

ROUNDTABLE: THE FUTURE OF LOUISIANA ENERGY AND THE ENVIRONMENT

-ENVIRONMENTAL REGULATORY PICTURE FOR LOUISIANA ENERGY-

Presentation to

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The Future of Louisiana Energy
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by

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PRESENTATION OUTLINE

INTRODUCTION

MAJOR ISSUES

- **Ozone Standard Revision**
- **Climate Change/Greenhouse Gases**
- **Fracking Rules**
- **Redefining Waters of the U.S. (WOTUS)**

OZONE STANDARD REVISION

- **Expected to be proposed in the November-December time frame**
- **October 8th, EPA sent ozone regulation for White House Review**
- **Expected to be in the range of 60-70 ppb (currently 75 ppb)**
- **Recent CASAC recommendations state that 70 ppb does not offer a sufficient margin of safety**
- **A standard of 60 ppb would be catastrophic and politically untenable**
- **So, we expect a standard perhaps a little above midrange**

National Ambient Air Quality Standards for Ground-level Ozone

	PRIMARY STANDARDS		SECONDARY STANDARDS	
	Level	Averaging Time	Level	Averaging Time
1979	0.12 ppm	1-hour¹	same as primary	
1997	0.08 ppm	8-hour²	same as primary	
2008	0.075 ppm	8-hour³	same as primary	
2010*	0.060-0.070 ppm	8-hour	W126 index : 7-15 ppm-hours	

*proposed January 6, 2010

Withdrawn – now pending

1 (a) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 parts per million (ppm) is ≤ 1 .

(b) EPA revoked the 1-hour ozone standard in all areas, although some areas (such as Baton Rouge) have continuing obligations under that standard (“anti-backsliding”).

2 (a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.

(b) EPA is in the process of reconsidering these standards.

3 To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm.

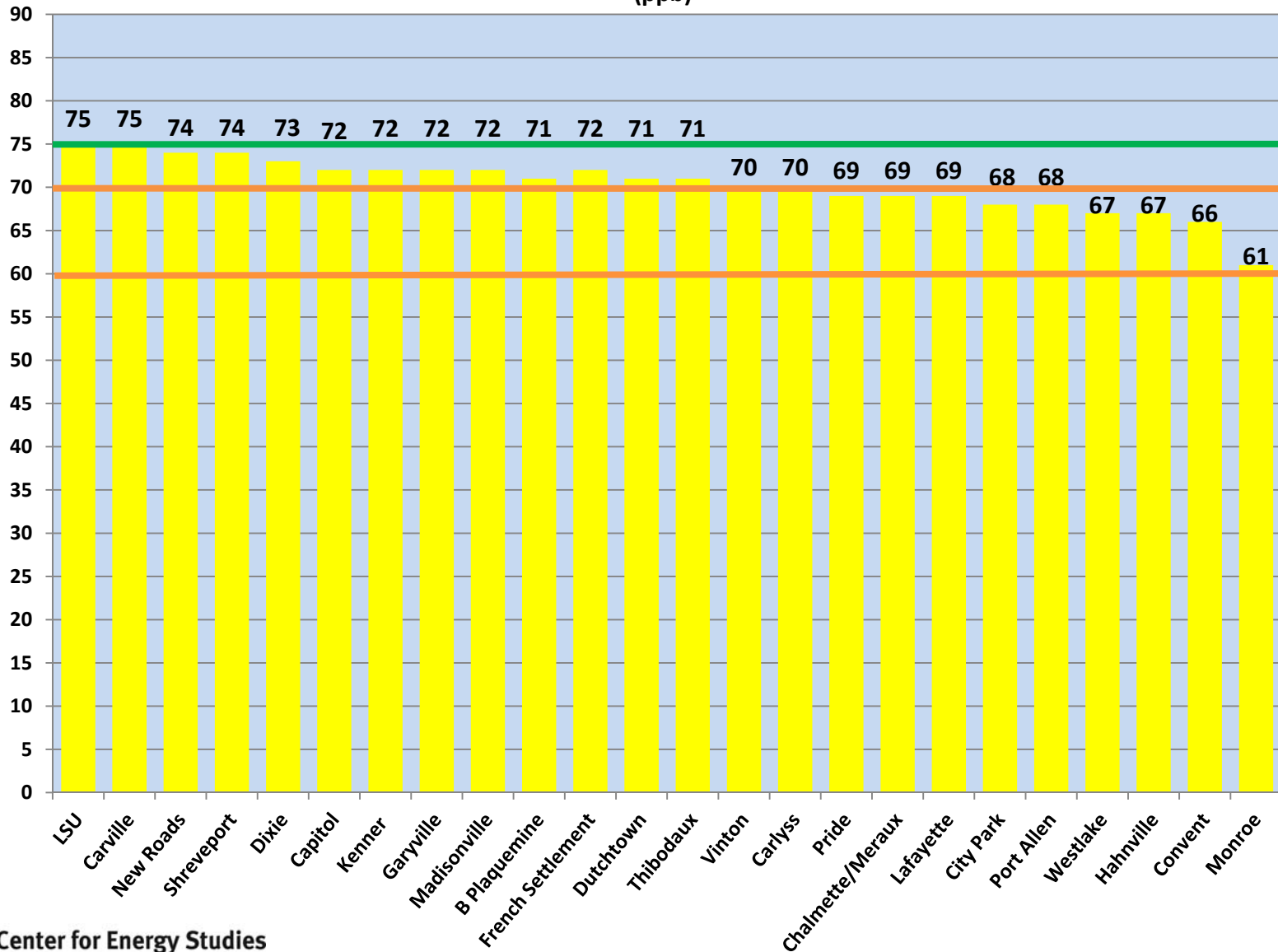
HOW WILL THIS NEW STANDARD AFFECT LOUISIANA?

