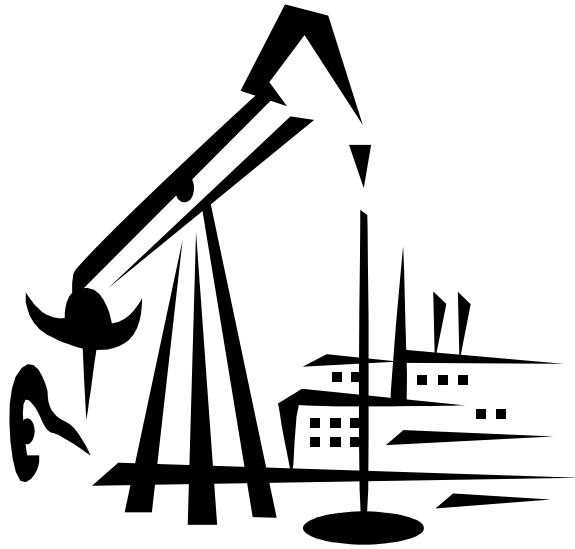


# Public Opinion on Exploration and Production of Oil and Natural Gas in Environmentally Sensitive Areas



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Gene L. Theodori

**Sam Houston**  
STATE UNIVERSITY  
*A Member of The Texas State University System*

# Environmentally Friendly Drilling Systems Program

Identifying, developing and demonstrating cost effective, low-impact technologies that can be used in environmentally sensitive areas that are currently off-limits or highly restrictive should these areas be opened up for development.



# Texas Study

## Ecological Regions of Texas

### **GULF COAST PRAIRIES & MARSHES**

(Coastal Wetlands)

### **PINEY WOODS**

(Hardwood Forests)

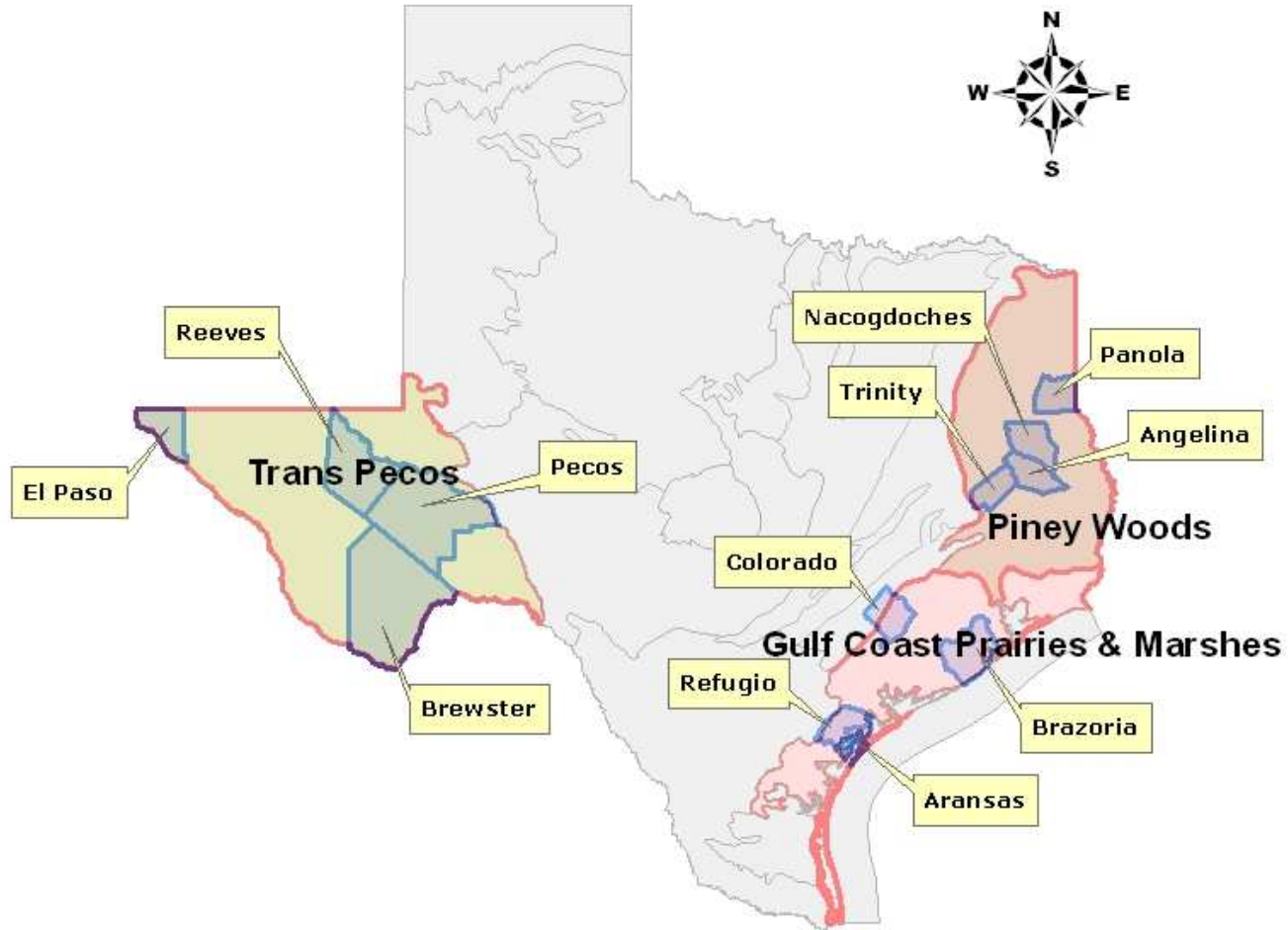
### **TRANS PECOS**

(Desert Ecosystems)

## Counties within Each Ecological Region

<b>Metropolitan</b>	<b>Relatively high-producing O&amp;G</b>
<b>Nonmetropolitan</b>	<b>Relatively high-producing O&amp;G</b>
<b>Metropolitan</b>	<b>Relatively low-producing O&amp;G</b>
<b>Nonmetropolitan</b>	<b>Relatively low-producing O&amp;G</b>

# NATURAL REGIONS



# Sample

- **500 randomly selected households per county**
- **Early February 2008 – mailed an ‘initial contact letter’ to 6,000 households**
- **Late February 2008 – mailed questionnaire to 5,948 households (*original sample size was reduced by 52 due to bad addresses or sampled respondents asking not to be included in the study; these households were not replaced with new addresses*)**
- **Late March 2008 – first follow-up mailing to nonrespondents**
- **Late April 2008 – second and final follow-up mailing to nonrespondents**
- **1,228 completed and returned questionnaires**

