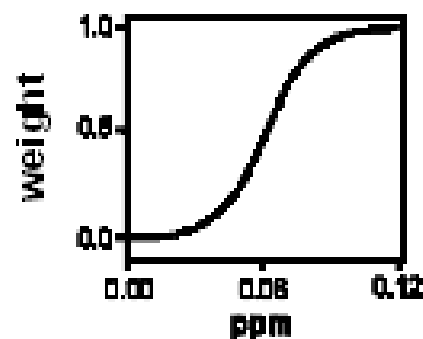
Proposed Ozone Standard

- Proposed New Standard
 - Primary Range 60-70 ppb
 - Secondary Standard W126 7-15 ppm-hrs
- Public Hearings
 - February 2, 2010 in Houston, Texas and in Arlington, Virginia
 - February 4, 2010 in Sacramento, California
- Final Standard August 31, 2010

Understanding the W126 Form (from Erika Sasser)

Steps in calculating W126 value for a particular site:

1. Measure hourly O_3 value
2. Weight hourly O_3 value based on concentration: lower concentrations receive less weight than higher concentrations
3. Add the weighted hourly O_3 values for each hour of a 12-hour daylight period (8 am – 8 pm) to calculate daily value for each day
4. Sum daily values over consecutive 3-month period with highest ozone levels
5. W126 = Sum of all weighted daily O_3 values over highest consecutive 3-month period, in ppm-hrs



Example of weighting over 5-hour period:

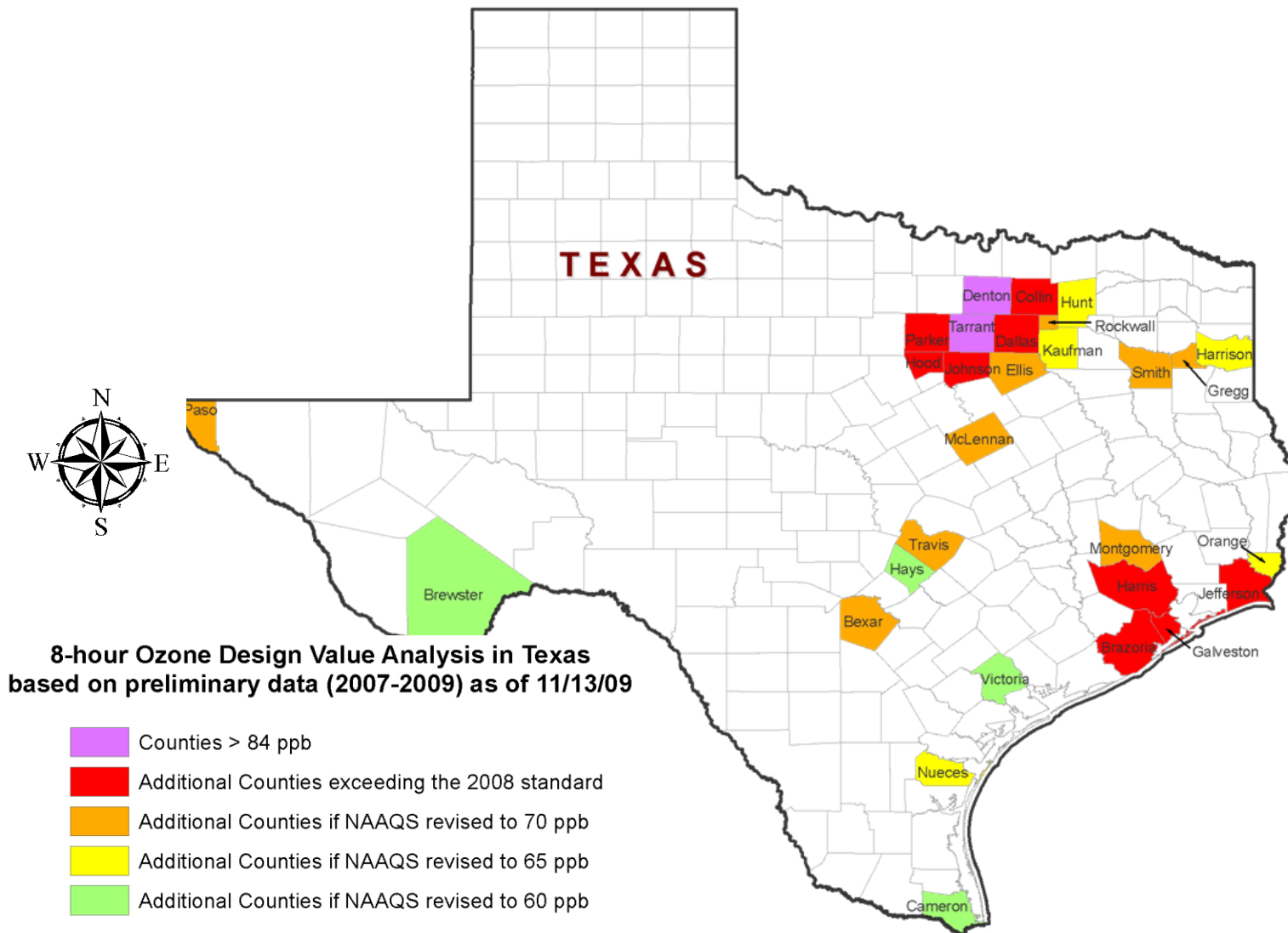
Hourly O_3 (ppm)	Weight	W126 (ppm-hrs)
0.03	0.01	0.00
0.05	0.11	0.01
0.06	0.30	0.02
0.08	0.84	0.07
0.10	1.0	0.10
SUM:		0.20

