

Fall 2020 Production Forecast

HFIN Committee

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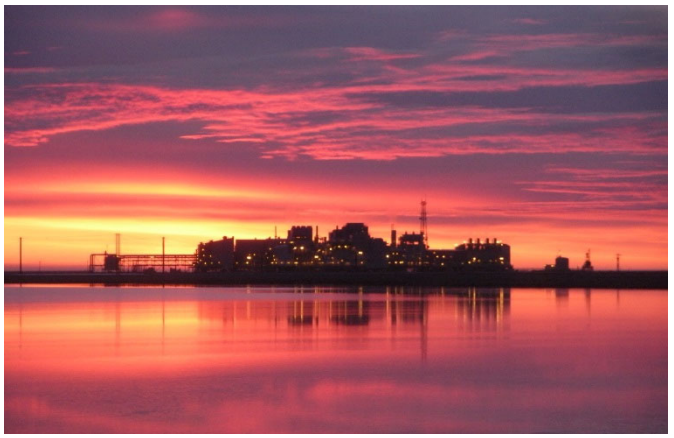



OUTLINE

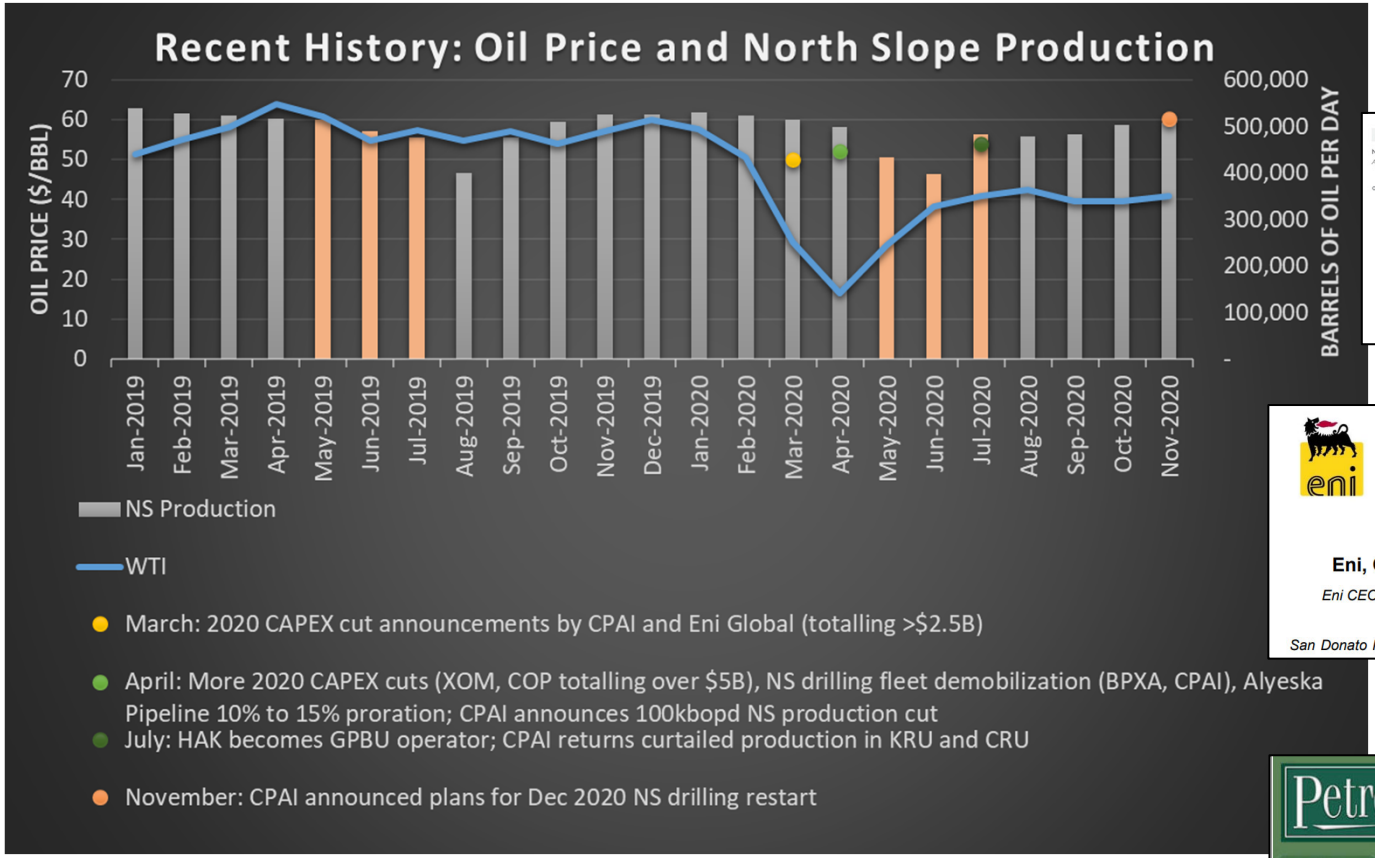
- Background
  - 2020 Pandemic and North Slope oil production
  - FY2020 in review
- 2020 Production Forecast
  - Result highlights
    - FY2021 Outlook
    - Ten-year outlook
- Summary

2020: Pandemic-related Production disruptions

Energy

ConocoPhillips halts North Slope drilling program to protect workers amid coronavirus crisis

