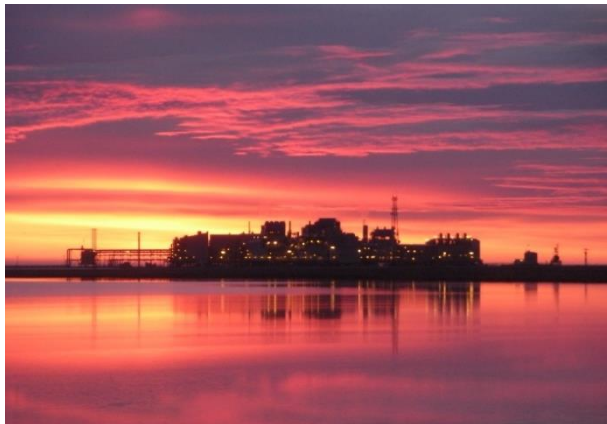


Cook Inlet Update: Net Profit Share Leasing (NPSL) & Gas Storage House Energy Committee



Presented by:
Deputy Commissioner John Crowther
Derek Nottingham, Director, Division of Oil & Gas
Department of Natural Resources
January 23, 2025



WHY IS COOK INLET GAS IMPORTANT?



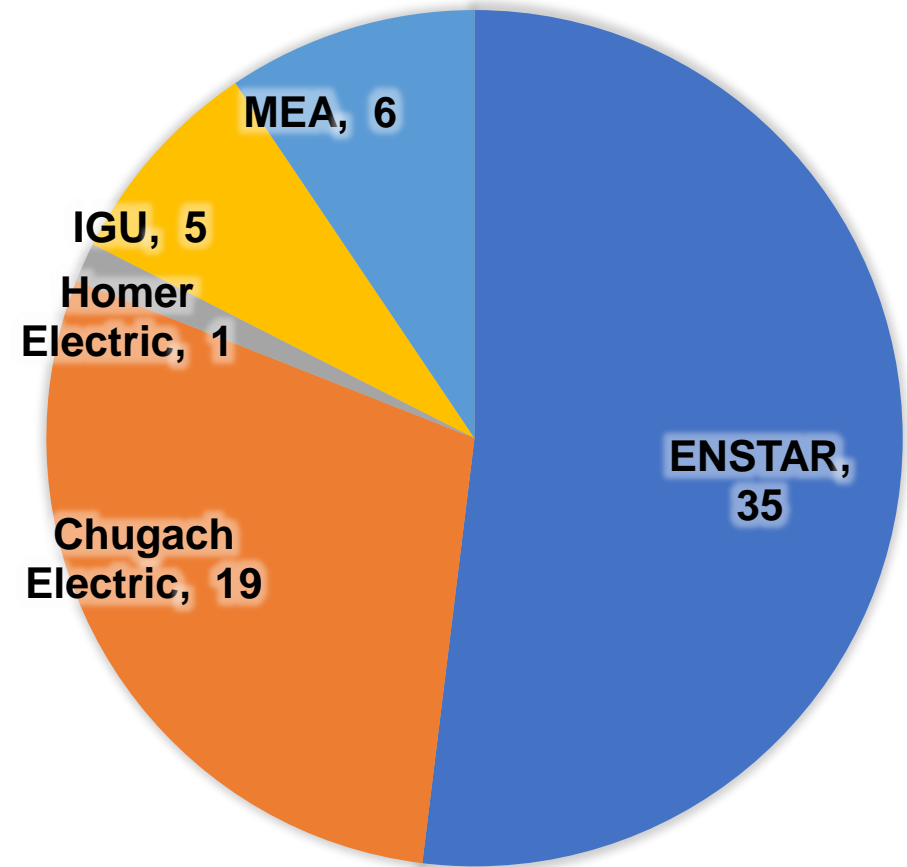
Natural Gas Utilities

- **Enstar** serves over 440,000 people and operates in over 25 communities throughout Southcentral Alaska
 - Hilcorp contracts expire March 2033
- **Interior Gas Utility (IGU)** serves over 2,400 people
 - IGU to take gas from Harvest LNG on the North Slope beginning April 2025