Daily value = sum of values over 12 daylight hours

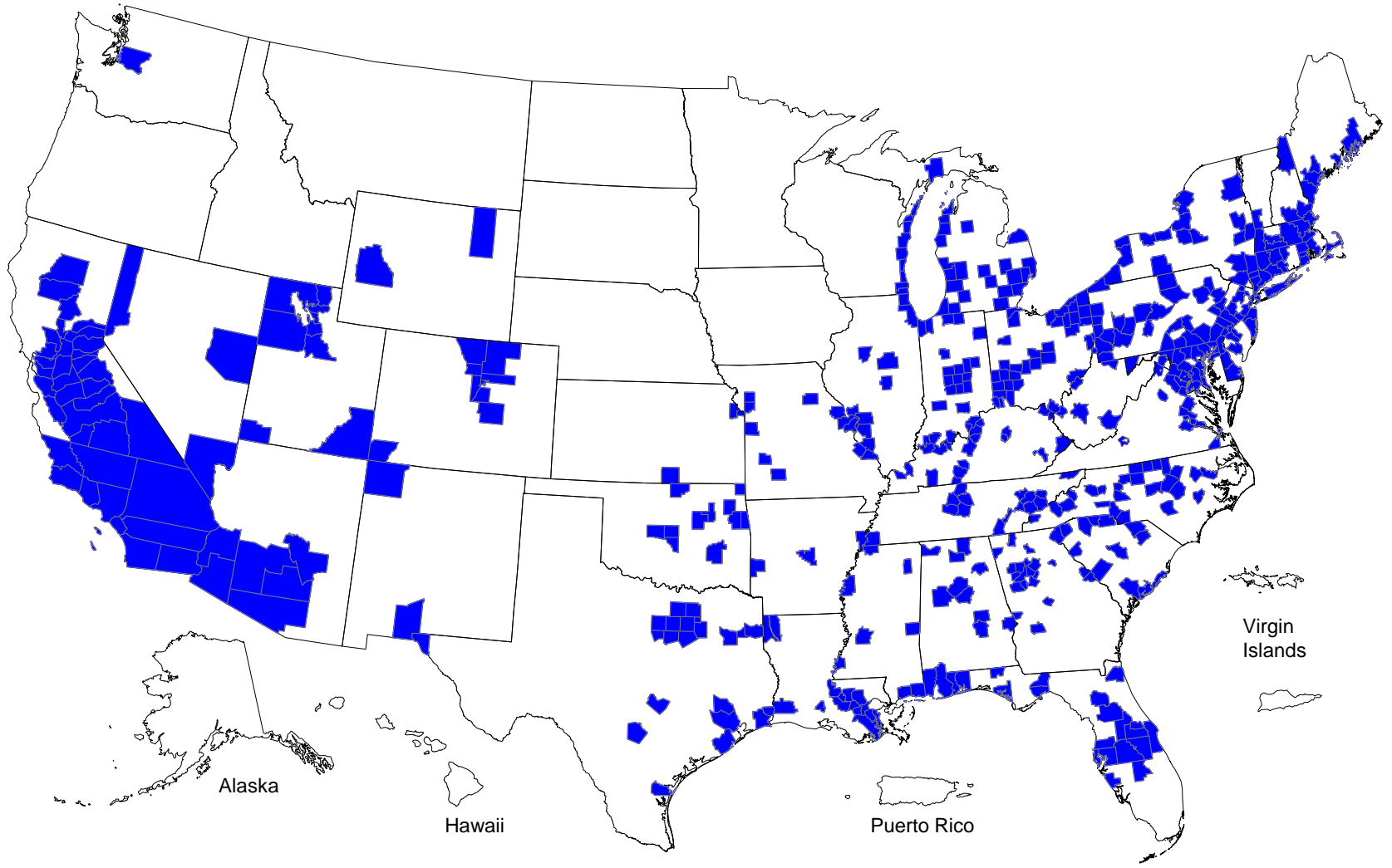
Designation Schedule

- Final Standard 8/31/2010
- Governor's Recommendation 1/7/2011
- EPA's 120 day letter 3/2011
- Final Designations 7/2011

