## ACES: Is it Working?

Senator Bill Wielechowski April 29, 2011

## **A Little History**

- In 2006, the legislature overhauled the state's outdated oil and gas tax system.
- Under the old system, called "ELF," 15 out of 19 oil fields on the North Slope paid no production tax at all.

## Alaska's Constitution Requires:

• "The legislature shall provide for the utilization, development and conservation of all natural resources belonging to the State for the maximum benefit of its people." (Art. VIII, § 2)

The consensus was that Alaska was not receiving the maximum benefit of the wealth generated from its own resources.

## Petroleum Profits Tax (2006)

- The new tax system, called the "Petroleum Profits Tax" or "PPT" taxed net profits, not gross earnings.
- Concerns lingered that the tax deductions were too generous and Alaska was still not getting the "maximum benefit" for its resources

## Alaska's Clear and Equitable Share

As a result, the legislature reconsidered PPT in 2007 and, after much deliberation, replaced it with "Alaska's Clear and Equitable Share" (ACES) to ensure that Alaskans received the maximum benefit for our resources.

## **ACES: Is it working?**

 Only 3.5 years have passed since ACES was adopted, but already there are calls for major changes to this system.

 What do the facts say about the effects ACES has had and whether immediate changes are needed?

## 8 Ways to Measure Effectiveness

- 1. Revenues generated for Alaskans
- 2. How do we compare?
- 3. Level of industry investment
- 4. New exploration and development
- 5. Number of industry jobs
- 6. New interest in Alaska
- 7. Industry profits
- 8. Oil production levels

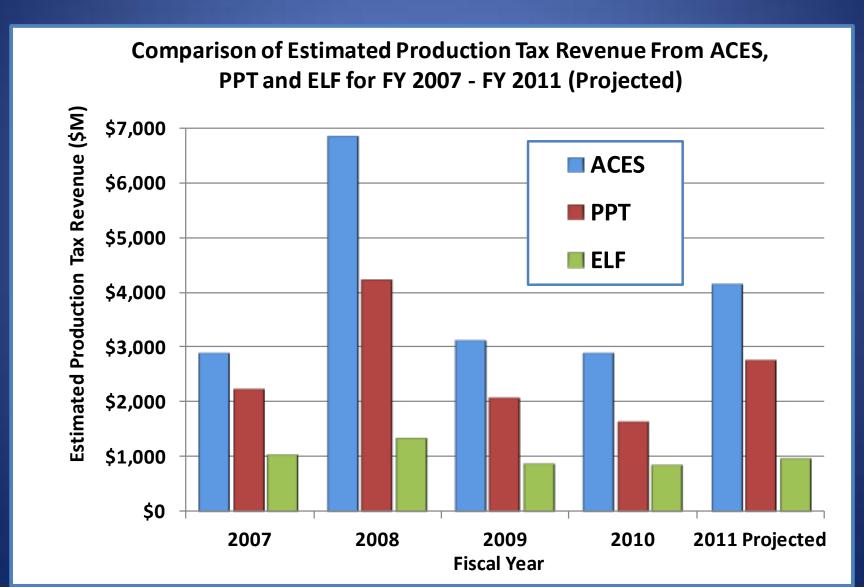
#### Measure #1

How has ACES

affected the revenues

Alaskans receive for our oil?

## ACES has generated about \$15 billion more than ELF would have.



### **Increased Revenue for Alaskans**

This has enabled the state to invest more in infrastructure, create jobs, and fund critical state services, dampening the effect of the worldwide recession in Alaska.

# Biggest Savings Account in the Nation

It has also allowed lawmakers to pay back a \$5.5 billion loan used to cover prior budget shortfalls and to grow Alaskans' savings account, now the largest in the nation at about \$15 billion.

