

TITLE: Spring 2009 Forecast

PREPARED BY: Department of Revenue, Tax Division

PURPOSE: To provide the Department's official Spring 2009 revenue forecast for FY 2009 and FY 2010.

DATA SOURCES: Department of Revenue Tax Division Reports and Forecast
Treasury Division
Office of Management and Budget
Permanent Fund Corporation
Department of Natural Resources
Alaska State Accounting System

ASSUMPTIONS: The forecast assumes the tax laws in place as of March 31, 2009.
Production volumes are in millions of barrels per day for Alaska North Slope only, unless otherwise noted.

For FY 2009, we forecast production volume of 0.689 million barrels per day.

For FY 2010, we forecast production volume of 0.655 million barrels per day.

For FY 2009, we use nine months of actual prices and three months of the NYMEX futures as of March 30, 2009, for a WTI average of \$67.40. For FY 2010, we use a blend of the EIA's March 2009 forecast, the NYMEX as of March 30, 2009, the Fall 2007 Delphi Low Price Scenario, and the Fall 2008 Delphi median base price for a WTI annual average of \$60.79.

ANS is forecasted to trade at a differential of \$2.50 below WTI for the remainder of FY 2009 and FY 2010 resulting in an annual average forecast for ANS of \$65.70 and \$58.29 respectively.

Other assumptions include the TAPS tariff and transportation costs required to estimate value at the wellhead, and the inflation rate.

Key data used to estimate the production tax are detailed in Figure 7 "Basic Data Used for Oil & Gas Production Taxes."

Historical data for FY 2008 may differ from previous forecasts as amendments and revisions may have been submitted since the last forecast.

Numbers may not add exactly due to rounding.

DISCLAIMER: The Department of Revenue uses an engineering consultant in conjunction with assistance from the Department of Natural Resources and the Alaska Oil & Gas Conservation Commission to derive its biannual production forecast.

The department may adjust its production expectations as we continue to examine reservoir performance, review the pace and scope of development of new fields, and re-evaluate downtime.

Figure 1. Total State Government Revenue by Major Component, FY 2008 and Forecasted FY 2009-2010
\$ Million

	History FY 2008	Forecast FY 2009	Forecast FY 2010
OIL REVENUE			
<u>Unrestricted</u>			
Property Tax	81.5	72.5	69.4
Corporate Petroleum Income Tax	605.8	560.0	440.0
Production Tax	6,822.6	2,939.0	883.1
Royalties (including Bonuses, Rents & Interest)	<u>2,446.1</u>	<u>1,591.0</u>	<u>1,243.3</u>
Subtotal	9,956.0	5,162.6	2,635.8
<u>Restricted</u>			
Royalties to Perm Fund & School Fund (includes Bonuses & Rents)	850.5	624.7	566.2
Tax Settlements to CBRF	476.4	44.8	20.0
NPR-A Royalties, Rents and Bonuses	<u>5.2</u>	<u>16.0</u>	<u>7.4</u>
Subtotal	1,332.1	685.5	593.6
Subtotal Oil Revenue	11,288.1	5,848.0	3,229.4
OTHER REVENUE (EXCEPT FEDERAL & INVESTMENT)			
<u>Unrestricted</u>			
Taxes	433.2	329.5	259.2
Charges for Services	29.3	20.8	23.5
Fines and Forfeitures	8.9	8.9	8.9
Licenses and Permits	38.9	38.9	37.2
Rents and Royalties	14.6	17.8	15.5
Other	<u>26.2</u>	<u>31.0</u>	<u>17.0</u>
Subtotal	551.1	446.9	361.3
<u>Restricted</u>			
Taxes	139.6	136.1	126.8
Charges for Services	240.7	298.8	262.4
Fines and Forfeitures	41.9	35.0	33.4
Licenses and Permits	38.0	39.9	39.2
Rents and Royalties	7.0	8.4	8.5
Other	<u>131.2</u>	<u>113.9</u>	<u>105.3</u>
Subtotal	598.4	632.1	575.6
Subtotal Other Revenue (Except Federal & Investment)	1,149.5	1,079.0	936.9

