

**1/27/12**

**PRESENTATION:  
BRYAN BUTCHER,  
COMMISSIONER,  
DEPARTMENT OF  
REVENUE**

<TARGET><BILL></BILL><SUBJECT>1-27-12 PRESENTATION  
BRYAN BUTCHER, COMMISSIONER, DEPARTMENT OF  
REVENUE</SUBJECT><COMM>SRES27</COMM></TARGET>



Fall 2011 Revenue  
Forecast and  
Tax Credit Update

*Presentation to the  
Senate Resources Committee  
January 27, 2012  
Alaska Department of Revenue*



# Presentation Requested on the Following Items



- **Fall 2011 Forecast**
- **Tax Credits**
- **Tax Revenue Management System**
- **Production Tax Audits**
- **Staffing Levels for Audits**
- **Data Assessment Project**
- **Regulations**



# Fall 2011 Oil Production Forecast



# Factors That Affect Production Forecasting



## 1. GEOLOGY

- Rock type and formation characteristics
- Depth, thickness, pressure
- Oil & gas characteristics (oil gravity, viscosity, water content, etc.)

## 2. DEVELOPMENT PLAN

- Well density and development rate
- Well bore size and completion technique
- Artificial lift and enhanced oil recovery
- Facilities & surface operations

## 3. COMMERCIAL

- Project economics
- Oil price and market conditions
- Government Policy: access, regulation, taxation