# Sample

<b>GULF COAST PRAIRIES &amp; MARSHES</b>			
<b>COUNTY</b>	<b>CLASSIFICATION</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>Brazoria</b>	<b>metro/high producing</b>	<b>103</b>	<b>8.4%</b>
<b>Refugio</b>	<b>nonmetro/high producing</b>	<b>96</b>	<b>7.8%</b>
<b>Aransas</b>	<b>metro/low producing</b>	<b>98</b>	<b>8.0%</b>
<b>Colorado</b>	<b>nonmetro/low producing</b>	<b>125</b>	<b>10.2%</b>

n = 422

# Sample

<b>PINEY WOODS</b>			
<b>COUNTY</b>	<b>CLASSIFICATION</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>Nacogdoches</b>	<b>metro/high producing</b>	<b>119</b>	<b>9.7%</b>
<b>Panola</b>	<b>nonmetro/high producing</b>	<b>90</b>	<b>7.3%</b>
<b>Angelina</b>	<b>metro/low producing</b>	<b>116</b>	<b>9.5%</b>
<b>Trinity</b>	<b>nonmetro/low producing</b>	<b>138</b>	<b>11.3%</b>

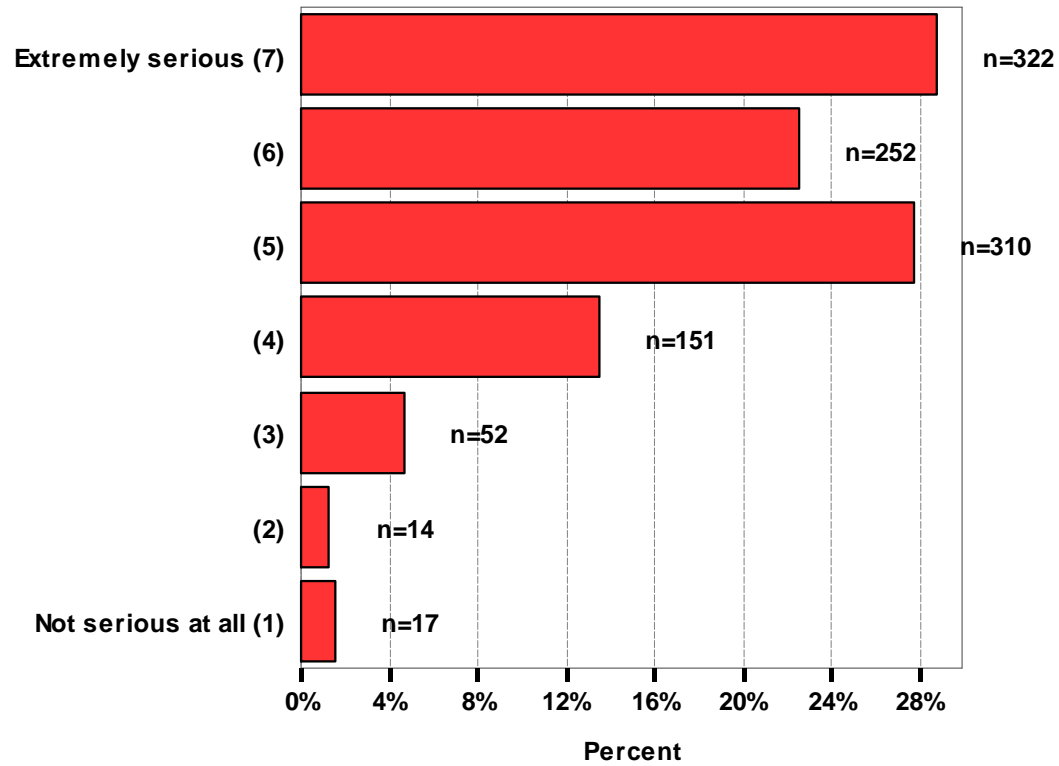
n = 463

# Sample

<b>TRANS PECOS</b>			
<b>COUNTY</b>	<b>CLASSIFICATION</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>Reeves</b>	<b>metro/high producing</b>	<b>67</b>	<b>5.5%</b>
<b>Pecos</b>	<b>nonmetro/high producing</b>	<b>77</b>	<b>6.3%</b>
<b>El Paso</b>	<b>metro/low producing</b>	<b>76</b>	<b>6.3%</b>
<b>Brewster</b>	<b>nonmetro/low producing</b>	<b>121</b>	<b>9.9%</b>

**n = 341**

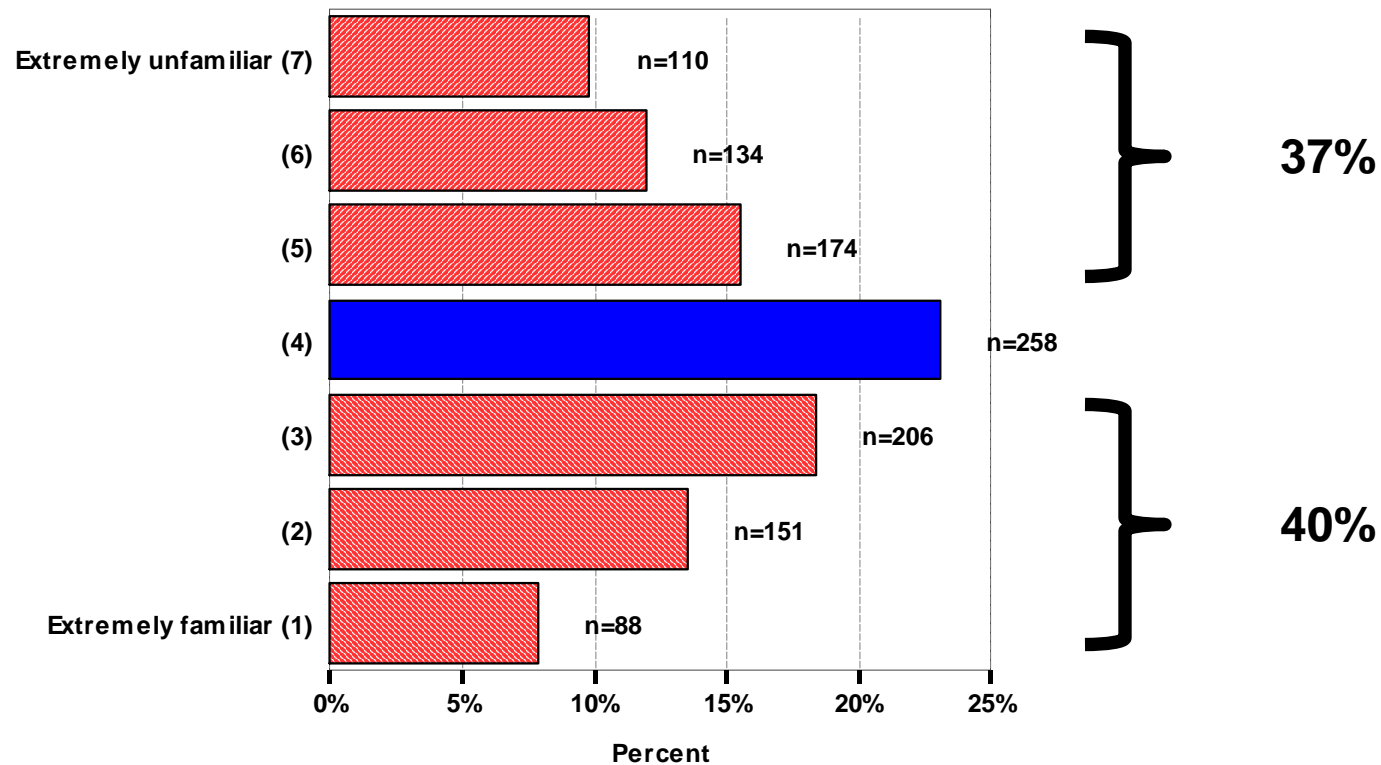
# Seriousness of the energy situation in the United States today