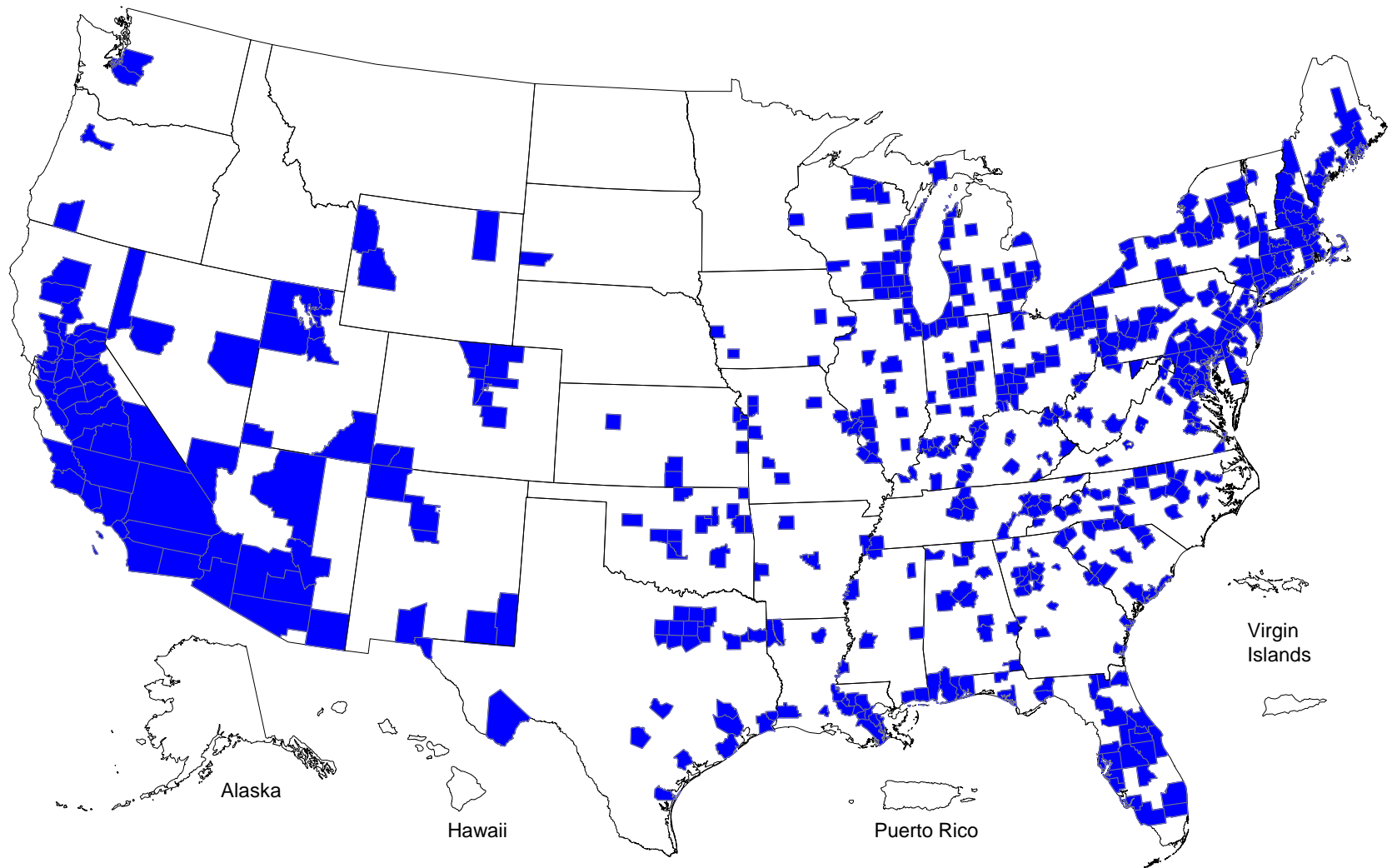
Texas Ground Level Ozone Concentrations