- **Depending upon the final number, the Baton Rouge area along with other currently attainment metro areas will fall into nonattainment status**

- **According to a recent NAMS study:**
 - ❖ **A more stringent ozone standard could reduce U.S. GDP by \$270 billion per year and carry a compliance price tag of \$2.2 trillion from 2017 to 2040**
 - ❖ **Setting the standard at 60 ppb could lower LA GSP by \$53 billion through 2040 and lead to 117,000 fewer LA jobs**
 - ❖ **Setting the standard at 60 ppb would require a 63% reduction in Louisiana NOx emissions to comply**
 - ❖ **The new standards could be the costliest regulations in U.S. history**

Louisiana 8-hr Ozone Design Values as of December 31, 2013

(ppb)

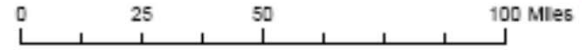
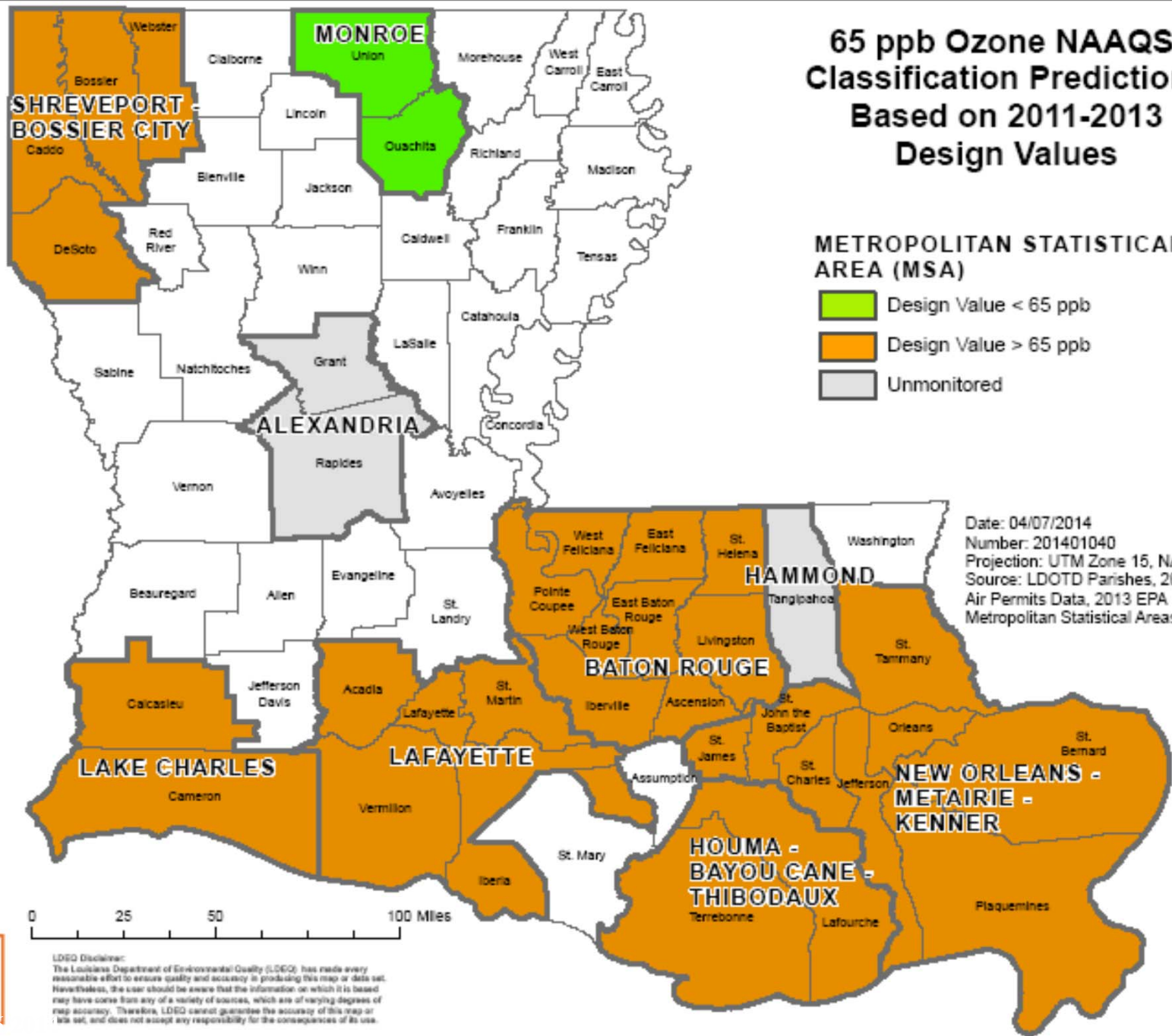


