



# Fall 2013 Revenue Forecast

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January 23, 2014

Department of Revenue

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Commissioner

Alaska Department of Revenue

# FALL 2013

## Revenue Forecast



# UNRESTRICTED REVENUE FORECAST 2012-2022

	Actual		Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ANS WC Oil Price (\$/bbl)	112.65	107.57	105.68	105.06	107.69	110.38	115.40	121.19	122.43	123.67	133.00
Total ANS Production (State + Federal) (thousand bbls/day)	579.4	531.6	508.2	498.4	487.6	482.7	459.5	429.1	399.6	368.8	340.1
Deductible Lease Expenditures	\$4,405	\$4,924	\$6,600	\$7,294	\$7,147	\$6,439	\$6,060	\$6,247	\$6,018	\$5,766	\$5,604
General Fund Unrestricted Revenues (million)	\$9,485	\$6,929	\$4,930	\$4,532	\$4,610	\$4,981	\$5,105	\$5,135	\$4,810	\$4,503	\$4,654
PTV per Taxable Barrel	\$79.33	\$67.76	\$54.67	\$49.04	\$51.85	\$57.44	\$62.50	\$63.20	\$62.12	\$60.86	\$66.67

## CONTRIBUTORS OF CHANGES IN FY2013 REVENUE - ACTUAL

Component	FY 2012 Actual	FY 2013 Actual	Change
ANS Production (thousand bbl/day)	579.4	531.6	-47.8
ANS Price	\$112.65	\$107.57	-\$5.08
ANS Deductible Lease Expenditures (\$million)	\$4,405	\$4,924	+\$519
Transportation Costs	\$8.81	\$9.76	+\$0.95

- **Average Production Tax Value per barrel fell from about \$79 to about \$68.**
- **General Fund Unrestricted Revenue fell \$2.5 billion**

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# FALL 2013 HIGHLIGHTS

- Oil price and production levels have been reduced relative to the 2013 Spring Forecast.
- Correspondingly, unrestricted revenues have been revised down from the Spring 2013 Forecast.
- Revenue impacts largely due to changes in oil price, production, lease expenditures, and tariffs.
- Substantial (~\$10 billion) increase in spending on the North Slope over the next 10 years.
- Oil companies project increased North Slope production following the increased activity.
  - DOR continues to prudently assess future production and the forecast is not intended as a comprehensive assessment of all the potential activity or projects under evaluation.
- State investment earnings are strong.

# GENERAL FUND UNRESTRICTED OIL REVENUES

(MILLIONS\$)

Revenue Type	Actual		Forecast			
	2013	Percent	2014	Percent	2015	Percent
<b>Petroleum Revenue</b>						
Net Royalty (less PF & SF)	\$1,768	25.5%	\$1,696	34.4%	\$1,663	36.7%
Production Tax	\$4,050	58.5%	\$2,100	42.6%	\$1,711	37.8%
Corporate Income Tax	\$435	6.3%	\$464	9.4%	\$464	10.2%
Property Tax	\$99	1.4%	\$100	2.0%	\$97	2.1%
<b>Total Petroleum Revenue</b>	<b>\$6,352</b>	<b>91.7%</b>	<b>\$4,360</b>	<b>88.4%</b>	<b>\$3,935</b>	<b>86.8%</b>
<b>Non-petroleum Revenue</b>	<b>\$576</b>	<b>8.3%</b>	<b>\$571</b>	<b>11.6%</b>	<b>\$597</b>	<b>13.2%</b>
<b>Total General Fund Unrestricted Revenue</b>	<b>\$6,929</b>	<b>100.0%</b>	<b>\$4,930</b>	<b>100.0%</b>	<b>\$4,532</b>	<b>100.0%</b>

# GENERAL FUND UNRESTRICTED OTHER REVENUES

(MILLIONS\$)

Revenue Type	Actual		Forecast			
	2013	Percent	2014	Percent	2015	Percent
<b>Taxes</b>						
Non-petroleum Corporate Income	\$113	19.5%	\$88	15.4%	\$127	21.3%
Mining License Tax	\$47	8.1%	\$45	7.9%	\$42	7.0%
Insurance Premium	\$52	9.1%	\$54	9.5%	\$56	9.4%
Tobacco	\$45	7.8%	\$44	7.7%	\$43	7.2%
Motor Fuel	\$42	7.3%	\$41	7.2%	\$41	6.8%
Other Taxes	<u>\$63</u>	10.9%	<u>\$66</u>	11.5%	<u>\$67</u>	11.2%
<b>Subtotal Taxes</b>	<b>\$361</b>	62.7%	<b>\$338</b>	59.3%	<b>\$376</b>	62.9%
<b>Investments</b>	<b>\$28</b>	4.9%	<b>\$86</b>	15.1%	<b>\$85</b>	14.2%
<b>Other</b>	<u><b>\$187</b></u>	32.5%	<u><b>\$146</b></u>	25.6%	<u><b>\$137</b></u>	22.9%
<b>Total Non-Oil</b>	<b>\$577</b>	<b>100.0%</b>	<b>\$571</b>	<b>100.0%</b>	<b>\$597</b>	<b>100.0%</b>

# TOTAL REVENUE FORECAST – FY13, 14 & 15

(MILLIONS\$)

Revenue Type	Actual	Forecast	
	FY 2013	FY 2014	FY 2015
<b>Unrestricted General Fund</b>			
Oil Revenue	\$ 6,352.0	\$ 4,359.5	\$ 3,935.0
Non-Oil Revenue*	\$ 548.4	\$ 484.1	\$ 512.3
Investment Revenue	\$ 28.1	\$ 86.4	\$ 84.7
<b>Total Unrestricted Revenue</b>	<b>\$ 6,928.5</b>	<b>\$ 4,930.0</b>	<b>\$ 4,532.0</b>
<b>Designated General Fund</b>			
Non-Oil Revenue*	\$ 299.8	\$ 329.0	\$ 327.6
Investment Revenue	\$ 40.5	\$ 40.1	\$ 30.7
<b>Subtotal</b>	<b>\$ 340.3</b>	<b>\$ 369.1</b>	<b>\$ 358.3</b>
<b>Other Restricted Revenue</b>			
Oil Revenue	\$ 1,032.5	\$ 756.5	\$ 738.5
Non-Oil Revenue*	\$ 185.2	\$ 214.0	\$ 215.4
Investment Revenue	\$ 4,937.3	\$ 3,523.5	\$ 3,531.3
<b>Subtotal</b>	<b>\$ 6,155.0</b>	<b>\$ 4,494.0</b>	<b>\$ 4,485.2</b>
<b>Federal Revenue</b>			
Oil Revenue	\$ 3.6	\$ 3.6	\$ 3.6
Federal Receipts	\$ 2,383.2	\$ 2,963.0	\$ 2,963.0
<b>Subtotal</b>	<b>\$ 2,386.8</b>	<b>\$ 2,966.6</b>	<b>\$ 2,966.6</b>
<b>Total State Revenue</b>	<b>\$ 15,810.6</b>	<b>\$ 12,759.7</b>	<b>\$12,342.1</b>