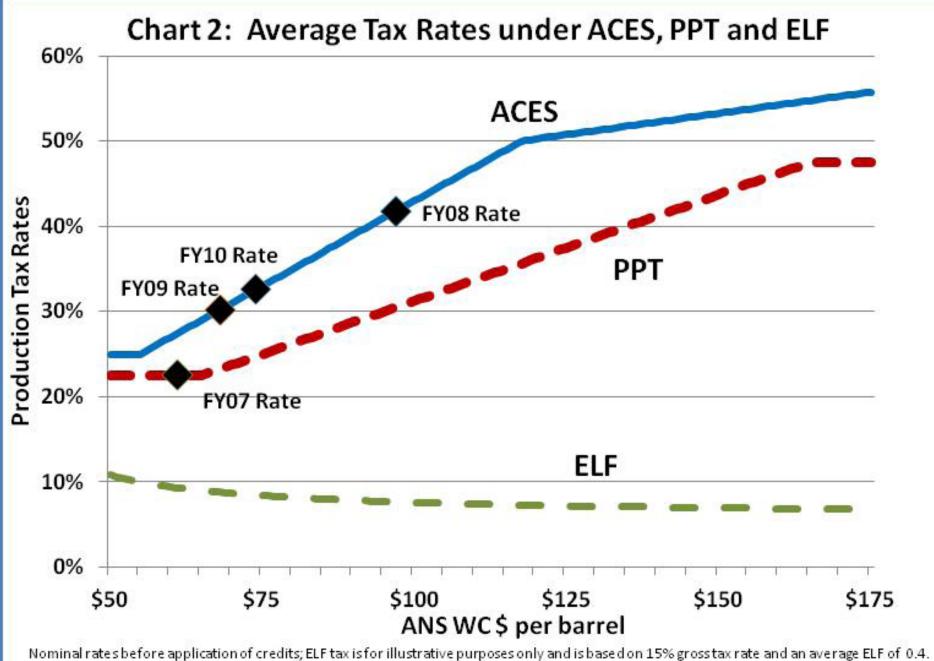
#### Measure #2

How do our tax rates compare with other jurisdictions?

Are we competitive?

# Alaska's Taxes: Fair or Excessive?

- Some critics of ACES talk about tax rates as high as 90%.
- However, in the 4 years since PPT and ACES passed, the average production tax rate has been 32%, according to the Parnell Administration. This is before generous tax credits are factored in, lowering taxes significantly.



## **Calculating Tax Rates under ACES**

No production taxes are paid until a profit is made. It costs about \$26 to get a barrel of oil out of the ground and to market. The base tax rate is 25%. After \$30 of profit, .4% is added for every dollar increase per barrel.

## For Example

At \$56/barrel oil, the tax rate is 25%. At \$57/barrel, the tax rate is 25.4% because the oil company has made over \$30 in profit. At \$58/barrel, the rate is 25.8%.

## Under the Governor's Proposal, Alaska will Lose Billions

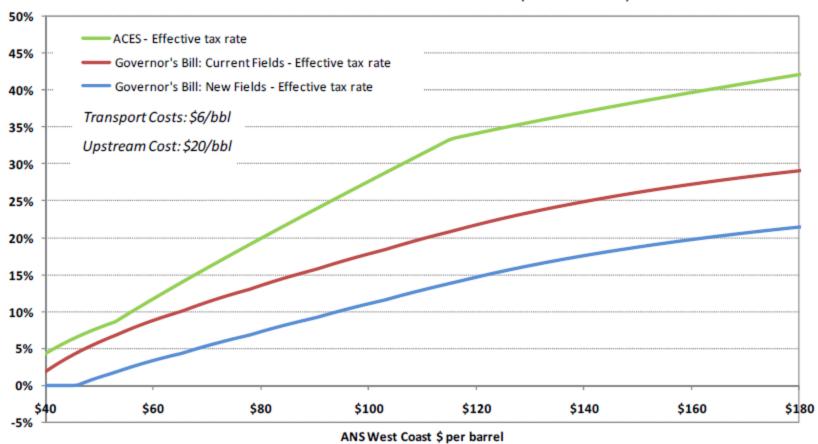
- The Governor's bill will lower taxes significantly, costing Alaskans an estimated \$8.2 billion over the next five years.
- As the following chart shows, if the Governor's bill passes, Alaska's actual production tax rate will be between 15% and 25% on industry profits at today's prices.



## Effective Tax Rates on Gross Current law and HB 110



Effective Tax Rate based on Gross Value (After Credits)



# What is the Tax Rate Elsewhere?

• Is this multi-billion dollar reduction necessary or reasonable?

 How do our taxes compare with taxes in other world class oil basins?