<b>Mean</b>	<b>5.47</b>
<b>S.D.</b>	<b>1.35</b>

**n = 1,118**

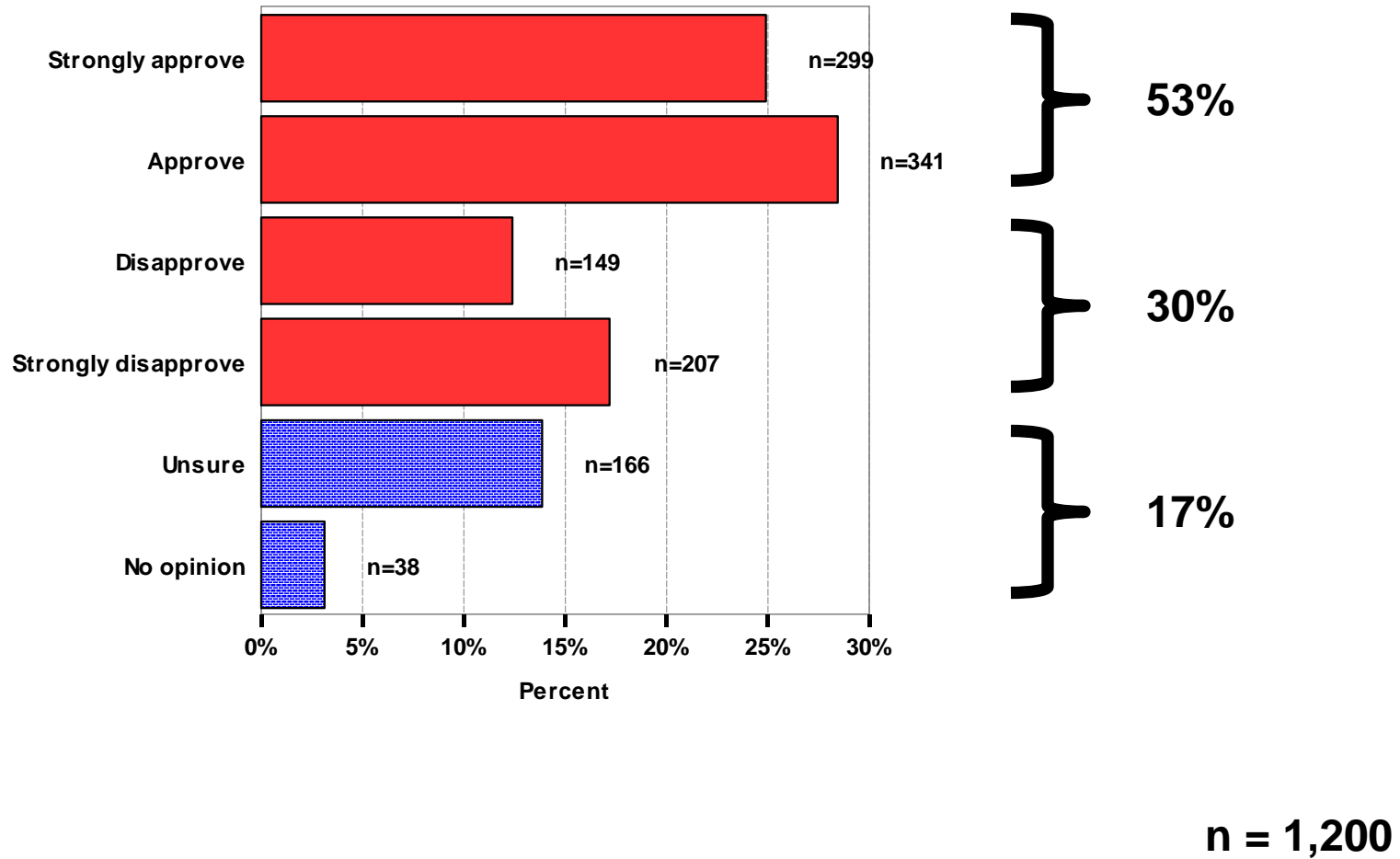
# Level of familiarity with the debate surrounding the E&P of O&G in environmentally sensitive offshore areas and onshore lands