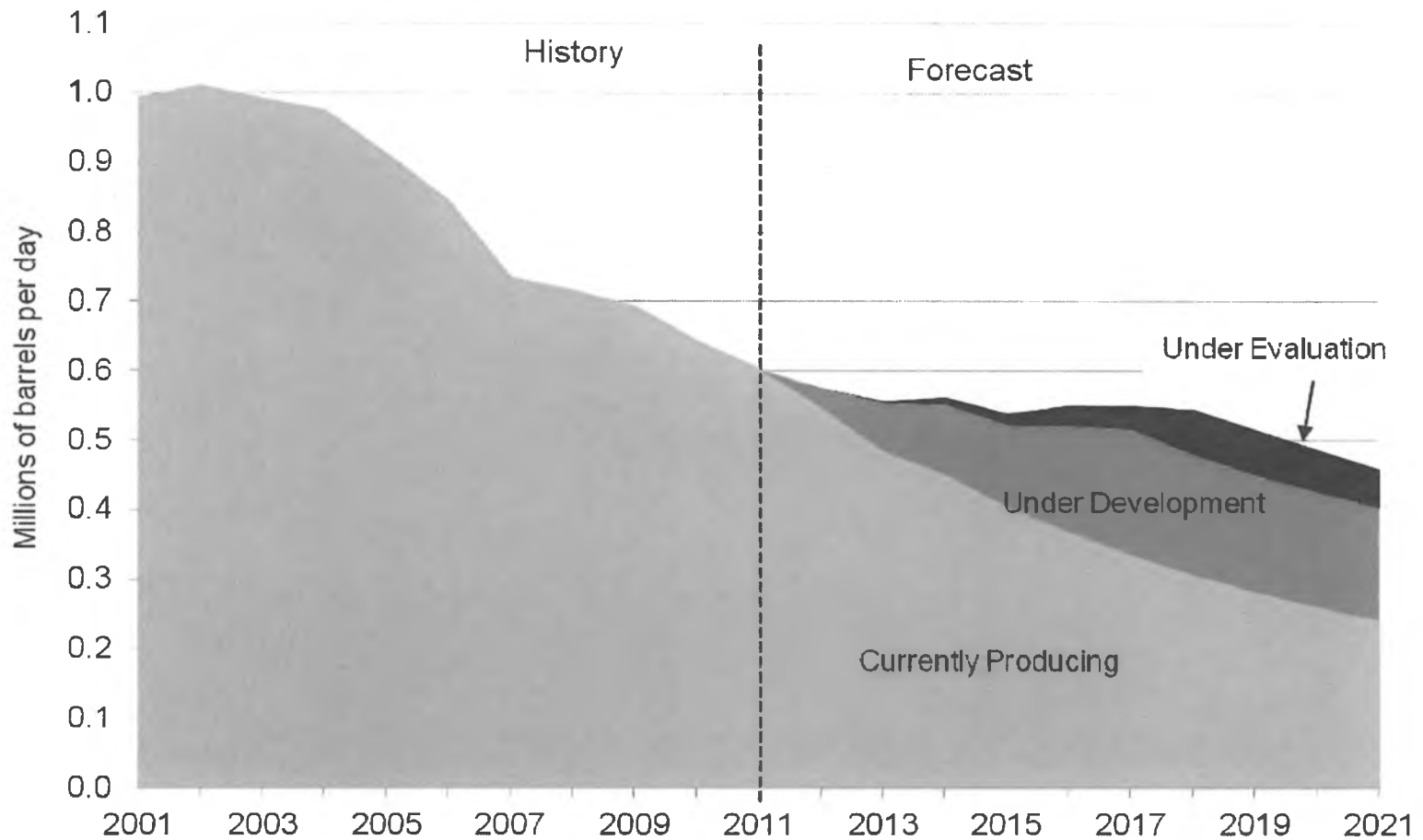
## 4. PRODUCTION PROFILE

- History, stage of depletion
- Use production profile to extrapolate trends

## 5. TIMING!



# ANS Production, FY 2001-2011 and Forecast FY 2012 - 2021



Source: Fall 2011 Revenue Sources Book



# ANS Production Forecast and Decline Rates, FY 2012 - 2021



Fiscal Year	Currently Producing	% Change from Prior Year	Under Development	Under Evaluation	Total ANS	% Change from Prior Year
2011	0.603	(6.3%)	0.000	0.000	0.603	(6.3%)
2012	0.548	(9.1%)	0.026	0.001	0.574	(4.7%)
2013	0.485	(11.6%)	0.069	0.001	0.555	(3.3%)
2014	0.451	(6.9%)	0.099	0.010	0.561	1.0%
2015	0.406	(10.0%)	0.115	0.017	0.538	(4.1%)
2016	0.369	(9.1%)	0.151	0.029	0.550	2.1%
2017	0.336	(9.1%)	0.179	0.034	0.549	(0.1%)
2018	0.307	(8.5%)	0.171	0.066	0.544	(0.9%)
2019	0.282	(8.1%)	0.166	0.066	0.515	(5.4%)
2020	0.262	(7.4%)	0.164	0.061	0.486	(5.6%)
2021	0.241	(7.7%)	0.161	0.056	0.458	(5.8%)

Source: Fall 2011 Revenue Sources Book





# Production Forecast – Improvements in Methodology



- Created standardized reporting forms for production forecasting information.
- Petroleum Engineer and Petroleum Economists compiled the forecast information from electronic reports rather than interpreting data provided by operators in various formats.
- Compliance and standardization improved with regard to reported downtime.
- Production forecasting requires consideration of each project's geology, development plans, production profiles, decline curves and timing.
- Department uses extensive well and field specific data acquired from producers, AOGCC, and DNR.
- New field development is very important in mitigating decline rates.
- Current engineering consultant is a member of the Society of Petroleum Evaluation Engineers (SPEE)
- Forecast included estimating decline curves for thousands of producing wells



# Fall 2011 Oil Price and Revenue Forecast



# Fall 2011 DOR Oil Price Forecast



	Real \$		Nominal \$	
	WTI	ANS	WTI	ANS
FY 2011 (actual)	89.39	94.49	89.39	94.49
FY 2012 (projected)	88.71	106.66	90.92	109.33
FY 2013	91.97	104.20	96.62	109.47
FY 2014	92.75	101.29	99.88	109.08
FY 2015	93.50	98.52	103.21	108.75
FY 2016	93.60	95.27	105.90	107.79

\*Note: FY 2012 forecast includes one quarter of actual prices.