Electric Utilities

- **Chugach Electric** serves over 302,000 people in Anchorage, Whittier, Girdwood, and Fairbanks
 - Hilcorp contracts expire March 2028
- **Matanuska Electric (MEA)** serves the Mat-Su Borough and Chugach and Eagle River, over 180,000 people
 - Hilcorp contracts expire March 2028
- **Homer Electric** serves nearly 36,000 people

2024 Utility Gas Under Contract
(Firm and Option Contracts)
(billion cubic feet)



The logo of the Alaska Department of Natural Resources is a circular emblem. It depicts a landscape with a large evergreen tree on the left, a winding river in the foreground, and a mountain range in the background. A red sun is positioned on the right side of the mountain. The text "ALASKA DEPARTMENT OF NATURAL RESOURCES" is written around the bottom half of the circle.

- Has produced over 1.4 billion barrels of oil and 12 trillion cubic feet of gas
- 26 producing fields operated by 7 different companies
- There are over 200 oil and gas leases in Cook inlet

- Peak gas production in 1990 was over 850,000 thousand cubic feet per day
- Current production is just over 200,000 thousand cubic feet per day

This map displays the Cook Inlet Oil and Gas Units, highlighting various leases, fields, and game refuges. The map includes a legend, a scale bar, and a north arrow. The legend identifies the following units:

- State Unit (Yellow)
- State/Federal Unit (Orange)
- State/Native Unit (Light Blue)
- Federal Unit (Green)
- Gas Storage Lease (Purple)
- Non-Producing (Hatched)
- Field (White)
- Highway (Black line)
- Well(s) (Black dot)

The map shows the Cook Inlet, including the Kenai Peninsula and the surrounding waters. Key locations and units include:

- Game Refuges:** Susitna State Game Refuge, Trading Bay State Game Refuge, Redoubt Bay Critical Habitat Area, Kenai National Wildlife Refuge.
- Units and Fields:** North Cook Inlet, Granite Point, Kitchen Lights, North Trading Bay, Trading Bay, West, Redoubt, McCarthy River, Middle Ground Shoal Unit (Terminated), Nikiski, Salamatof, Kenai Loop 1-1, 1-3 wells, Soldotna, Kaslof, Clam Gulch, Ninilchik, Ninilchik, Deep Creek, Cosmopolitan, Anchor Point, Seaview, North Fork, Nikolai, Nikolai Unit (Terminated).
- Other Features:** Lewis River, Beluga River, Ivon River, Piety Creek, Tyonek, Swanson River, Beaver Creek, Skitak Lake, Tustumena Lake, Esri, Garmin, NaturalView.