Author: Alex DeMarban Updated: April 11, 2020 Published April 8, 2020



Newsroom
News
April 7, 2020

ExxonMobil reduces 2020 capex by 30%, cash opex by 15%; maintains long-term outlook

IRVING, Texas – ExxonMobil said today said it is reducing its 2020 capital spending by 30 percent and lowering cash operating expenses by 15 percent in response to low commodity prices resulting from oversupply and demand weakness from the COVID-19 pandemic.

eni

Eni, COVID-19 update: 2020-2021 business plan revision

Eni CEO, Claudio Descalzi: "Actions to maintain robust balance sheet and dividend"

San Donato Milanese (Milan), 25 March 2020 – With respect to the information disclosed to

FINANCIAL NEWS, RESULTS AND STRATEGIC PLAN

Eni, COVID-19 update: 2020-2021 business plan revision

25 MARCH 2020 - 5:41 PM CET

Eni CEO, Claudio Descalzi: "Actions to maintain robust balance sheet and dividend"

TAPS runs smoothly under prorations

PDF Click here to go to the full PDF version of this issue, with any maps, photos or other artwork that appears in some of the articles.

Pipeline oil volume cut increased from 10% to 15%; prorations likely to continue into June based on volumes, tanker schedules

Steve Sutherlin

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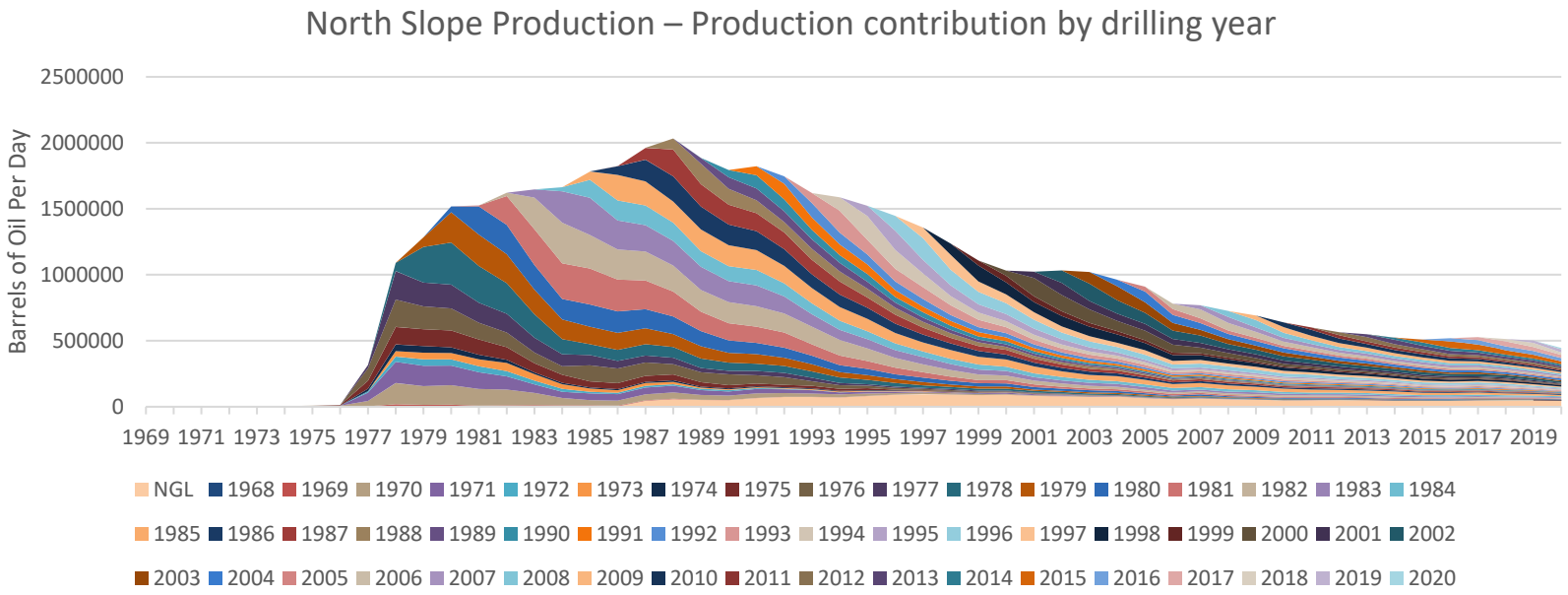
Prudhoe drilling ends

BP worker tests positive for COVID-19; company ends development drilling for 2020

PRODUCTION & THE 2020 PANDEMIC: MEDIUM/LONG TERM EFFECTS



- Every year of drilling contributes to long term rates. Production from new wells helps to mitigate overall NS production decline. For example, some past years of drilling contribute on average 3% to 8% of annual NS production for almost a decade

- Laydown of drilling rigs in the FY2020/FY2021 is expected to impact NS production decline in the short term as well as the long term. FY2020/FY2021 undrilled wells constitute a set of '*Missing Wells*' that would typically mitigate decline for periods beyond the year the wells are drilled.