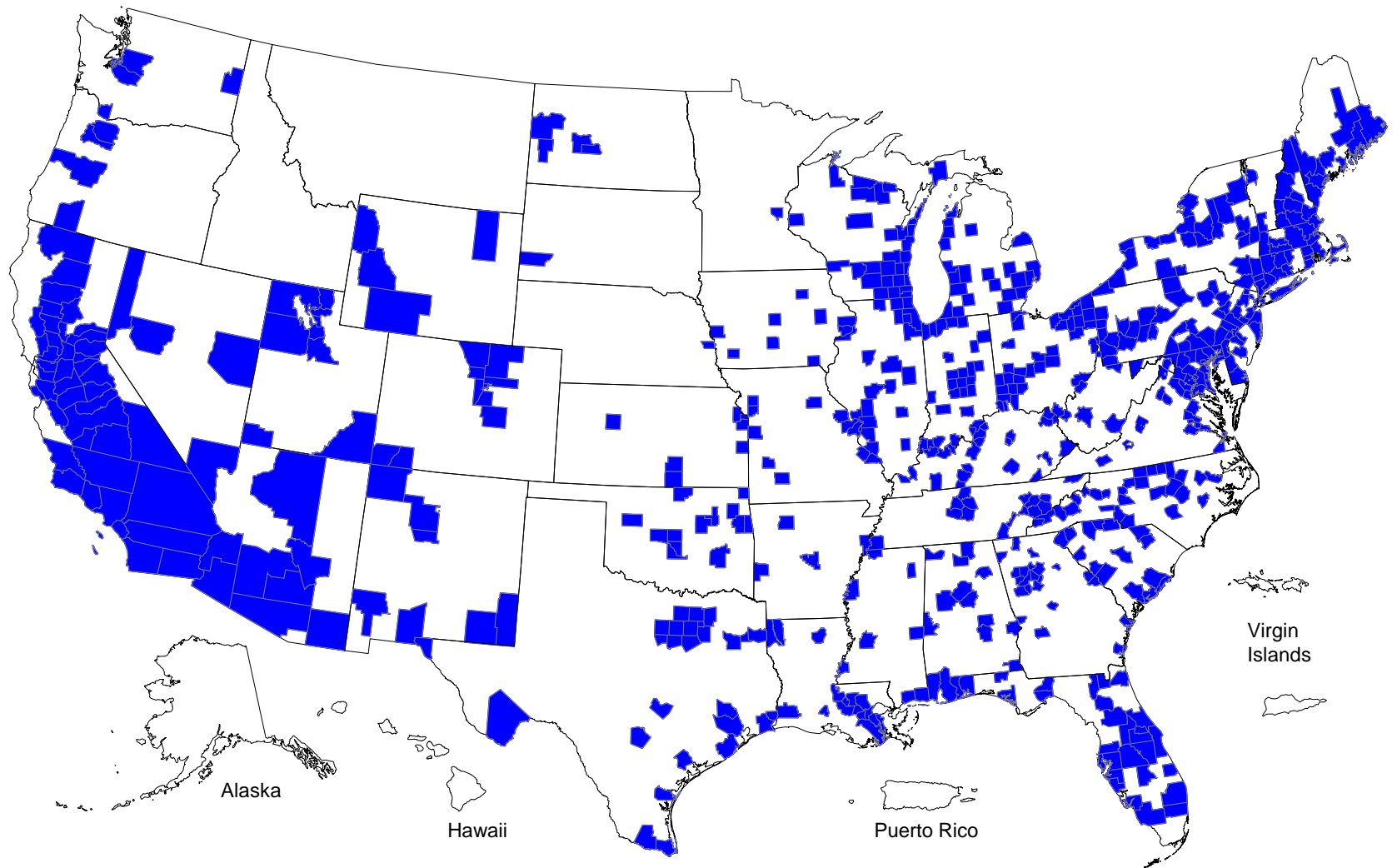
Unofficial Counties with 2006-2008 8-hour Design Value Above 0.070 ppm