(continued on next page)

Figure 1. Total State Government Revenue by Major Component, FY 2008 and Forecasted FY 2009-2010
\$ Million

	History FY 2008	Forecast FY 2009	Forecast FY 2010
FEDERAL REVENUE ⁽¹⁾			
<u>Restricted</u>	<u>1,902.5</u>	<u>3,304.7</u>	<u>2,775.8</u>
Subtotal Federal Revenue	1,902.5	3,304.7	2,775.8
INVESTMENT REVENUE			
<u>Unrestricted</u>			
Investments	226.5	246.7	212.2
Interest Paid by Others	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>
Subtotal	227.9	248.1	213.6
<u>Restricted</u>			
Investments	48.9	67.9	52.8
Constitutional Budget Reserve Fund	(60.1)	(1,077.3)	380.5
Other Treasury Managed Funds	(9.0)	(61.4)	19.9
Alaska Permanent Fund (GASB) ⁽²⁾	<u>(1,463.3)</u>	<u>(9,368.3)</u>	<u>2,036.8</u>
Subtotal	(1,483.6)	(10,439.1)	2,490.0
Subtotal Investment	(1,255.7)	(10,191.0)	2,703.6
Grand Total	13,084.4	40.7	9,645.7

(1) Federal revenue estimates from the Governor's Office of Management and Budget are based upon state agency projections of potential federal revenues for FY 2009 and FY 2010. These estimates include the Governor's proposed use of federal funds from the American Recovery and Reinvestment Act as of April 6, 2009. It is important to note that the State of Alaska routinely budgets in excess of expected allotments.

(2) Both realized and unrealized gains and losses are included per GASB 34 as interpreted by the Finance Division of the Department of Administration in its Comprehensive Annual Financial Report.

**Figure 2. Total State Government Revenue, FY 2008 and Forecasted FY 2009-2010
\$ Million**

Revenue Source	History	Forecast	Forecast
	FY 2008	FY 2009	FY 2010
<u>Unrestricted</u>			
Oil Revenue	9,956.0	5,162.6	2,635.8
Non-Oil Revenue	551.1	446.9	361.3
Investment Earnings	<u>227.9</u>	<u>248.1</u>	<u>213.6</u>
Subtotal	10,735.0	5,857.6	3,210.7
<u>Restricted</u>			
Oil Revenue	1,332.1	685.5	593.6
Non-Oil Revenue	598.4	632.1	575.6
Investment Earnings	(1,483.6)	(10,439.1)	2,490.0
Federal Revenue ⁽¹⁾	<u>1,902.5</u>	<u>3,304.7</u>	<u>2,775.8</u>
Subtotal	2,349.4	(5,816.8)	6,435.0
Grand Total	13,084.4	40.7	9,645.7

(1) Federal revenue estimates from the Governor's Office of Management and Budget are based upon state agency projections of potential federal revenues for FY 2009 and FY 2010. These estimates include the Governor's proposed use of federal funds from the American Recovery and Reinvestment Act as of April 6, 2009. It is important to note that the State of Alaska routinely budgets in excess of expected allotments.

Figure 3. Unrestricted Non-Petroleum Revenue Detail, FY 2008 and Forecasted FY 2009-2010
\$ Million

