



State of ALASKA

Department of Natural Resources



Putting More Oil in TAPS: What Will it Take?

RDC - 38th Annual Resources Conference

November 15, 2017

Commissioner Andy Mack

Alaska Department of Natural Resources

www.dnr.alaska.gov

AGENDA



PART I: Alaska as a Storehouse

PART II: Production: Maximizing TAPS Throughput

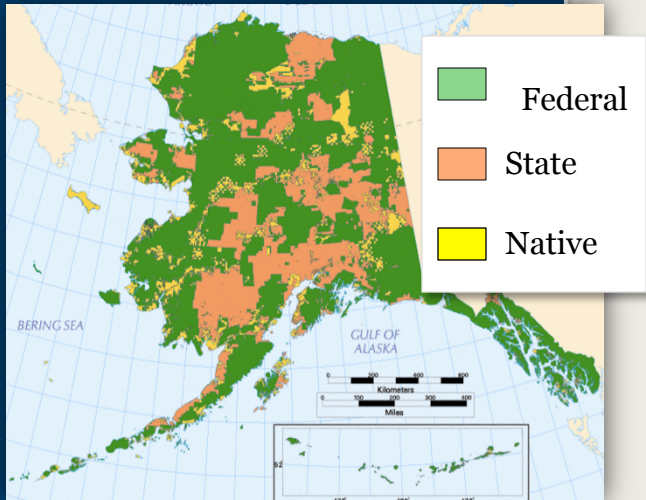
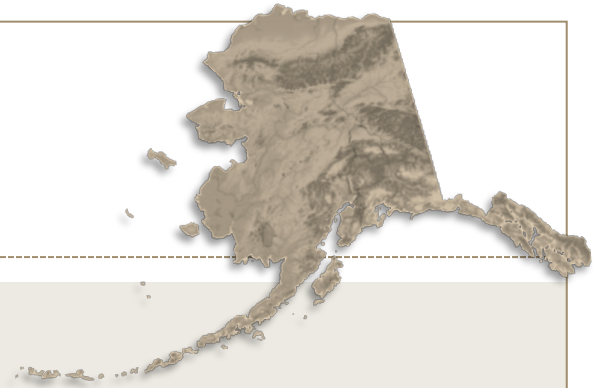
Part I



ALASKA AS A STOREHOUSE

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Land Ownership

- *Federal Land*: More than 200 million acres
- *State Land*: Approx. 100 million acres of uplands, 60 million acres of tidelands, shore lands, and submerged lands, and 40,000 miles of coastline
- *Native Corporation Land*: 44 million acres

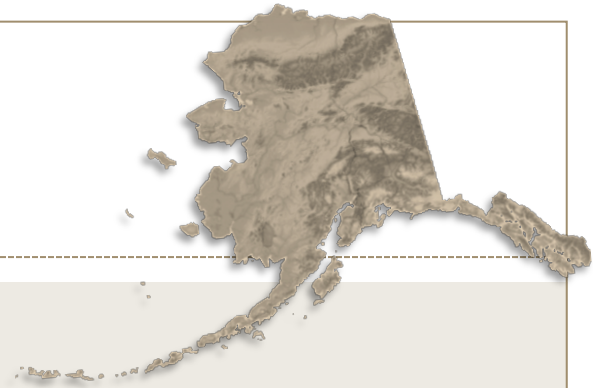
DNR:

- Manages one of the largest portfolios of oil, gas, minerals, renewable resources, water, and land in the world
- Manages all oil and gas fields on state land, including two of the largest oil and gas fields in North America
- Oversees all activities that occur on state land

Mission: *Responsibly develop Alaska's resources by making them available for maximum use and benefit consistent with the public interest*

Alaska *as a* Storehouse

Hydrocarbons



North Slope

It's estimated that Alaska's North Slope has more oil than any other Arctic nation

