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# Understanding the Production Forecast

*An Update Based on the Spring 2014 Forecast*

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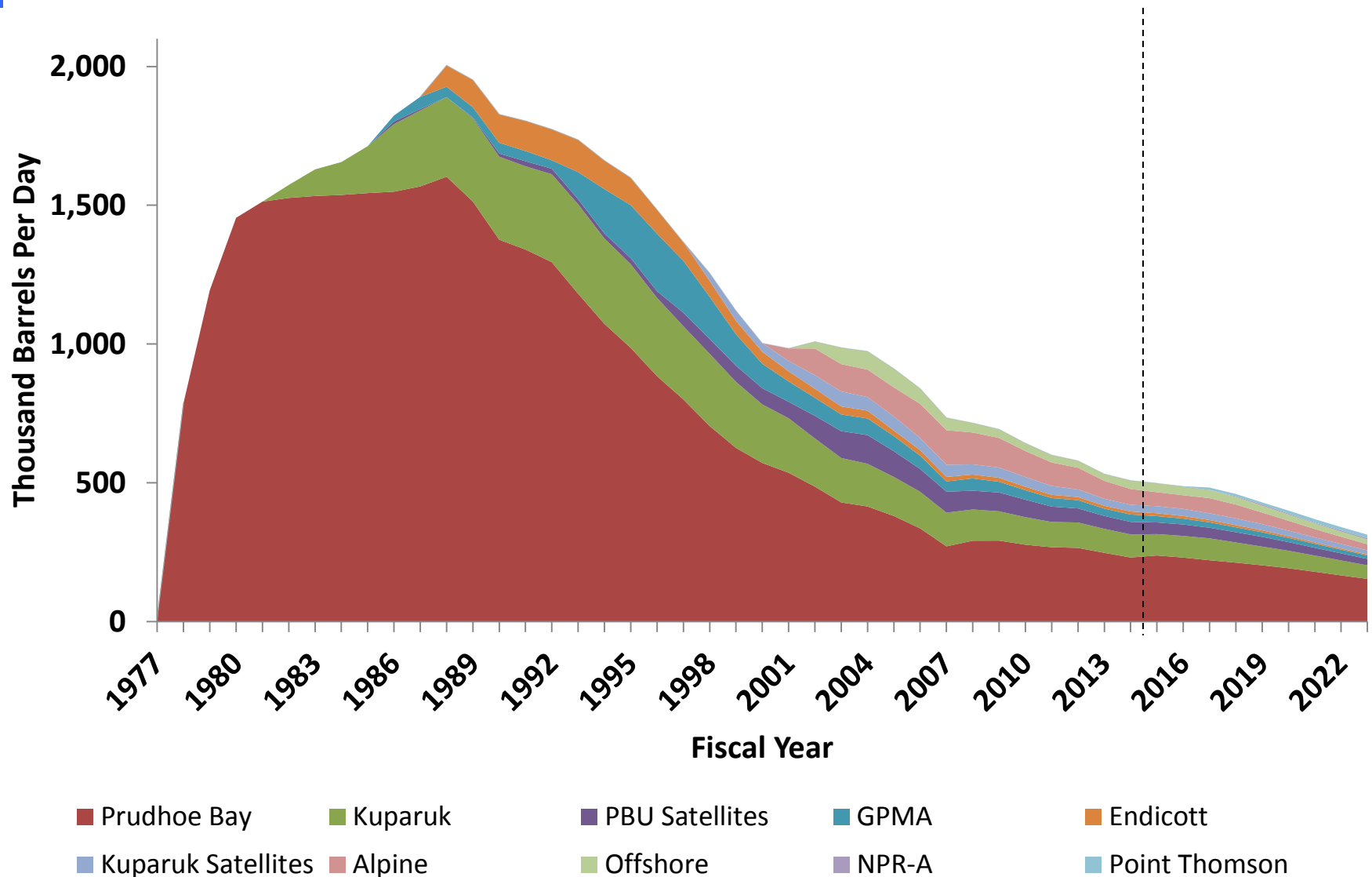
# Production Forecast and Methodology

An Update Based on the Spring 2014 Forecast



Note: although the underlying data may have been updated, there has been no change to the forecast methodology adopted in the Fall 2012 Forecast.

