

Spring 2019 Revenue Forecast Update



Presented by

Commissioner Designee Bruce Tangeman,
Department of Revenue

- Revenue Forecast & Changes from Fall Forecast
- ANS Oil Price Forecast
- Oil Production Forecast
- North Slope Lease Expenditures Forecast
- Oil Credits Forecast & Tax Credit Bonding Update

Spring 2019 Revenue Forecast



10-year Revenue Forecast and Comparison to Fall Forecast

Unrestricted GF Petroleum Revenue (\$ millions) – Fall 2018 vs Spring 2019

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fall 2018	2,211	1,689	1,718	1,657	1,642	1,621	1,618	1,729	1,855	2,024
Spring 2019	2,135	1,755	1,700	1,658	1,654	1,632	1,621	1,739	1,833	2,005
change	-76	66	-18	1	12	12	3	10	-22	-19

Unrestricted GF Non-Petroleum Revenue excluding PF Transfer (\$ millions) – Fall 2018 vs Spring 2019

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fall 2018	561	576	586	597	604	615	620	631	642	644
Spring 2019	548	549	542	539	543	551	556	565	569	576
change	-13	-27	-44	-58	-61	-64	-64	-66	-73	-68

Total Unrestricted GF Revenue excluding PF transfer (\$ millions) – Fall 2018 vs Spring 2019

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fall 2018	2,772	2,265	2,304	2,254	2,246	2,235	2,238	2,360	2,496	2,669
Spring 2019	2,683	2,304	2,242	2,197	2,197	2,183	2,176	2,303	2,402	2,581
change	-89	39	-62	-57	-49	-52	-62	-57	-95	-87

PF transfer (\$ millions) – Fall 2018 vs Spring 2019

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fall 2018	2,723	2,933	3,090	3,091	3,254	3,361	3,432	3,505	3,578	3,652
Spring 2019	2,723	2,933	3,090	3,091	3,253	3,361	3,432	3,504	3,576	3,648
change	0	0	0	0	-1	0	0	-1	-2	-4

Reasons for Changes to FY19 / FY20 Unrestricted Revenue forecast

FY19 unrestricted revenue forecast is reduced by about \$89m compared to the fall forecast, despite higher forecasted near-term oil prices. The primary changes to the FY19 forecast are:

- **Production Tax reduced by \$80m :**
 - **Higher Oil Prices**, though partially offset by lower production, increased the production tax forecast by \$25m.
 - **Lower than Expected FERC payments, Higher than Expected Refunds, and other Company-Specific items** reduced the production tax forecast by \$105m.
- **Non-Petroleum CIT reduced by \$15m** due to lower than expected payments in December 2018.
- **Other revenues reduced by \$2m** due to a variety of smaller nonpetroleum forecast changes.
- **Royalties increased by \$8m** due to higher oil prices and despite lower production.

The unrestricted revenue forecast for FY20 is increased by about \$39m compared to the fall forecast. The primary changes to the FY20 forecast are:

- **Production Tax increased by \$45m** due to higher prices, partially offset by lower production.
- **Royalties increased by \$19m** due to higher oil prices and despite lower production.
- **Non-Petroleum CIT reduced by \$15m** primarily due to weaker nonprecious minerals prices.
- **Other revenues reduced by \$10m** due to a variety of smaller nonpetroleum forecast changes.

ANS Oil Price Forecast



Price Forecast Summary

ANS Price Forecast – Change from Fall 2018 Forecast
Nominal \$ per barrel

Fiscal Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Fall 2018 Forecast	67.96	64.00	66.00	67.00	69.00	70.00	72.00	74.00	75.00	77.00
Spring 2019 Forecast	68.90	66.00	66.00	67.00	69.00	70.00	72.00	74.00	75.00	77.00
\$ / bbl change	0.94	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent change	1.4%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- DOR revised the oil price forecast for FY19 and FY20 up to align with current futures market prices (NYMEX).
- NYMEX has been shown to be one of the best methods of predicting oil prices in the near-term.
- Long-term (FY 21+) oil price forecast remains unchanged from the fall.
- Real (in 2019 dollars) price forecast for FY2021+ remains in the low to mid \$60's.

Potential Macroeconomic and Global Drivers of Price Change

A speculative and non-exhaustive list of things that could happen beyond Alaska which could affect ANS oil prices.