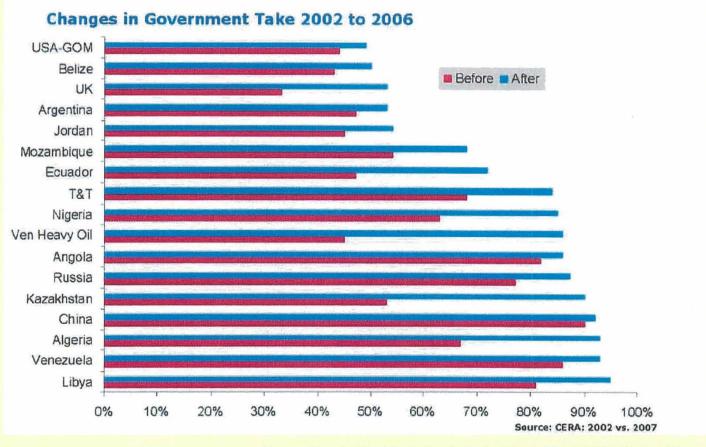
## Alaska Is Competitive

- The following slide, developed by Chevron, shows the government take in even more countries.
- As this slide illustrates, governments have generally been increasing their taxes to ensure that their citizens are fairly reimbursed for selling their nonrenewable oil resources.

## Capturing "Fair Share"

Assessment of Oil and Gas Jurisdictions is Complex and Continuous





### Worst Fiscal Terms in the World\*

Highlighted are places where Alaskan oil companies (BP, ConocoPhillips, Exxon or Repsol) currently do or have done business in recent years

- 1. Bolivia
- 2. Venezuela
- 3. Russia
- 4. Libya
- 5. Iran
- 6. Florida
- 7. Kuwait

- 8. Kazakhstan
- 9. Algeria
- **10.** Iraq
- 11. Ecuador
- 12. Argentina

<sup>\*</sup> According to the Frasier Institute Global Petroleum Survey

## What Would this Loss of Revenue Mean for Alaskans?

- Depletion of our Rainy Day savings account
- Future deficits
- Drastically reduced spending on infrastructure and job-creating capital projects
- Cuts to revenue sharing and operating budgets with associated job and service losses and increased local property taxes

#### In Return?

- Governor Parnell hopes industry will invest more in Alaska.
- However HB 110 and SB 49 require no assurances of increased investment or job creation.
- Is this a reasonable gamble to take? Let's look at more facts.

### **Measure #3**

Has industry investment decreased or increased since the passage of ACES?

## According to the Alaska Department of Natural Resources:\*

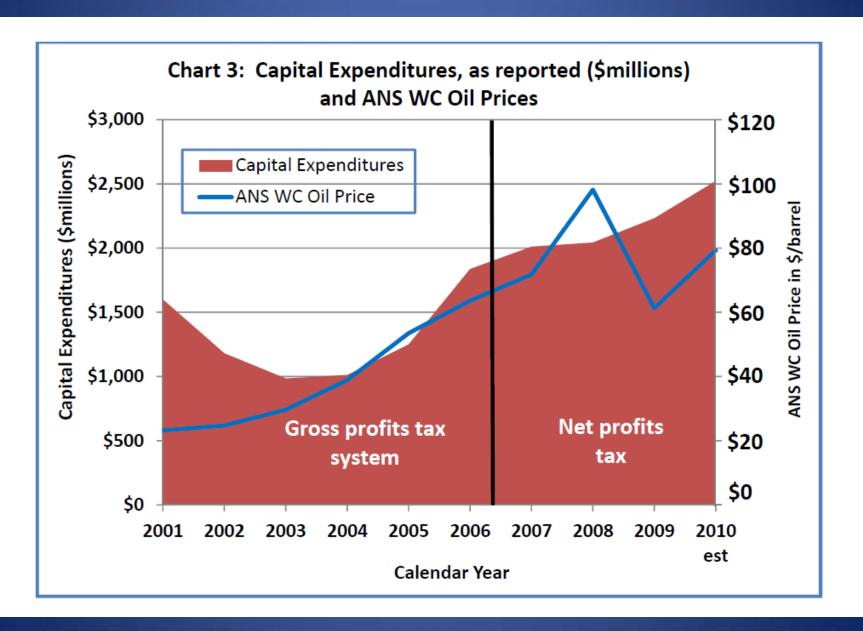
- "Alaska is successfully encouraging investment from companies that are new to the state, with the number of petroleum companies doing business in the state almost doubling from 2006 to 2008."
- "Legacy producers on the North Slope are investing in their own assets, leaving room for new players..."