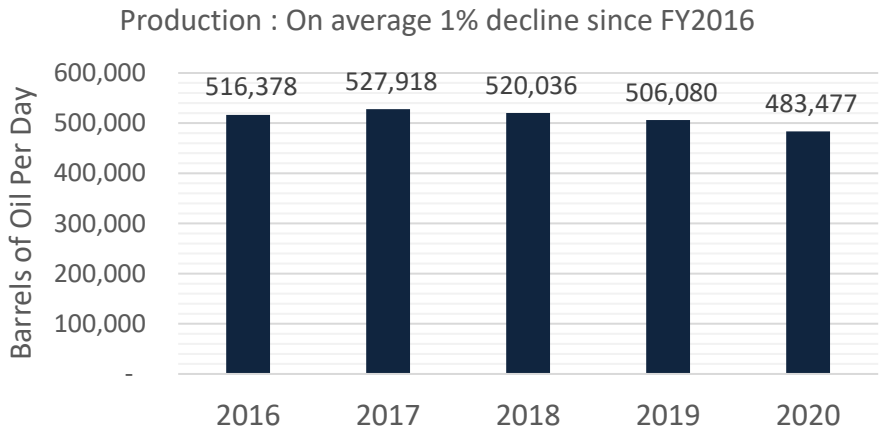
- '*Compensatory*' production enhancement activities could mitigate this 'lost development drilling' impact in the short term

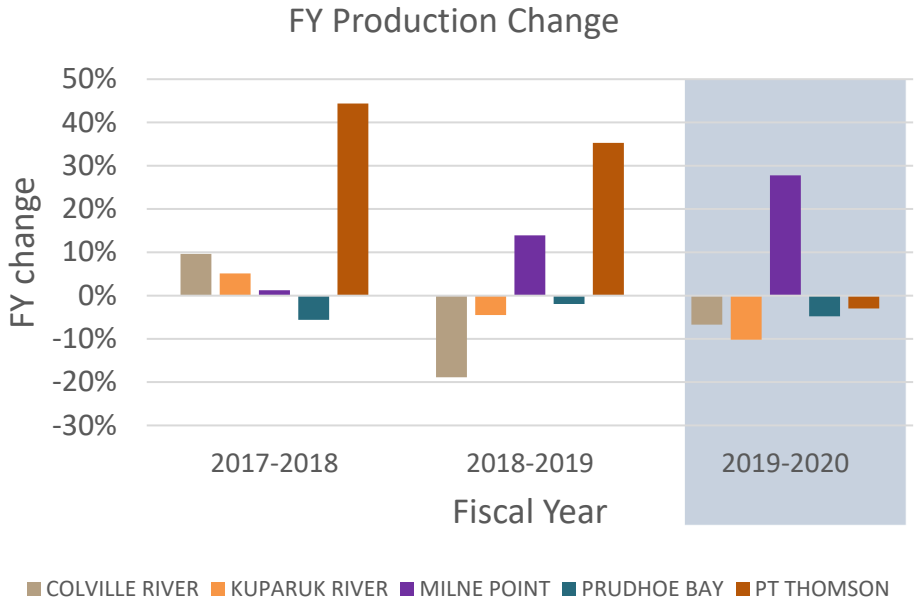
Overall perspective: North Slope

- On average, modest decline in production over the last 5 Fiscal Years:
  - FY16 to FY20 on average annual ~1% decline in production

- Recent Major Changes in Production
  - **Prudhoe Bay Unit:** Change of operatorship; strong ongoing production optimization efforts
  - **Kuparuk Unit :** Natural decline; pandemic related production disruption /interrupted rig activity
  - **Colville River Unit**: Natural decline; pandemic related production disruption /interrupted rig activity
  - **Milne Point**: ~28% growth (FY19 to FY 20)-M, L, I pad drilling
  - **PTU**: Progressively improved facility reliability

- Future Projects coming in:
  - Near future:
    - Fiord West Development, GMT2, Raven Pad in Milne Point Unit, CD5 Expansion
  - Farther out:
    - Pikka: FEED 2021
    - Willow: FEED; FID YE 2021