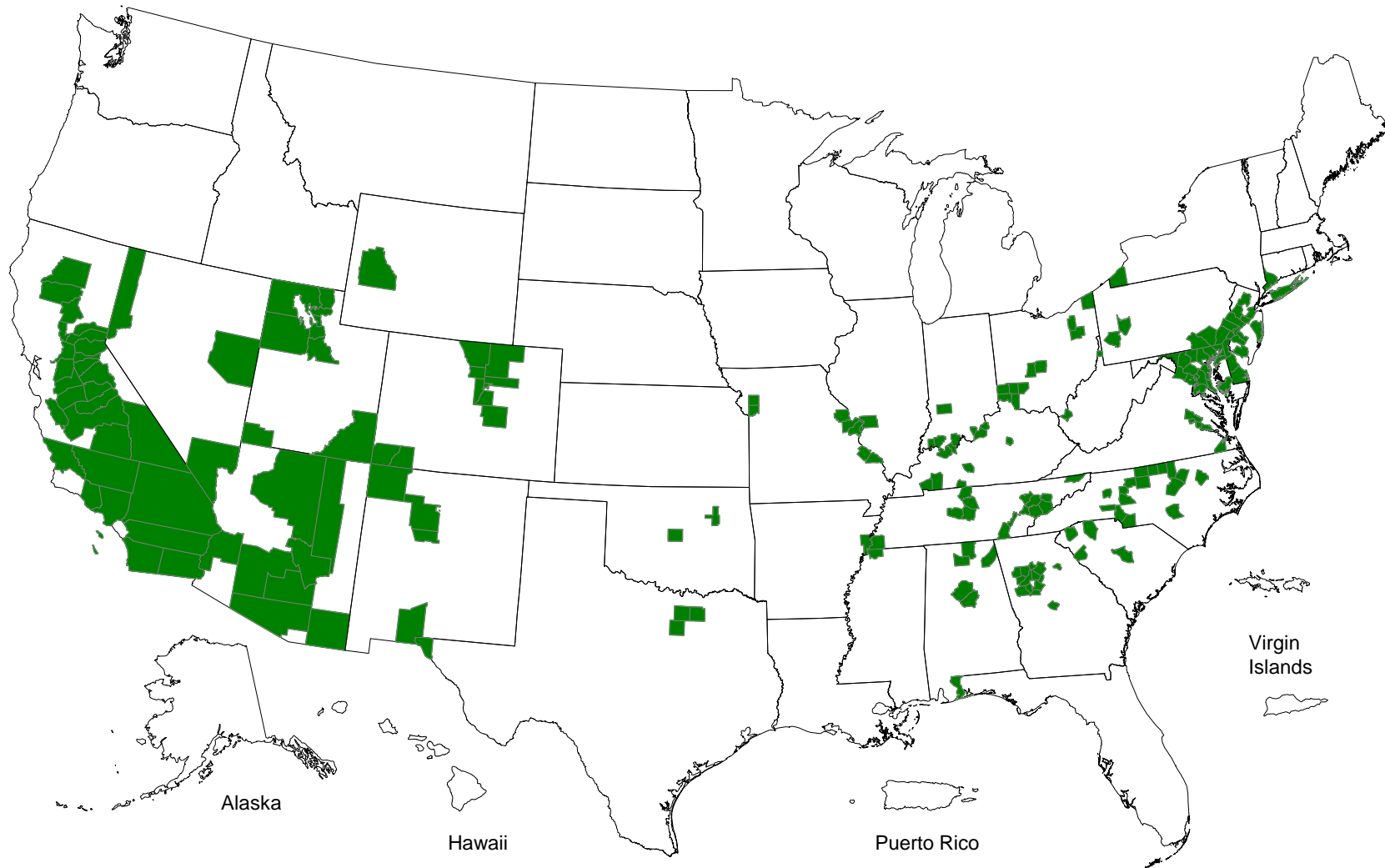
Unofficial Counties with 2006-2008 8-hour Design Value Above 0.065 ppm