Mean	4.00
S.D.	1.72

n = 1,121

# Approve or disapprove of the proposal to open up the Arctic National Wildlife Refuge in Alaska for O&G drilling



# **Environmentally-Friendly Approach**

## **Rig technology**

- **Smaller and lighter-weight drilling rigs**

## **Drilling technology**

- **Directional, multilateral, extended reach drilling and pad drilling**

## **Waste management**

- **Reducing, reusing, and safely disposing of drilling wastes**

# **Environmentally-Friendly Approach**

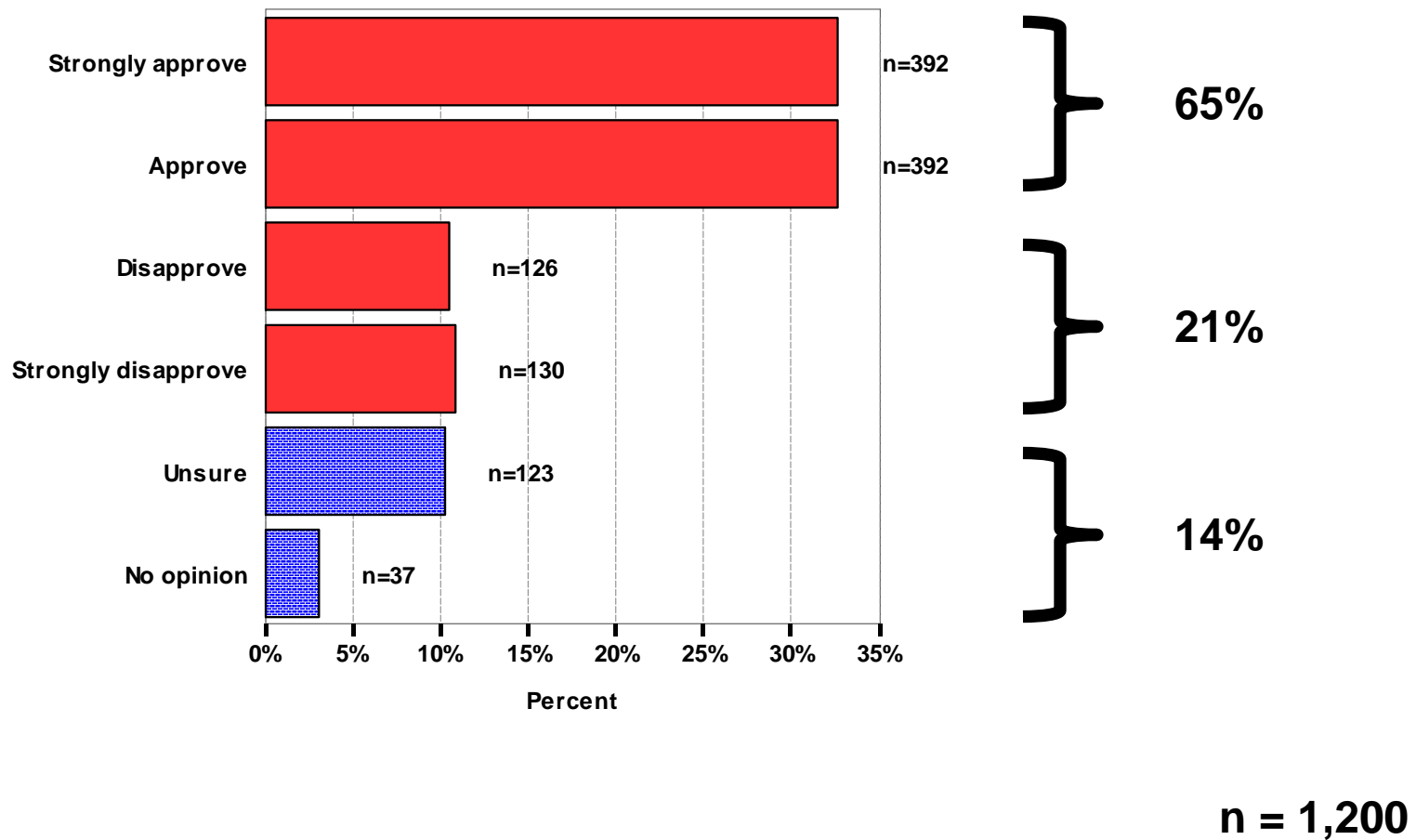
## **Low-impact access and transport**

- **Artificial or temporary road technologies to eliminate or reduce negative ecosystem impacts**

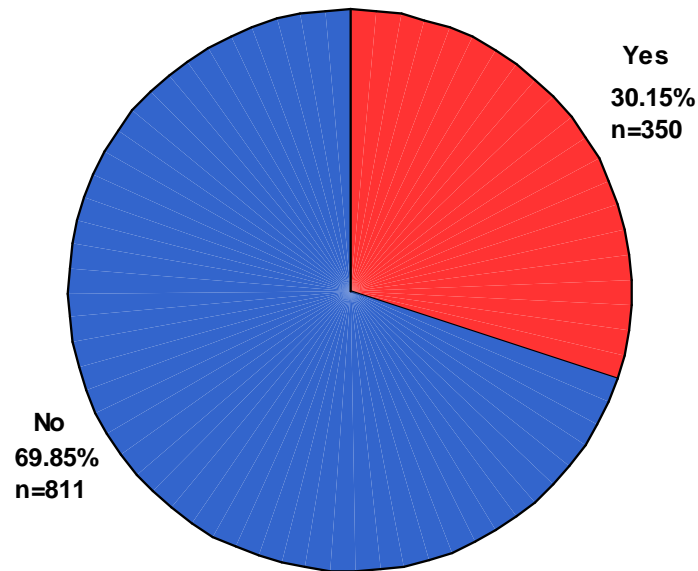
## **Pollution control**

- **Reduced rig noise and air emissions**

# Approve or disapprove of the proposal to open up the Arctic National Wildlife Refuge in Alaska for O&G drilling as the energy industry adopts and uses a more environmentally-friendly approach to energy development



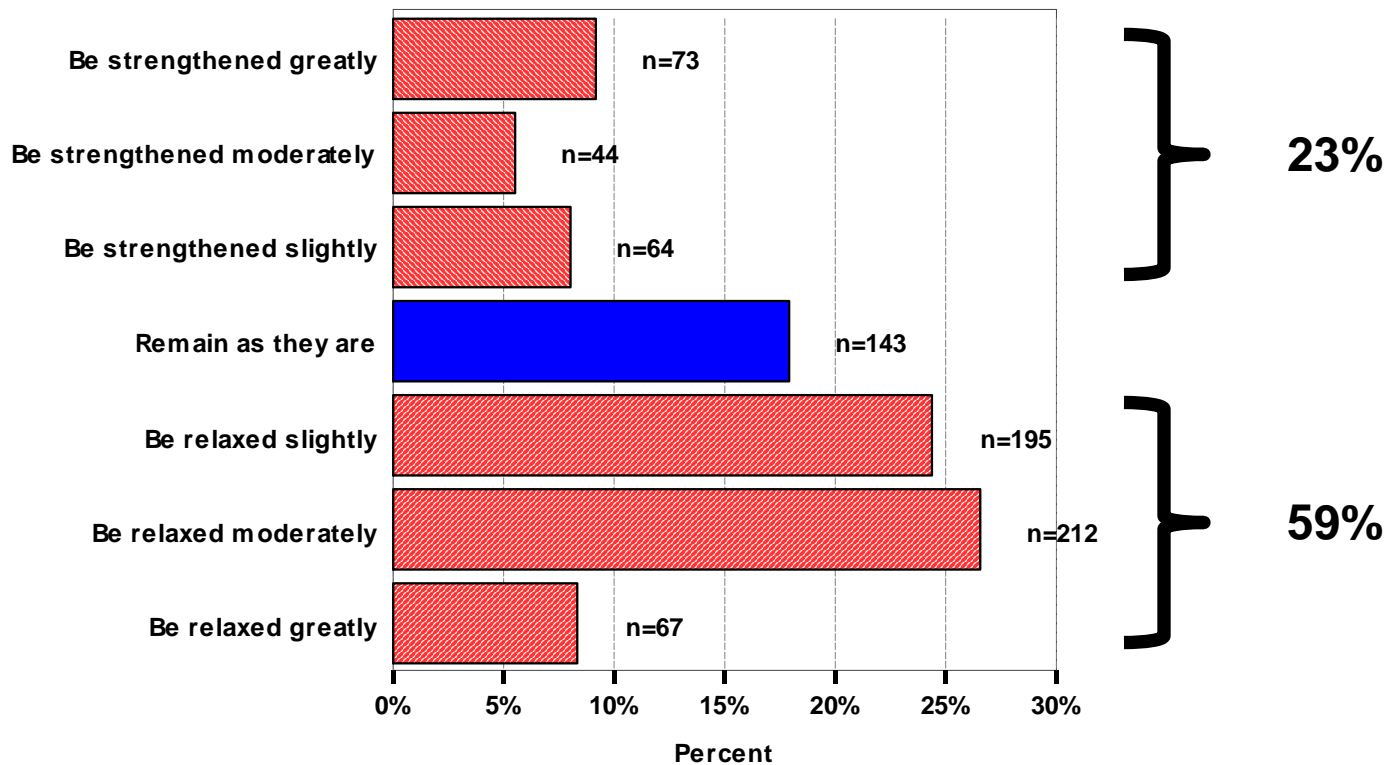
**As the energy industry adopts and uses a more environmentally-friendly approach, would you agree that current governmental regulations limiting the E&P of O&G on the continental shelf should be eliminated?**