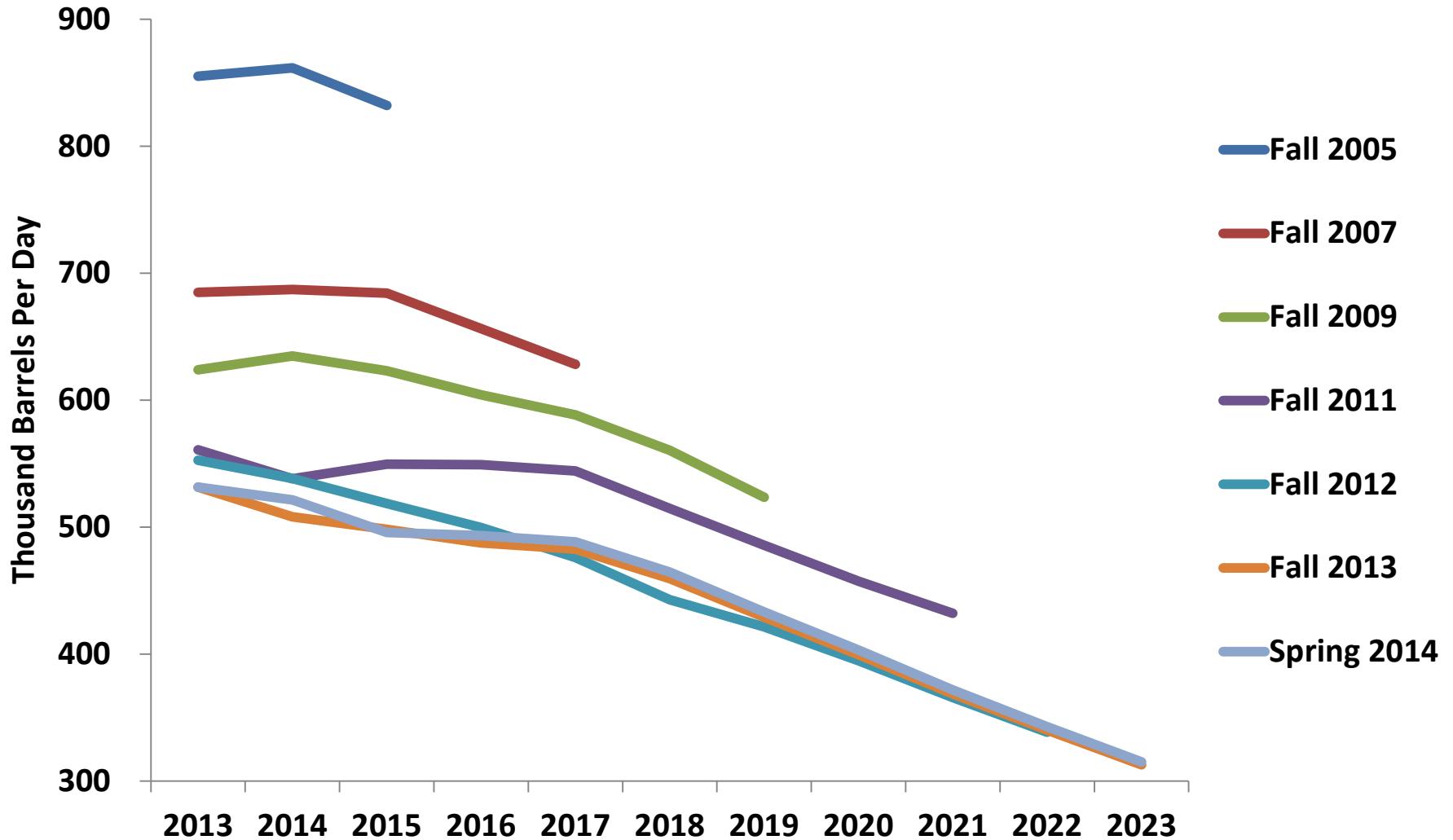
# PRODUCTION HISTORY AND FORECAST



Source: Department of Revenue

# ANS OIL PRODUCTION FORECASTS

## WHY THE DEPARTMENT OF REVENUE REVISED THE METHODOLOGY



Source: Department of Revenue - Revenue Sources Books Fall 2005-2013, 2014 Spring Update