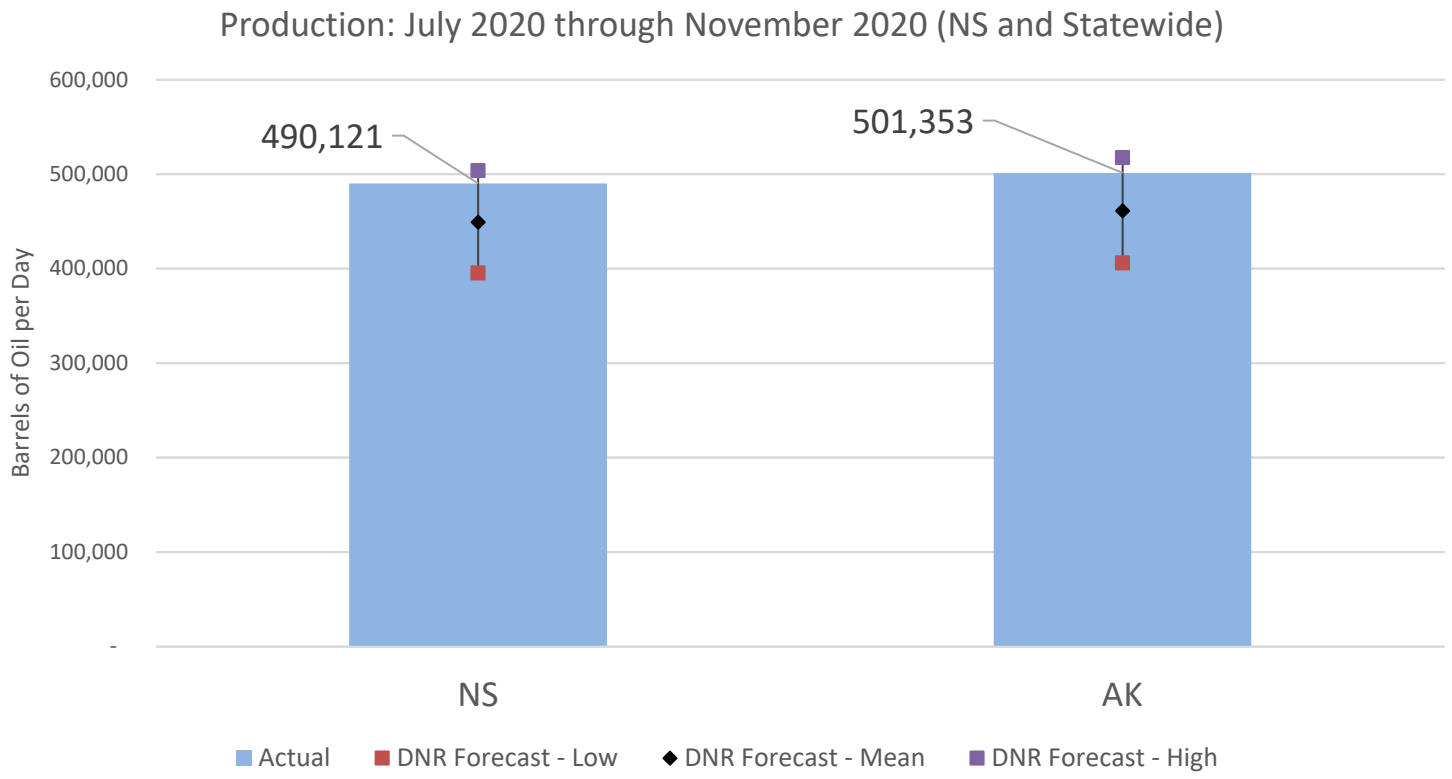


STATUS UPDATE OF KEY FUTURE PROJECTS: NORTH SLOPE

	Status: January 2020	Status: January 2021	Production Rate Estimates
Moose Pad Development	Production is online. Production rate ~5000 BOPD	Production is online. Production rate 9700+ BOPD	Peak rate: 22,000 barrels of oil per day
CD5 2nd Expansion	Ongoing drilling	Ongoing drilling by YE 2020 after Covid-related interruption	Reaching over 10,000 barrels of oil per day
GMT2	GMT2 Sanctioned in Oct 2018	GMT2 First oil YE 2021	Peak rate: 35,000 to 40,000 barrels of oil per day
Pikka	-Now planned for 2-phases; start of production (Phase 1: 2022; Phase 2: 2024); -To move to FEED after 15% divestment of interests	-Now planned for 2-phases; start of production (Phase 1: 2025); -To move to FEED 2021; FID & 15% AK divestment YE2021 through 2022	Peak design capacity rate, phase 1: 80,000 barrels of oil per day
Willow	Plan to submit Supplemental EIS. Record of decision expected Q4 2020 Announced first oil: 2025-2026	Plan to submit Supplemental EIS. Record of decision achieved, FEED FID expected YE 2021 Announced first oil: 2025-2026	Peak rate: 130,000 barrels of oil per day
Liberty	Final EIS (August 2018). Record of Decision (Oct 2018) Start up in ~2022, pending litigation on Fed decision	The 9th Circuit court decision placed project on hold pending operator appeal to the Supreme Court.	Peak rate: 60,000 to 70,000 barrels of oil per day