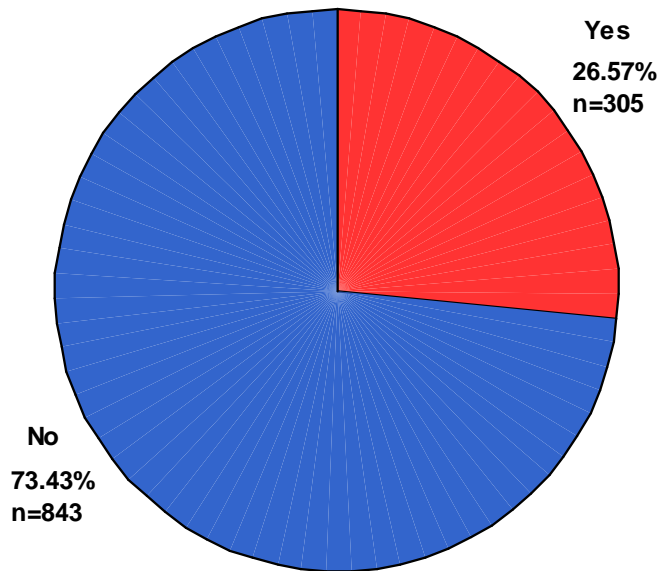
**n = 1,161**

*Those who do not support eliminating current governmental regulations limiting E&P of O&G*

**As the energy industry adopts and uses a more environmentally-friendly approach, current governmental regulations limiting the E&P of O&G on the continental shelf should:**



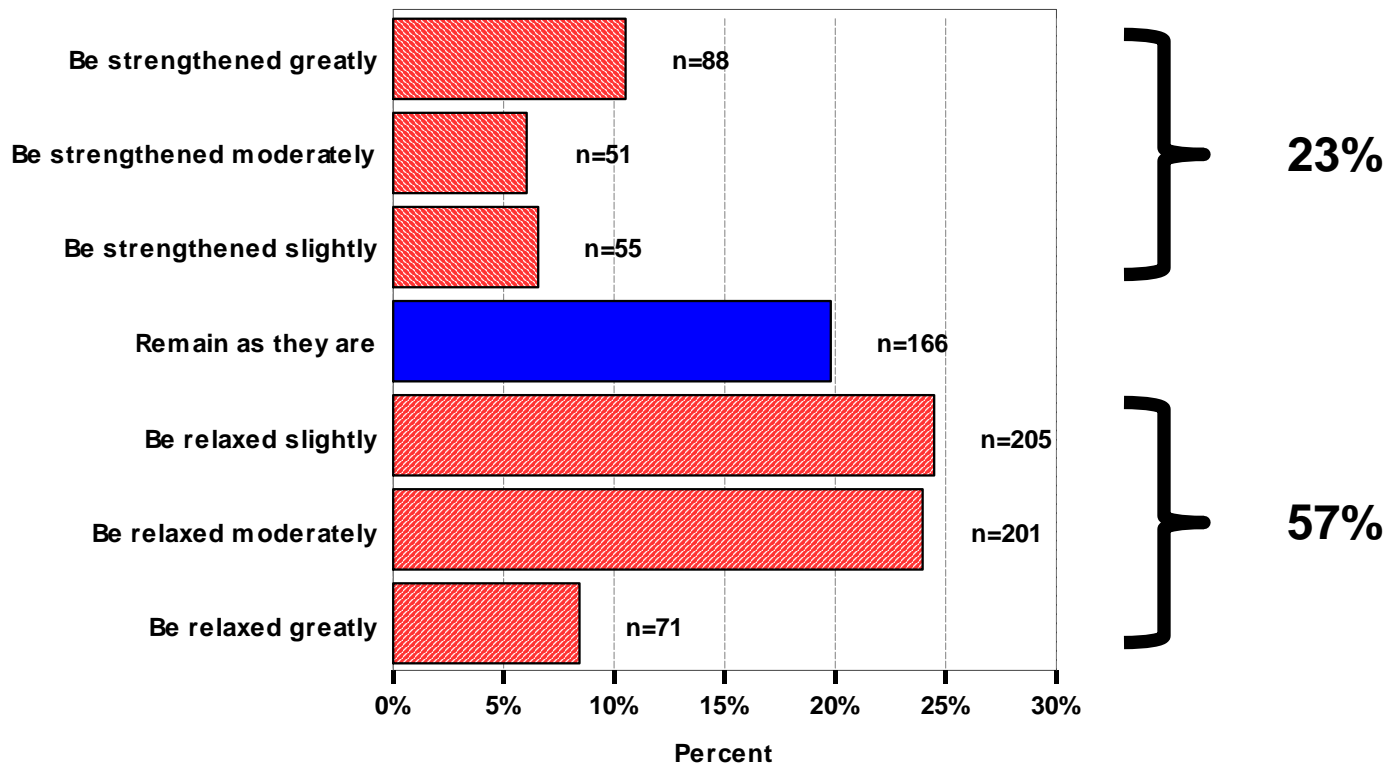
**As the energy industry adopts and uses a more environmentally-friendly approach, would you agree that current governmental regulations limiting the E&P of O&G in coastal wetlands should be eliminated?**



**n = 1,148**

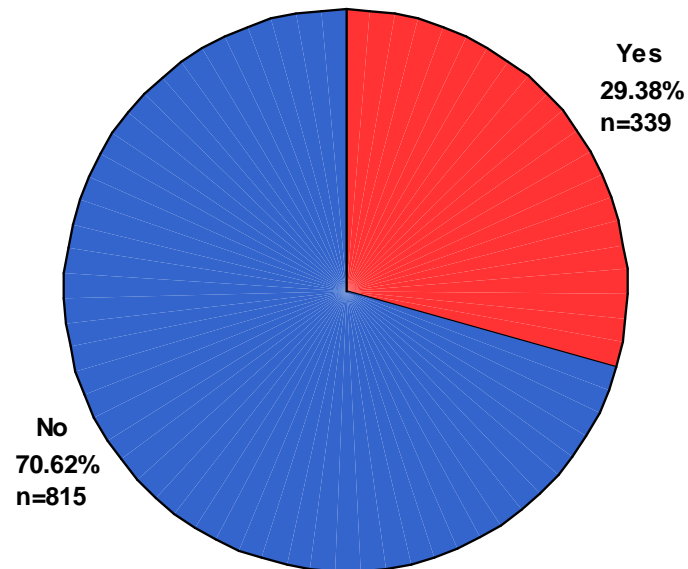
*Those who do not support eliminating current governmental regulations limiting E&P of O&G*

**As the energy industry adopts and uses a more environmentally-friendly approach, current governmental regulations limiting the E&P of O&G in coastal wetlands should:**