Unofficial Counties with 2006-2008 8-hour Design Value Above 0.060 ppm



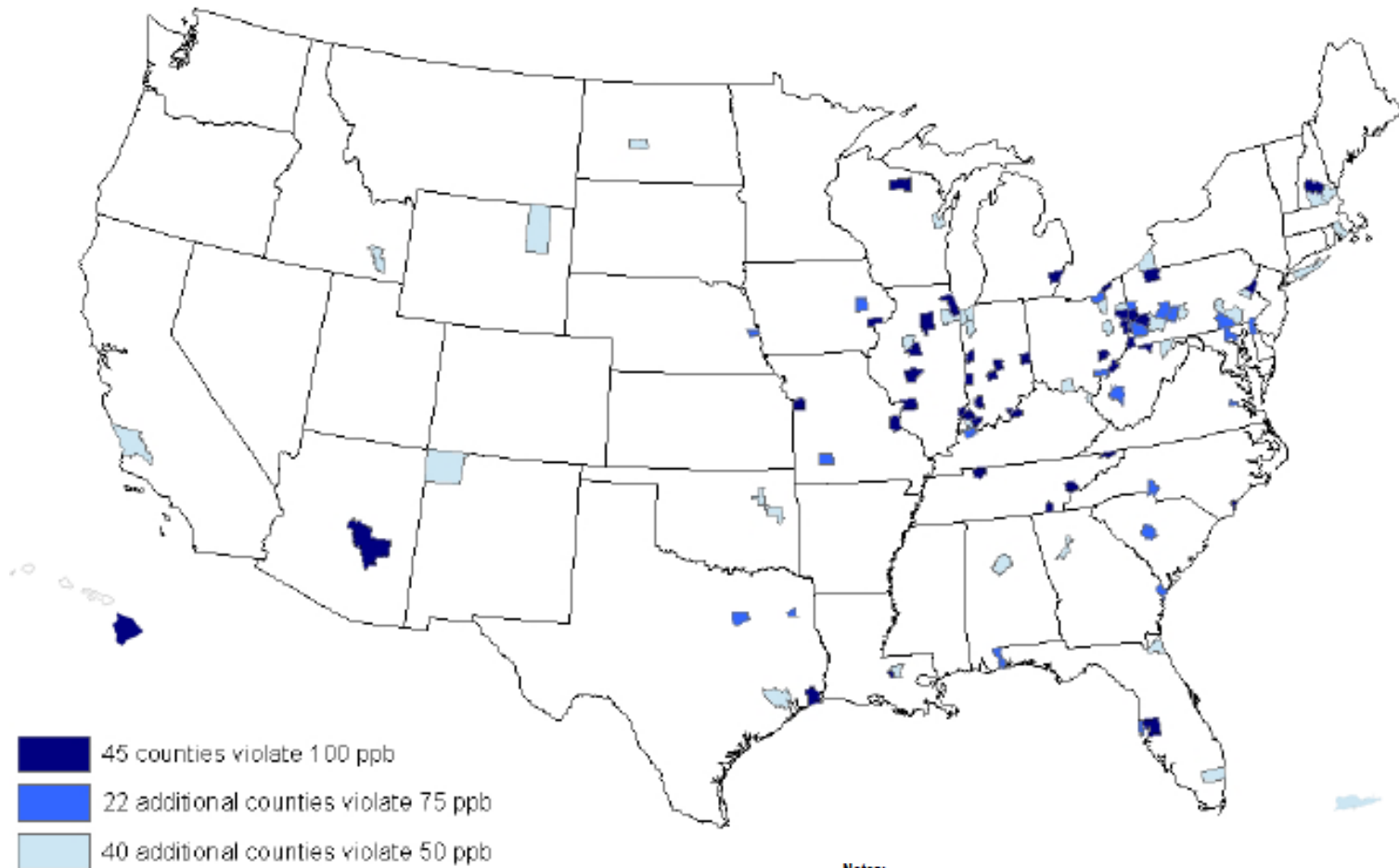
Unofficial Counties with 2006-2008 W126 Value Above 15 ppm-hours