"Alaska: We're Open for Business!"

# Industry Investment: On the rise

In the years since ACES passed,
capital expenditures have
increased consistently to all-time
highs each year,
as shown in red on the next chart.

### Capital expenditures from 2001-2010



## Both operating and capital spending are up since ACES went into effect

	FY2007	FY2008	FY2009	FY2010
Operating Expenditures (million \$)	2,081	1,881	2,085	2,270
Capital Expenditures (million \$)	1,578	1,967	2,212	2,389
Total Capex/Opex (million \$)	3,659	3,848	4,297	4,659

Source: Revenue Source Books, Alaska Department of Revenue - Fall 2007, Fall 2008, Fall 2009 and Fall 2010

# And investment is forecast to increase this year and next.

	FY2011 Forecast	FY 2012 Forecast
Operating Expenditures (million \$)	2,553	2,558
Capital Expenditures (million \$)	2,572	2,937
Total Capex/Opex (million \$)	5,125	5,495

Source: Revenue Sources Book, Alaska Department of Revenue, Fall 2010

# Are increased investments on the North Slope due to maintenance?

In 2010, the Parnell Administration examined this issue. The following slide was presented by the Administration to the Legislature in February 2010.

## Are the Increasing Spending Levels due to Maintenance Costs?

CAPEX- Capital expenditures ("CAPEX") on pipeline repairs at Prudhoe Bay increased after corrosion incidents in 2006. However, the majority of growth in capital expenditures since 2007 is attributable to drilling, seismic and other production related projects.

OPEX - Since 2007, the proportion of total operating expenditures ("OPEX") related to major repairs does not appear to be the key driver in the growth of total operating expenditures

# Many Factors (Including the Economy) Affect Spending Decisions

- In 2009, ConocoPhillips announced that it planned to layoff 4% of its workforce and cut capital spending by 12.6%.
- "We are positioning ourselves in the current business environment to live within our means ..." said James Mulva, chief executive of the nation's third-largest oil company.

(Houston Chronicle, 1/16/09)

#### **Taxes Are Just One Factor**

 As John Minge, BP's Alaska President, recently said: "It's not always only about taxes."

 The worldwide recession, tightening capital markets, fluctuating oil and gas prices, environmental regulations, access to infrastructure, availability of skilled labor and many other factors affect investment decisions.

### Measure #4

How has ACES affected exploration and development?

## Stimulating investment

- ACES encourages new investment through tax credits and deductions for exploration and development.
- According to Parnell Administration consultants, these credits and deductions are among the most generous in the world.
- Alaska has paid out over \$2 billion in tax credits since ACES passed.

# New Development Wells On the North Slope

2006: 137 wells

2007: 153 wells

2008: 139 wells

2009: 132 wells

2010: 164 wells – highest # in 5 years

Source: Alaska oil and Gas Conservation Commission

# Increases in exploration

"The good news is we are seeing a lot of increase in oil exploration."

 Karen Rehfeld, Director of the Governor's Office of Management and Budget, in testimony before House Finance Committee on January 19, 2011, a week before the Governor introduced his bill.

## Investment is increasing

• Since 2006, the number of applications for exploration tax credits and the amount of qualifying expenditures has generally increased.

• It hit an all-time high under ACES, peaking in 2009.

#### Measure #5

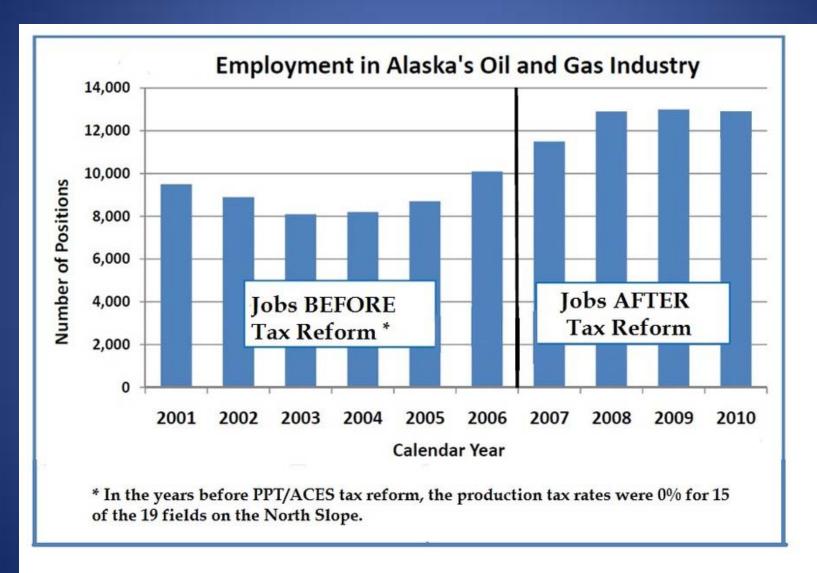
How has ACES affected jobs in the oil and gas industry?