FALL 2020 PRODUCTION FORECAST

Fall 2020 Production Forecast: FY 2021 outlook

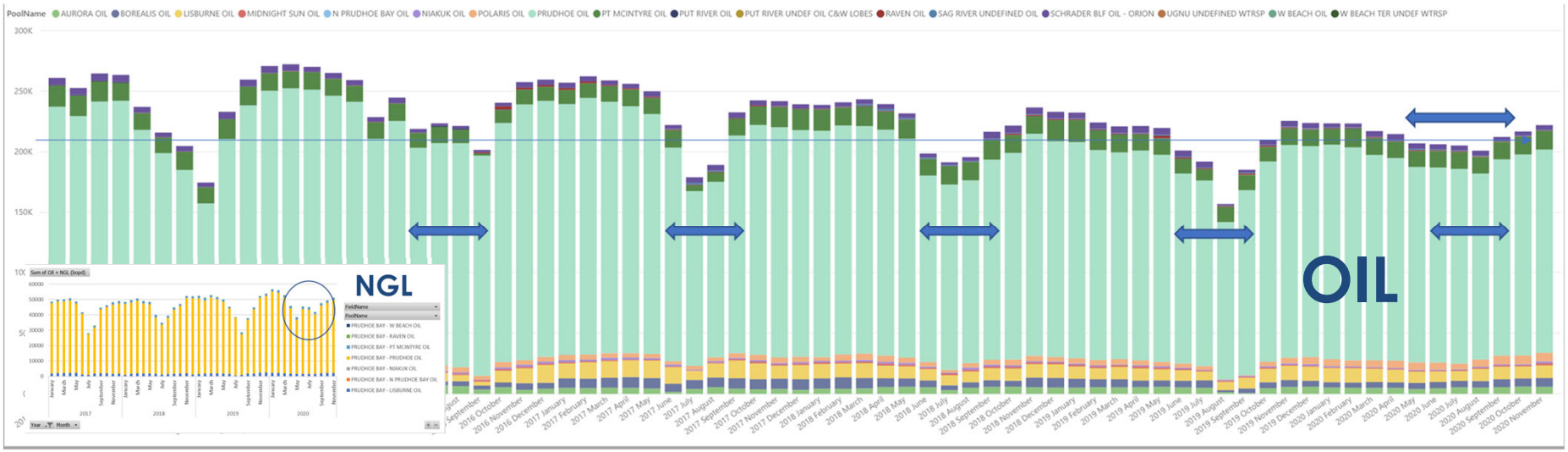


- For the first 5 months of FY2021 (July 2020 to Nov 2020), on average, daily production has come in within the range forecasted by the DNR.
- Difference between average daily production and mean forecasted statewide production is ~40,000 bbl; related to operational and production ramp-up timing decisions

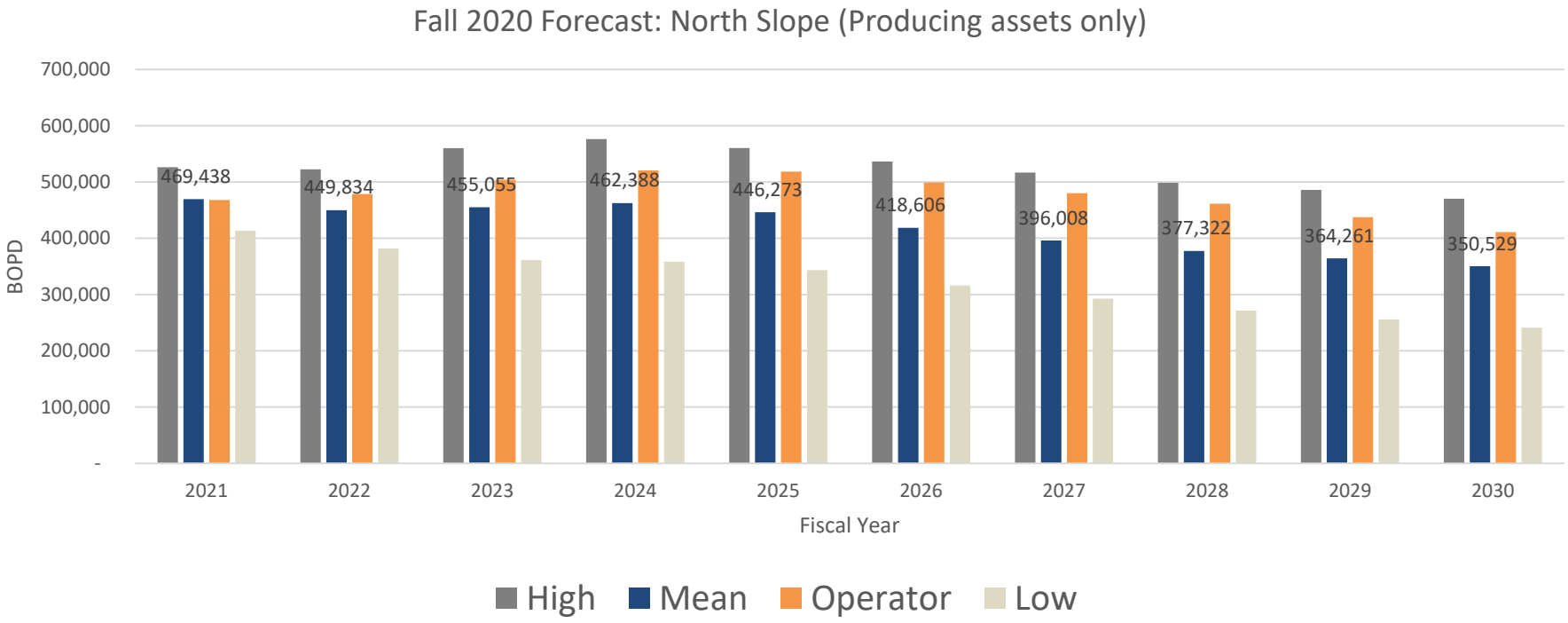
FY2021: Production Variance July – Nov 2020

- Deferred/forestalled summer turnaround maintenance (TAR) benefits summer oil and NGL production

- Ongoing production optimization efforts improve facility efficiency, as well as facility and well uptimes.