\*Except Federal and Investment

Source: Department of Revenue - Revenue Sources Book Fall 2013



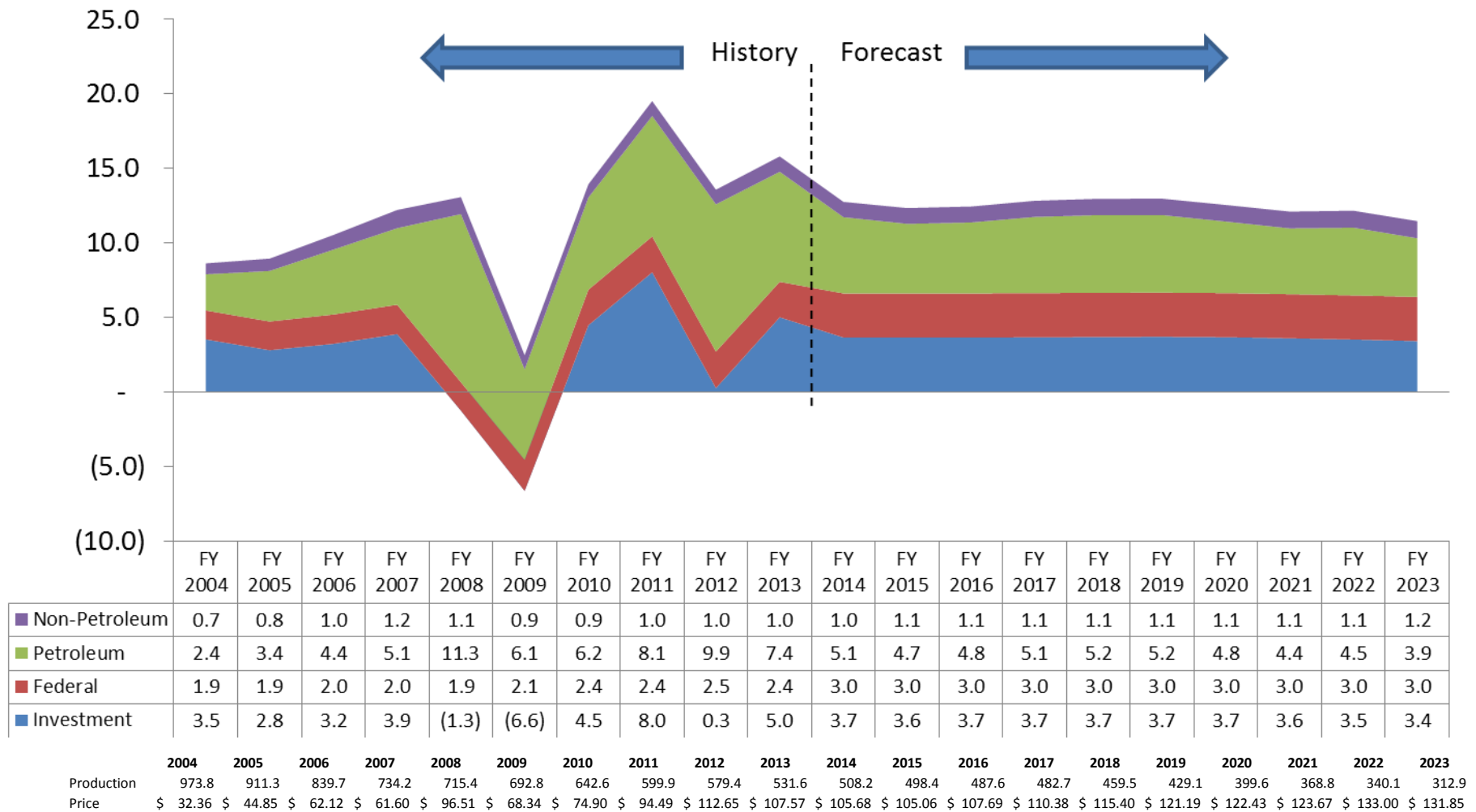
# GENERAL FUND UNRESTRICTED REVENUE

## PRICE SENSITIVITY FY2014-2016

Year	2014	2015	2016
<b>Production</b> (ths bbls/day)	508.2	498.4	487.6
<b>Forecast Price</b>	\$105.68	\$105.06	\$107.69
<b>Revenue (million\$)</b>	\$4,930	\$4,532	\$4,610

ANS (\$/barrel)	GF Unrestricted Revenue (Million \$)		
\$50	\$2,350	\$1,860	\$1,820
\$60	\$2,620	\$2,130	\$2,090
\$70	\$2,880	\$2,410	\$2,350
\$80	\$3,170	\$2,690	\$2,620
\$90	\$3,530	\$3,240	\$3,160
\$100	\$4,370	\$4,150	\$4,040
\$110	\$5,380	\$4,900	\$4,930
\$120	\$6,360	\$5,820	\$5,830
\$130	\$7,470	\$6,730	\$6,720
\$140	\$8,450	\$7,650	\$7,460
\$150	\$9,420	\$8,560	\$8,360