65 ppb Ozone NAAQS Classification Predictions Based on 2011-2013 Design Values

METROPOLITAN STATISTICAL AREA (MSA)

- Design Value < 65 ppb
- Design Value > 65 ppb
- Unmonitored

Date: 04/07/2014
 Number: 201401040
 Projection: UTM Zone 15, NAD 83
 Source: LDOTD Parishes, 2009 LDEQ OEA
 Air Permits Data, 2013 EPA
 Metropolitan Statistical Areas (MSA)



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Climate Change/Greenhouse Gases

- Obama Climate Action Plan
- GHG Rules
- Clean Power Plan
- Regulating Methane
- CEQ NEPA Guidance

Climate Change/Greenhouse Gases

Obama Climate Action Plan

June 2013 Obama uses executive authority to address climate change with an initial focus on power plants. Energy-related aspects include:

- **Cutting carbon pollution for power plants**
- **Promoting American leadership in renewable energy**
- **Unlocking long-term investment in clean energy innovation**
- **Increasing fuel economy standards**
- **Developing and deploying advance transportation technologies**
- **Reducing energy bills for American families and businesses**
- **Reducing methane emissions**
- **Leading in clean energy at the Federal level**

GHG Rules

- October 2009, EPA promulgates its mandatory greenhouse gas emission reporting rule.
- December 7, 2009, EPA publishes GHG Endangerment Finding.
- May 2010, EPA publishes GHG tailoring rule.
- August 2012, EPA and the National Highway Traffic Safety Administration (NHTSA) coordinate issuing rules designed to reduce greenhouse gas emissions and improve fuel use in motor vehicles.
- September 2013, EPA issues rules to cut carbon pollution from new power plants.
- June 2014, EPA issues rules to cut carbon pollution from existing power plants.

Climate Change/Greenhouse Gases

Clean Power Plan

- On Sept. 20, 2013, the EPA issued a new proposal for carbon pollution from new power plants.
- June 2014, under President Obama's Climate Action Plan EPA proposes new regulations to cut carbon pollutions from existing and modified/reconstructed power plants. EPA's goal is to reduce CO₂ emissions 30% by 2030.
- Emission reduction goal set for LA is 40%.
- A dozen states (including LA) are suing EPA over proposed regulations to cut GHG emissions from existing power plants.
- September 12, 2014 LDEQ comments: "LDEQ opposes EPA's proposed rule because it unequivocally exceeds the authority provided to EPA by Section 111(d) of the Clean Air Act, and risks undermining our state's economic development while providing questionable and unsubstantiated environmental benefits". LDEQ comments also point out errors and omissions in the data used to calculate Louisiana's state goal.
- Comment period has been extended to December 1, 2014