# 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"*

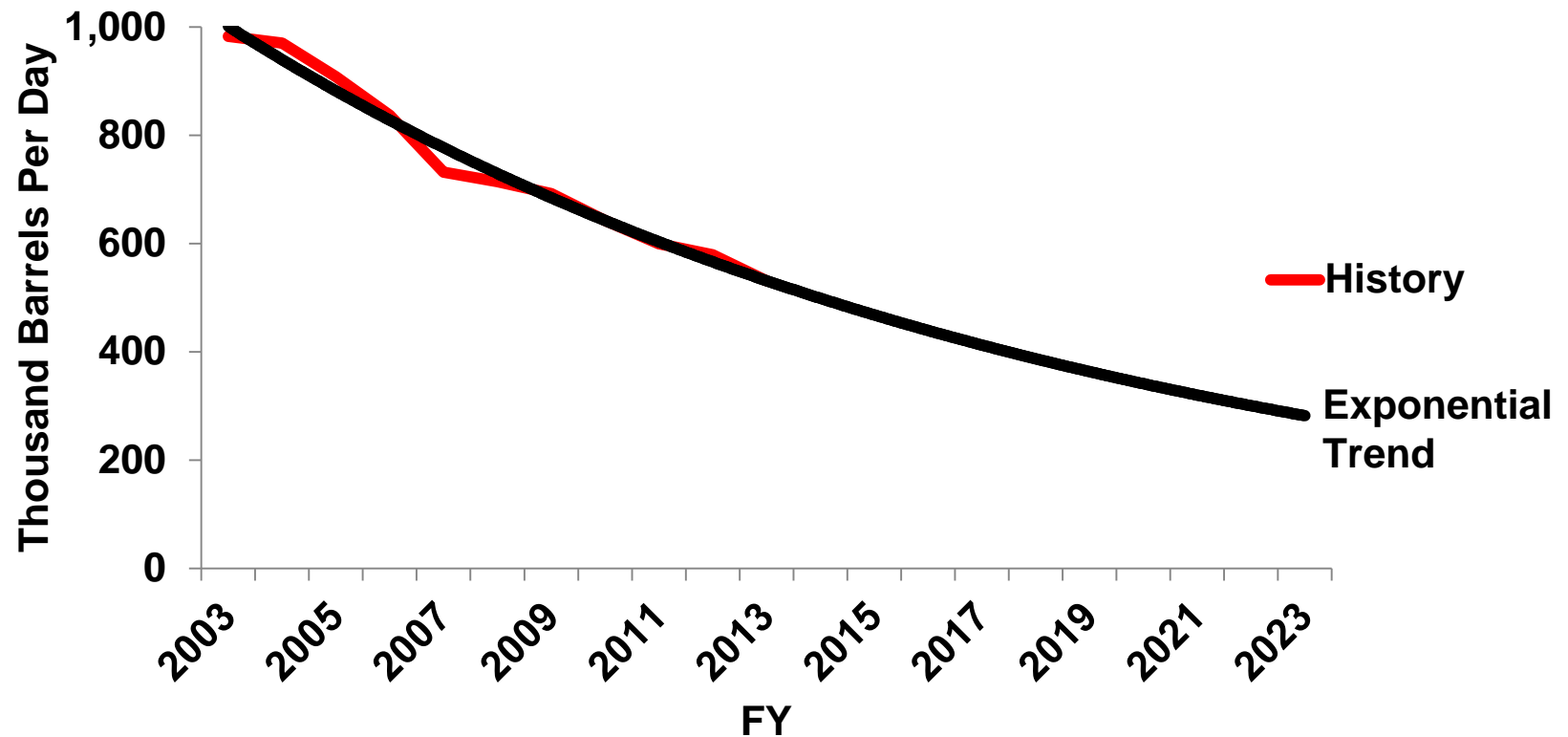
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# REVISIONS TO THE ANS OIL PRODUCTION FORECAST ADOPTED IN THE FALL 2012 FORECAST

- “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

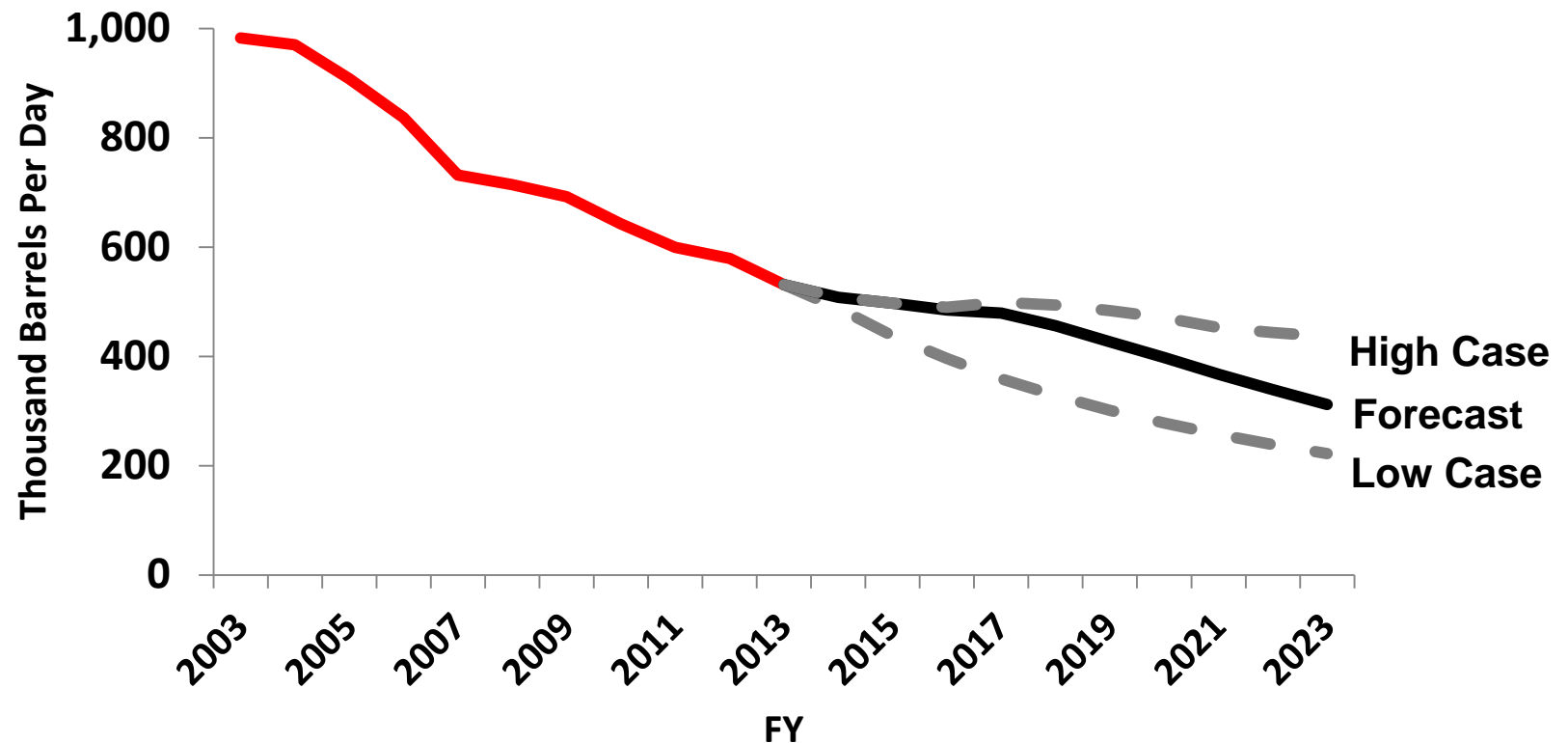
# ANS OIL PRODUCTION – ACTUALS & FORECAST