Cook Inlet Oil and Gas Units

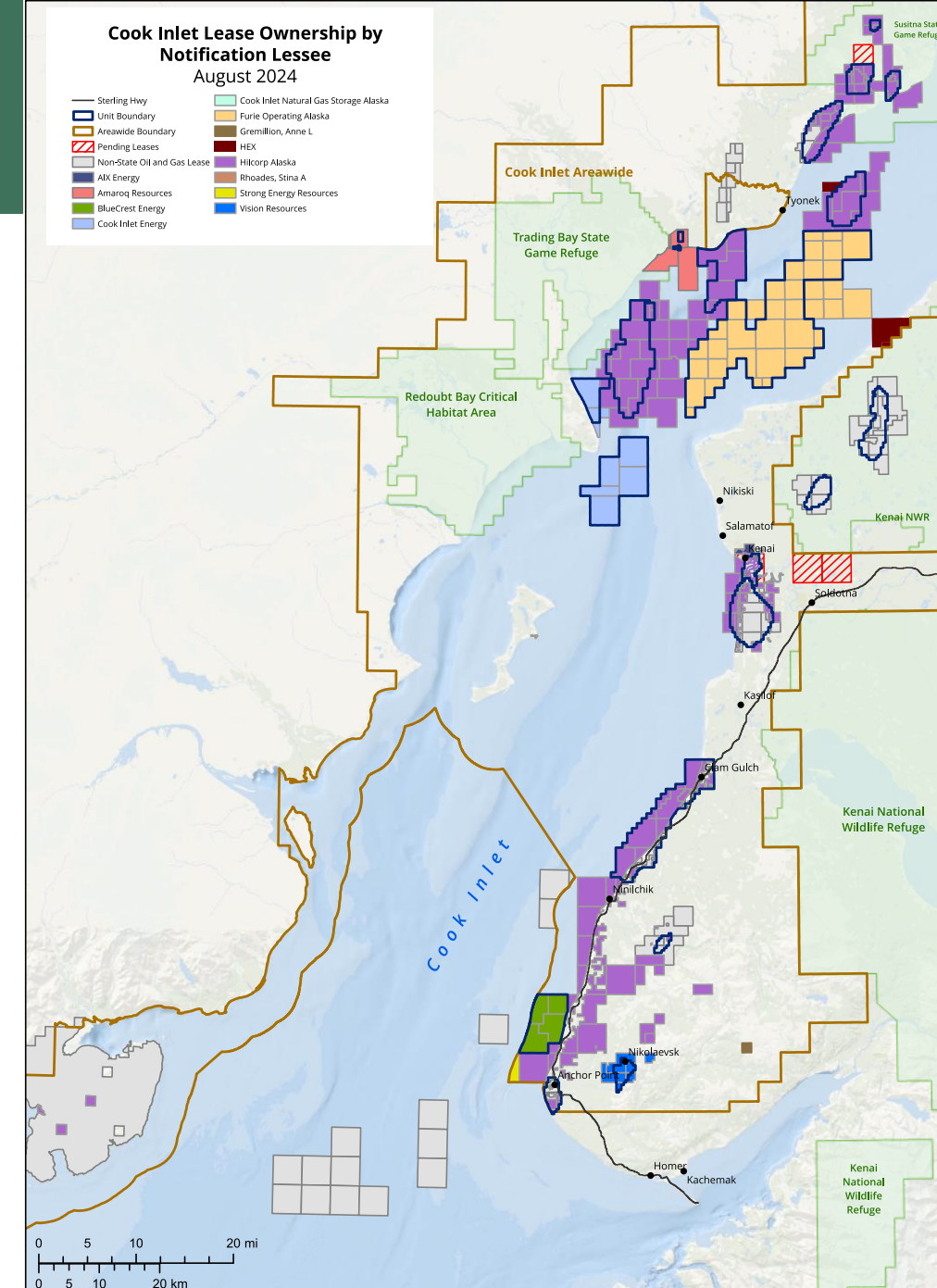
State of Alaska
Department of Natural Resources
Division of Oil and Gas

December 2023

This map was created, edited, and published by the State of Alaska Department of Natural Resources (DNR), Division of Oil and Gas (DOG). The information displayed is for graphical illustration only.

- A lease is a tract of land designated for oil and gas exploration
- Leases are offered at lease sales or through exploration licenses
- Primary lease terms are between five and ten years
- Commercial production extends the lease beyond the primary term

- Leases are combined to form a ***unit*** for the protection of all parties
- Facilitates joint development, conserves natural resources, and avoids waste
- Unit agreement is reached between the lessees and the State
 - Requires a plan of development/exploration (POD/POE) along with other reporting requirements
 - Requires the operator to act as a prudent operator while developing the unit



NET PROFIT SHARE LEASING (NPSL)



In 2023, DNR begun offering "Net Profit Share Leases" or NPSLs with no royalty in Cook Inlet – making for potentially extremely competitive terms:

- The percentage of the net profit share is the bid variable, with a 5% minimum
- Net-profit share means a percentage of net profits are owed to the State after recovering capital investments and operating costs to bring production online
- No royalty term
- Fixed per-acre cash bonus
- Early cost recovery is a significant advantage for development economics, and it avoids the burden of royalty modification applications for both the operator and DNR
- [AS 38.05.180\(f\)\(3\)](#) provides seven options for leasing methods—this is option (D), which had not previously been used in Cook Inlet

2023–2024 NPSL SALE RESULTS

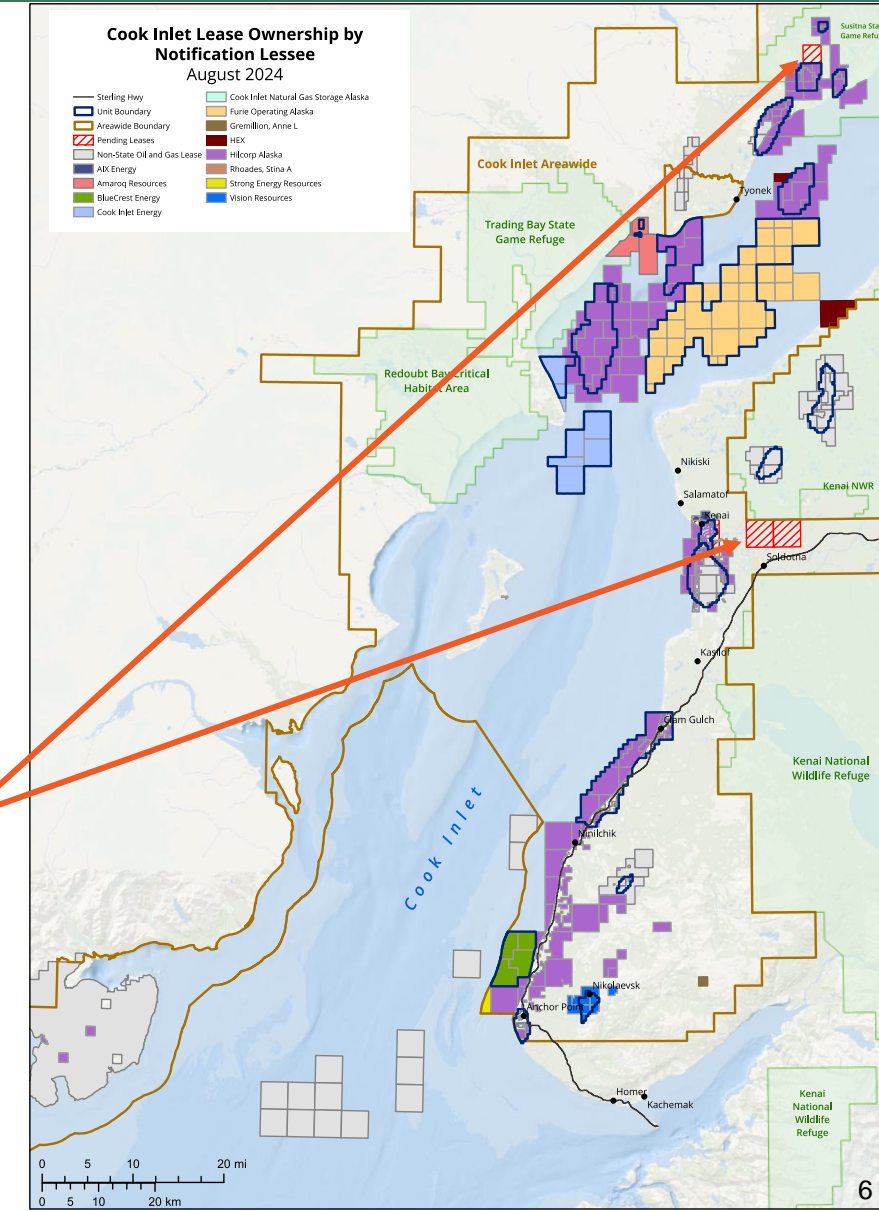


2023 Results:

- Six tracts received bids
 - Three from Hilcorp Alaska LLC
 - Three from Hex LLC
- Net profit share rate bids: 5.7% – 11%
- Cash bonus revenue: About \$600,000
- Acres receiving bids: About 15,000 acres