### Jobs on the rise

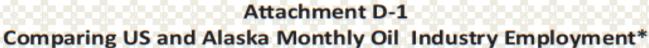
• Employment in the oil and gas industry has increased since ACES was implemented.

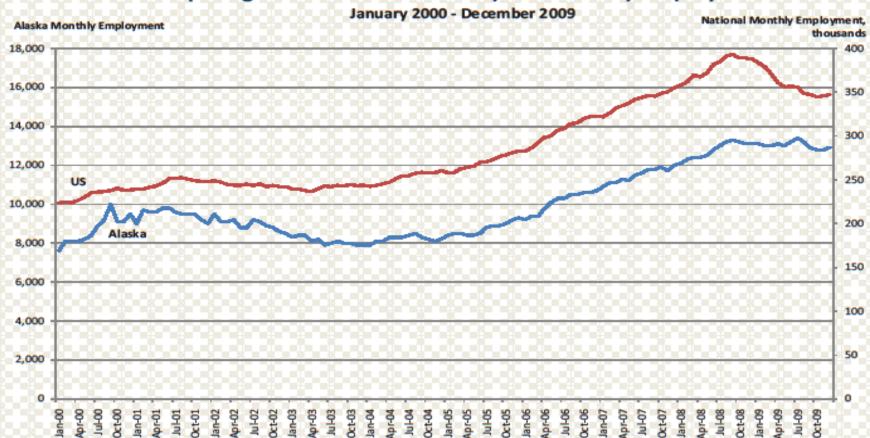
 These are high paying jobs, with average wages of \$14,000 per month, according to the Department of Labor.

#### **New Jobs in the Oil Patch**



#### Oil Industry Jobs - Alaska Versus U.S.





<sup>\*</sup>A laska monthly oil industry employment includes employment for NAICS industries 211, 213111 and 213112. Due to data constraints at the national level, US monthly oil industry employment includes employment for NAICS industries 211 and 213112 (excludes drilling employment). Since drilling is a relatively small percentage of national oil industry employment, the overall trend is the same and is considered an acceptable proxy for total national oil industry employment for this illustration.

Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; US Bureau of Labor Statistics, February 18, 2010.

# Who's Getting the New Jobs?

- According to the Alaska Department of Labor, unemployment claims for Alaskan resident oil and gas workers increased 160% from 793 in 2006 to 2,058 in 2010.
- In 2009, roughly 50% of all new oil and gas hires were non-residents.

#### Measure #6

# How has ACES affected industry interest in Alaska?

# **New Companies to Alaska**

- The state has seen new entrants into Alaska's oil and gas industry since ACES passed.
- At the most recent lease sale in October 2010, a company new to Alaska (Great Bear Alaska) bid on over 500,000 acres and paid more than \$9 million in bonus bids.

## More companies doing business

- In 2006, the first year that tax filings were made under the net profit tax, 19 companies filed annual returns.
- In 2007, this grew to 26.

 In 2008, it grew to 36, and in 2009, 39 companies filed returns.

#### **Recent News**

- In early March, the large Spanish oil company Repsol announced plans to begin exploring in Alaska next winter.
- The company hopes to spend at least \$768 million under a "broad-reaching exploration and development program."
- "The North Slope of Alaska is an especially promising area for Repsol as it has already shown to be oil-rich and carries low exploratory risk," Repsol said.

# ACES is Particularly Attractive to "Independent" Oil Companies

"... a lot of the prospects that are readily drillable are not large enough for the majors to chase, but for us, they are intriguing," said Greg Vigil, executive vice president at Savant Alaska LLC.

