

State of **ALASKA**

America's Energy Solution



Lt. Governor Mead Treadwell

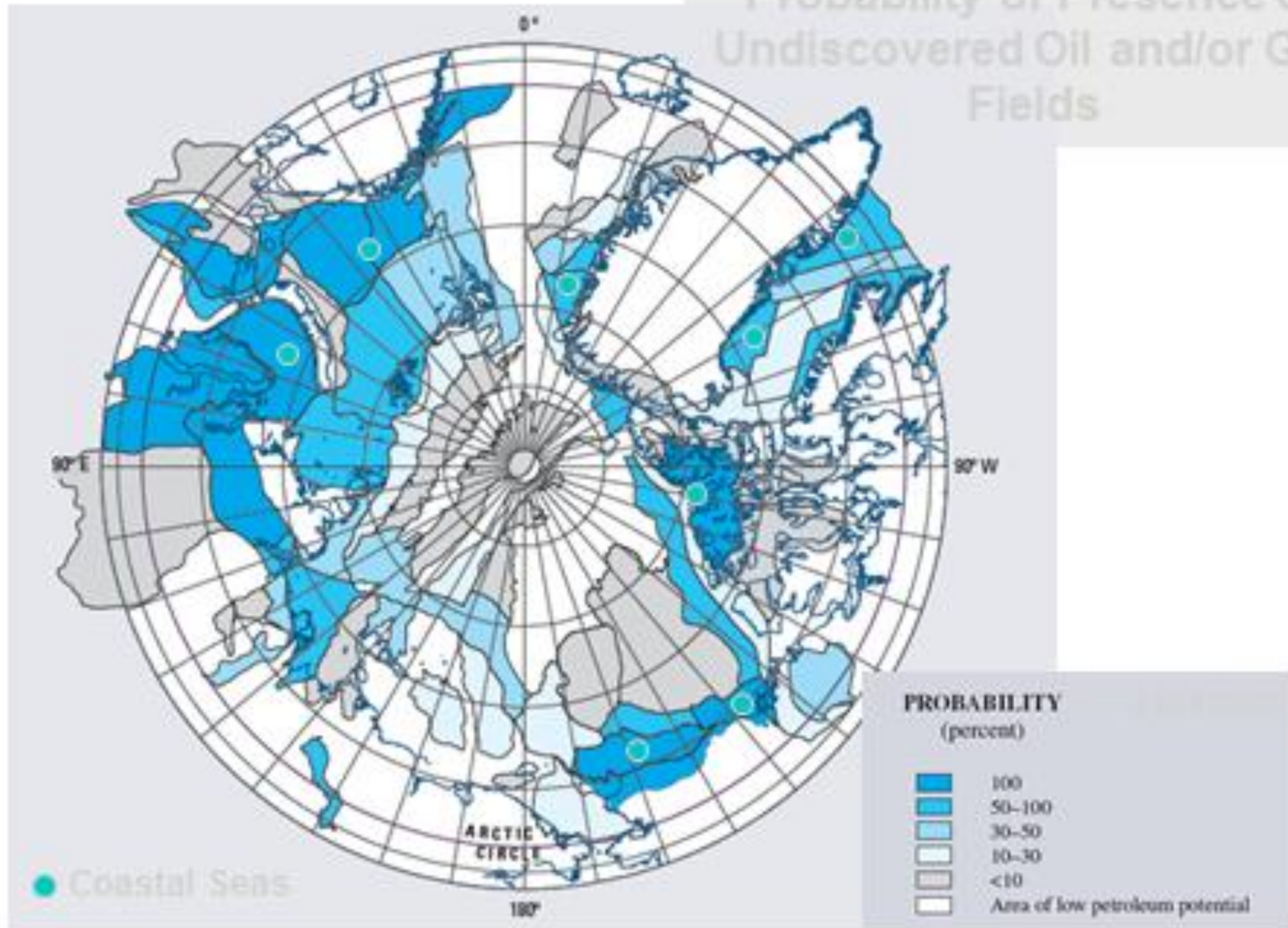
Presented to: CSIS, Energy and National Security Program
July 12, 2011

Alaska...