**n = 837**

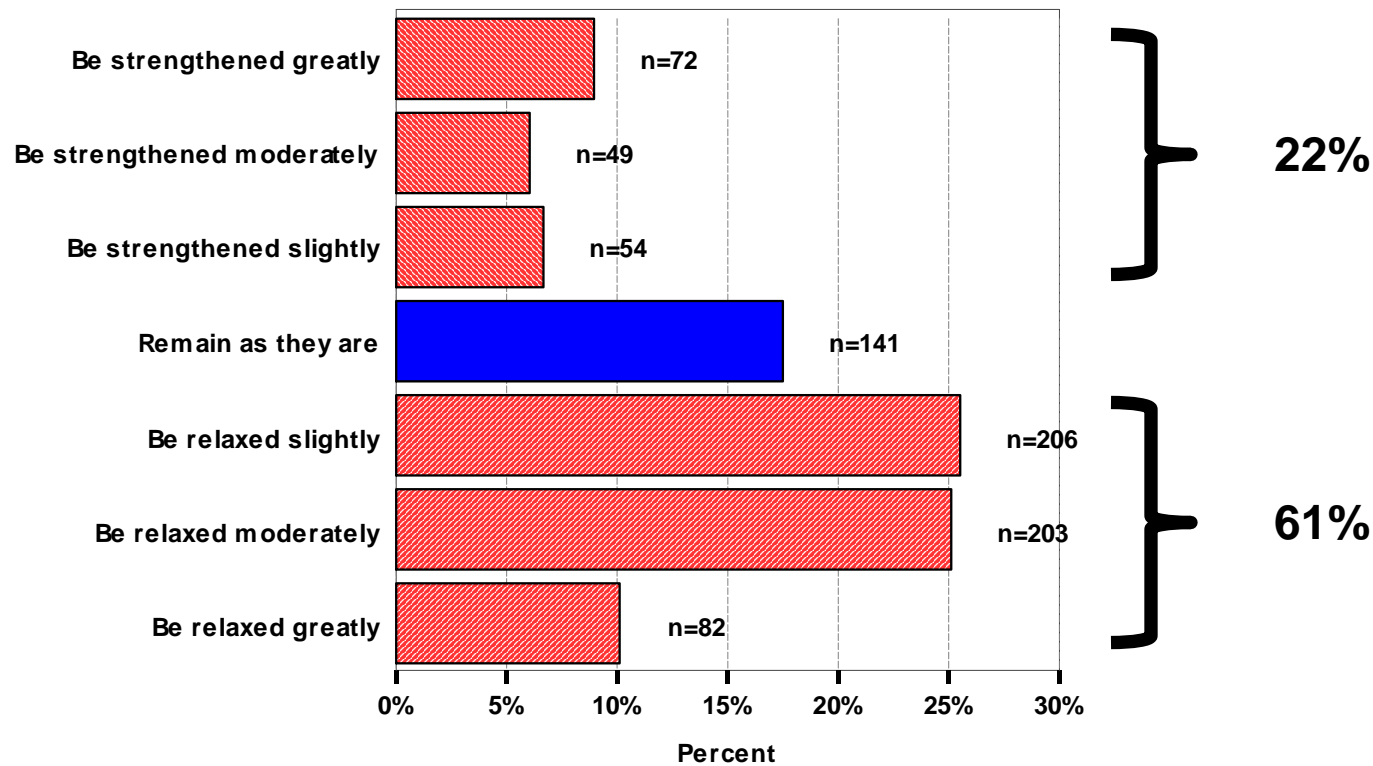
**As the energy industry adopts and uses a more environmentally-friendly approach, would you agree that current governmental regulations limiting the E&P of O&G in desert ecosystems should be eliminated?**



**n = 1,154**

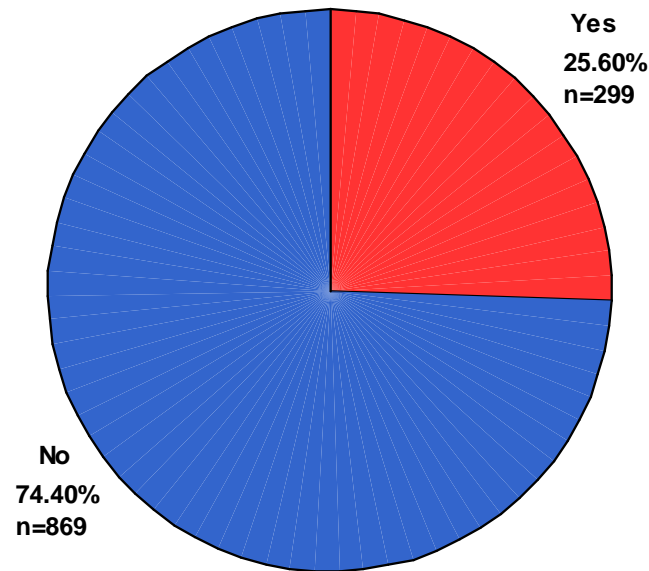
*Those who do not support eliminating current governmental regulations limiting E&P of O&G*

**As the energy industry adopts and uses a more environmentally-friendly approach, current governmental regulations limiting the E&P of O&G in desert ecosystems should:**



**n = 807**

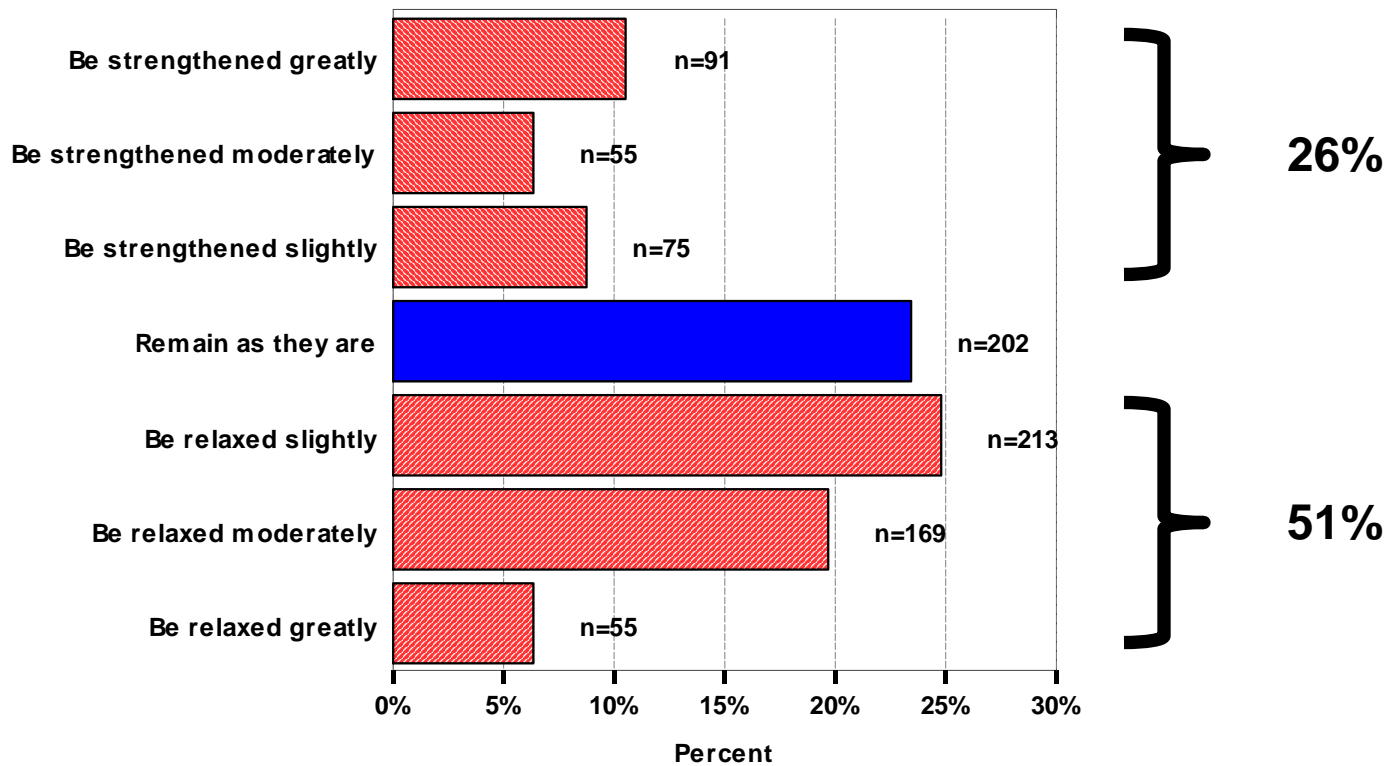
**As the energy industry adopts and uses a more environmentally-friendly approach, would you agree that current governmental regulations limiting the E&P of O&G in hardwood forests should be eliminated?**