Climate Change/Greenhouse Gases

Regulating Methane

- Reported methane emissions from petroleum and natural gas systems sector have decreased by 12 percent since 2011, with the largest reductions coming from hydraulically fractured natural gas wells, which have decreased by 73 percent.
- March 2014, EPA proposed revised greenhouse reporting rule. It revises monitoring and disclosure requirements for the petroleum and natural gas systems category. Among other things, the proposal would change the units of emissions for reporting, moving from CO₂ equivalent for all GHG to separate reports for methane, CO₂ and nitrous oxide. Also adds reporting requirements for onshore production sources.
- However, pressure from environmentalists and Democratic politicians has increased for new EPA rules for specifically regulating methane emissions from the oil and gas industry.

CEQ NEPA Guidance

CEQ issued draft NEPA guidance related to climate change in February 2010, but now is not expected to finalize guidance.

FRACKING RULES

FEDERAL

- Fracking process itself has been generally exempt from key federal environmental regulations, including: CWA, SDWA, RCRA, Superfund, CERCLA, NEPA, and TRI under EPCRA. These exemptions are being eroded by EPA rulemaking.
- May 2013, EPA publishes a Direct Final Rule pursuant to the Toxic Substance Control Act (TSCA) establishing significant new use and recordkeeping requirements for 15 chemical substances, some of which are commonly used in fracking operations.
- February 2014 EPA releases final permitting guidance for oil and gas activities using diesel fuels.
- May 2014 EPA proposes “Hydraulic Fracturing Chemicals and Mixtures” rule in response to petitions from Earthjustice and 114 other groups under the Toxic Substances Control Act.
- The Environmental Protection Agency (EPA) is finalizing air pollution standards for natural-gas drilling. The standards were proposed in April 2012 with a proposed update in July 2014. The air pollution rules include a requirement that oil and gas companies notify the U.S. EPA at least two days before they "frack" a well, which became effective on October 8, 2012.
- The White House has started to review a Bureau of Land Management (BLM) proposed rule for fracking on federal and Indian lands. BLM submitted its final regulations to OMB for review on August 26, 2014.

FRACKING RULES

STATE

- Well fracking activity has been in practice in Louisiana for many decades.
- 2010 STRONGER (State Review of Oil and Natural Gas Environmental Regulations) found that the Louisiana hydraulic fracturing regulatory program was well-managed and meeting program objectives.
- In 2011, LDNR adopts new rules that require an operator to obtain a work permit before engaging in hydraulic fracturing, and to publicly disclose the content of the fluids they use in the fracking process, although it allows exemptions for chemicals deemed “trade secrets”.
- LDNR volunteers to have its hydraulic fracturing program reviewed by STRONGER. 2011 report (Louisiana Hydraulic Fracturing State Review, March, 2011) provided a number of recommendations to strengthen the program.
- A new report from the GAO concludes that states are more effective at regulating the disposal of wastewater from hydraulic fracturing operations than is the EPA.

REDEFINING WATERS OF THE UNITED STATES (WOTUS)

- April, 2014 EPA and U.S. Army Corps of Engineers move to assert authority over the nation's streams and wetlands under the Clean Water Act. The two agencies propose a rule that would clarify that the majority of the nation's streams and wetlands are under their jurisdiction. The rule would keep in place exemptions for farming, ranching, and forestry practices.
- Some see the rule as a means to restore protections to many waters left at risk of pollution due to earlier court decisions in 2001 and 2006 that questioned the extent of the EPA's protections. The second ruling restricted the federal government's authority by stating such waters must be "relatively permanent or continuously flowing and sizeable, "like oceans, rivers, streams and lakes."
- EPA's Scientific Advisory Board is wrapping up a report on the connectivity of small bodies of water such as streams and wetlands.
- EPA has extended the comment period on the controversial rule through November 14th. The agency previously extended the comment period in June.
- Very controversial rule – supported by environmentalist organizations and vigorously opposed by farmers, landowners, business owners, home builders, construction companies, and the forestry and mining industries.

POTENTIAL EFFECT OF EPA'S PROPOSED WOTUS DEFINITION ON LOUISIANA

EPA's Traditional Jurisdiction

Streams that flow all the time or at least seasonally, rain or not.



6,871,168 ACRES 57,033 STREAM MILES

EPA's Proposed Jurisdiction

All those streams, plus land where surface runoff channels when it rains.



7,187,168 ACRES 109,348 STREAM MILES

Source: American Farm Bureau Federation