# FALL 2013 TOTAL REVENUE FORECAST



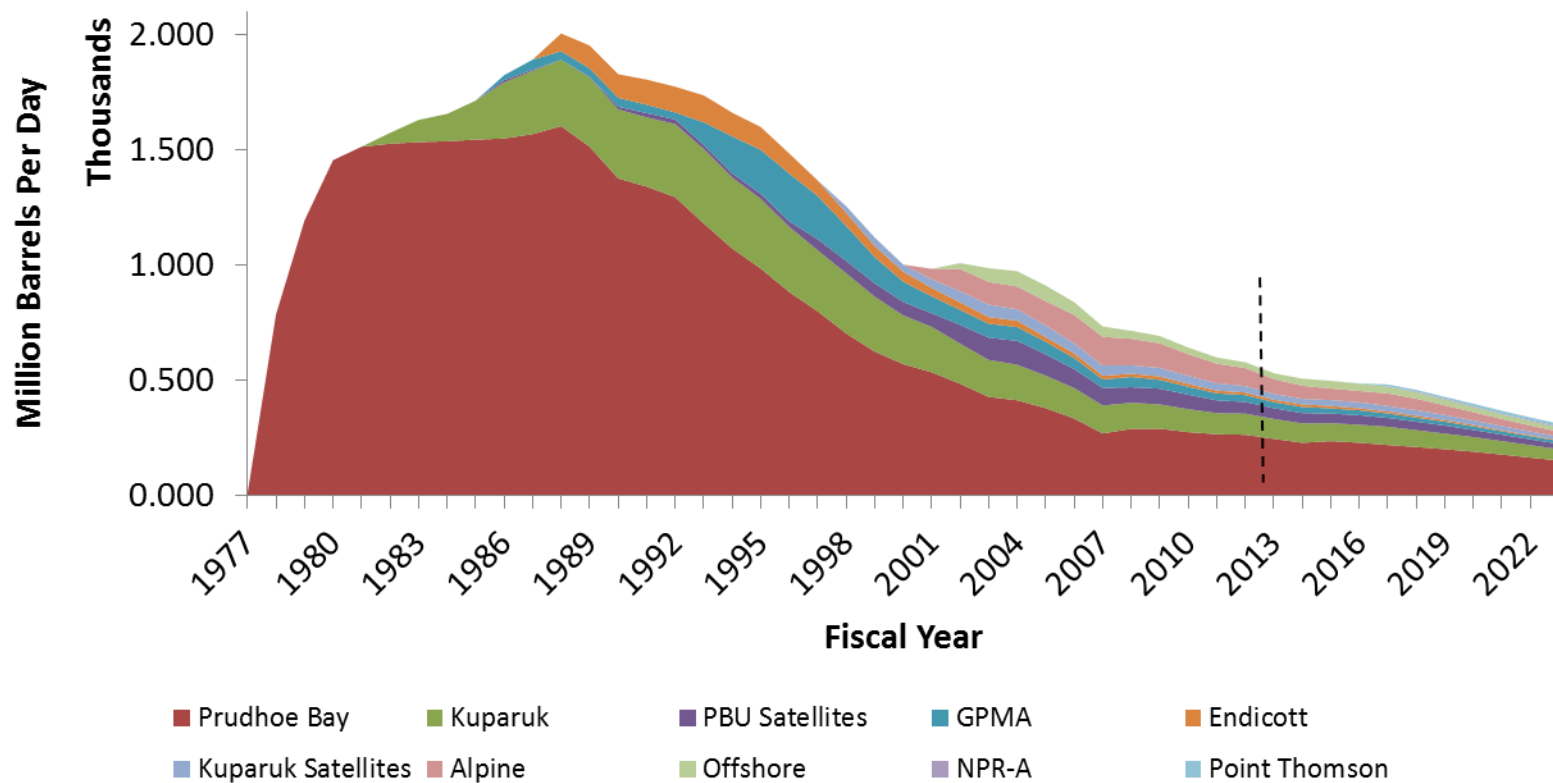
Source: Department of Revenue - Revenue Sources Book Fall 2013