	2006	2007	2008	2009	2010	2011	2012	2013	2014 Forecast
Production	837.1	732.2	714.4	692.7	642.5	599.9	579.4	531.6	521.8
Decline Rate	-7.8%	-12.5%	-2.4%	-3.0%	-7.2%	-6.6%	-3.4%	-8.2%	-1.8%



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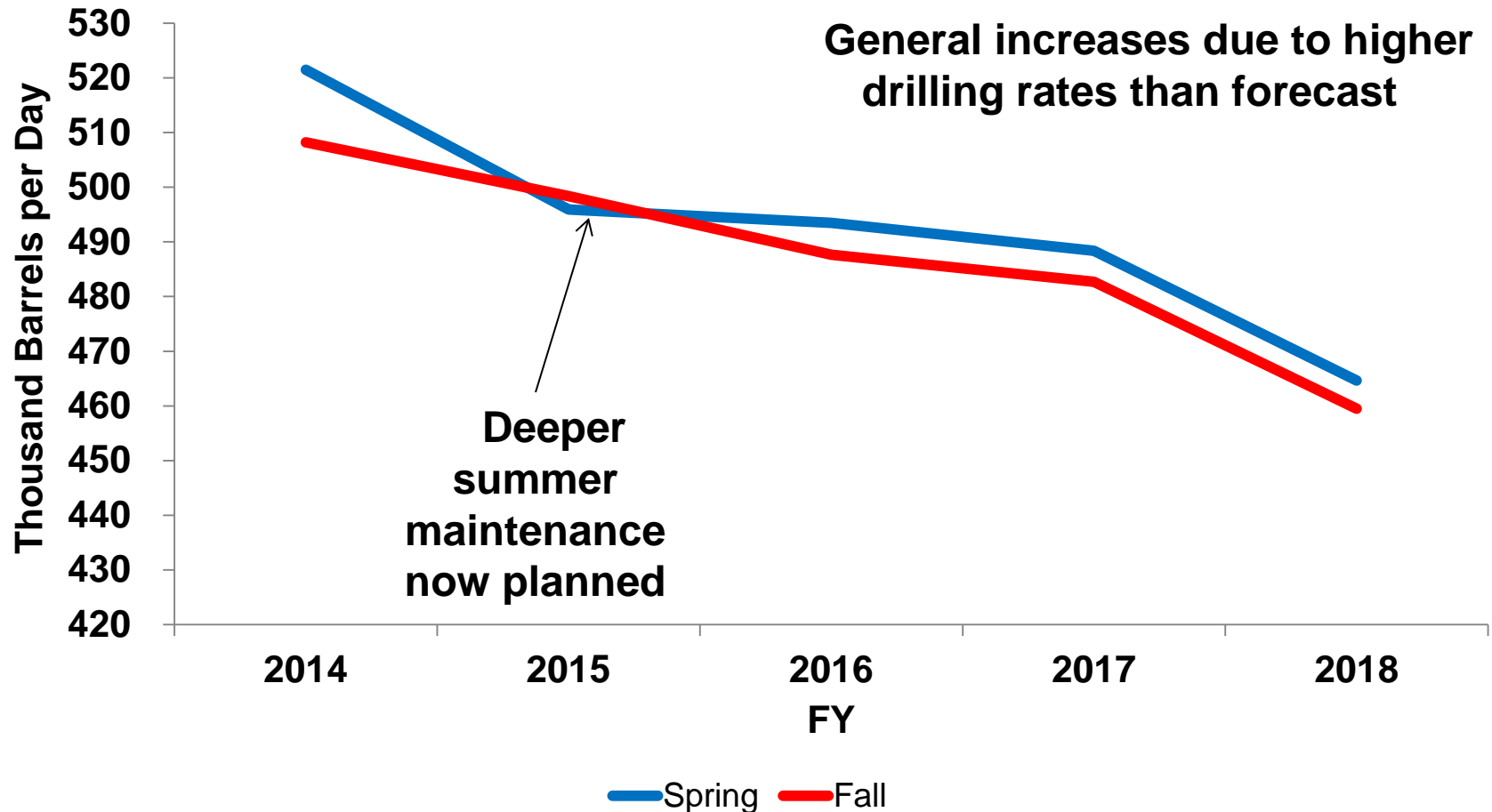
## WHAT'S IN THE FORECAST?