Forecast is made in terms of Real WTI , then adjusted using 2.5% inflation rate and a forecast differential to ANS.



# FY 12 & FY 13 General Fund Unrestricted Revenue Forecast



Revenue Type	FY 12 (\$M)	% Total	FY 13 (\$ M)	% Total
Royalty - Net PF / SF	\$ 2,085.2	23.4%	\$ 1,962.0	23.9%
Production Tax	\$ 5,376.4	60.2%	\$ 4,715.8	57.4%
Corp Income Tax	\$ 662.1	7.4%	\$ 728.4	8.9%
Property Tax	<u>\$ 91.7</u>	<u>1.0%</u>	<u>\$ 89.7</u>	<u>1.1%</u>
Subtotal Oil Revenue	\$ 8,215.3	92.0%	\$ 7,496.0	91.2%
Non-Oil Revenue	<u>\$ 712.6</u>	<u>8.0%</u>	<u>\$ 721.7</u>	<u>8.8%</u>
<b>Total Revenue</b>	<b>\$ 8,927.9</b>	<b>100.0%</b>	<b>\$ 8,217.7</b>	<b>100.0%</b>

Source: Fall 2011 Revenue Sources Book



# Production Tax Credits Update



## Credits Applied Against Production Tax Liability, by Fiscal Year (\$M)



	<u>Pre-2008</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011*</u>	<u>2012*</u>	<u>Total</u>
Capital Expenditure Credit	292	219	278	342	345	360	1,837
TIE Credits	171	73	0	0	0	0	244
Small Producer Credits	46	31	27	27	41	35	208
Exploration Credits	48	55	28	42	19	5	196
<b>Totals</b>	<u><b>557</b></u>	<u><b>378</b></u>	<u><b>333</b></u>	<u><b>412</b></u>	<u><b>405</b></u>	<u><b>400</b></u>	<u><b>2,485</b></u>

\*estimated pending final true-up



## Transferable Tax Credits Certificates Claimed by Fiscal Year (\$M)



<u>Credit Type</u>	<u>Pre- 2008</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012*</u>	<u>Total</u>
Capital Expenditure - .023(a)(1)	52.3	78.4	66.9	114.9	160.7	83.4	556.7
Capital Expenditure Exploration - .023(a)(2)	15.9	13.3	42.6	34.7	4.6	0.4	111.5
Net Operating Loss .023(b)	38.1	85.5	153.8	140.4	188.6	8.3	677.7
Well Lease Expenditure - .023(l)					9.4	23.8	33.2
Exploration -.025	<u>93.2</u>	<u>85.5</u>	<u>56.6</u>	<u>99.5</u>	<u>2.4</u>	<u>2.5</u>	<u>339.7</u>
<b>Total</b>	<u>199.6</u>	<u>325.7</u>	<u>320.0</u>	<u>389.5</u>	<u>365.7</u>	<u>118.4</u>	<u>1,718.9</u>

\* through December 2011



## Transferable Tax Credit Certificate Activity by Fiscal Year (\$M)



	<u>Pre-2008</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012*</u>	<u>Total</u>
Issued	116.0	130.8	308.0	361.3	458.0	132.9	1,507.1
Refunded	(54.6)	(54.1)	(193.1)	(250.5)	(450.2)	(273.5)	(1276.1)
Transferred/ Applied to Taxes	(52.3)	(62.7)	(46.6)	(20.0)	(7.4)	0	(189.0)
Activity by year	9.1	14.0	68.3	90.8	.3	(140.5)	
Transferable Tax Credit Certificates Outstanding	<u>13.0</u>	<u>13.1</u>	<u>91.5</u>	<u>182.3</u>	<u>182.6</u>	<u>42.0</u>	<u>42.0</u>