#### **ACES** is all about incentives

"One of the big things is to let independent oil and gas companies know is that Alaska is open for business and a big incentive is the ACES legislation,"

Vigil said.

## ACES Rewards New Investment

- The state actually pays for much of the cost of exploration and development activities.
- This fact is generally not highlighted by those who claim Alaska's share of profits is too high.
- Let's look at examples prepared by the Parnell Administration in 2010.

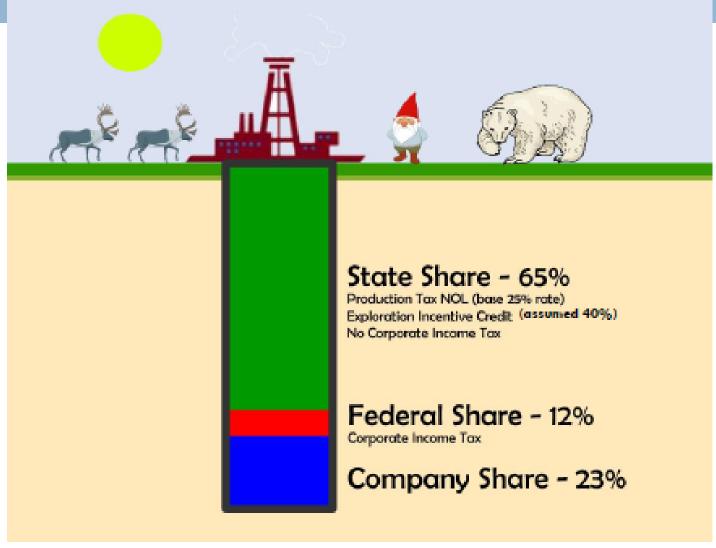
#### Credit Example 1: New Entrant

- A new entrant with no current production pursues an exploration project requiring \$200 million in investment
- Company receives a 20% 40% investment credit (depending on location), worth \$40 - \$80 million
- Company also receives an additional 25% credit for its "tax loss" or "net operating loss (NOL)", worth up to \$50 million

#### Credit Example 1: New Entrant (cont.)

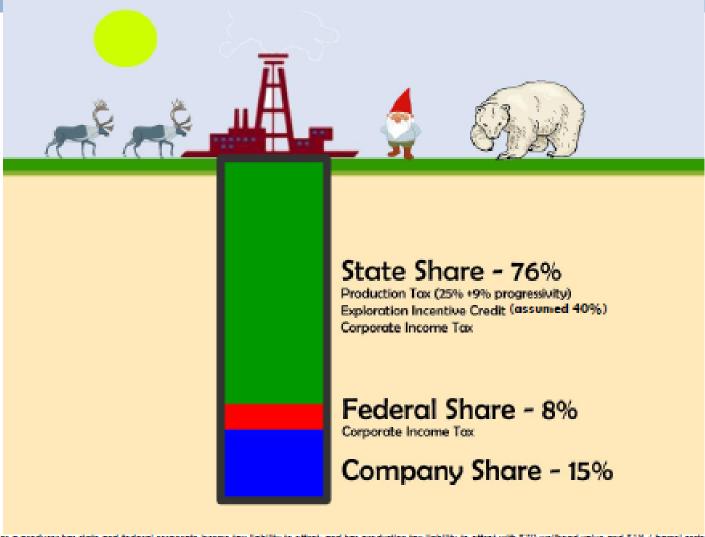
- The total credits of \$90 \$130 million, can be:
  - Directly recouped (cash) from the state
  - Transferred to a person that does pays tax, so that the Transferee pays \$90 - \$130 million less in tax
- Either way, State pays \$90 \$130 million for the exploration; company pays \$70 - \$110 million.
- If the exploration effort fails, the state never recoups this money.
  - The state bears the risk for failure as does the new entrant

## Exploration Dry Hole – New Entrant



# Unsuccessful Development Project – Existing Producer

19



\*This graphic assumes a producer has state and federal corporate income tax liability to offset, and has production tax liability to offset with \$70 wellhead value and \$18 / barrel costs.

Alaska Department of Revenue

# Alaska's Clear and Equitable Share

• Given this level of state investment, it is appropriate that Alaskans share in the profits that are sometimes generated.

 Alaskans are major investors in oil exploration and development and as such should reap some of the rewards.