Potential Macroeconomic Drivers:

1. **Recession.** Global growth could be disrupted by recession, pushing down demand. (-)
2. **China.** Chinese economic growth could drive up demand if/when trade dispute is resolved. (+)

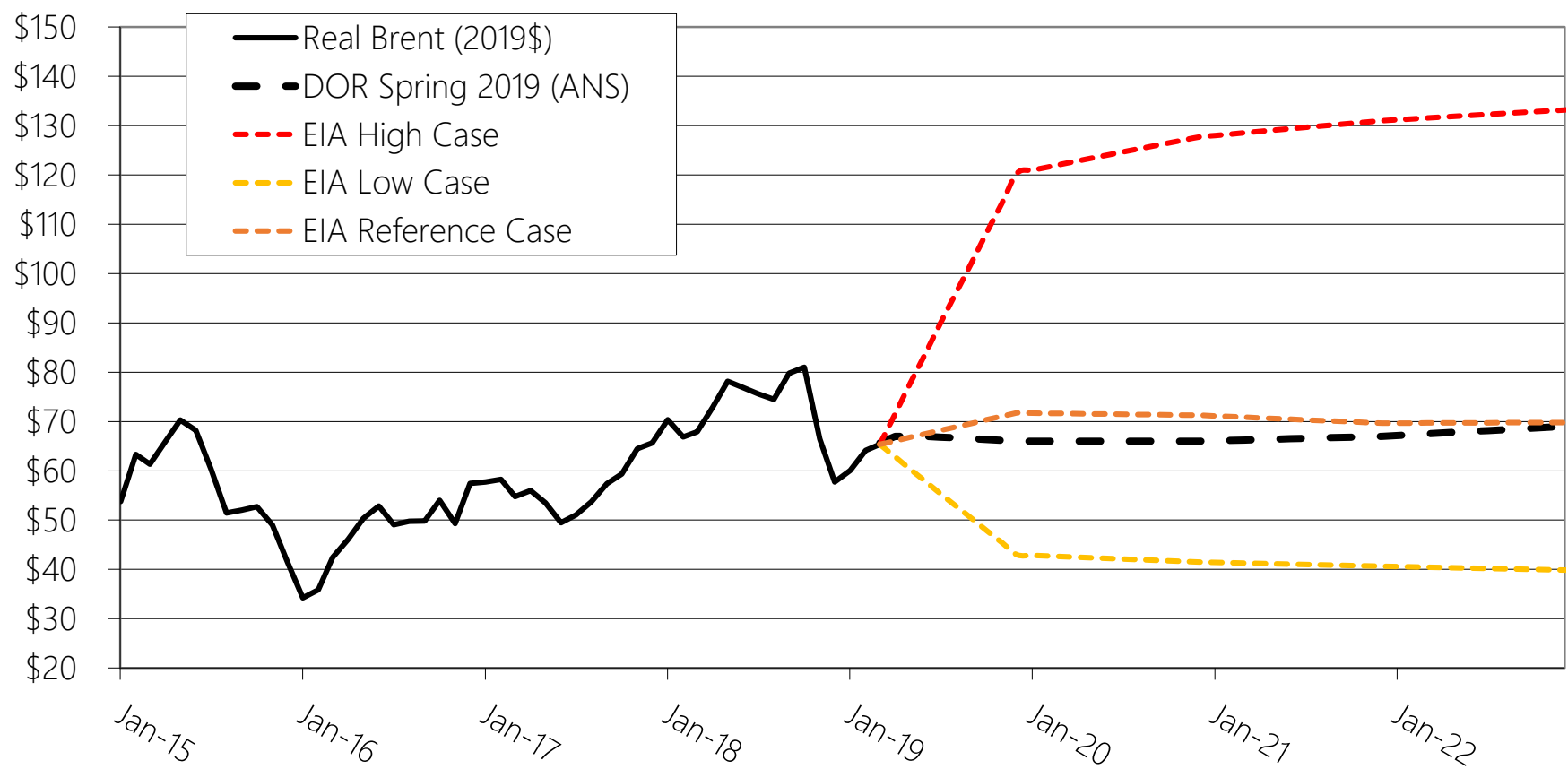
Potential Microeconomic Drivers:

1. **New fields.** New energy resources could be developed, increasing supply. (-)
2. **Shale.** Shale producers could hit capacity limits, allowing demand to surpass supply. (+)
3. **Production technology.** More efficient production technology could increase supply. (-)
4. **Vehicle efficiency.** Emerging transportation tech could lower demand for fossil fuels. (-)

Potential Geopolitical Drivers:

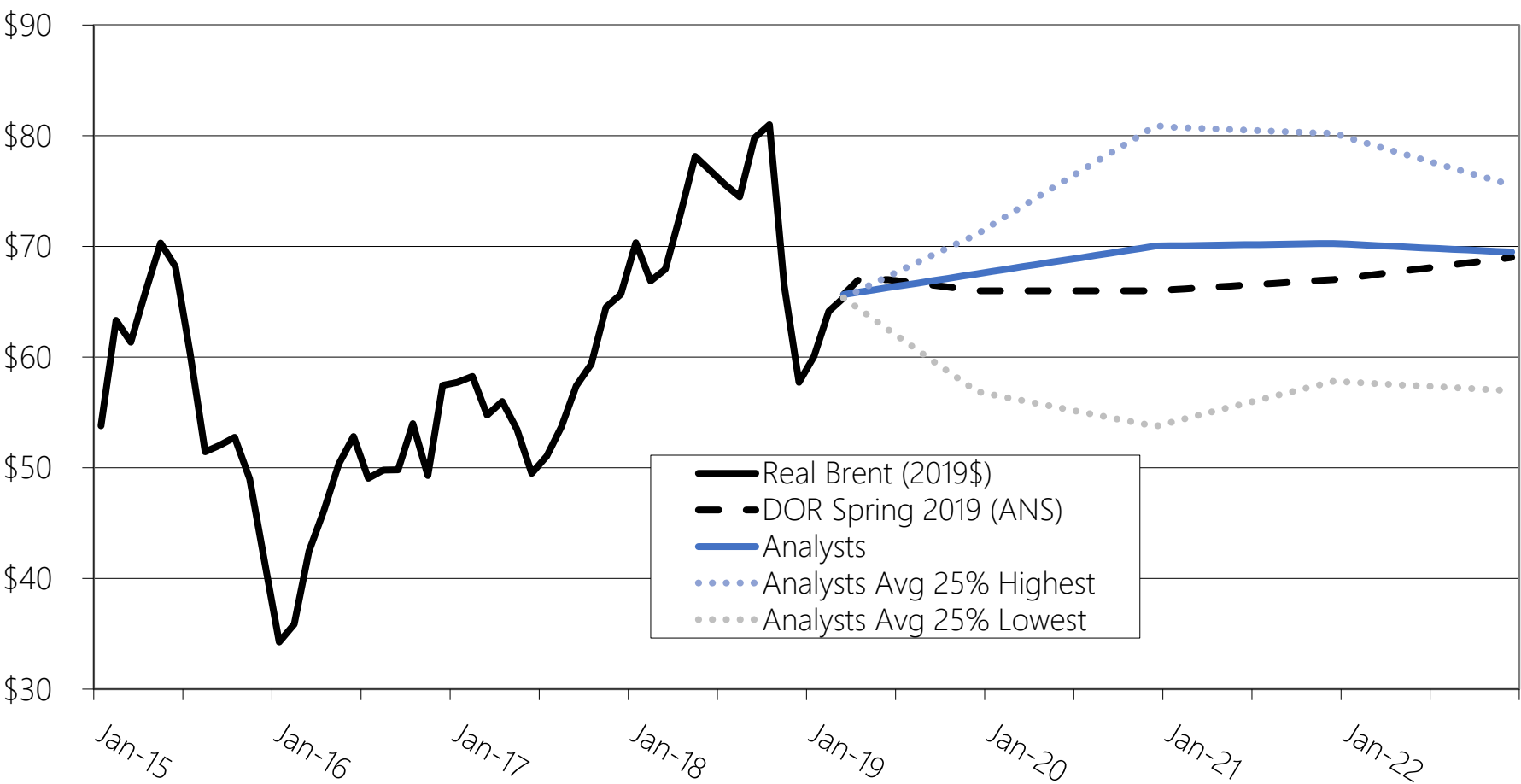
1. **OPEC / Saudi Arabia.** OPEC and/or SA could enforce higher or lower production levels. (?)
2. **Iran.** Sanction waiver renewals could be denied, reducing supply. (+)
3. **Regime change.** Iran/Venezuela regime change could occur, disrupting supply. (+)
4. **Venezuelan recovery.** State-owned PDVSA could stabilize operations, increasing supply. (-)