- **OIL:** Est. 40 billion barrels of conventional oil (*USGS & BOEMRE*)
- **GAS:** Est. 200 trillion cubic feet of conventional natural gas (*USGS*)
- Alaska has world-class unconventional resources, including tens of billions of barrels of heavy oil, shale oil, and viscous oil, and hundreds of trillions of cubic feet of shale gas, tight gas, and gas hydrates

Cook Inlet

USGS estimates that significant undiscovered volumes of hydrocarbons remain to be found in the Cook Inlet:

- 19 trillion cubic feet of natural gas
- 600 million barrels of oil
- 46 million barrels of natural gas liquids
- In June 2011, the State of Alaska received the highest number of Cook Inlet lease sale bids in 28 years, totaling more than \$11 million

Compared to most basins, Alaska is relatively underexplored, with 533 exploration wells on the North Slope, compared to Wyoming's 19,000.



Part II

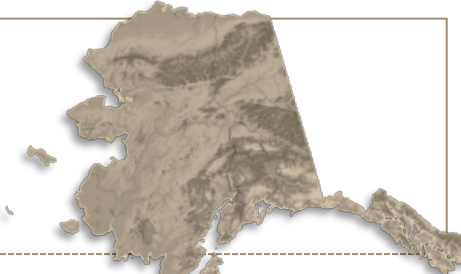


PRODUCTION: MAXIMIZING TAPS THROUGHPUT

- Alaska's Future is Energy

TAPS

Maximizing TAPS throughput



- TAPS has **transported over 17.66 billion** barrels of oil and natural gas liquids since June of 1977. Production peaked at 2.2 million barrels per day in the late 1980s, representing 25% of U.S. domestic production
- Today, TAPS is producing ~ 520,000 barrels per day
- The State of Alaska is actively seeking investment in exploration and development of conventional and unconventional resources on state and federal land, onshore and offshore
- TAPS has **plenty of capacity** for increased throughput
- **Federal officials making this a national priority**

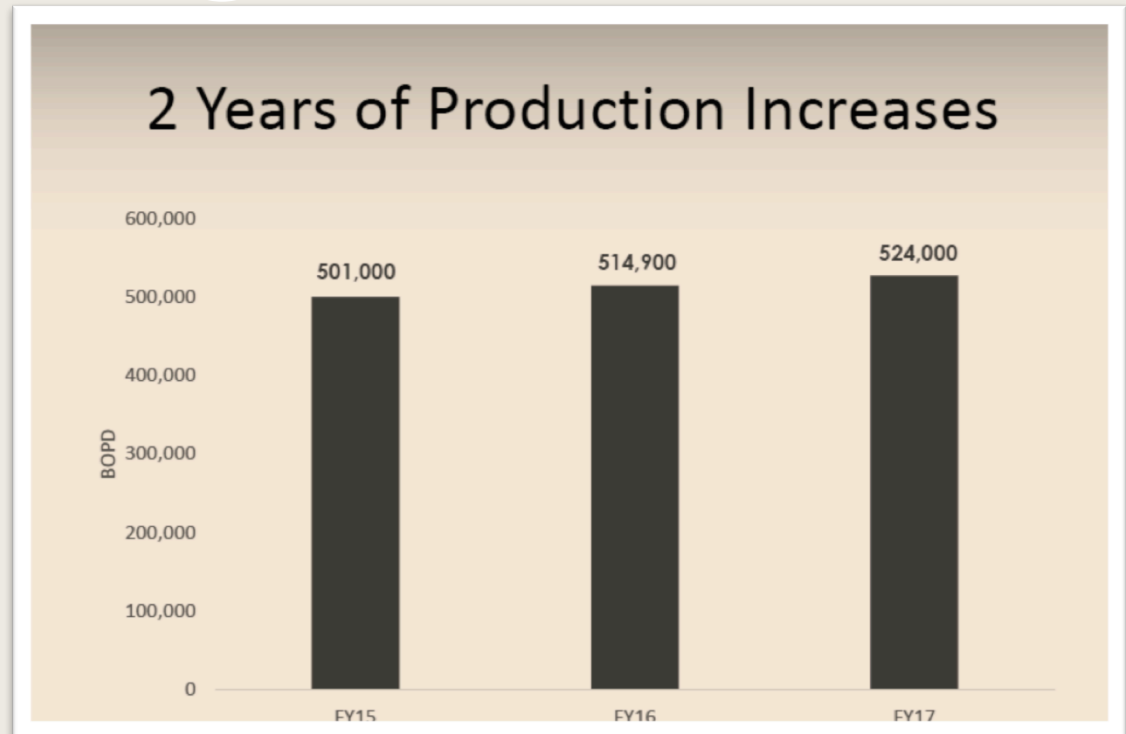
Declining oil through TAPS is the most critical economic issue facing our state.