# FALL 2013

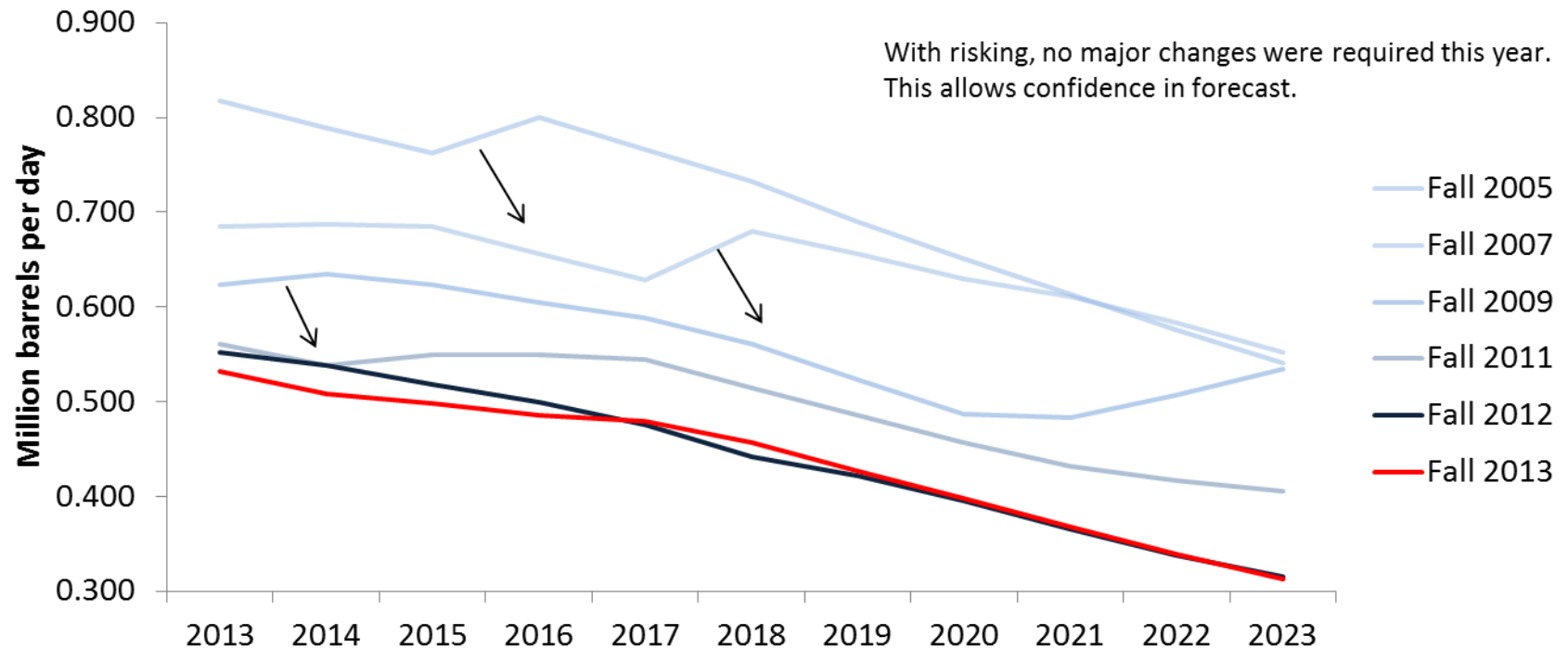
## Production Forecast and Methodology



# PRODUCTION HISTORY AND FORECAST



# ANS OIL PRODUCTION FORECAST



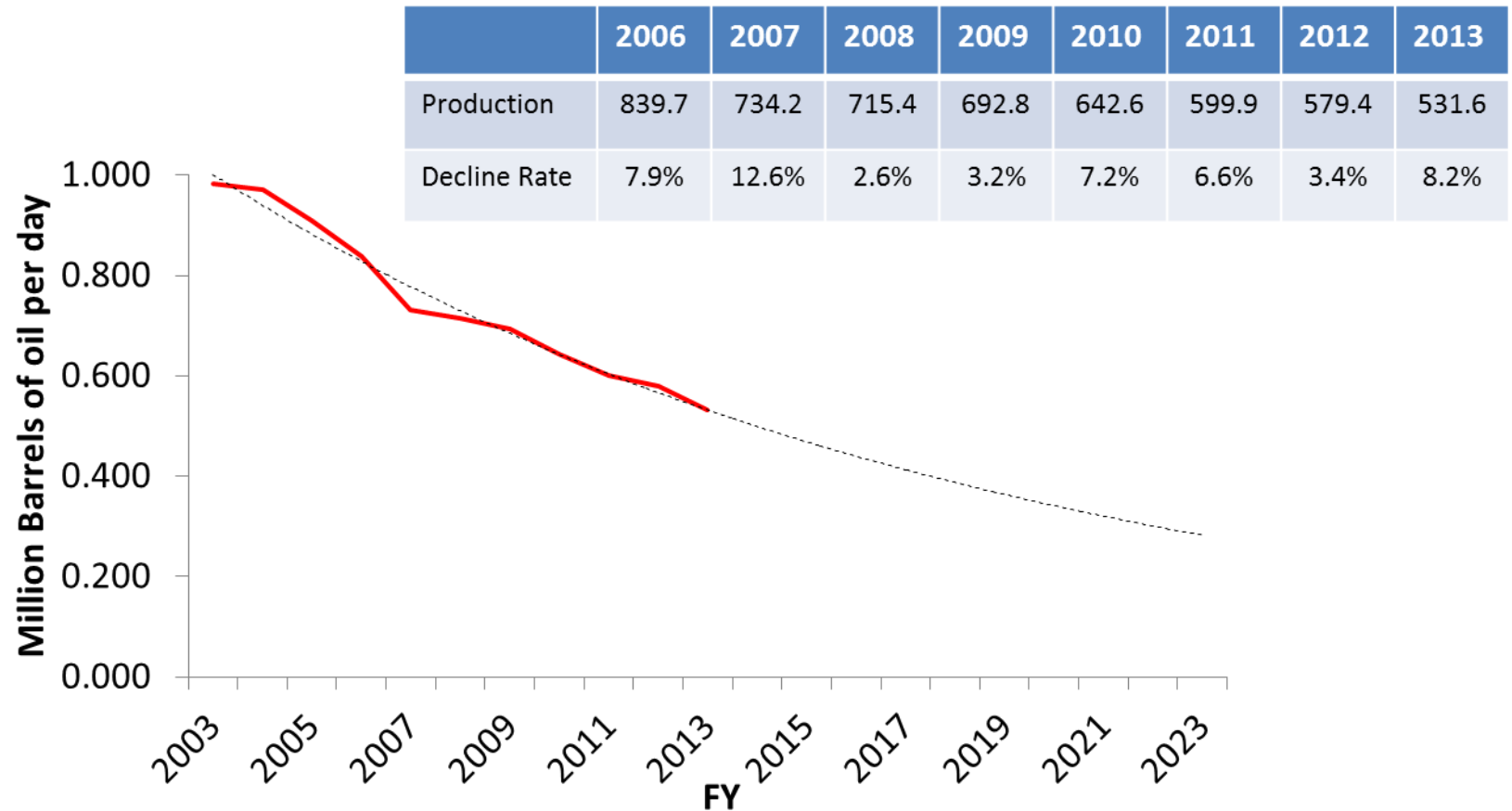
# ANS OIL PRODUCTION FORECAST

- **Currently Producing:**
  - Oil from wells that are in production and following typical reservoir engineering optimization without major investment.
- **Under Development (UD):**
  - Oil from projects that will add incremental oil to existing fields or will bring new fields into production.
  - Project must have senior management approval and be allocated funds in the company's budget.
- **Under Evaluation (UE):**
  - Oil from projects that are likely to occur in the future, but have not met the requirements of the previous category.
  - Requires that oil reserves are known and recovery is technically possible with current technology.
- *Under Development + Under Evaluation = “New Oil”*