Real (Inflation-adjusted) Oil Prices and Forecasts



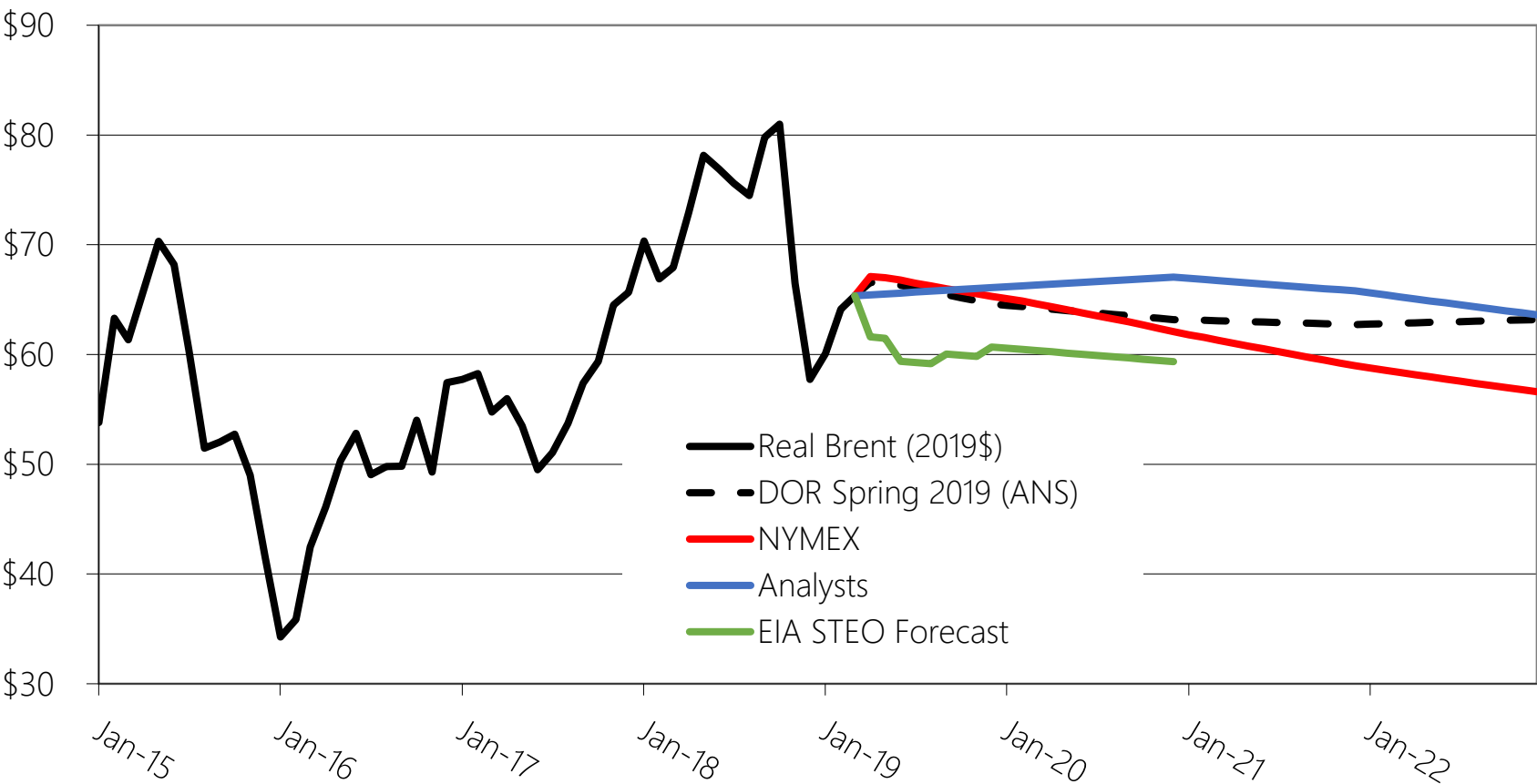
Sources: The U.S. Energy Information Administration (EIA) forecast is from their 2019 Annual Energy Outlook. Forecasts are adjusted using Alaska Department of Revenue's 2.25% inflation assumption.

Real (Inflation-adjusted) Oil Prices and Forecasts



Sources: Analyst forecast is an average of 8-18 firms from a Bloomberg survey as of March 11th, 2019. Forecasts are adjusted using Alaska. Department of Revenue's 2.25% inflation assumption.