The World of 5% Decline is Over



- This Administration's focus is **not on individual, declining fields**
- The **focus is systemwide**, meaning Governor Walker is looking for **any and all opportunities to maximize TAPS throughput**
- The Administration is **partnering with the industry** to encourage exploration and development. New, public releases of seismic data will **stimulate activity across the Slope**

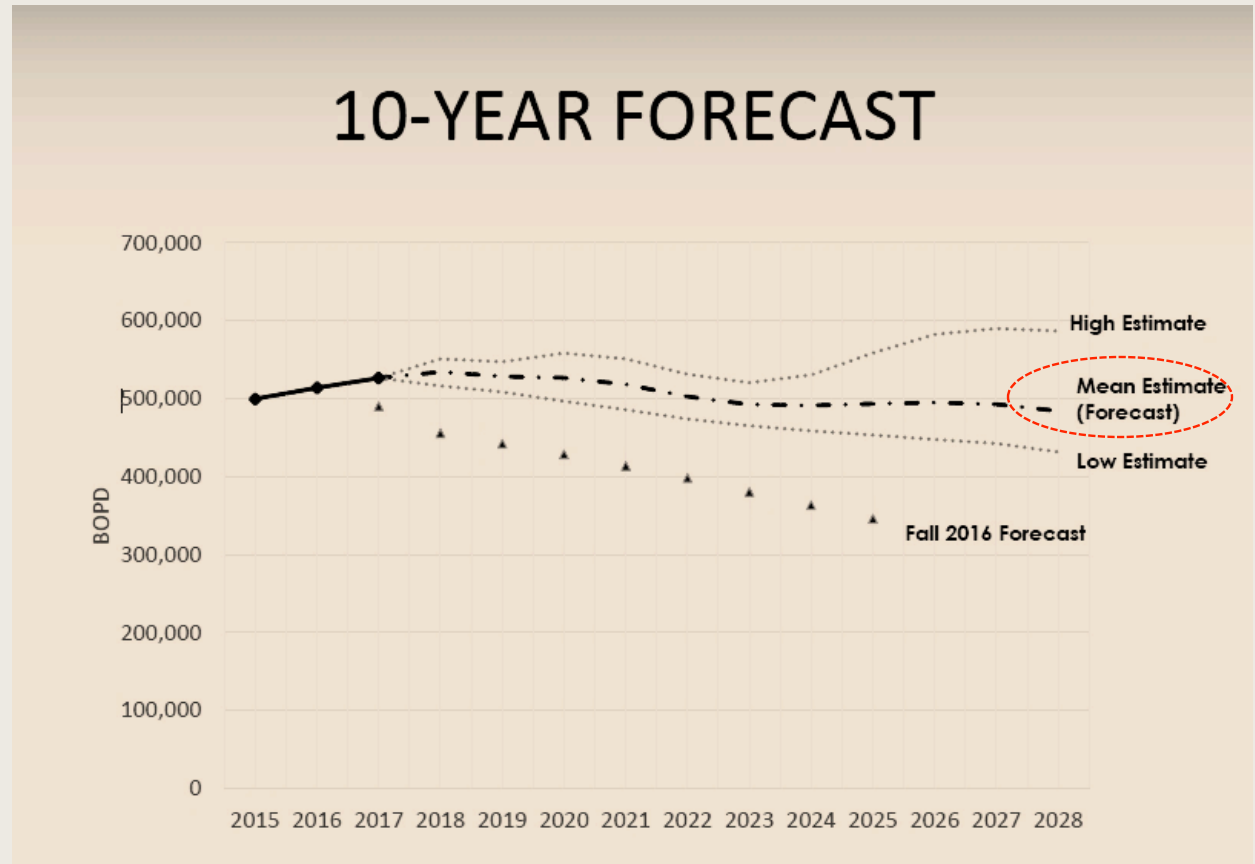


For years, Alaskans had resigned themselves to the idea that a 5% year over year decline was imminent

Forecast for the Future: *Bright*



- Just years ago, it seemed that **decline below 500,000 was inevitable**
- Today, our **mean** forecast predicts throughput of **nearly 500,000 by 2028**
- Projects **under development** and **under evaluation** were risk-weighted and added to 10 year forecast