	History FY 2008	Forecast FY 2009	Forecast FY 2010
Taxes	433.1	329.5	259.2
Alcoholic Beverage	20.0	19.1	19.2
Charitable Gaming	2.7	3.0	2.7
Cigarette	35.7	34.8	32.7
Corporation General Income Tax	182.7	125.0	70.0
Electric and Telephone Cooperative	0.2	0.2	0.2
Estate	0.0	0.1	0.0
Fishery Business	14.7	17.4	15.1
Fishery Resource Landing	7.9	5.8	4.8
Insurance Premium	47.1	45.7	43.4
Large Passenger Vessel Gambling	6.8	6.8	6.2
Mining	54.4	40.8	15.1
Motor Fuel Tax	41.8	10.7	29.8
Motor Vehicle Tire Fee	1.5	1.5	1.5
Other Tobacco Product (General Fund)	9.2	10.0	10.4
Vehicle Rental	8.5	8.6	8.1
Charges for Services	29.3	20.8	23.5
General Government	27.0	15.0	18.0
Natural Resources	2.0	2.0	2.0
Other	0.3	3.8	3.5
Fines and Forfeitures	8.9	8.9	8.9
Licenses and Permits	38.9	38.9	37.2
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicles	36.0	35.9	34.2
Other Fees	1.9	2.0	2.0
Rents and Royalties	14.6	17.8	15.5
Mining Rents and Royalties	7.8	9.3	9.5
Other Non-Petroleum Rents and Royalties	6.8	8.5	6.0
Other (Except Federal and Investment)	26.2	31.0	17.0
Miscellaneous	11.2	27.0	13.0
Unclaimed Property	15.0	4.0	4.0
Investments ⁽¹⁾	227.9	248.1	213.6
Interest Paid by Others ⁽²⁾	1.4	1.4	1.4
Investments	226.5	246.7	212.2
Total Unrestricted Revenue	778.9	695.0	574.9

(1) Governmental Accounting Standards Board (GASB) principles require the recognition of changes in the value of investments as income or losses at the end of each trading day, whether the investment is actually sold or not.

(2) Interest paid by others includes "unrestricted interest earned" as reported in the state accounting system, less the amount attributable to oil and gas which is included in the petroleum section of the forecast. Interest paid by others includes several small categories of interest paid to the state including interest on loans, interest on bank deposits, interest on bid payments, arrearage interest, and other interest earned.

Figure 4. Restricted Non-Petroleum Revenue Detail, FY 2008 and Forecasted FY 2009-2010
\$ Million

	History FY 2008	Forecast FY 2009	Forecast FY 2010
Taxes	139.5	136.1	126.9
Alcoholic Beverage (Alcohol and Drug Treatment)	19.1	19.1	19.2
Cigarette (School Fund)	24.9	23.4	22.0
Cigarette (Tobacco Use Cessation)	3.6	3.4	3.2
Cruise Ship Passenger Fee (Municipal Share)	10.0	9.8	8.8
Cruise Ship Passenger Fee (Regional Cruise Ship Impact Fund)	11.7	11.4	10.3
Cruise Ship Passenger Fee (State Share)	25.2	24.5	22.1
Electric and Telephone Cooperative (Municipal Share)	3.9	4.0	4.1
Fisheries Business (Municipal Share)	20.2	19.9	17.6
Fishery Resource Landing (Municipal Share)	6.4	6.4	5.4
Insurance Premium/ Other (Worker's Safety and Compensation) ⁽¹⁾	7.6	7.7	8.0
Motor Fuel Tax-Aviation (Municipal Share)	0.1	0.0	0.1
Salmon Enhancement (Aquaculture Association Share)	5.5	5.2	4.8
Seafood Development (Qualifying Regional Association Share)	1.4	1.3	1.2
Charges for Services	240.7	298.8	262.4
Cruise Ship Ranger Fee	4.1	4.0	3.6
DCCED Business Licenses	6.4	8.1	4.7
Environmental Compliance Fees	2.3	2.3	2.0
General Government	9.2	5.0	4.5
Marine Highway Receipts	47.6	50.3	51.1
Natural Resources	0.6	0.6	0.6
Oil and Gas Conservation	4.2	5.2	5.5
RCA Receipts	8.4	9.9	9.7
Receipt Supported Services	123.6	108.3	112.2
Statutorily Designated	31.5	101.8	65.2
Test Fisheries Receipts	1.5	2.5	2.5
Timber Sale Receipts	1.3	0.8	0.8
Fines and Forfeitures	41.9	35.0	33.4
Tobacco Settlement (Northern Tobacco Securitization Corporation)	27.6	26.8	25.5
Tobacco Settlement (Tobacco Use Education & Cessation Fund)	6.9	6.7	6.4
Other Fines and Forfeitures	7.4	1.5	1.5
Licenses and Permits	38.0	39.9	39.2
Alcoholic Beverage License (Municipal Share)	0.9	0.9	0.9
Hunting and Fishing	32.7	33.5	33.8
Other Fees	4.4	5.5	4.5
Rents and Royalties	7.0	8.4	8.5
Mining Rents and Royalties	1.6	3.2	3.3
Other Non-Petroleum Rents and Royalties	5.4	5.2	5.2
Other (Except Federal and Investment)	131.2	113.9	105.3
Alaska Energy Authority	0.0	0.0	0.0
Alaska Housing Finance Corporation	56.1	59.7	62.5
Alaska Industrial Development & Export Authority	10.0	23.8	22.0
Alaska Municipal Bond Bank Authority	0.0	1.3	0.8
Alaska Student Loan Corporation	44.6	4.1	0.0
Miscellaneous	20.5	25.0	20.0
Federal	1,902.5	3,304.7	2,775.8
Investments ⁽²⁾	(1,483.6)	(10,439.1)	2,490.0
Alaska Permanent Fund	(1,463.3)	(9,368.3)	2,036.8
Constitutional Budget Reserve Fund	(60.1)	(1,077.3)	380.5
Investments	48.9	67.9	52.8
Other Treasury Managed Funds	(9.0)	(61.4)	19.9
Total Restricted Revenue	1,017.3	(6,502.3)	5,841.5