Real (Inflation-adjusted) Oil Prices and Forecasts

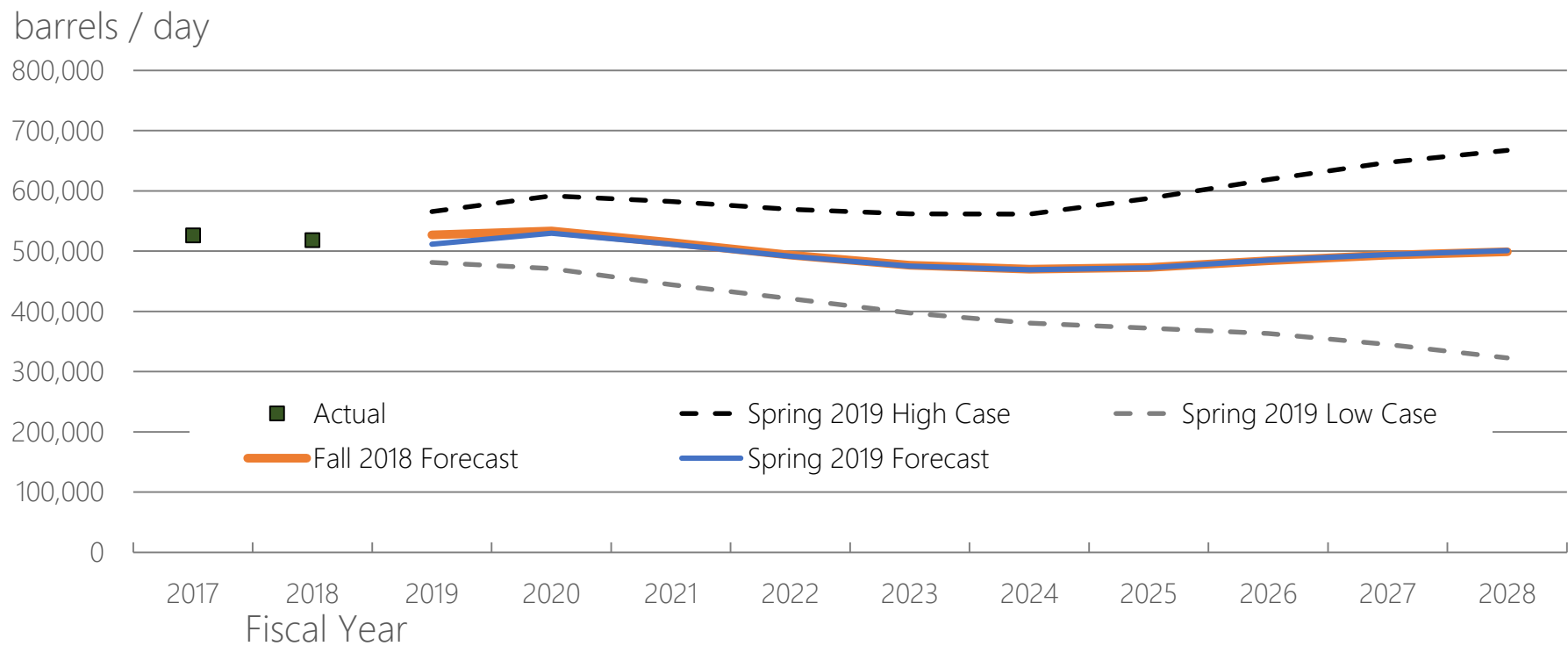


Sources: Analyst forecast is an average of 8-18 firms from a Bloomberg survey as of March 11th, 2019. Futures prices are from the New York Mercantile Exchange (NYMEX) as of March 11, 2019. The U.S. Energy Information Administration (EIA) forecast is from their February 2019 *Short-Term Energy Outlook*. Forecasts are adjusted using Alaska Department of Revenue's 2.25% inflation assumption.

Oil Production Forecast



10-Year Production Forecast: Changes since *Fall 2018 Revenue Sources Book*



ANS PRODUCTION (barrels per day)

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Fall 2018	518,368	526,787	533,197	514,233	493,225	476,682	470,035	472,731	484,089	493,378	498,825
Spring 2019	518,368	511,460	529,459	511,692	491,400	475,359	469,115	472,436	484,789	494,476	500,643
Percentage Change	0.0%	-2.9%	-0.7%	-0.5%	-0.4%	-0.3%	-0.2%	-0.1%	0.1%	0.2%	0.4%

Source: Department of Revenue and Department of Natural Resources

ANS = Alaska North Slope

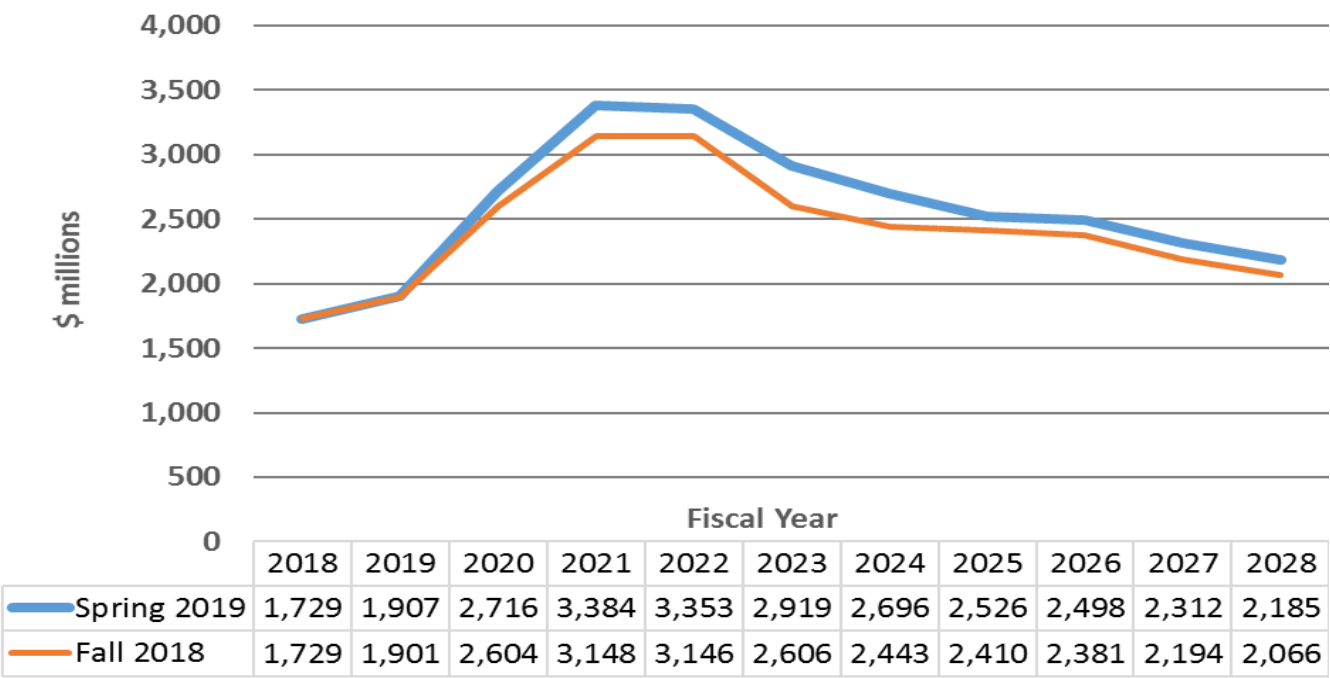
Note: Totals may not sum due to rounding

