



Fall 2010 Oil Production Forecast

*Presentation to the
House Finance Committee
March 16, 2011
Alaska Department of Revenue*



Three Categories of Forecasted Production



- 1) Currently Producing- Includes base production and enhanced recovery production from investment in rate enhancing activities (perforations, stimulations, well workovers, gas and water injection support).
- 2) Currently under Development- New projects that are currently funded or awaiting project sanction in near future.



Three Categories of Forecasted Production



- 3) Currently Under Evaluation- Includes technically viable projects in the stage where engineering, cost, risk and reward are being actively evaluated. Unfunded but are considered to have a high chance of being brought to fruition.



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!



North Slope Production Decline



FY 1988: production peak → 2.01 million barrels per day (bpd).

FY 2010: production → 644,000 bpd, a 68% decline since peak.

FY 1988 to date: production decline rate ~ 5% per year, on average.

Over the last 10 years, production decline rate ~ 4.2% per year, on average.

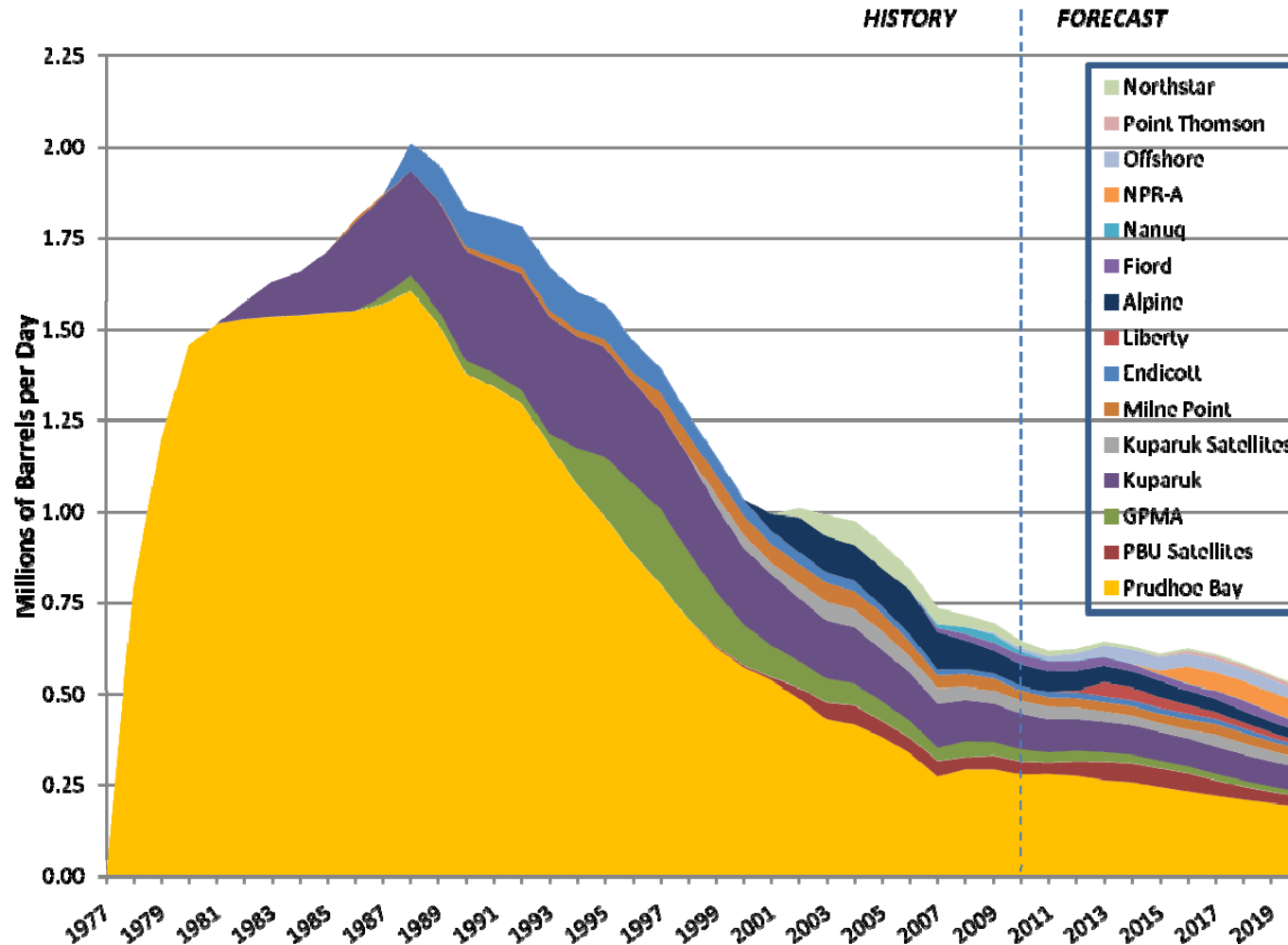
We expect the decline rate to flatten out to 3.2% per year, on average, through FY 2030.