Sulfur Dioxide Standard

- Proposed between 50 and 100 ppb
- Hourly Basis
- Final Standard due June 2, 2010
- To support the proposed 1-hour SO₂ NAAQS, EPA is proposing two categories of required monitors, with ALL sites required to be source-oriented and situated for maximum ground-level concentrations
- Proposed SO₂ network would have ~348 sites nationwide
- EPA is proposing to require that all new SO₂ monitors be operational by Jan. 1, 2013

Counties with Monitors Currently Violating Proposed Range for 1-hour Sulfur Dioxide Standard, 50 – 100 parts per billion



Notes:

¹Based on the most recent air monitoring data (2006 – 2008).

²EPA will *not* designate areas as nonattainment on these data but likely using 2009 – 2011 data.

³Data are shown for monitors that met the following criteria: 75% of the day has valid hourly values, 75% of the days in a quarter are valid, and all 4 quarters for each of the three years are valid.

185 fees

- Plan required to impose fees for severe areas that miss their attainment date
- EPA issued guidance January 5, 2010

Guidance says 185 fees are not required for areas that have attained the standard because of permanent and enforceable measures.

EPA must do rulemaking to suspend fee requirement.

Litigation

- BCCA litigation on Texas Permits
- LEAN Baton Rouge litigation
- Wild Earth Guardian Transport SIPs
 - Oklahoma
 - New Mexico
- Wild Earth Guardian Numerous SIPs New Mexico and Albuquerque
- Sierra Club Infrastructure SIP Louisiana
- Wild Earth Guardian Findings of Attainment Houston and Beaumont