2024 Results:

- Three tracts received bids, all from Hilcorp Alaska LLC
- Net profit share rate bids: 5.0%
- Cash bonus revenue: About \$177,000
- Acres receiving bids: About 4,400 acres



COOK INLET SEISMIC DATA



Three seismic surveys released in 2024

A significant amount of data is already accessible at competitive rates, with additional releases expected over the next 2–3 years

Legend: Seismic Data Release Status

2D
Survey



3D
Survey

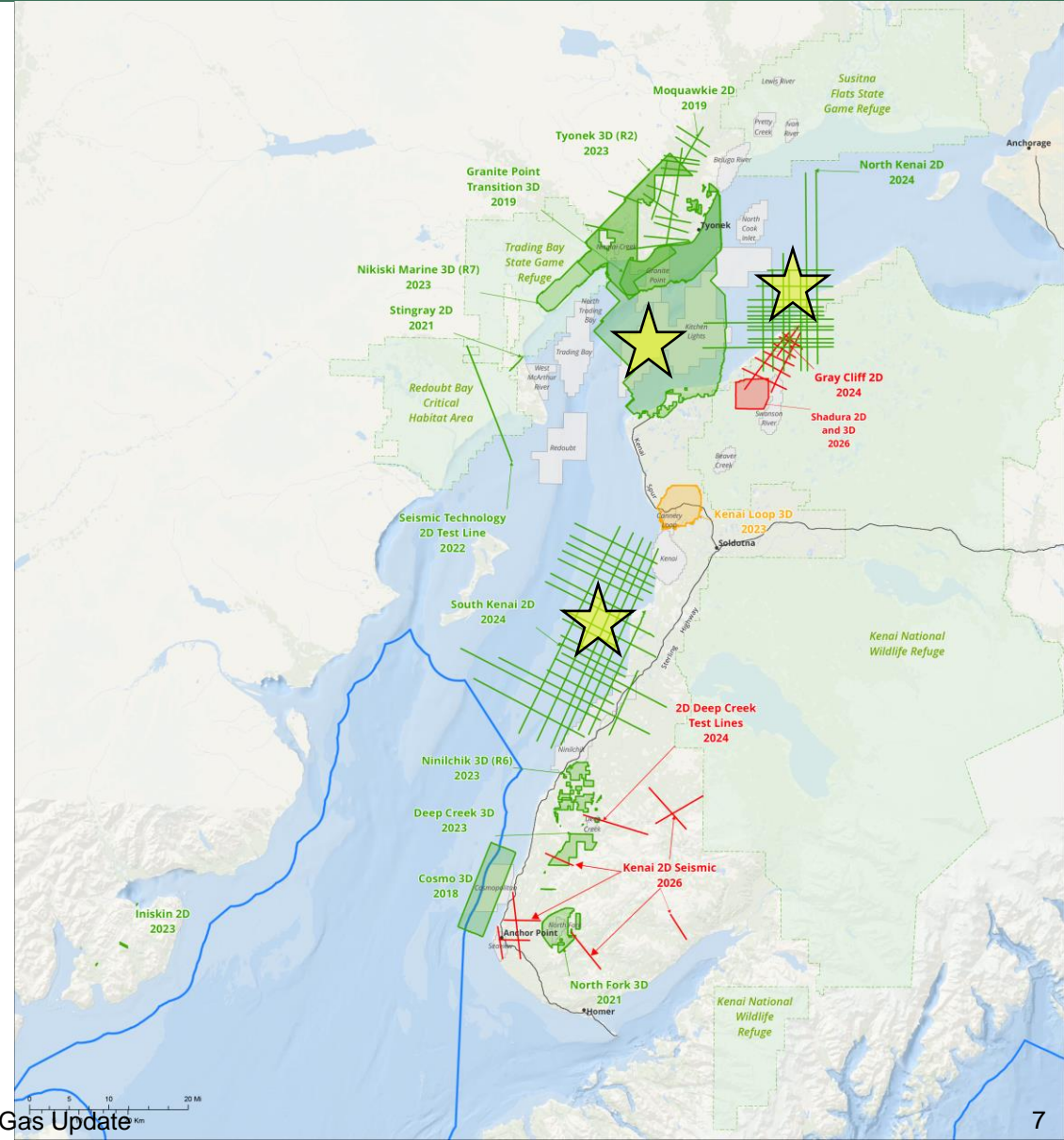