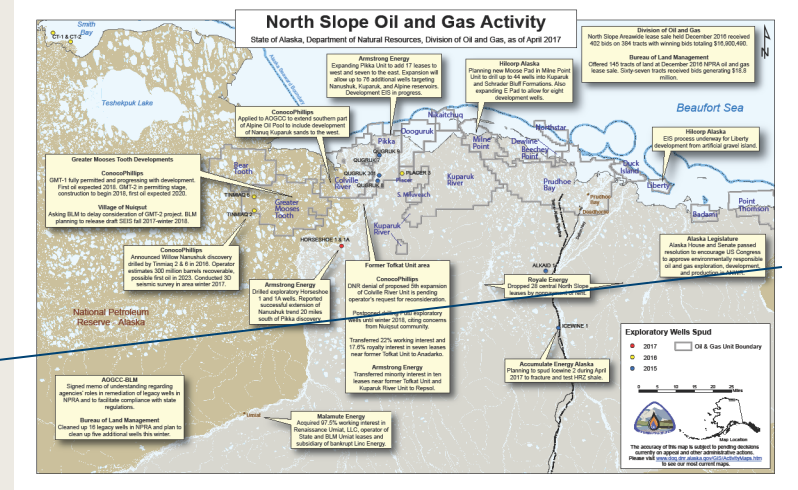


New Federal Areas



- Alaska is **closer than ever** before to achieving access to historically closed off areas for oil and gas exploration and production

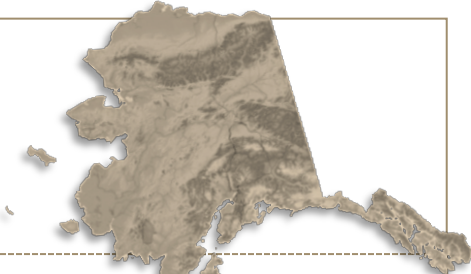
Alaskan Governors, lawmakers, and citizens alike have **worked for decades** to open ANWR



- This year will see **the most concerted effort yet** to establish a regulatory scheme for **opening ANWR to exploration and development**
- The introduction of **production in ANWR is monumentally significant to TAPS** throughput and to state revenue
- Mean case of economically recoverable oil shows over **600,000 barrels/day**. The state sees revenue from production taxes, revenue sharing, and increased production