ANS Production History & Forecast

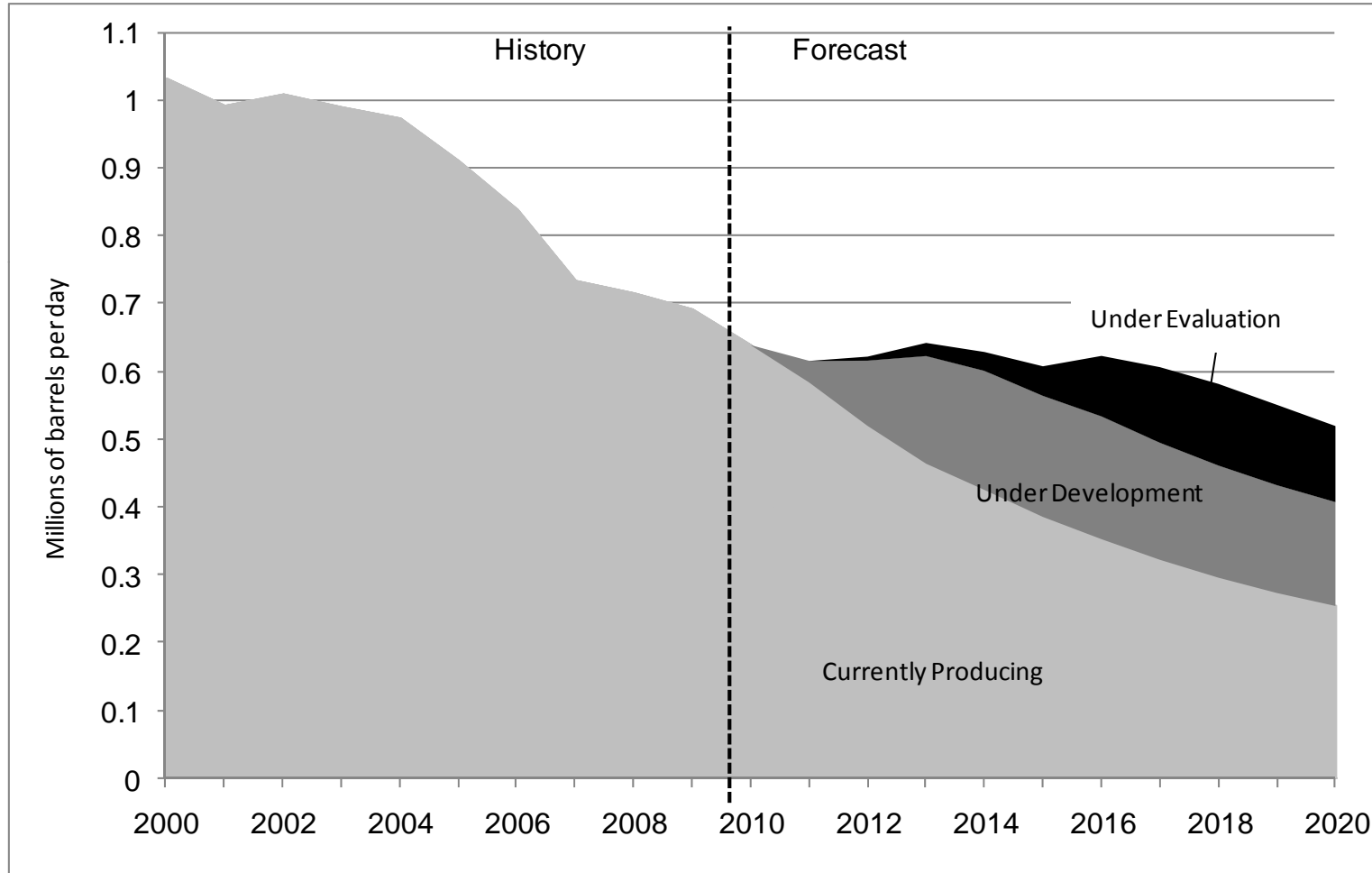


Annual North Slope Production and Contribution of Fields





Forecasted ANS Production FY 2010 - 2020





Conclusion on Production



- Production forecasting requires consideration of each project's geology, development plans, commerciality, 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.