# ANS OIL PRODUCTION FORECAST

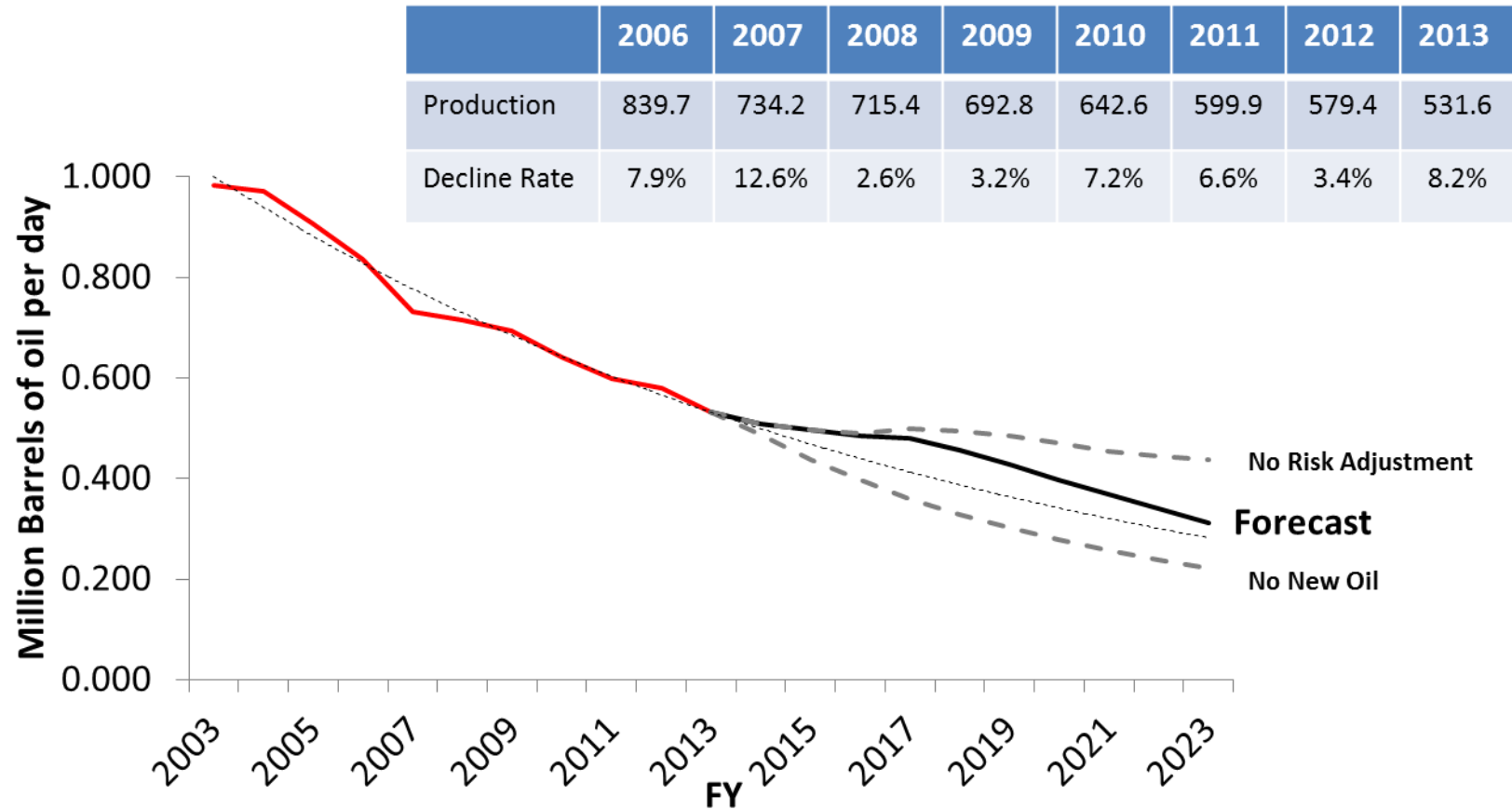
- “Currently Producing” oil **was not** risked
  - Engineering assessment based on actual production data
- The “New Oil” portion of the Forecast was adjusted for risks
  - Accounts for uncertainty in subsurface conditions and risk of delay
- The “Under Evaluation” portion of the Forecast was risked at a greater rate than “Under Development”
  - Accounts for greater uncertainty in subsurface conditions and higher risk of delay