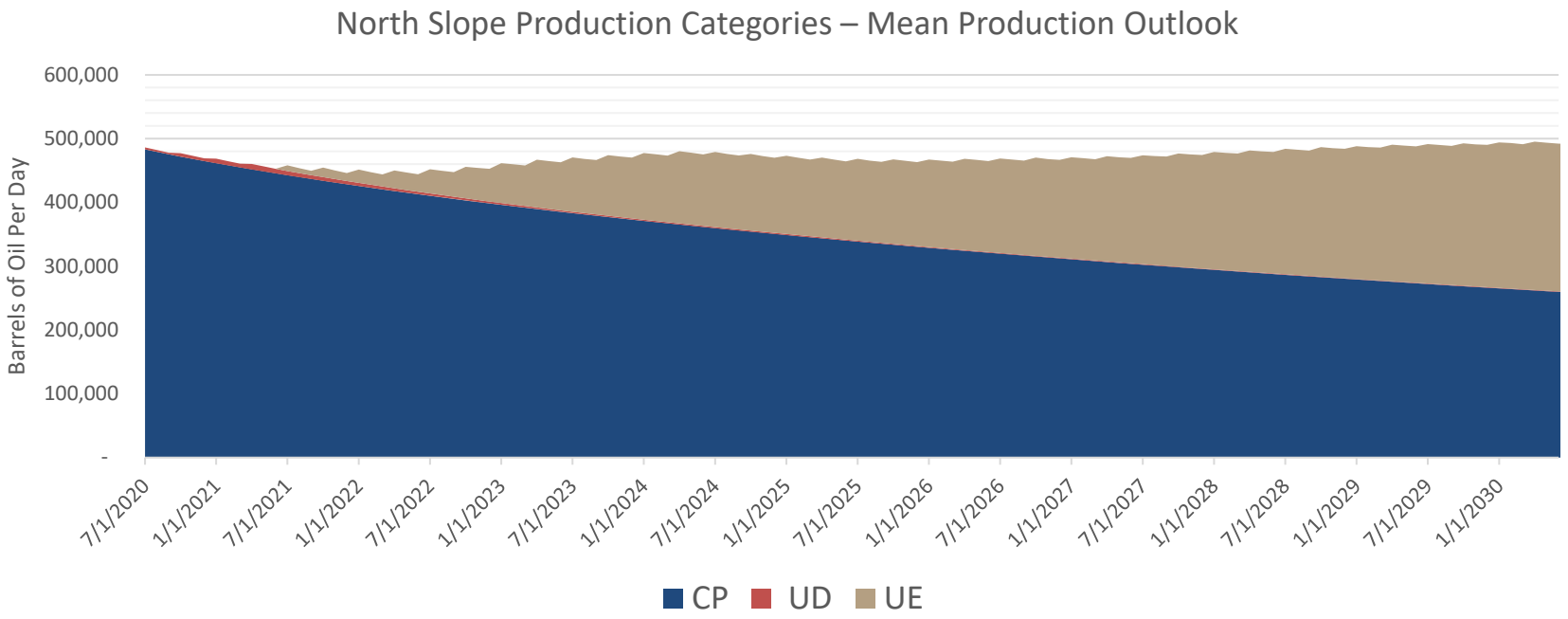


COMPARING LONG-TERM PROJECTIONS



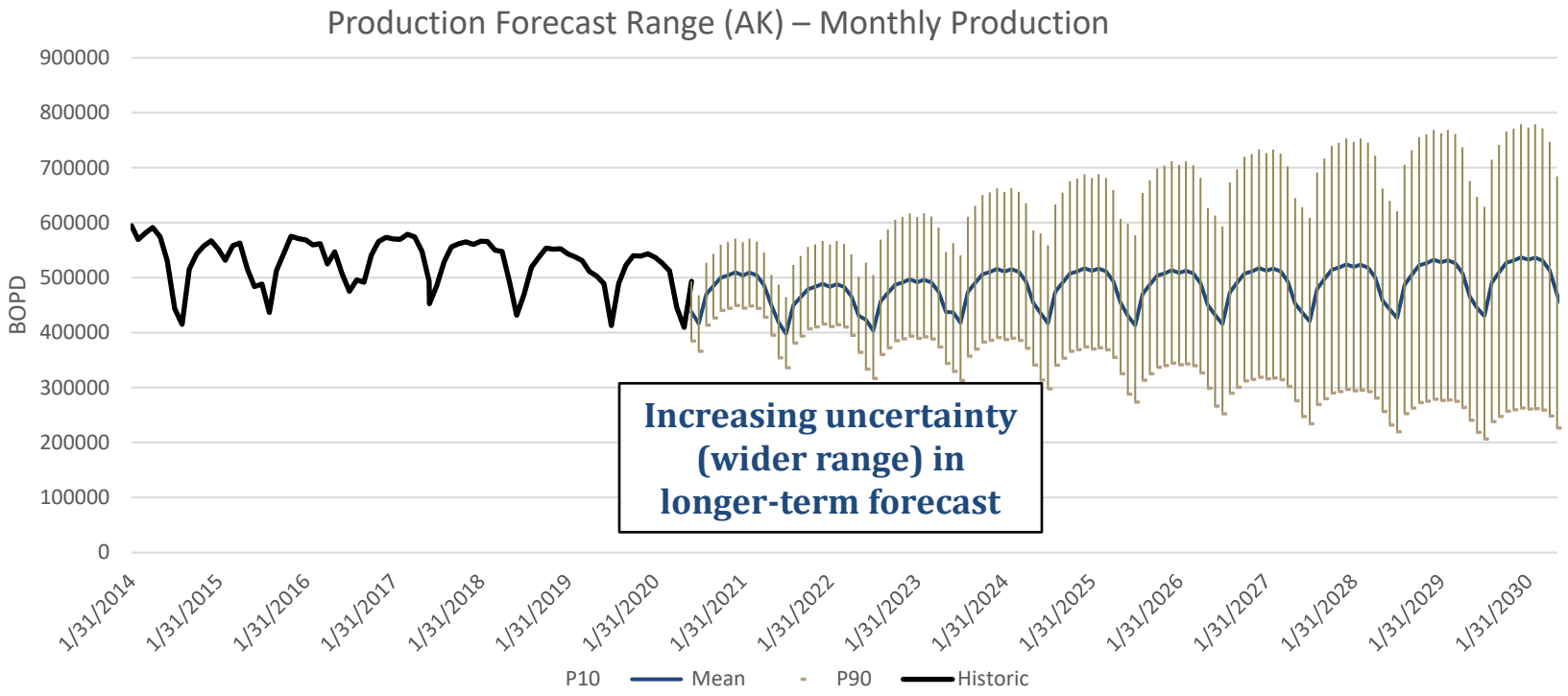
- DNR forecasts FY2021 average annual production at 470MBOPD and a range of 413MBOPD and 526 MBOPD
- DNR's forecast is a snapshot in time, reflecting current information on all projects considered, as well as operators' current plans.
- Operators' long-term outlook falls within DNR's long term forecast range
  - DNR's mean case falls below sum of the aggregate of operators' submitted case forecasts, for most of outlook period, reflecting differences in long term development case assumptions between DNR and operators.