North Slope Lease Expenditures Forecast



Lease Expenditures Forecast: North Slope Capital Expenditures

Forecast: North Slope Capital Lease Expenditures

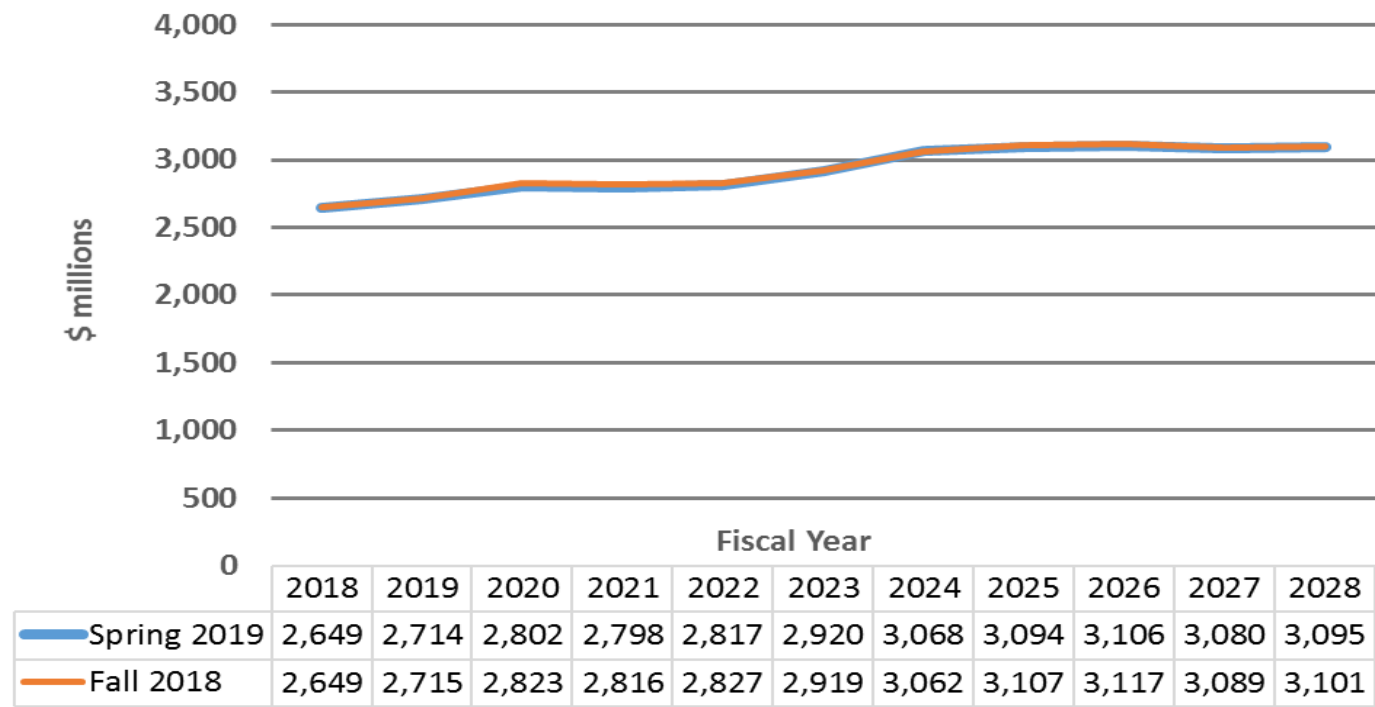


The increase in projected lease expenditures from the fall forecast is due to higher-than-expected development costs at upcoming fields

Source: Department of Revenue – Economic Research Group
Note: These estimates include lease expenditures by companies that are not expected to have a tax liability.