# ANS OIL PRODUCTION – ACTUALS & FORECAST

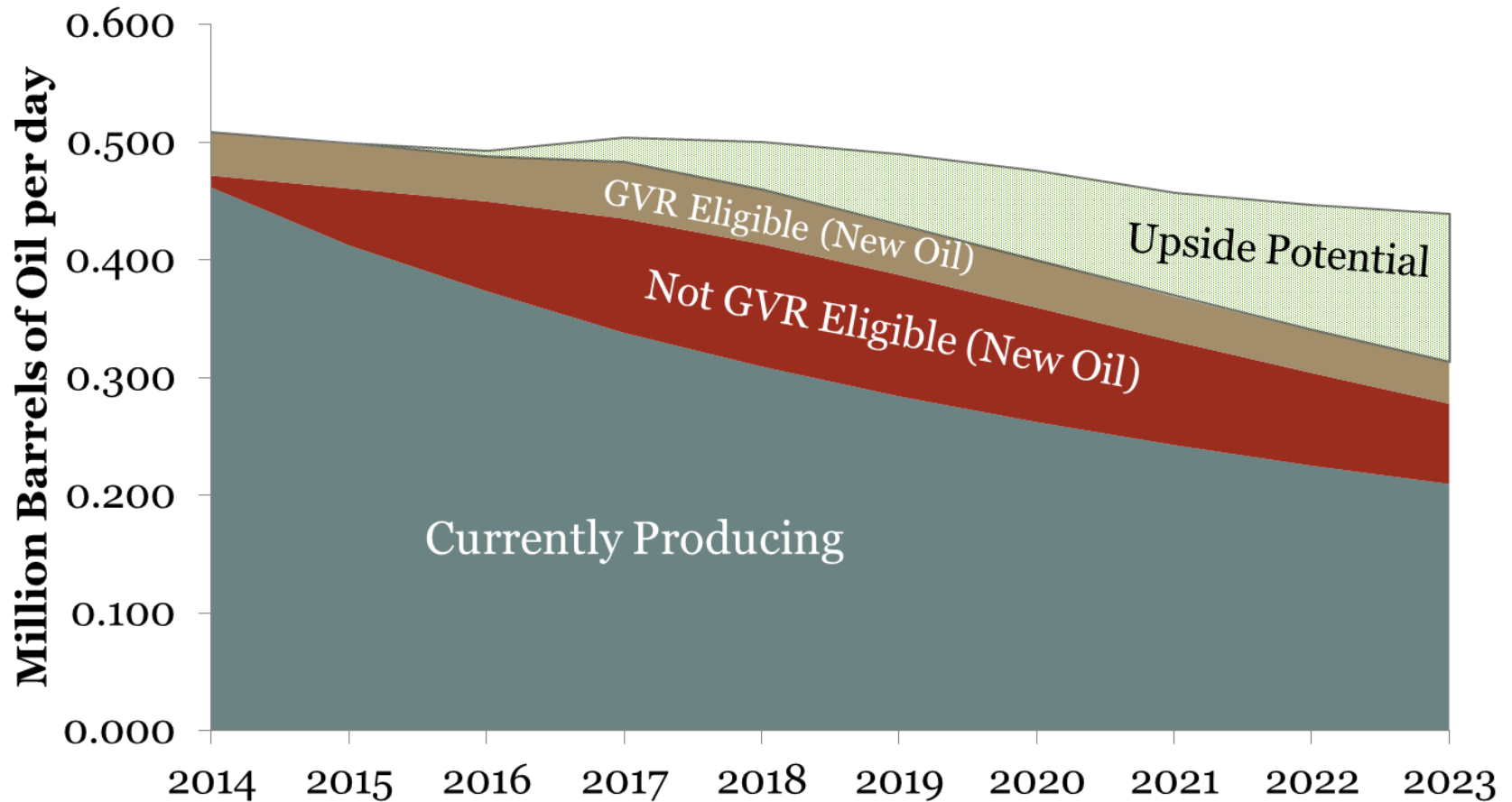




# ANS OIL PRODUCTION – ACTUALS & FORECAST



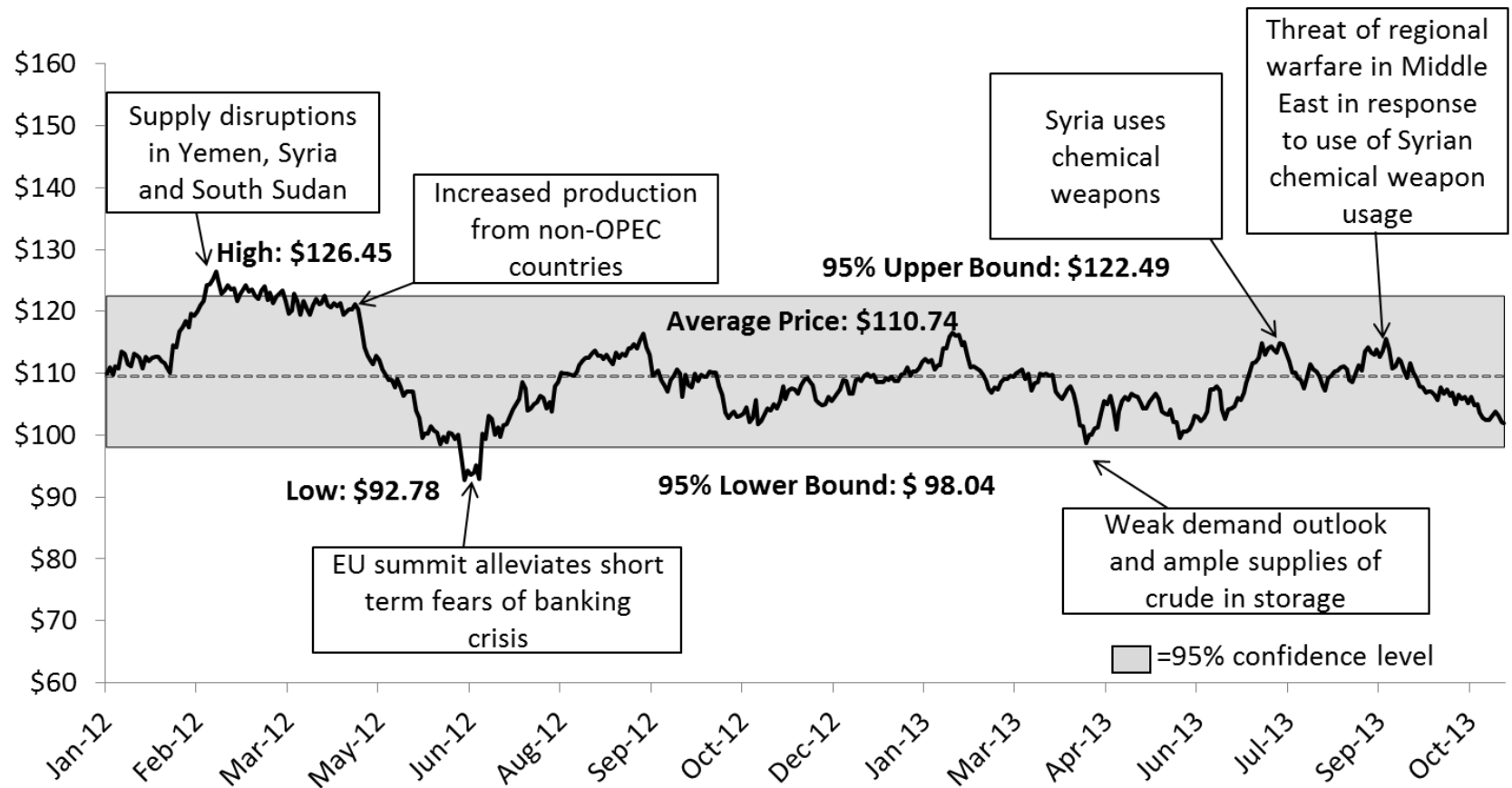
# NORTH SLOPE PRODUCTION FORECAST



# FALL 2013 Price Forecast



# ALASKA NORTH SLOPE CRUDE WEST COAST PRICE



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# KEY OIL PRICE DRIVERS

- Supply & Demand
  - There are two main factors to monitor.
    - Global spare capacity, since it is both a reflection of supply and demand. In other words, the Organization of Petroleum Exporting Countries (OPEC) spare capacity (flipping a switch) is key.
    - Cost of developing new oil supply.
  - Department is developing a probability and statistical model incorporating spare capacity and cost of developing new supply to help forecast ANS prices in the future.