**n = 1,168**

*Those who do not support eliminating current governmental regulations limiting E&P of O&G*

**As the energy industry adopts and uses a more environmentally-friendly approach, current governmental regulations limiting the E&P of O&G in hardwood forests should:**



**n = 860**

# **Associated Factors**

## **Age**

- 19 to 95 years old

## **Education**

- 4 to 25+ years of formal education

## **Race**

- American Indian, Asian, Black, Hispanic, White

## **Gender**

- male or female

# **Associated Factors**

## **Household income**

- under \$9,999 – \$130,000 or more

## **Political views**

- very liberal – very conservative

## **Political party affiliation**

- Constitution Party, Democratic Party, Green Party, Libertarian Party, Republican Party, Other

# **Associated Factors**

## **Mineral rights ownership**

- yes or no

## **Personal / familial ties to industry**

- yes or no

## **Political party affiliation**

- Constitution Party, Democratic Party, Green Party, Libertarian Party, Republican Party, Other

# Associated Factors



**Perception of the O&G industry**



**In 1993 a group of grassroots oil producers and royalty owners from Oklahoma, Texas and Kansas met to discuss their concerns about the image of their chosen profession – and one specific concern resurfaced over and over:**

**the public's negative perception of the oil and gas industry.**

**Even more telling was the research gathered by the American Petroleum Institute, which concluded that the oil industry was second only to tobacco as the industry with the worst public image.**

# Gallup's Annual Poll

<b>Year</b>	<b>Very/Somewhat positive (%)</b>	<b>Neutral (%)</b>	<b>Very/Somewhat negative (%)</b>
<b>2001</b>	<b>24</b>	<b>21</b>	<b>54</b>
<b>2002</b>	<b>25</b>	<b>28</b>	<b>44</b>
<b>2003</b>	<b>35</b>	<b>22</b>	<b>43</b>
<b>2004</b>	<b>21</b>	<b>18</b>	<b>58</b>
<b>2005</b>	<b>20</b>	<b>17</b>	<b>62</b>
<b>2006</b>	<b>15</b>	<b>7</b>	<b>77</b>
<b>2007</b>	<b>19</b>	<b>14</b>	<b>67</b>
<b>2008</b>	<b>15</b>	<b>8</b>	<b>76</b>
<b>2009</b>	<b>21</b>	<b>16</b>	<b>63</b>

# Factor 1: Environmental, Social, Political

<b>Statement</b>	<b>Strongly/mildly agree (%)</b>
<b>The oil and gas industry MUST adopt and use more environmentally friendly drilling practices.</b>	<b>82</b>
<b>Not enough information concerning oil and gas development in Texas is being made available to the general public.</b>	<b>71</b>
<b>Oil and gas industry operators in Texas are too politically powerful.</b>	<b>69</b>
<b>Oil and gas companies will do only what's required by law.</b>	<b>66</b>

# Factor 1: Environmental, Social, Political

<b>Statement</b>	<b>Strongly/mildly agree (%)</b>
<b>Too little attention is being paid to the social costs of oil and gas development in our State.</b>	<b>47</b>
<b>The oil and gas industry has no compassion for our natural environment.</b>	<b>39</b>
<b>Even when carefully controlled, oil and gas development is likely to upset the quality of life in Texas.</b>	<b>36</b>
<b>Oil and gas operators are drilling and producing too close to homes and businesses.</b>	<b>35</b>

## Factor 2: Economic

<b>Statement</b>	<b>Strongly/mildly disagree (%)</b>
<b>Because industry has to be competitive, it is unfair to expect oil and gas companies to tell the public about their plans.</b>	<b>59</b>
<b>People who object to oil and gas development in Texas should move someplace else.</b>	<b>54</b>
<b>Decisions about oil and gas-related development in Texas should be made solely on economic grounds.</b>	<b>50</b>
<b>All in all, the benefits of oil and gas development are greater than the costs.</b>	<b>28</b>

# **American Clean Energy and Security Act of 2009**

**Passed by U.S. House of Representatives  
on June 26, 2009**

The legislation will help America create green jobs, ensure clean air for our children, move towards energy independence and combat climate change.



## **Securing our Energy Future**

Our reliance on oil poses a threat to our economic security. Over the last few decades, we have watched our economy rise and fall along with the price of a barrel of oil. We must commit ourselves to an economic future in which the strength of our economy is not tied to the unpredictability of oil markets. We must make the investments in clean energy sources that will curb our dependence on fossil fuels and make America energy independent.

**Breaking Dependence on Oil.** Promote the next generation of cars and trucks and the fuels they run on.

**Producing More Energy at Home.** Enhance U.S. energy supplies through responsible development of domestic renewable energy, fossil fuels, advanced biofuels and nuclear energy.

**Promoting Energy Efficiency.** Promote investments in the transportation, electricity, industrial, building and agricultural sectors that reduce energy bills.

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## Shell gets conditional OK for Beaufort Sea drilling plan

**OPPOSITION:** Groups question spill response ability, climate effects.

Daily News staff and wire reports  
Published: October 19th, 2009 12:15 PM  
Last Modified: October 20th, 2009 12:14 PM

The Obama administration has given conditional approval to Shell Oil's plan to explore two of its leases in the Beaufort Sea next summer and fall, federal regulators said Monday.