Long term Production Outlook: Production Categories



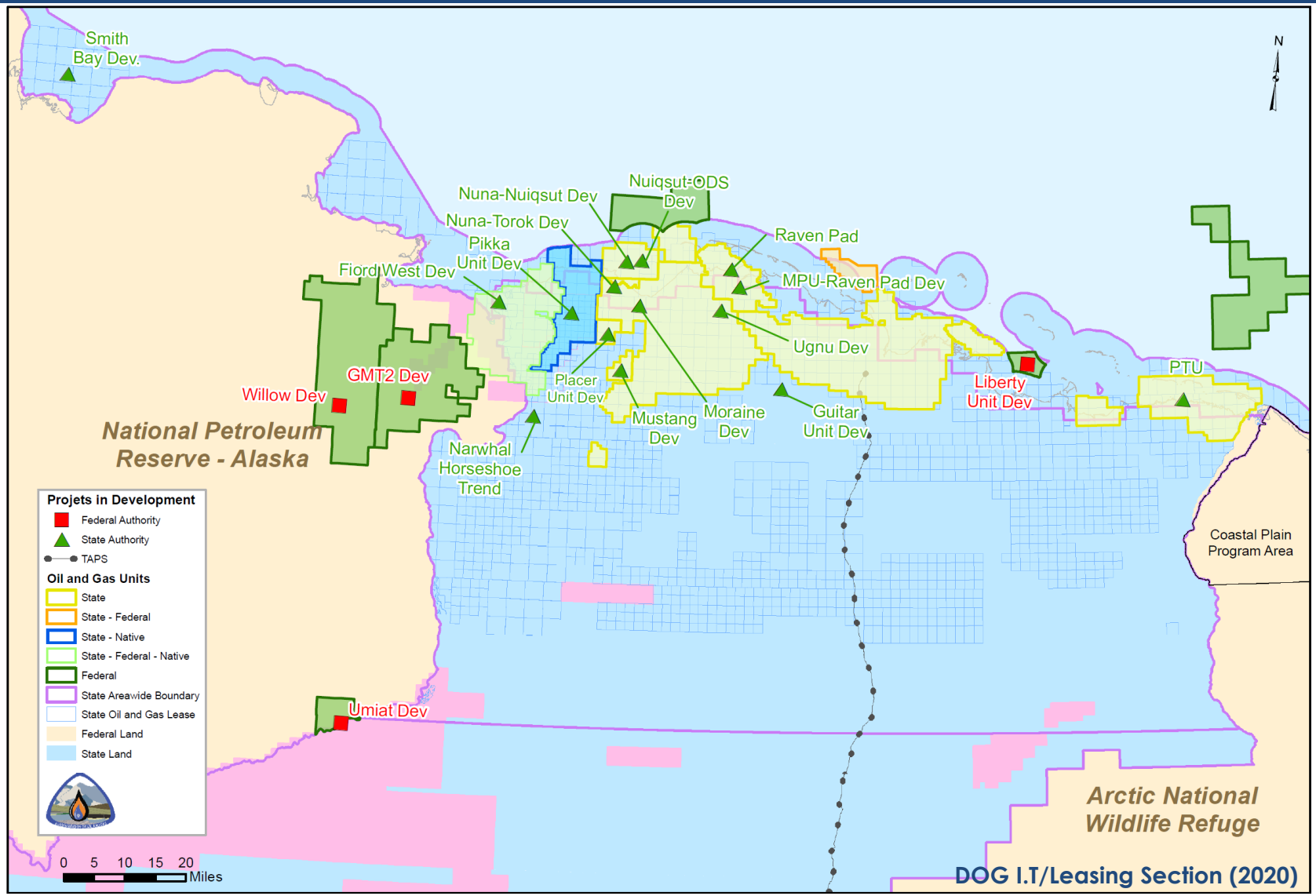
- Currently producing (CP) fields remain backbone of state oil production in near and medium term. Near-term projects under development (UD), often within existing fields, impact 12-month outlook.
- Future fields (UE), which are currently being evaluated by operators, begin to play a more significant role in farther out in outlook period.
- All new production/projects add to a declining base production