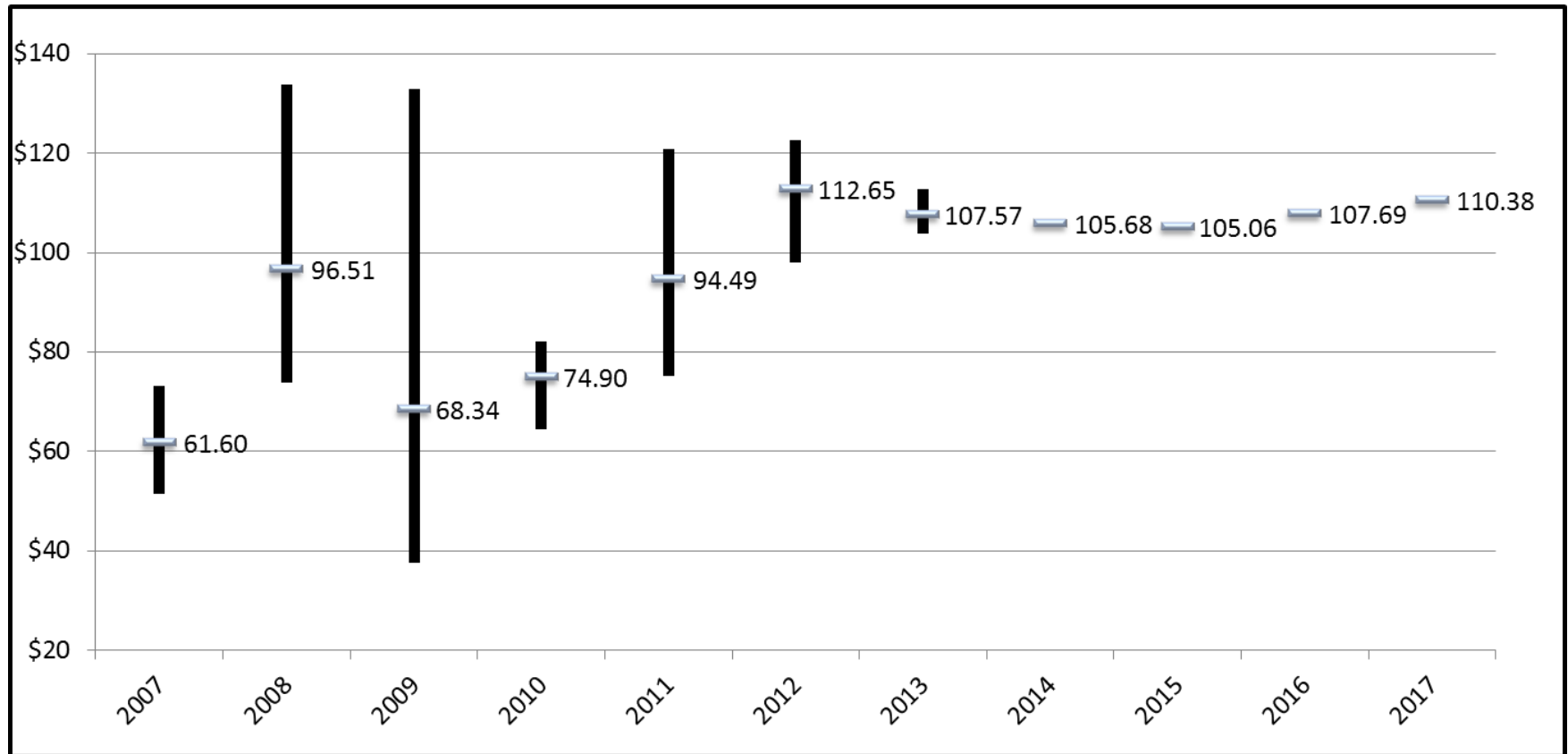
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# PRICE FORECAST METHODOLOGY

- Price Forecasting Session
  - Held a day long oil price forecasting session on October 1, 2013.
  - Speakers provided insight into oil markets, probability and analysis, modeling, and financial aspects of commodity markets.
  - 39 participants from state government, academia and the private sector.
    - DOR, DNR, DOL, OMB, University, Legislative Finance and outside participants.
  - Participants were asked to forecast real ANS prices for the West Coast.
    - Real prices were converted to nominal using a 2.5% inflation assumption.
  - Median price path was chosen for each time period.

# HISTORICAL ANS WEST COAST FY OIL PRICE BANDS

## ANNUAL AVERAGE AND OFFICIAL FY2013 FORECAST



# Changes from Spring 2013 Forecast





## COMPARISON – FALL VS. SPRING 2013 FORECASTS

### FY 2014

	Spring 2013	Fall 2013	Difference	Change
Oil Price (ANS West Coast per barrel)	\$109.61	\$105.68	(\$3.93)	-3.6%
Avg ANS oil Production (ths barrels/day)	526.6	508.2	(18.60)	-3.5%
Unrestricted GF Revenue (million)	\$6,712.7	\$4,930.0	(\$1,782.7)	-26.6%

### FY 2015

Oil Price (ANS West Coast per barrel)	\$111.67	\$105.06	(\$6.61)	-5.92%
Avg ANS oil Production (ths barrels/day)	512.8	498.4	(14.40)	-2.8%
Unrestricted GF Revenue (million)	\$6,521.0	\$4,532.0	(\$1,989.0)	-30.5%

## CONTRIBUTORS OF CHANGES IN FY2014 REVENUE FORECAST

Component	Fall 2013 Forecast	Spring 2013 Forecast	Change
ANS Production (thousand bbl/day)	508.2	526.6	-18.4
ANS Price	\$105.68	\$109.61	-\$3.93
ANS Deductible Lease Expenditures (\$million)	\$6,600	\$6,146	+\$454
Transportation Costs	\$10.11	\$8.87	+\$1.24

- **Average Production Tax Value per barrel is reduced by \$9.23. Simplified calculation, does not represent any actual company value. Assumes 12.5% royalty.**

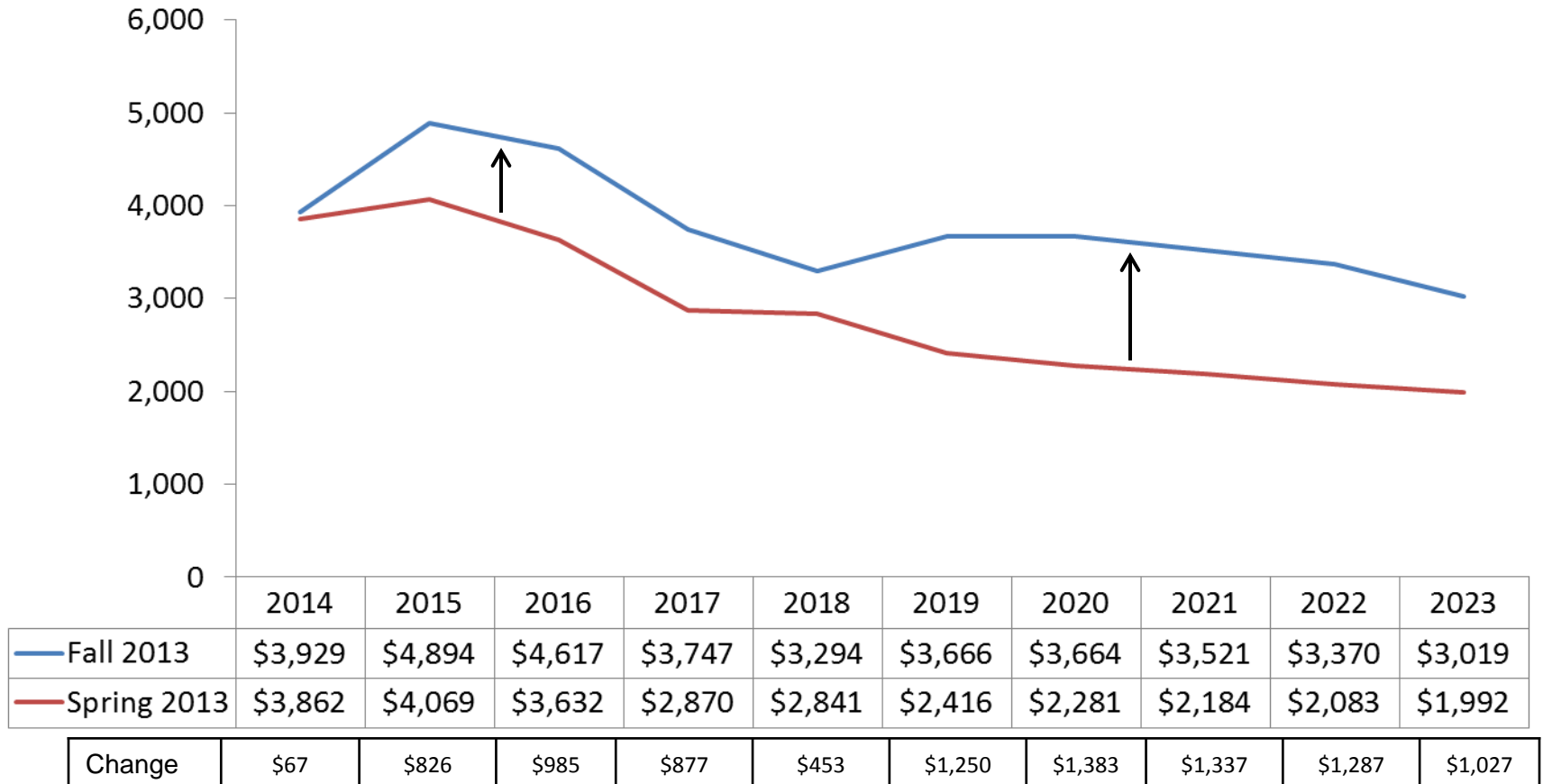
## CONTRIBUTORS OF CHANGES IN FY2015 REVENUE FORECAST