#### Measure #7

# How has ACES affected company profits?

# **Profits Are Strong**

From ConocoPhillips Consolidated Income Statements:

US E&P Net Income	2008	2009	2010
Alaska	2.3 Billion	1.5 Billion	1.7 Billion
Lower 48	2.7 Billion	-37 Million	1.0 Billion

#### Alaska Profits vs. World Profits

From Petroleum News (8/16/2009)

Alaska O&G production makes up about 12% of ConocoPhillips' worldwide output. In the 1<sup>st</sup> quarter of this year (2009), Alaska operations earned the company \$240 million, or 29% of its worldwide exploration and production income.

ConocoPhillips' acknowledges that Alaska production tax credits are a significant component in the company's profit.

In the 2nd quarter, ConocoPhillips had \$725 million in E&P worldwide earnings, more than 55% of that, \$404 million, came from its Alaska business.

# **Healthy Rates of Return**

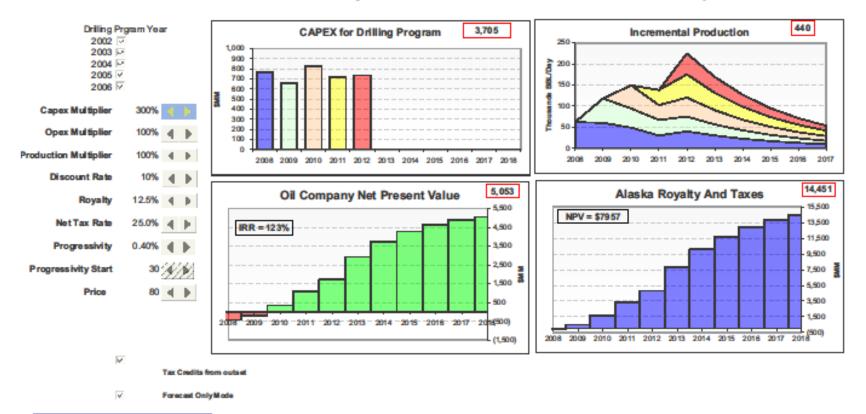
- On 3/23/11, ConocoPhillips executives said Alaska had "strong cash margins" and "very good rates of return."
- In 2007, consultants hired by the Legislature modeled the rate of return an oil company receives when investing in Prudhoe Bay.
- The following slide, developed by Gaffney and Cline, estimates returns at 123% when oil sells at \$80 a barrel.



#### Senate CS – Forecast Mode, \$80 oil

IRR = 123%, NPV10 = \$5.375 billion

Modeling the Prudhoe Success contained in AOGA/BP Testimony



Gaffney, Cline & Associates

#### Measure #8

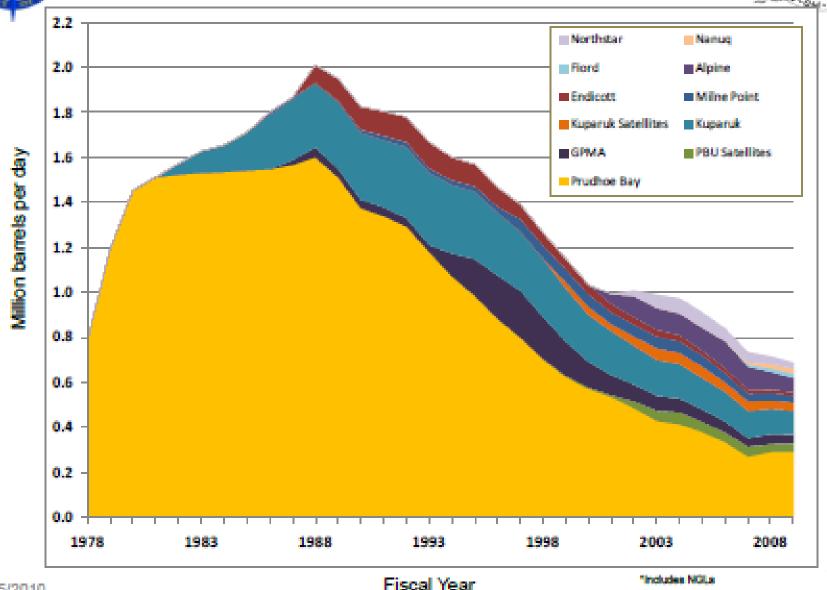
How has ACES affected oil and gas production levels?