- Encompasses 586,412 square miles – twice the size of Texas
- Is larger than all but 18 sovereign nations
- Has more coastline than all other U.S. states combined
- Has more than 3 million lakes and half of the world's glaciers
- Is the least densely populated U.S. state



Probability of Presence of Undiscovered Oil and/or Gas Fields



Arctic Oil: 13% of world resources; gas 23%



Arctic Oil: 13% of world resources, gas 25%

(<http://NASA.GOV>)

One Million Barrels/Day:

Arresting TAPS
Throughput Decline



"By taking action, we will experience longer term state savings and sustainable budgets and contribute more to our nation's energy security and domestic stability."

- Gov. Parnell, 3/30/11

- TAPS throughput decline threatens economic disruption and the very existence of our pipeline
- Pipeline is 2/3 empty and declining 6% per year
- At low throughput levels it takes longer for oil to flow; at lower outside temperatures, significant damages can occur
- We must encourage industry to invest in exploration and development of conventional and unconventional resources on state and federal land, onshore and offshore.

One Million Barrels/Day:

Alaska is a world-class
hydrocarbon basin



- The North Slope of Alaska remains a world-class energy basin, with *more oil than any other Arctic nation*
- There are 40 billion barrels of oil and 236 trillion cubic feet of natural gas on the North Slope and OCS
- There are tens of billions of barrels of heavy oil, shale oil and other unconventional resources

Compared to most basins, Alaska is relatively underexplored, with 500 exploration wells on the North Slope, compared to Wyoming's 19,000

One Million Barrels/Day:

Comprehensive Strategy



- I. Enhance Alaska's global competitiveness and investment climate
- II. Ensure the permitting process is structured and efficient
- III. Facilitate and incentivize the next phases of North Slope development
- IV. Unlock Alaska's full resource development potential
- V. Promote Alaska's resources and positive investment climate to world markets



III. Facilitate and Incentivize the Next Phase of North Slope Oil Development



- The next phase of North Slope Development includes:
 - OCS resources
 - Federal onshore resources: NPR-A and ANWR 1002 Area
 - Unconventional resources: heavy, viscous, and shale oil
 - Smaller pools of conventional oil
 - Commercialization of North Slope gas
- Legal Access
- Physical Access
- Intellectual Access
- Access to capital

Alaska:

Robust Environmental Standards



- Alaska has a strong record of responsibly developing resources while protecting our environment. We are also a leader in environmental research.
- Our efforts to protect the environment and wildlife have been successful.
 - For example, when debating the development of the Trans-Alaska Pipeline System (TAPS), many predicted that oil and gas development would decimate caribou herds.
 - These predictions have not come true. In fact, caribou numbers have increased dramatically over the past thirty years. The Central Arctic caribou herd, which occupies summer ranges surrounding Prudhoe Bay, has grown from 5,000 in 1975 to over 66,000 today.



The State of Alaska balances environmental stewardship with responsible resource development.

Because of the efforts taken by federal, state, and local governments and the energy industry, oil and gas development in Alaska is conducted in a safe and responsible manner with standards that exceed most other jurisdictions in the world.