Lease Expenditures Forecast: North Slope Operating Expenditures

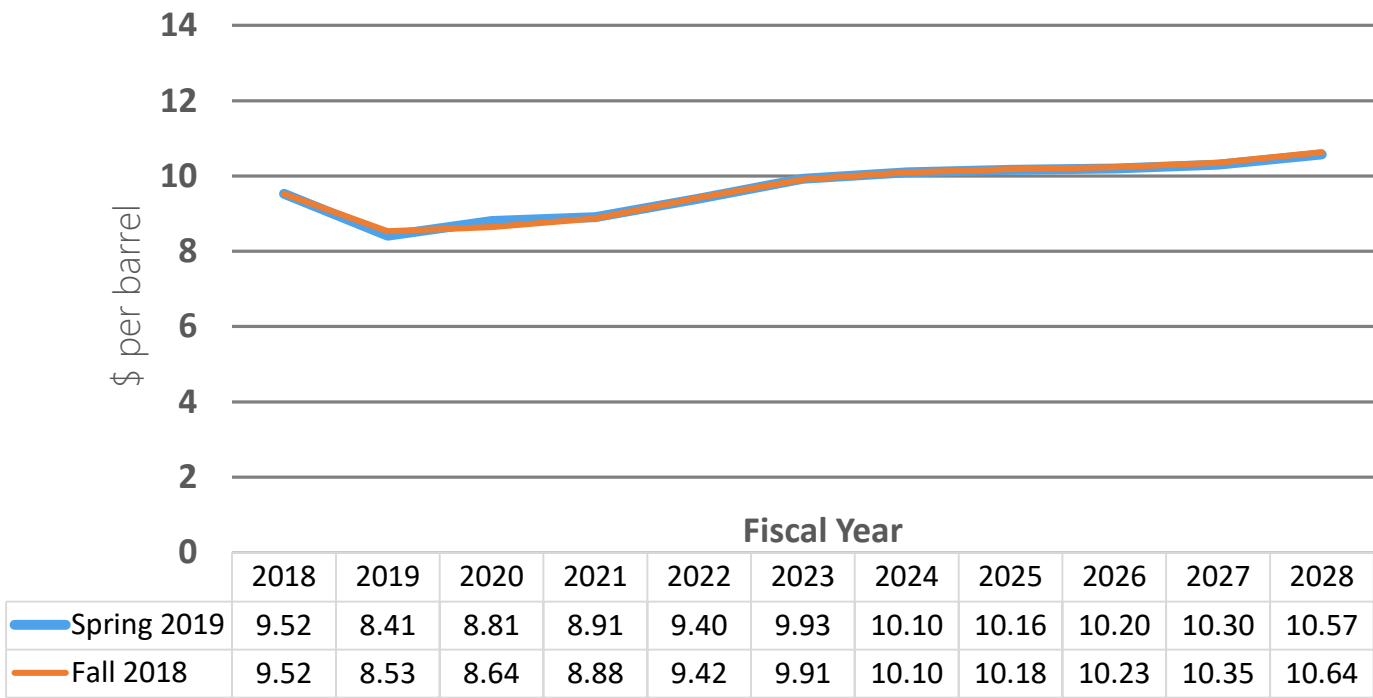
Forecast: North Slope Operating Lease Expenditures



Source: Department of Revenue – Economic Research Group
Note: These estimates include lease expenditures by companies that are not expected to have a tax liability.