(1) In addition to the worker's compensation insurance premiums for the Insurance Premium Tax, this amount also includes services fees from employers who are self-insured.

(2) Governmental Accounting Standards Board (GASB) principles require the recognition of changes in the value of investments as income or losses at the end of each trading day, whether the investment is actually sold or not.

Figure 5. Alaska North Slope Production, FY 2008 and Forecasted FY 2009-2018 ⁽¹⁾
Million barrels/day

Fiscal Year	Currently Producing	Under Development	Under Evaluation	Total ANS
2008	0.717	0.000	0.000	0.717
2009	0.640	0.049	0.000	0.689
2010	0.581	0.073	0.000	0.655
2011	0.541	0.092	0.001	0.634
2012	0.507	0.127	0.003	0.637
2013	0.476	0.155	0.006	0.637
2014	0.459	0.174	0.019	0.652
2015	0.434	0.171	0.030	0.635
2016	0.411	0.178	0.027	0.616
2017	0.390	0.173	0.035	0.598
2018	0.372	0.170	0.032	0.575

Figure 6. New Oil as a Percentage of Total Oil ⁽²⁾
Million barrels/day

Fiscal Year	Total New Oil	ANS Total	Percent New Oil
2008	0.000	0.717	0.0%
2009	0.049	0.689	7.1%
2010	0.074	0.655	11.3%
2011	0.093	0.634	14.7%
2012	0.130	0.637	20.5%
2013	0.161	0.637	25.2%
2014	0.193	0.652	29.6%
2015	0.201	0.635	31.6%
2016	0.205	0.616	33.3%
2017	0.208	0.598	34.8%
2018	0.203	0.575	35.3%

(1) Some of the oil forecasted in the Under Development and Under Evaluation categories are from new projects in fields currently producing.

(2) "New Oil" is the sum of the Under Development and Under Evaluation categories.

Figure 7. Basic Data Used for Oil & Gas Production Taxes

	FY 2008 History	FY 2009 Forecast	FY 2010 Forecast
Production Tax Revenue			
Millions of Dollars	6,822.6	2,939.0	883.1
Key Assumptions			
Price of ANS WC in dollars per barrel	96.51	65.70	58.29
Transit Costs & Other in dollars per barrel	6.05	6.30	5.59
ANS Wellhead in dollars per barrel	90.46	59.40	52.70
Production in barrels per day	716,779	689,150	654,823
Royalty barrels per day	89,597	94,326	87,009
Taxable barrels per day	627,182	594,824	567,814
Lease Expenditures in Millions of Dollars			
Operating Expenditures [OPEX]	2,027	2,086	2,357
Capital Expenditures [CAPEX]	<u>1,953</u>	<u>2,154</u>	<u>2,975</u>
Total Expenditures	3,980	4,240	5,332
Implied Data			
CAPEX Credits Used against Tax Liability in \$millions	346.4	350.0	400.0
CAPEX Credits for Potential Purchase in \$millions	151.2	200.0	200.0
Lease Expenditures per barrel of oil produced in dollars per barrel			
OPEX	7.7	8.3	9.9
CAPEX	<u>7.5</u>	<u>8.6</u>	<u>12.4</u>
Total Expenditures	15.2	16.9	22.3
Average Production Value per Barrel [Pre-Tax]	75.2	42.5	30.4
Production Tax Collected per Taxable Barrel	29.8	13.5	4.3