- In order to be included, a project must:
  - Have well data confirming reservoir
  - Have a company actively pursuing development
- Projects are “under development” if:
  - A company has partner alignment and/or senior management approval
  - The project has been allocated funds in the company budget
- Projects are “under evaluation” if:
  - The resource is known and being pursued, but financial hurdles have not been met
- “Under Evaluation” projects carry additional risk of delay or abandonment
  - Therefore, receive a greater risk adjustment

## WHAT'S NOT IN THE FORECAST

- Undiscovered resources
  - Up to 4 billion in Central North Slope
  - Some exploration projects remain in this category after an announced find until well data is available
- Technologically challenged oil
  - Heavy, Viscous, and Shale Oil
    - Combined estimates exceed 30 billion barrels
- Regulatory burdened or otherwise difficult
  - ANWR, OCS
    - Potentially over 30 billion barrels

# SPRING ANS PRODUCTION FORECAST ADJUSTMENTS

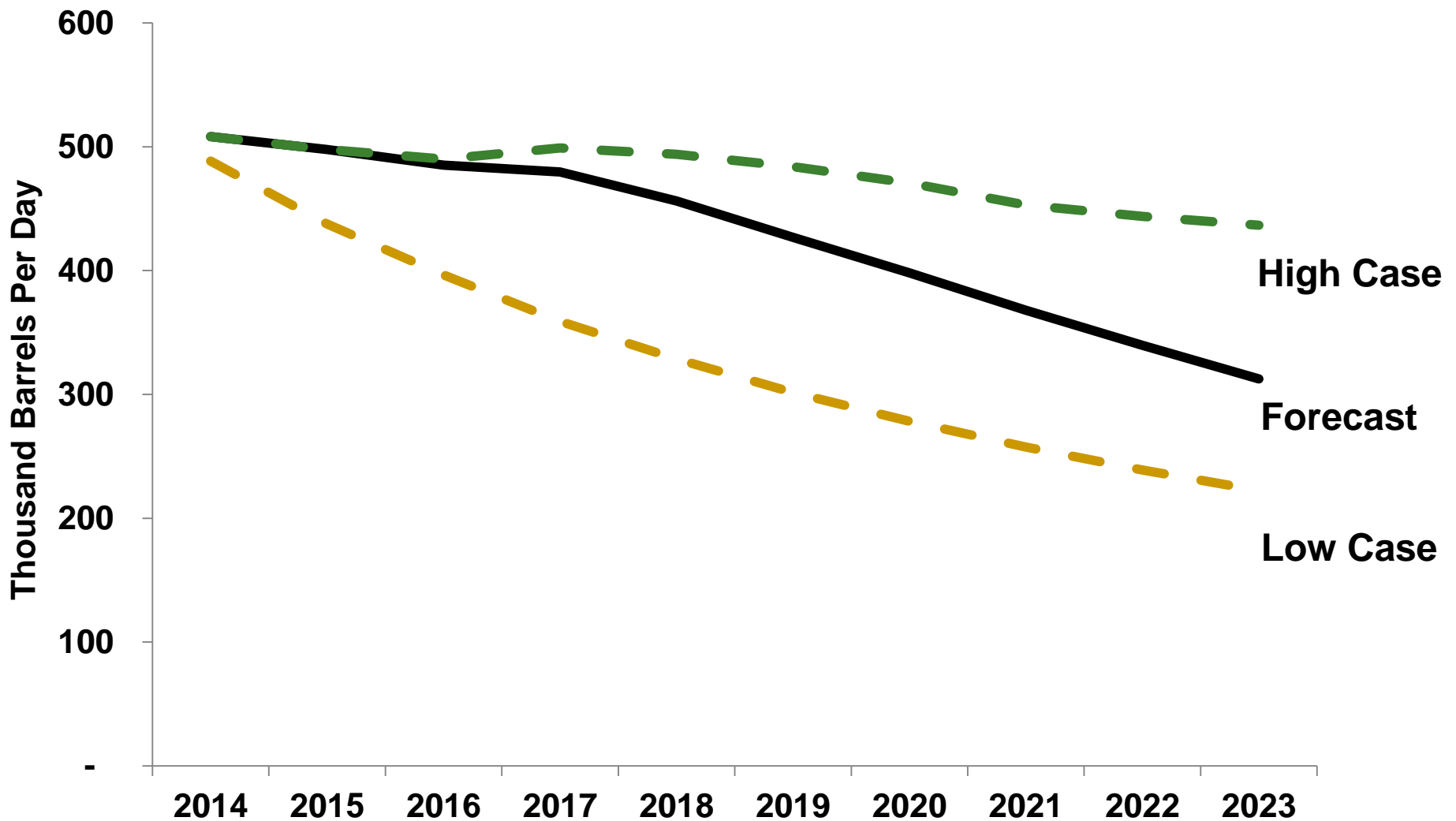


A more comprehensive review of company activity will be conducted in the Fall

## WHERE'S THE PRODUCTION?

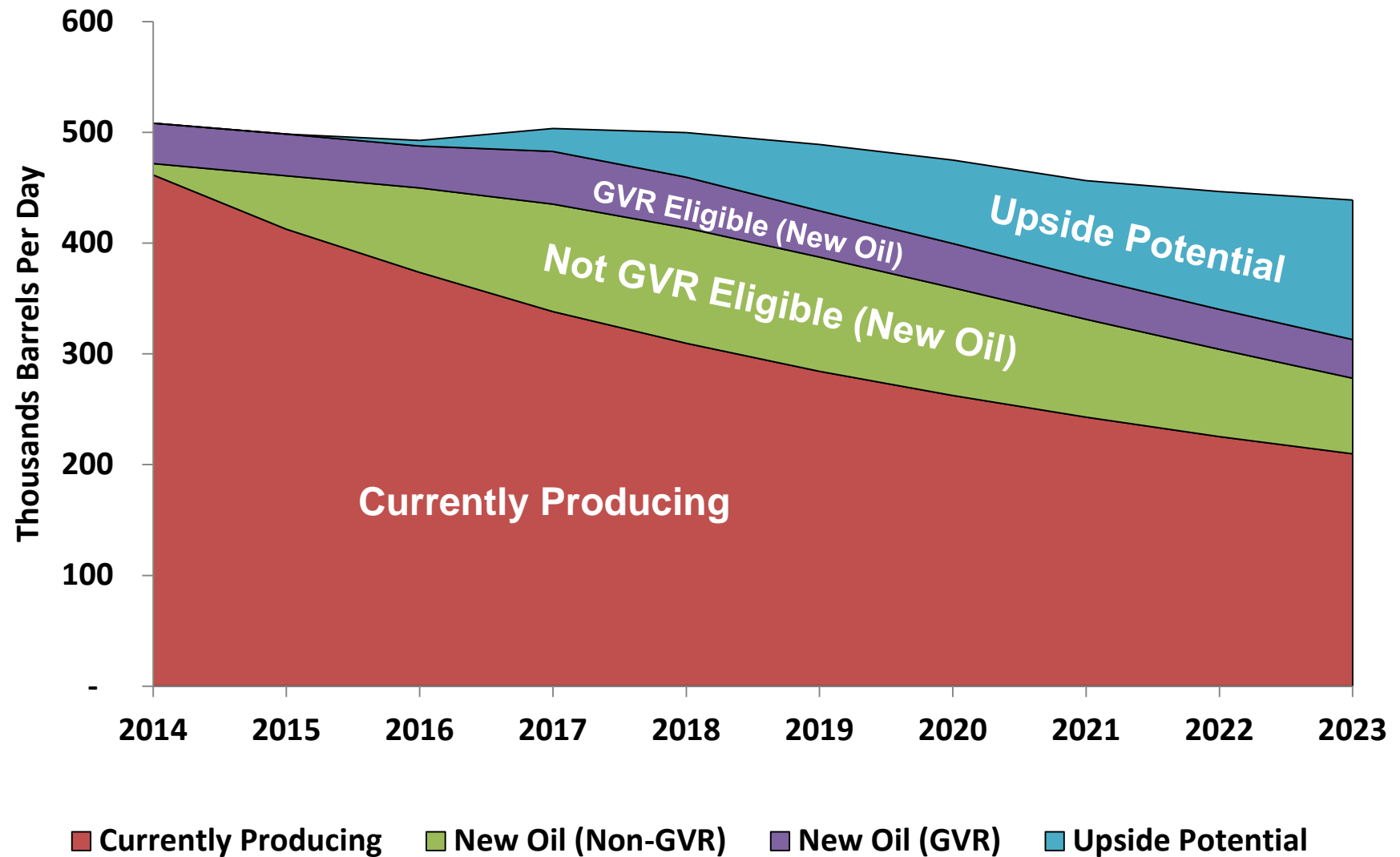
- Future production varies greatly based on projects currently under development or evaluation.
- The potential for significant production increases exist.
  - Forecasting it will occur is not prudent.
  - Revenues are projected as sufficient levels of certainty are obtained.
  - Likelihood of development increases with better economic conditions (price, cost, taxes, etc.).
- Many things can cause a project to be delayed or abandoned.