Release
Status

Survey released and available at Geological Materials Center

Statutory confidentiality period expired; survey Eligible for and in preparation for release

Survey with a tax credit certificate, statutory confidentiality period still in effect; survey not yet eligible for or prepared for release



Download full-size maps at: <https://dog.dnr.alaska.gov/Information/GeologicalAndGeophysicalData>



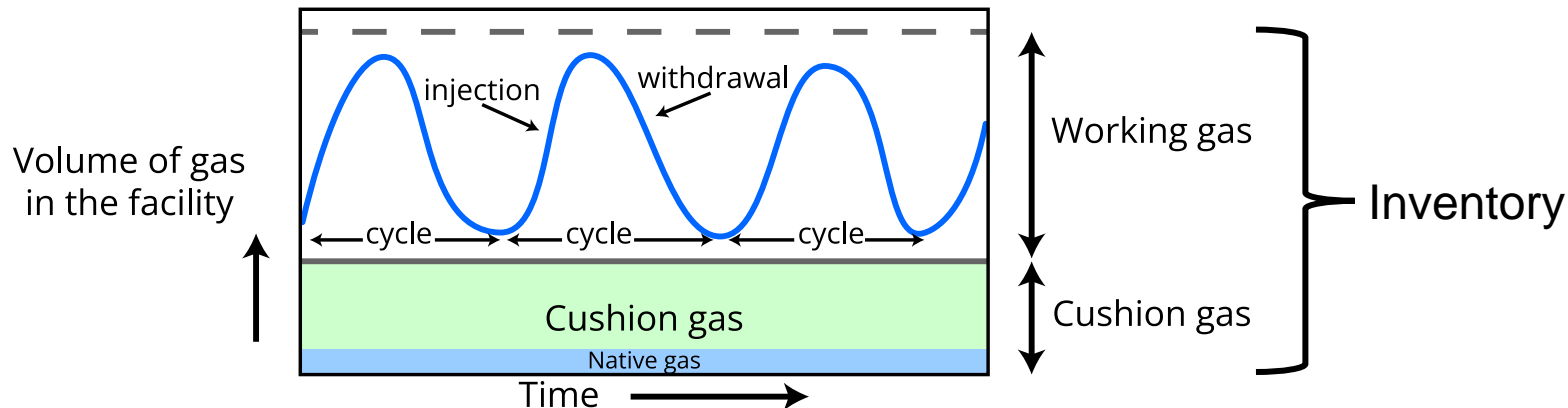
What is gas storage?