Notes

- 1 This table presents a grossly simplified snapshot of the production tax calculation on an average North Slope basis, and any use of this data should be viewed accordingly. Additionally, because production tax is calculated on a company basis, any simplification such as this distorts the actual value to companies. For example, a company's pre-tax production value per barrel could be significantly more or less than that shown in this table, depending on the "mix" of petroleum investments they have on the North Slope.
- 2 Lease expenditures for FY 2008 are estimated and unaudited. Expenditure data for July 2007 through December 2007 are as reported on tax returns received March 31, 2008, and January 2008 through June 2008 are as reported on tax returns received March 31, 2009.
- 3 Expenditure data for FY 2009 and FY 2010 are compiled from company submitted expenditure forecast estimates and other documentation as provided to the DOR.
- 4 CAPEX credits are spread out over two years as specified in ACES. In addition, the assumptions for the transitional credits and the \$12 million credits for small Alaska producers are not included in the table.

Figure 8.
Crude Oil Production, FY 2008-2018 ⁽¹⁾

million barrels/day

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Prudhoe Bay ⁽²⁾	0.291	0.289	0.268	0.257	0.247	0.237	0.238	0.228	0.219	0.210	0.202
PBU Satellites ⁽³⁾	0.034	0.038	0.040	0.042	0.047	0.052	0.057	0.060	0.057	0.056	0.053
GPMA ⁽⁴⁾	0.044	0.038	0.040	0.037	0.034	0.032	0.030	0.029	0.027	0.026	0.024
Kuparuk	0.113	0.105	0.096	0.091	0.088	0.086	0.083	0.080	0.077	0.075	0.072
Kuparuk Satellites ⁽⁵⁾	0.038	0.035	0.034	0.032	0.030	0.029	0.027	0.024	0.022	0.025	0.033
Milne Point ⁽⁶⁾	0.034	0.030	0.030	0.030	0.031	0.032	0.035	0.037	0.037	0.036	0.037
Endicott ⁽⁷⁾	0.014	0.014	0.014	0.013	0.014	0.014	0.015	0.015	0.016	0.017	0.018
Liberty					0.022	0.032	0.041	0.032	0.027	0.022	0.016
Alpine ⁽⁸⁾	0.079	0.064	0.062	0.057	0.052	0.049	0.049	0.044	0.040	0.036	0.031
Fiord ⁽⁹⁾	0.018	0.021	0.025	0.024	0.022	0.019	0.017	0.015	0.024	0.021	0.019
Nanuq ⁽¹⁰⁾	0.019	0.021	0.007	0.008	0.008	0.008	0.007	0.006	0.005	0.004	0.004
NPR-A ⁽¹¹⁾						0.002	0.010	0.015	0.013	0.021	0.019
Offshore ⁽¹²⁾	0.000	0.005	0.013	0.021	0.027	0.029	0.031	0.034	0.033	0.032	0.030
Pt.Thomson								0.005	0.010	0.010	0.010
Northstar ⁽¹³⁾	<u>0.034</u>	<u>0.027</u>	<u>0.026</u>	<u>0.021</u>	<u>0.017</u>	<u>0.014</u>	<u>0.012</u>	<u>0.010</u>	<u>0.008</u>	<u>0.007</u>	<u>0.006</u>
Total ANS	0.717	0.689	0.655	0.634	0.637	0.637	0.652	0.635	0.616	0.598	0.575
Cook Inlet	0.014	0.013	0.012	0.011	0.010	0.009	0.009	0.008	0.008	0.007	0.007
Total Alaska	0.731	0.702	0.666	0.645	0.647	0.646	0.660	0.643	0.624	0.605	0.581

(1) FY 2009 volumes represent the department's annual forecast numbers, and do not include the most recent monthly reported data by the operators.