# ANS PRODUCTION FORECAST



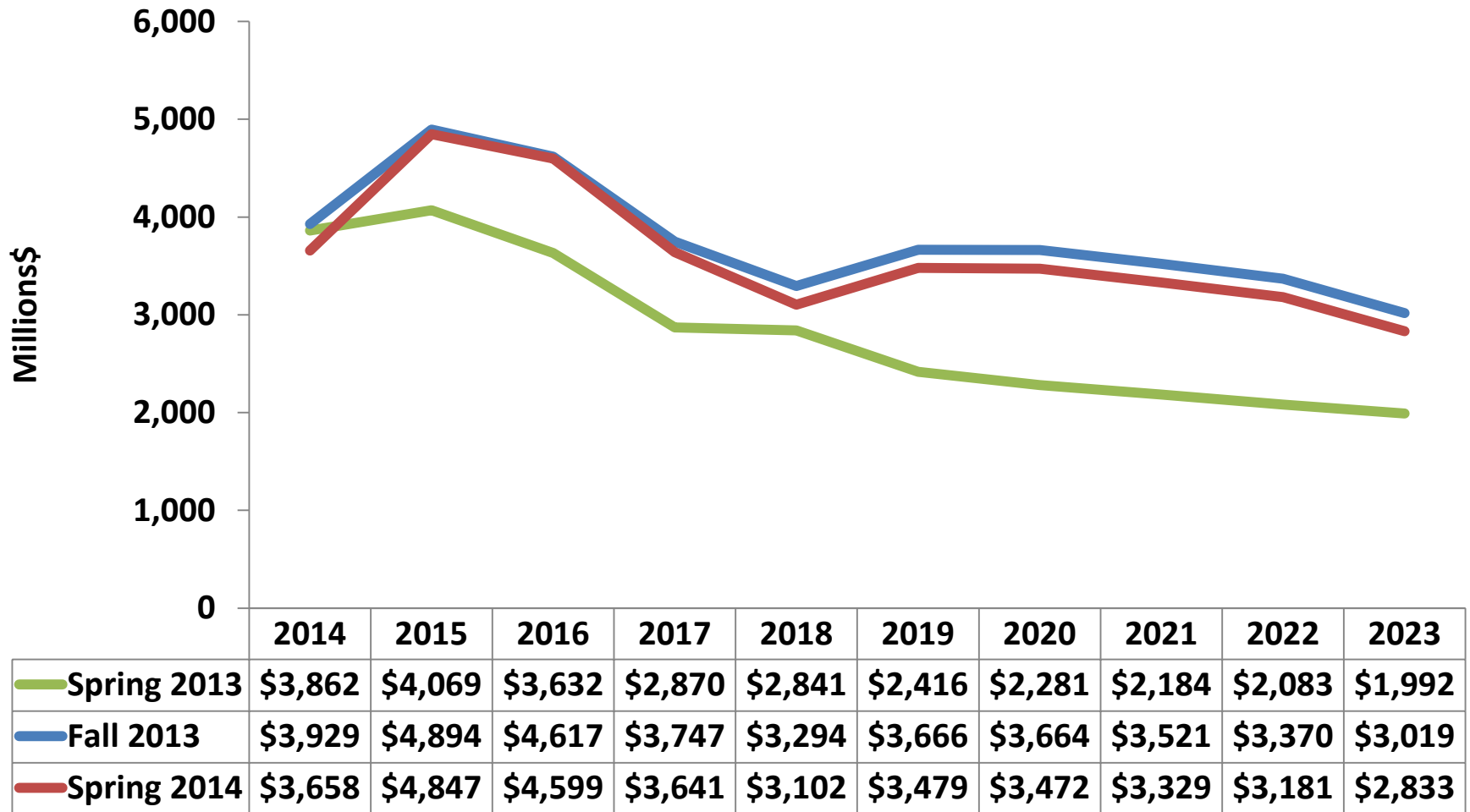
Source: Department of Revenue - Revenue Sources Book Fall 2013