Component	Fall 2013 Forecast	Spring 2013 Forecast	Change
ANS Production (thousand bbl/day)	498.4	512.8	-14.4
ANS Price	\$105.06	\$111.67	-\$6.61
ANS Deductible Lease Expenditures (\$million)	\$7,294	\$6,294	+\$1,000
Transportation Costs	\$10.03	\$9.03	+\$1.00

- **Average Production Tax Value per barrel is reduced by \$14.90. Simplified calculation, does not represent any actual company value. Assumes 12.5% royalty.**

# NORTH SLOPE LEASE EXPENDITURE FORECAST CHANGE

## CAPEX

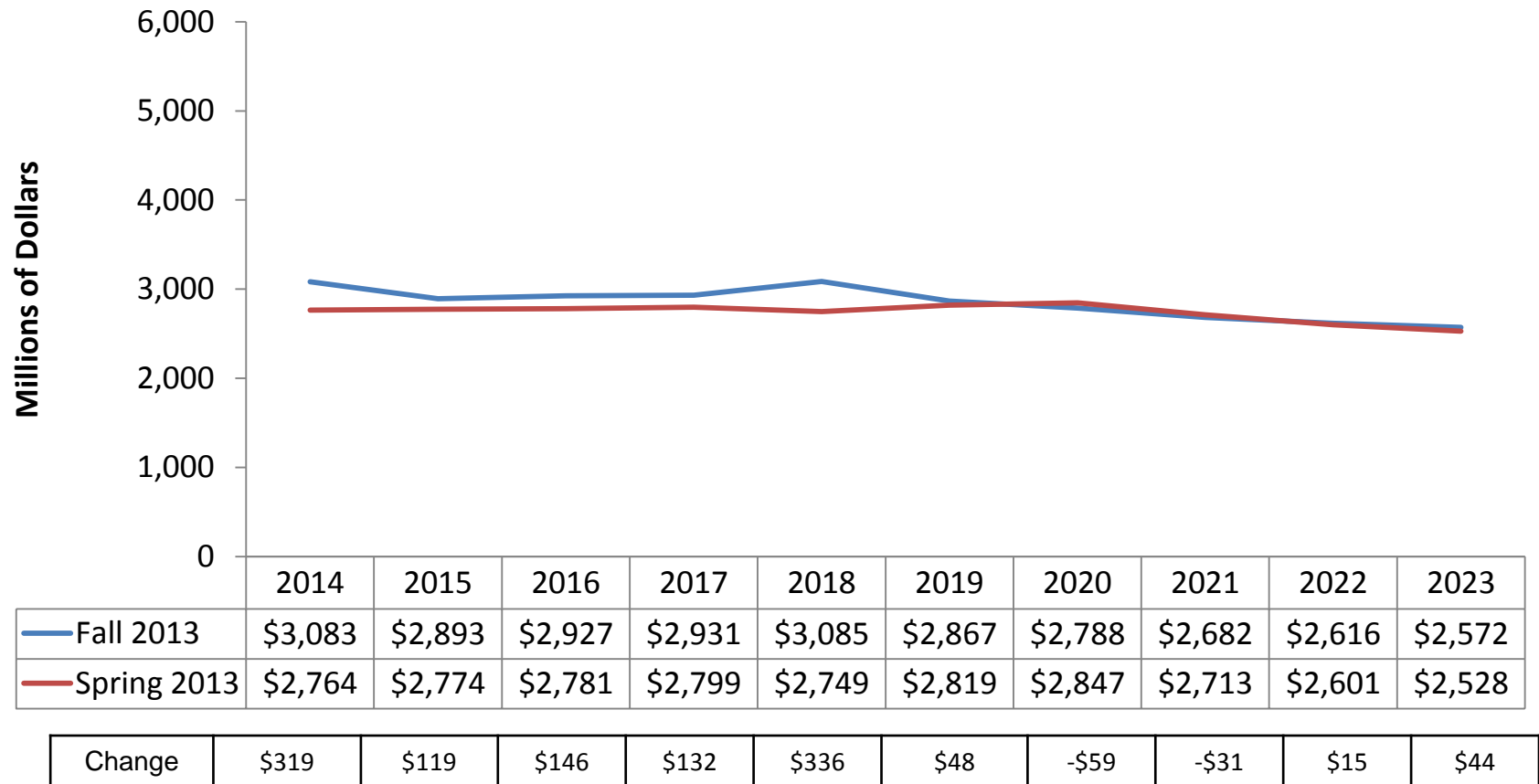


**Total Increase: \$9,492**

Source: Department of Revenue - Revenue Sources Book Fall 2013 and Spring 2013 forecast

# NORTH SLOPE LEASE EXPENDITURE FORECAST CHANGE

## OPEX



**Total Increase: \$1,069**

# THANK YOU

Please find our contact information below:

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