INCREASING UNCERTAINTY AS NEW FIELDS/PROJECTS COME ONLINE

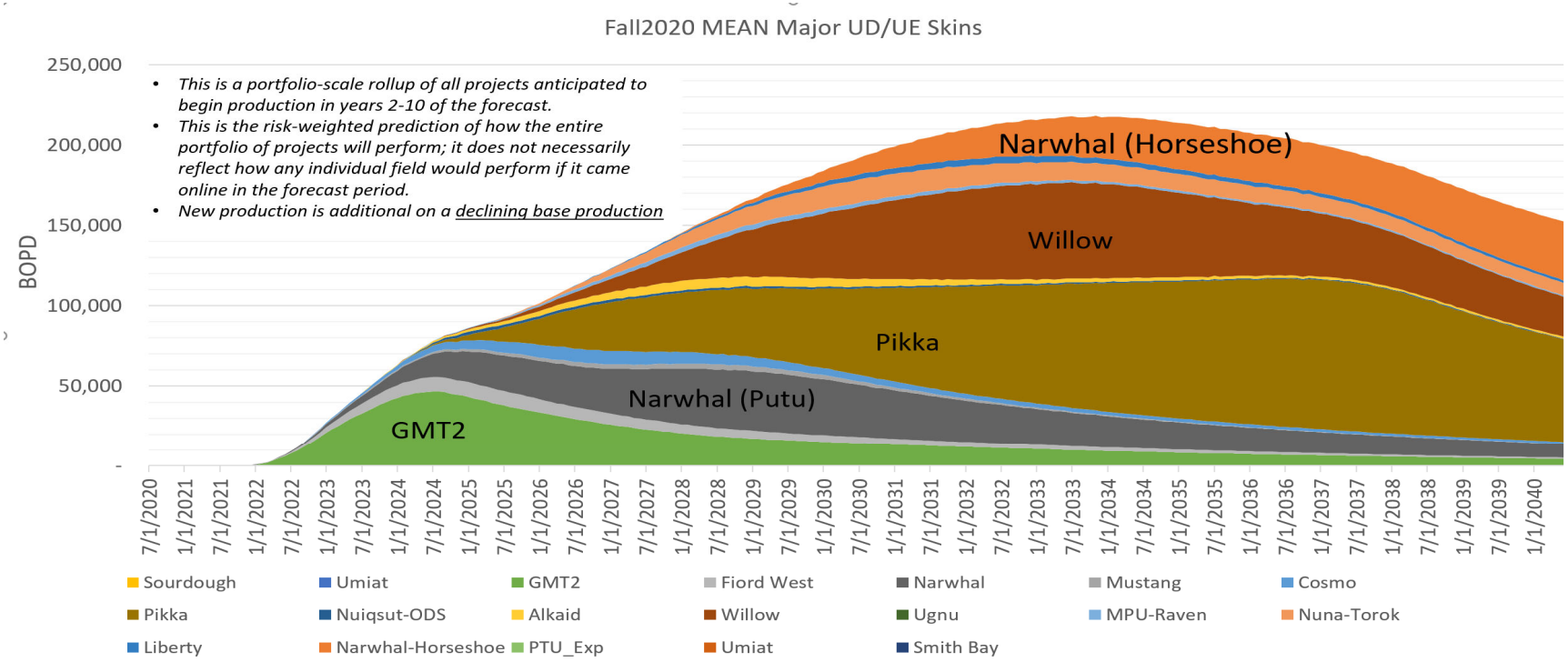


- Graph above shows seasonal variation in monthly production as well as widening uncertainty for the outlook period through 2030.
- New fields, currently in appraisal and under evaluation, are major drivers for medium/long term uncertainty in overall outlook

Projects Under Evaluation
Medium to Long Term



New projects Under Development/Evaluation: Adding to a declining base production



- New projects add to a declining base production. In the absence of new projects, decline of existing fields expected to exceed the 4% to 5% historical decline of the North Slope
- In scope and estimated ultimate volumes, new projects compare closely with historical PBU/KRU satellites, as well as some standalone developments such as CRU-Alpine.
- Inclusion of further risks and timing of new projects is reflected in rates lower than operator-announced estimates
- Actual outcome and timing of these projects remain critical in maintaining North Slope historical 4% to 5% historical decline or the possibility of flattening or growth in production.

SUMMARY

- DNR forecast continues to use the best information available to DNR/DOR, to generate independent production outlook for oil fields within the state, with a focus on generating accurate near-term and realistic long-term forecasts for planning purposes.

- Production from projects under evaluation within the 10-year outlook period reflects uncertainty in operator plans towards return to drilling activity, specific project uncertainties, depressed oil prices and commercial risks, as well as project scope and timing risks.

- DNR forecasts assume steady-state development on currently producing fields, similar to past history for all the fields.

- While considering a wide range of drivers for different fields and potential projects, and excluding specific exogenous production shocks such as production curtailments, prorations, or the full range of options available to operators in daily operations, the DNR forecast has so far provided a reliable range to guide fiscal planning for the State.

QUESTIONS?

Thank you on behalf of the DOG 2020 Production Forecasting Core Team:

John Burdick, Linda Liu, Chalinda Weerasinghe

&

Steve Moothart