# ANS PRODUCTION FORECAST



Source: Department of Revenue - Revenue Sources Book Fall 2013

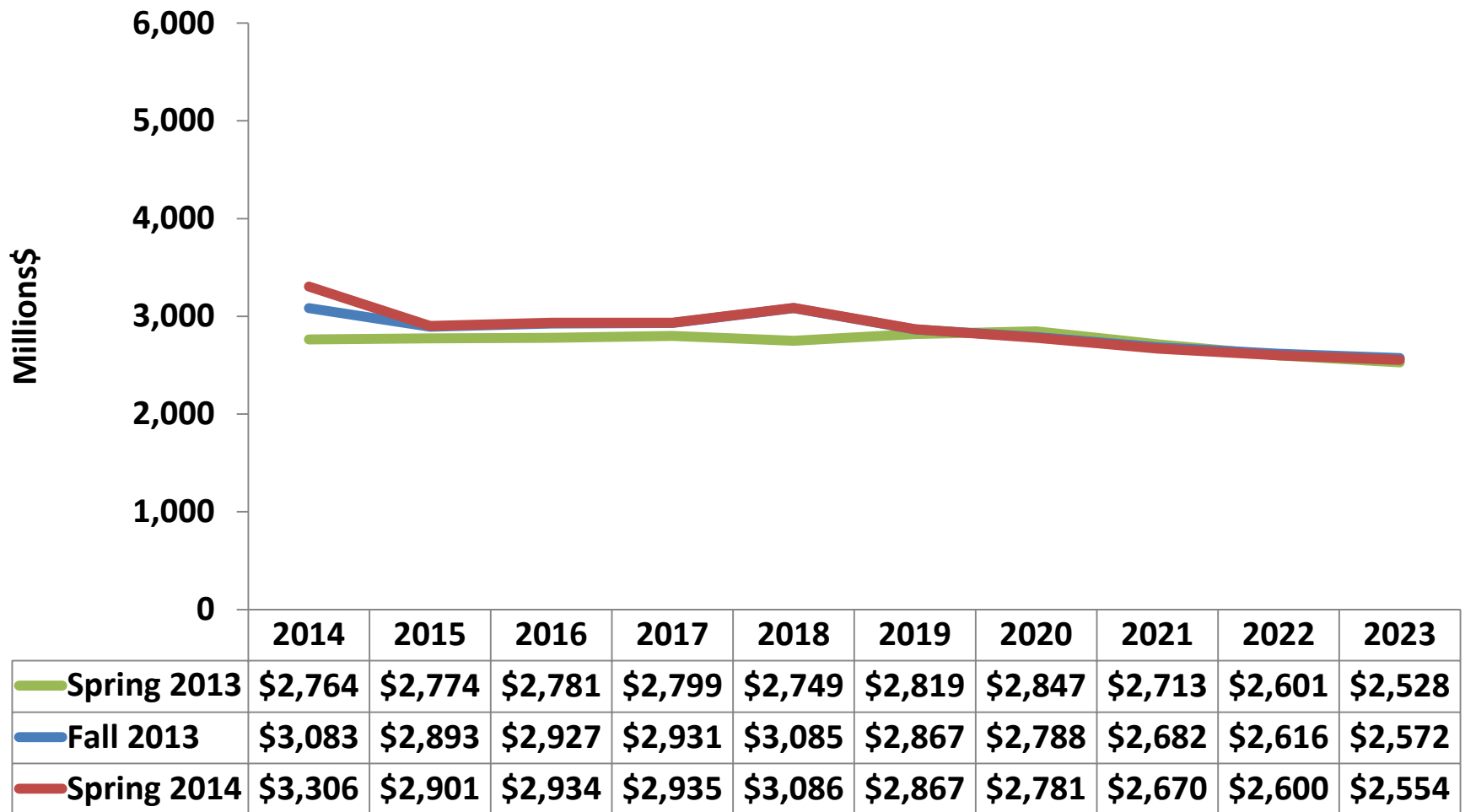
# NORTH SLOPE LEASE EXPENDITURE FORECAST CHANGE TOTAL NORTH SLOPE CAPEX



Note: These estimates include lease expenditures by companies that are not expected to have a tax liability.

Source: Department of Revenue - Revenue Sources Book Fall 2013 / 2014 Spring Update

# NORTH SLOPE LEASE EXPENDITURE FORECAST CHANGE TOTAL NORTH SLOPE OPEX



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Source: Department of Revenue - Revenue Sources Book Fall 2013 /2014 Spring Update



# THANK YOU

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