- Re-injecting gas in subsurface reservoirs and re-producing when it is needed, although it comes with costs and operational demands
- Usually used within a year to mitigate higher winter demand
- Gas fields operate best when produced at a relatively steady rate
 - Summer production is banked for cold winter days
- Storage is critical, as peak winter demand already requires more gas than is deliverable from producing reservoirs
- Gas storage can also be used across multiple years

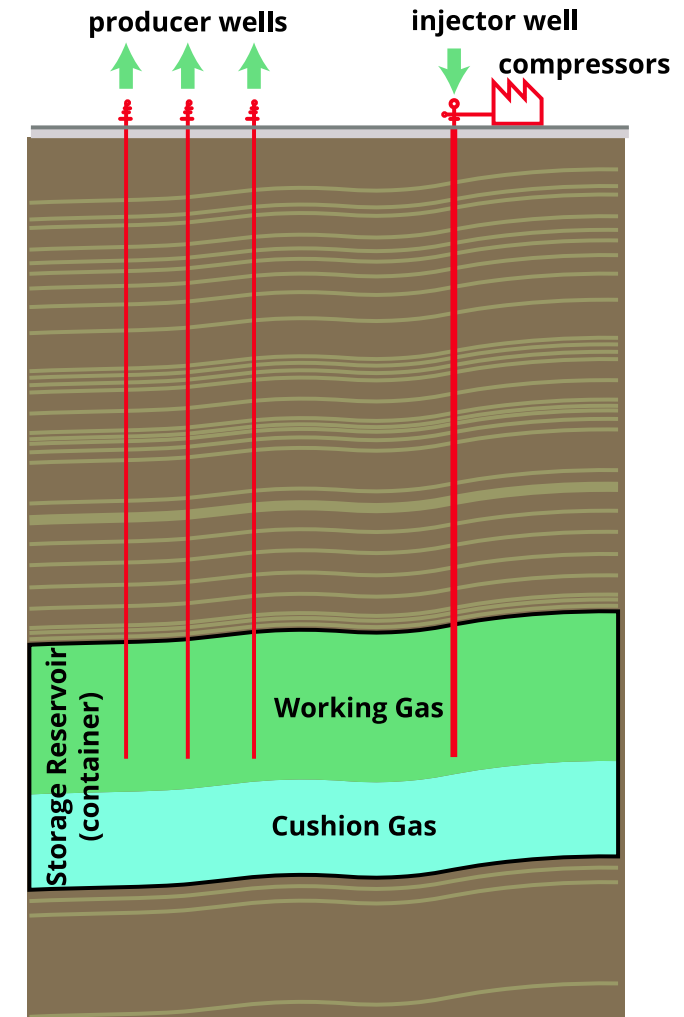
NATIVE GAS, CUSHION GAS, & WORKING GAS



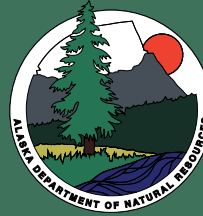
- **Native Gas:** Gas remaining in an underground formation before gas storage operations commence
- **Cushion or Base Gas:** Consists of native gas plus additional gas required to optimize storage pressure to ensure sufficient well deliverability — the volume of gas intended for permanent inventory
- **Working Gas or Non-native gas:** The volume of gas that fluctuates due to injection and withdrawal — the maximum volume of gas available for withdrawal during normal operations of a storage facility
- **Inventory Gas:** Represents the total volume of natural gas in a storage reservoir at any given time — the total “book value” balance which accounts for injections and withdrawals