(2) Includes NGLs from Central Gas Facility shipped to TAPS

(3) Aurora, Borealis, Midnight Sun, Orion and Polaris

(4) Lisburne, Niakuk, North Prudhoe Bay State, Point McIntyre, Raven, West Beach and West Niakuk

(5) Meltwater, Tabasco, Tarn and West Sak

(6) Includes Sag River and Schrader Bluff

(7) Includes Badami, Eider and Sag Delta

(8) Includes Qannik

(9) Fiord, Fiord-Kuparuk, and Fiord West

(10) Nanuq and Nanuq-Kuparuk

(11) Includes Alpine West NPR-A

(12) Known Offshore includes Nikaitchuq and Oooguruk

(13) Includes OCS production.

Figure 9.
Crude Oil Prices, FY 2008-2018

Nominal

WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices \$ per barrel

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTI	97.02	67.40	60.79	70.17	78.44	82.45	86.00	88.43	91.90	94.70	97.54
ANS West Coast Spot	96.51	65.70	58.29	67.68	75.94	79.95	83.50	85.93	89.40	92.20	95.04
ANS Wellhead Wtd Average All Destinations	90.46	59.40	52.70	62.00	70.09	74.01	77.45	79.76	83.09	85.66	88.40
Cook Inlet Wellhead	82.26	63.74	56.34	65.73	74.01	78.02	81.58	84.02	87.49	90.26	93.09

Real 2009\$

WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices \$ per barrel

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTI	102.16	67.40	59.16	66.46	72.31	73.97	75.09	75.15	76.01	76.22	76.41
ANS West Coast	101.62	65.70	56.73	64.11	70.00	71.73	72.91	73.02	73.94	74.21	74.45
ANS Wellhead Wtd Average All Destinations	95.25	59.40	51.29	58.73	64.61	66.40	67.62	67.77	68.72	68.95	69.25
Cook Inlet Wellhead	86.62	63.74	54.84	62.26	68.22	70.00	71.23	71.40	72.36	72.65	72.93

Figure 10.
General Purpose Unrestricted Revenue, FY 2008-2018

\$ million

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Corporate Petroleum Income Tax	605.8	560.0	440.0	500.0	550.0	575.0	590.0	600.0	615.0	625.0	635.0
Production Tax	6,822.6	2,939.0	883.1	1,312.3	2,198.5	2,290.9	2,837.7	3,052.8	3,016.0	3,283.8	3,620.6
Petroleum Property Tax	81.5	72.5	69.4	66.4	63.4	60.5	57.7	55.1	52.5	50.0	47.7
Oil and Gas Royalties-Net ⁽¹⁾	2,420.6	1,569.5	1,221.8	1,373.5	1,513.8	1,562.3	1,600.4	1,607.0	1,634.4	1,622.9	1,636.1
Bonuses, Rents & Interest-Net ⁽¹⁾⁽²⁾	25.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
Petroleum Special Settlements	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total Petroleum Revenue	9,956.0	5,162.6	2,635.8	3,273.7	4,347.2	4,510.3	5,107.3	5,336.4	5,339.4	5,603.2	5,960.9
Cumulative Total Petroleum Revenue ⁽³⁾	75,600.2	80,762.8	83,398.6	86,672.3	91,019.4	95,529.7	100,637.1	105,973.5	111,312.9	116,916.0	122,876.9
Total General Purpose Unrestricted Revenue	10,735.0	5,857.6	3,210.7	3,876.4	4,959.7	5,129.4	5,736.4	5,977.1	5,984.0	6,257.8	6,635.6
% Petroleum of Total GP Unrestricted Revenue	93%	88%	82%	84%	88%	88%	89%	89%	89%	90%	90%

(1) Royalties, bonuses, rents and interest are net of Permanent Fund contribution and Constitutional Budget Reserve Fund (CBRF) deposits.

(2) This category is primarily composed of petroleum revenue.

(3) The cumulative petroleum revenue total is based on revenue beginning in FY 1959.