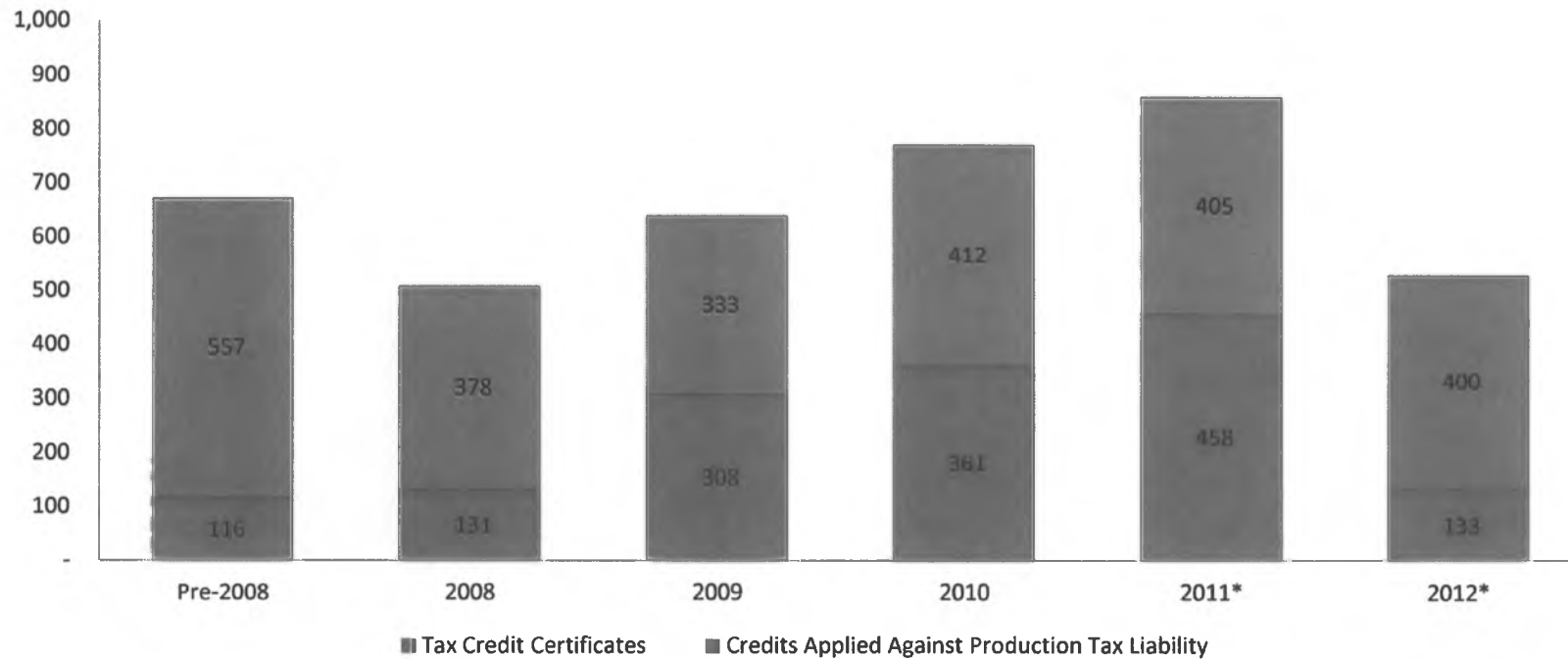
\* through December 2011



# Production Tax Credits



By Fiscal year



\* Estimates pending final true-ups



# Production Tax Credits



## Total Production Tax Credit Impact through FY 2012 (\$M)

	<u>Pre- 2008</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011*</u>	<u>2012*</u>	<u>Total</u>
Tax Credit Certificates	116	131	308	361	458	133	1,507
Credits Applied Against Production Tax Liability	557	378	333	412	405	400	2,485
Total by Year	673	509	641	773	863	533	3,992

\*Estimated pending final true-ups