# **Declining production**

 Oil production on the North Slope has been declining steadily since the late 80s.

 It declined under ELF, when production taxes were zero on most fields, and it has continued to decline under ACES, as the following chart shows.

#### Alaska North Slope History



# Decline, Year by Year, of North Slope Oil Production

Year	Decline	Year	Decline	Year	Decline
1989	-7%	1996	-6%	2003	-1%
1990	-5%	1997	-7%	2004	-6%
1991	1%	1998	-9%	2005	-5%
1992	-5%	1999	-11%	2006	-14%
1993	-8%	2000	-7%	2007	-2%
1994	-2%	2001	-1%	2008	-5%
1995	-5%	2002	2%	2009	-5%

Average since 1989: -5.2%

Source Data from EIA Crude Oil Production - Alaska North Slope Crude Oil Production <a href="http://www.eia.gov/dnav/pet/pet\_crd\_crpdn\_adc\_mbbl\_m.htm">http://www.eia.gov/dnav/pet/pet\_crd\_crpdn\_adc\_mbbl\_m.htm</a>

Decline percentage is calculated by comparing one year of production to the preceding year of production.

#### Decline is natural as fields mature

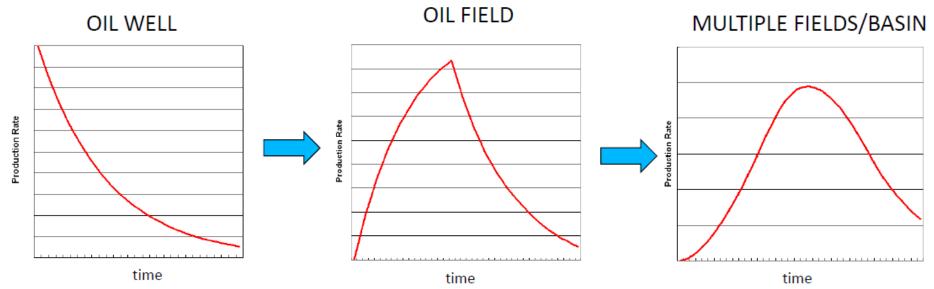
 This pattern of decline is a natural feature of oil fields around the globe, as the following charts show.

 The Parnell Administration has calculated that the throughput decline will decrease to about 2% per year.



#### Typical Production Profile





Production increases at first, reaches a peak, then declines. The decline rate typically levels off in later years.

The field's geology, operator's development plan, and commercial factors, all influence the shape of the curve.

# Is the Trans-Alaska Pipeline Going to Shut Down?

- BP Alaska told the SEC they expect continued production in Prudhoe Bay "until the year 2065."
- BP, Conoco & Exxon agreed that TAPS would operate through 2042 and presented evidence in a recent trial that TAPS could function down to 200,000 barrels a day.
- A judge recently determined TAPS will operate at least through 2047.

# **Closing Thoughts**

Just last year, the Parnell
 Administration told the legislature that ACES does not appear to be having a negative effect on the oil and gas industry.

## Conclusions from the Analysis

In general, the information does not indicate that changes in the tax system have had a direct negative impact on industry activity in the state

In fact, the data would indicate that the investment incentive provisions of ACES are contributing to increased levels of expenditure

#### What do others think?

• From 12/20/2009 Petroleum News:

 "Parnell also said that he has already discussed ACES with 10 oil companies. Of those, he said, "four to five" thought the tax system was "just fine," while "two or three" thanked the state for the tax credit program, and two companies wanted to see ACES changed."

# Alaska Taxes: Not a Deterrent to Investment

- These informal findings are consistent with a recent global survey of oil and gas industry executives conducted by the Frasier Institute.
- 40% said Alaska's oil taxes "encourage production," while another 34% say our oil tax regime "does not deter investment."
- Only 9% of the 645 executives surveyed said Alaska's oil taxes are a "strong deterrent to investment" or would cause them not to invest in Alaska.

# Conclusions

 We had a 20+ year experiment in Alaska to see if 0% taxes encouraged investment and created more Alaskan jobs.

 Under ELF, with most fields paying 0% in production taxes, jobs declined, investment declined and production declined.

# Conclusions

Under ACES, investment and jobs are at all-time highs, the number of companies doing business has doubled, and profits are strong.