Depleted Sand Reservoir Gas Storage Facility



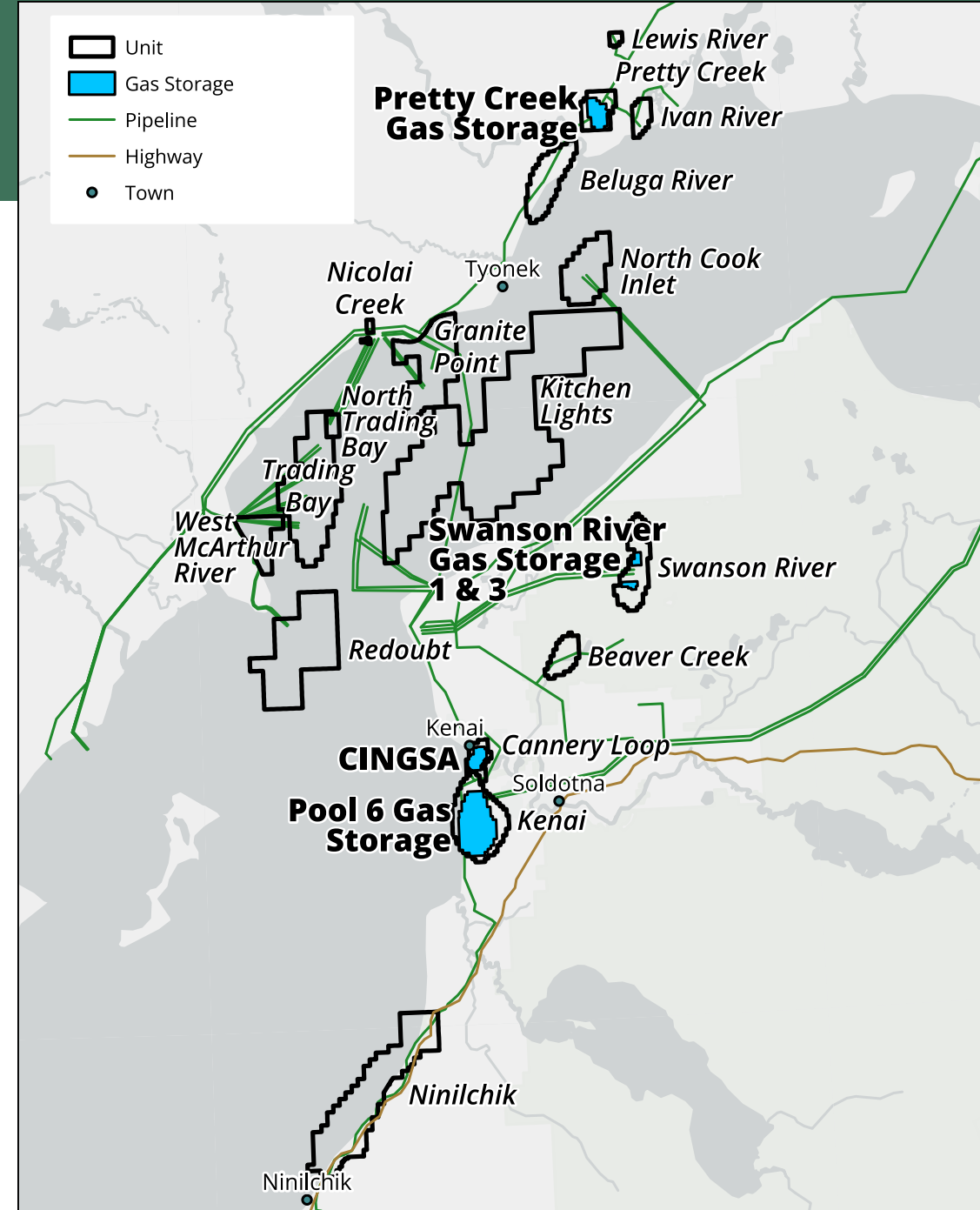
GAS STORAGE



Cook Inlet has four active gas storage facilities

- **CINGSA** – Established in 2011, gas storage capacity 11 bcf, operated by CINGSA
 - Two new wells to increase capacity and reliability of storage
 - Currently 11 bcf of gas available for sales
 - New wells add 2 bcf of capacity
- **Kenai Gas Pool 6** – Established in 2006, gas storage capacity 17.5 bcf, operated by Hilcorp. *Under application before the RCA to become a commercial storage facility like CINGSA*
- **Pretty Creek** – Established in 2005, gas storage capacity 2.9 bcf, operated by Hilcorp
- **Swanson River** (Federal) – Established in 2001, gas storage capacity ~3 bcf, operated by Hilcorp

bcf = billion cubic feet of natural gas
CINGSA = Cook Inlet Natural Gas Storage Alaska
RCA = Regulatory Commission of Alaska



QUESTIONS?



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