North Slope Transportation Costs Forecast

Forecast: North Slope Transportation Costs

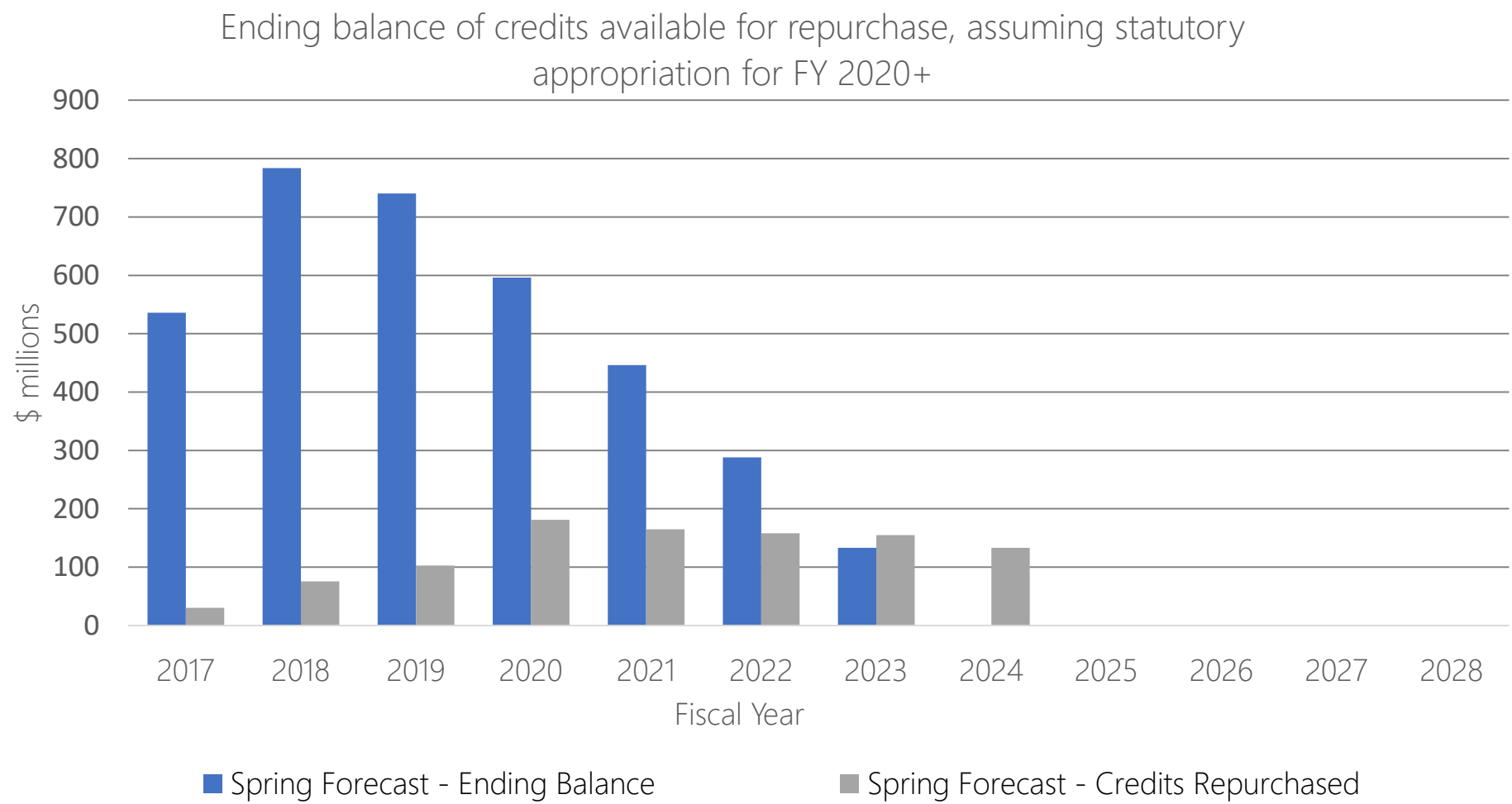


Source: Department of Revenue – Economic Research Group
Note: These estimates include lease expenditures by companies that are not expected to have a tax liability.

Oil Credits Forecast and Tax Credit Bonding Update



Spring 2019 Oil Credits Forecast



Per AS 43.55.028, statutory appropriation is 10% of production tax levied, before credits, when ANS price forecast is \$60 or higher. Statutory appropriation is 15% of production tax levied, before credits, when ANS price forecast is below \$60. Does not include changes in company behavior or credit transfers beyond FY 2020 as a result of only making statutory appropriation.

- House Bill 331 (HB 331) established a corporation for the purpose of financing the purchase of transferable tax credits, production tax credits, the payment of certain refunds. The Corporation is authorized to issue up to \$1 billion in subject-to-appropriation bonds. In FY2019, \$27 was million appropriated for debt service on bonds issued by the Corporation.
- Due to ongoing litigation, the Corporation has not yet issued any bonds. The Complaint alleges that the subject-to-appropriation bonds specified in HB331 are in violation of the state constitution regarding state debt and financing.
- The Superior Court granted the State's motion to dismiss on January 2, 2019. The State has moved for entry of final judgment. The plaintiff appealed the case to the Alaska Supreme Court on February 21, 2019. As such, it is unlikely that the suit will be resolved before the beginning of FY2020.
- The Spring 2019 Forecast assumes statutory appropriation for FY2020 and full credit payoff in FY2021 – this is an assumption for forecast purposes only.

Thank You

Bruce Tangeman
Commissioner Designee
Department of Revenue
bruce.tangeman@Alaska.gov
(907) 269-0081



dor.alaska.gov