NS & Beaufort Sea

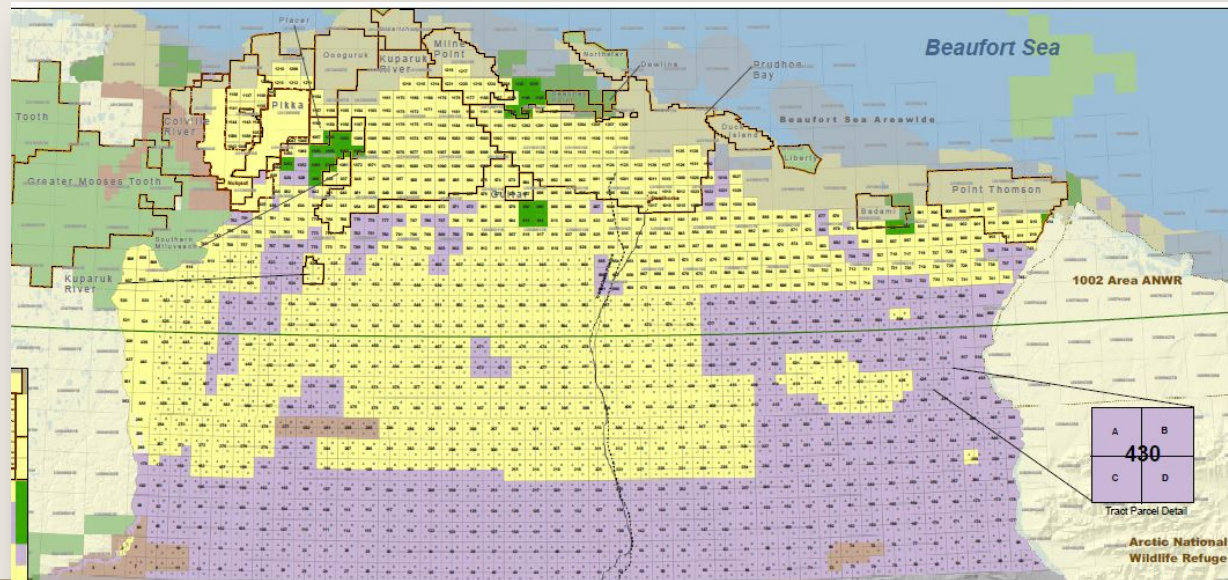
December 2017 Lease Sale



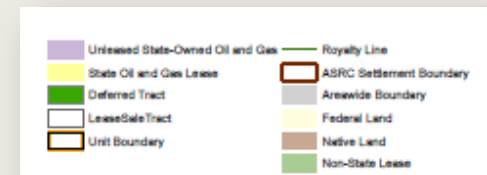
- December 2016 lease sales were strong with finds in the **Nanushuk and Torok formations driving interest**
- Bids totaled \$17.8 million covering 633,000 acres across NS and Beaufort Sea

- December 2017 (12/6) expecting somewhat less enthusiasm as prospective state acreage is picked up
- **900 NPR-A tracts opened for lease sales is unprecedented.** In 2016, 614,000 acres picked up for \$18.8 million
- Alaska received half the revenue from federal bonus

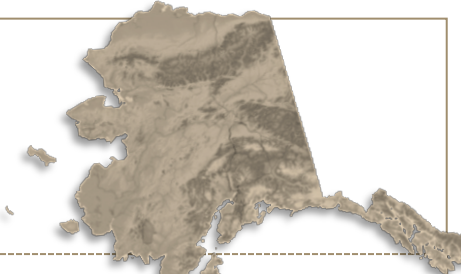
million in 2016



2017 North Slope Lease Sale Tract Map



Critical Infrastructure – *Growing Alaska*



- **Alaska is big.** One of the primary **challenges** in producing resources in our state is this **great size and distance**

ASTAR is designed to

- **Lower the cost of energy, basic goods, & utilities across the NS**
- **Improve infrastructure to provide community stability and improve public safety**
- **Enhancing access to create opportunities to strengthen cultural exchange and community connectivity**

- **Increased infrastructure allows these communities to thrive and increases ability to explore and produce**



The ASTAR project envisions connected communities across the North Slope Borough

In Conclusion