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### Shell plans to drill two exploratory wells



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The federal Minerals Management Service said it will allow Shell to drill for oil and gas in the far western area of Camden Bay, west of Kaktovik, if certain conditions are met. For the project to go forward, it must comply with state and federal environmental requirements and Shell needs to obtain a drill permit from MMS, the service announced Monday.

Shell is also seeking permission to drill one or two wells on its leases in the Chukchi Sea next year. Alaska Native organizations and environmentalists have sued to block the drilling, and under court order, the MMS is revising its analysis of the company's plans for its Chukchi leases.

National environmental groups said the latest decision ignores

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### A NEW SUIT?

Environmentalists said Monday that it's still possible to file a lawsuit to block Shell's proposed drilling in the Beaufort.

"Litigation is certainly likely," said Rebecca Noblin, a staff attorney in Anchorage for the Arizona-based Center for Biological Diversity, one of many groups contesting Shell's other leases.

U.S. Sen. Mark Begich, D-Alaska, praised the MMS Monday morning before the agency had made its decision public.

Begich said the decision showed that the Obama administration and Ken Salazar, the secretary of the Interior who is in charge of the MMS, "recognize the importance of Alaska's abundant offshore oil and gas resources, and it brings us one step closer to environmentally responsible development offshore of Alaska."

U.S. Sen. Lisa Murkowski, R-Alaska, said Monday that the MMS announcement was "an encouraging sign."

A Shell executive in Alaska called it a positive step toward drilling next year.

"We sincerely believe this exploration plan addresses concerns we have heard in the North Slope communities which have resulted in the programs being adjusted accordingly," said the executive, Pete Slaiby, in a prepared statement.


### SPILL WORRIES

Environmental groups claim the Arctic and its marine mammals already are under stress from global warming and the loss of sea ice.


"Obama could have installed Sarah Palin as secretary of Interior and the polar bear and Arctic

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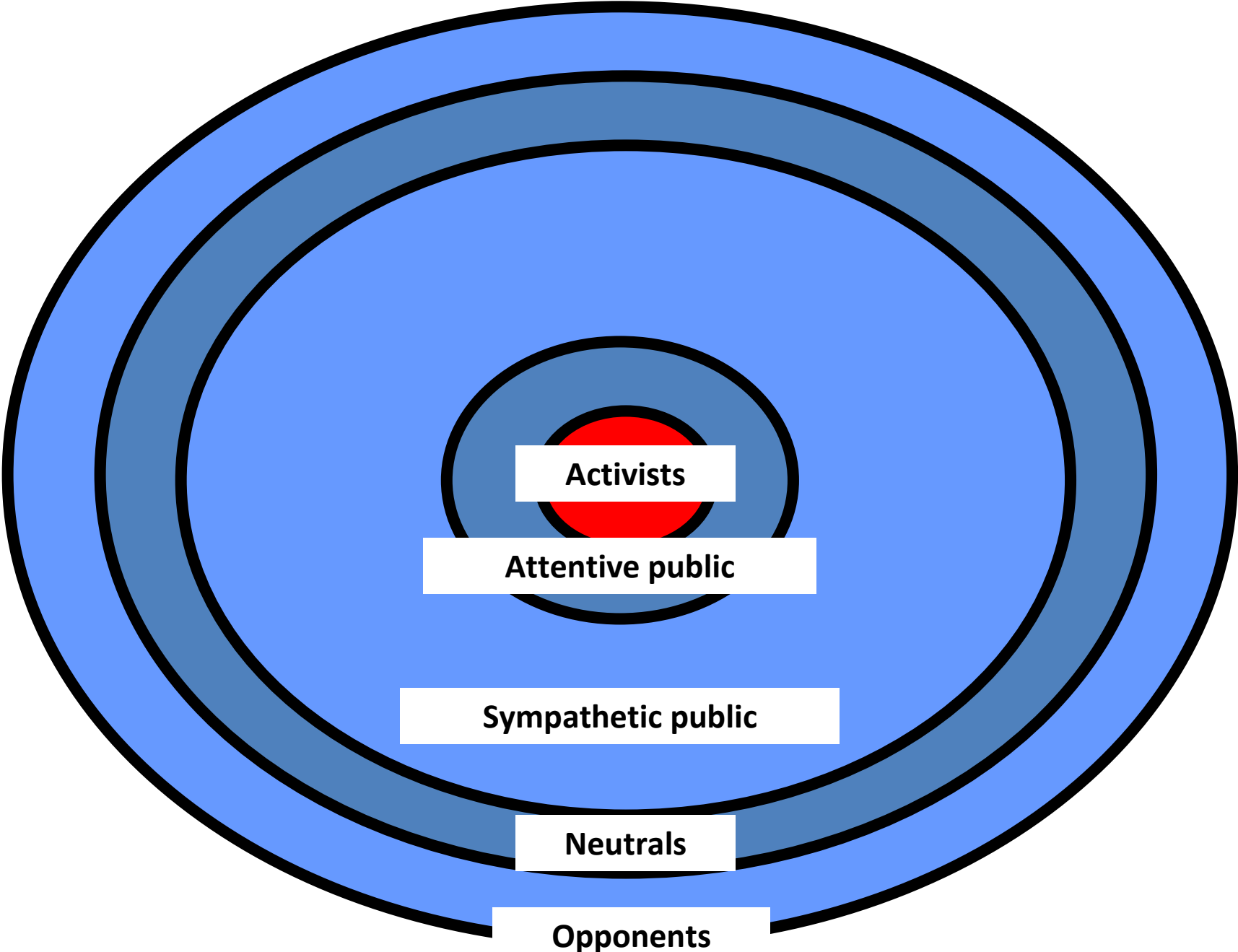
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**Activists**

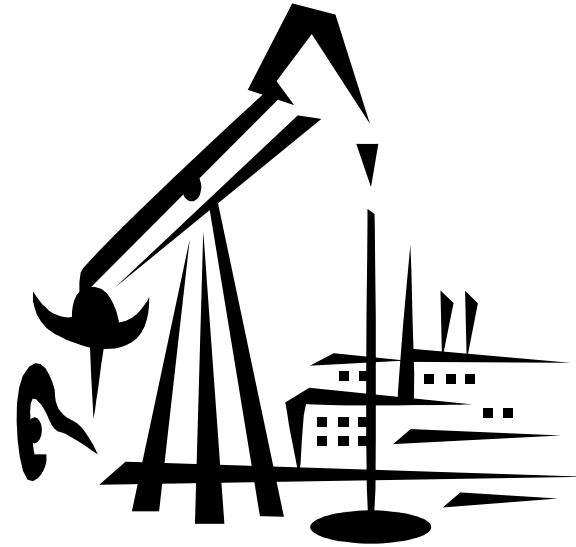
**Attentive public**

**Sympathetic public**

**Neutrals**

**Opponents**

# Questions?



**Sam Houston**  
STATE UNIVERSITY  
*A Member of The Texas State University System*