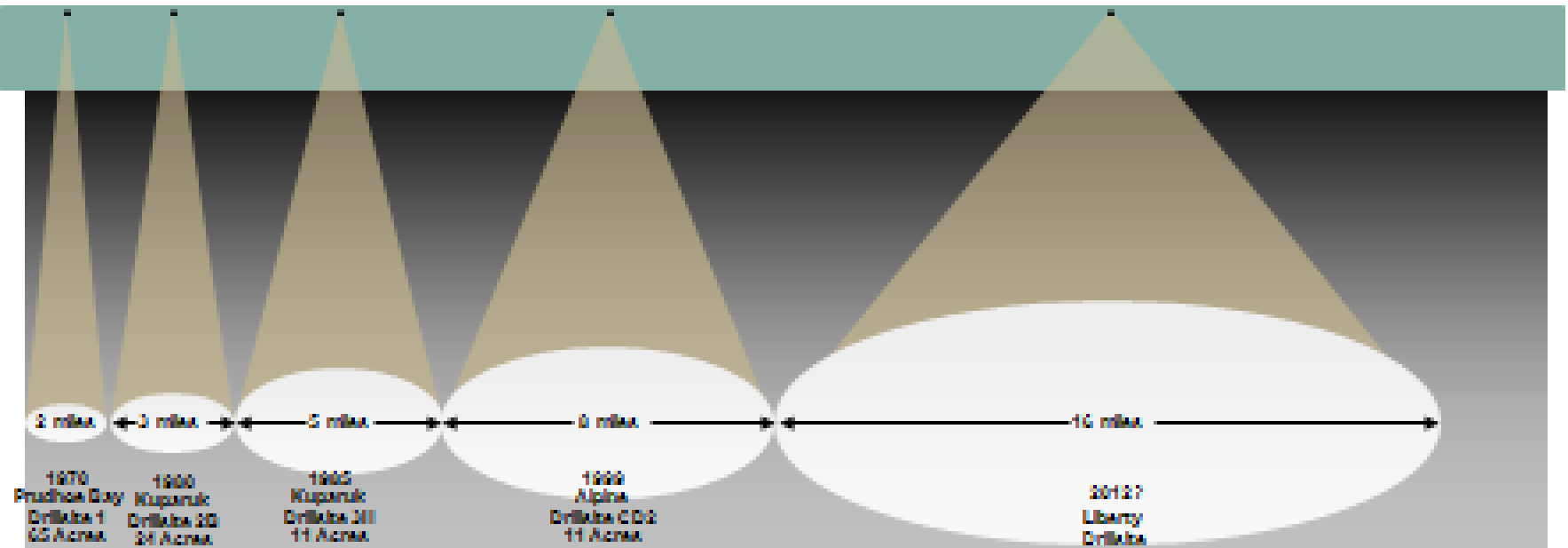
Alaska:

Robust Environmental Standards



- Dual goals of resource development and environmental responsibility are part of the Alaska Constitution
- Best Interest Findings
- Interactions between state and federal agencies guarantee consistency in environmental protection
- Alaska leads the way in environmental responsibility

Graphic: Alaska North Slope Drill Site Reach Evolution—Pad Size and Corresponding Subsurface Drillable Acreage



Alaska:

Robust Environmental Standards

Alaska North Slope Drillsite Footprint Evolution



*Drillsites are shown at the same scale as
the U.S. Capitol photo above*

1970

Prudhoe Drillsite 1



1980

Kuparuk Drillsite 2B



1985

Kuparuk Drillsite 3H



1999

Alpine Drillsite CD2



Alaska:



As a Storehouse:
Minerals, Timber, & Water



- **Coal:** 17% of the world's coal resources;
2nd most in the world
- **Copper:** 6% of the world's copper resources;
3rd most in the world
- **Lead:** 2% of the world's lead resources;
6th most in the world
- **Gold:** 3% of the world's gold resources;
7th most in the world
- **Zinc:** 3% of the world's zinc resources;
8th most in the world
- **Silver:** 2% of the world's silver resources;
8th most in the world
- **Rare earth elements:** over 150 occurrences
- **Timber:** 17% of U.S. forest land
- **Water:** ~40% of U.S. fresh water

USGS global resource assessments

Commercializing Alaska Natural Gas



- 236 trillion cubic feet of natural gas on the North Slope and Outer Continental Shelf (*USGS estimates*)
- Trillions more in unconventional gas (shale gas and gas hydrates)
- We have a world-class pipeline company as a licensee that has partnered with a world-class energy company to transport gas to the lower-48 states
- Progress is being made on a separate in-state gasline

Thank You, and Godspeed!



Mead Treadwell

lt.governor@alaska.gov

www.alaska.gov

(907) 269-7460