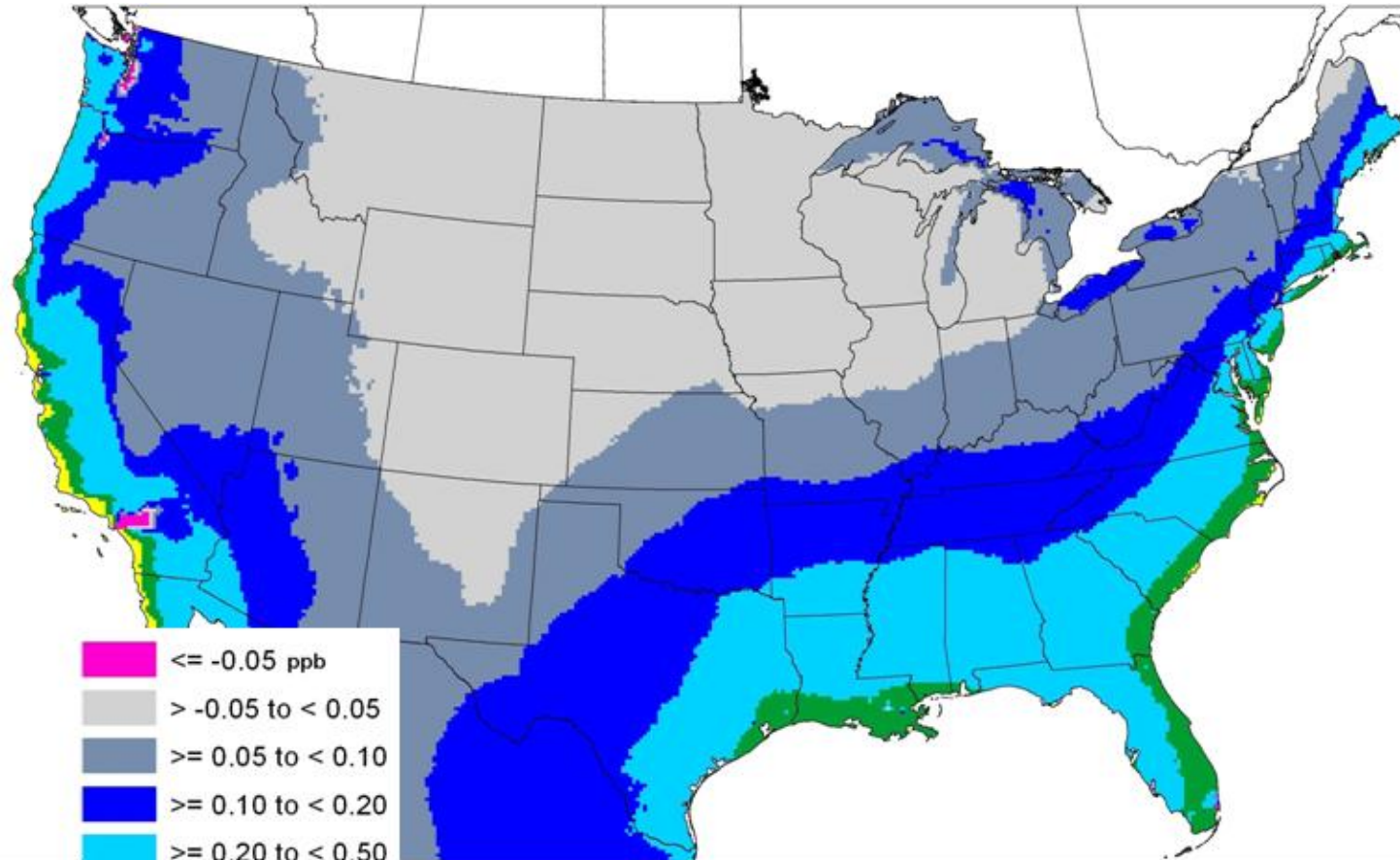
Priority Actions 2010

- Regional Haze SIPs
 - New Mexico
 - Oklahoma
- Redesignations
 - West Memphis
 - Beaumont/Port Arthur
- Designations-Lead
 - Collin County

Priority Actions Continued

- Designations-Ozone
- Reclassification-Dallas/Fort Worth
- Transport SIPs-
 - Oklahoma/New Mexico
- Infrastructure SIPs
- Texas Permits

2020 Potential ECA Ozone Reductions



Ozone (Smog) reductions from the proposed ECA reach well into the U.S. interior

2020 Potential ECA PM_{2.5} Reductions

