

# Wildlife and Drilling Don't Mix

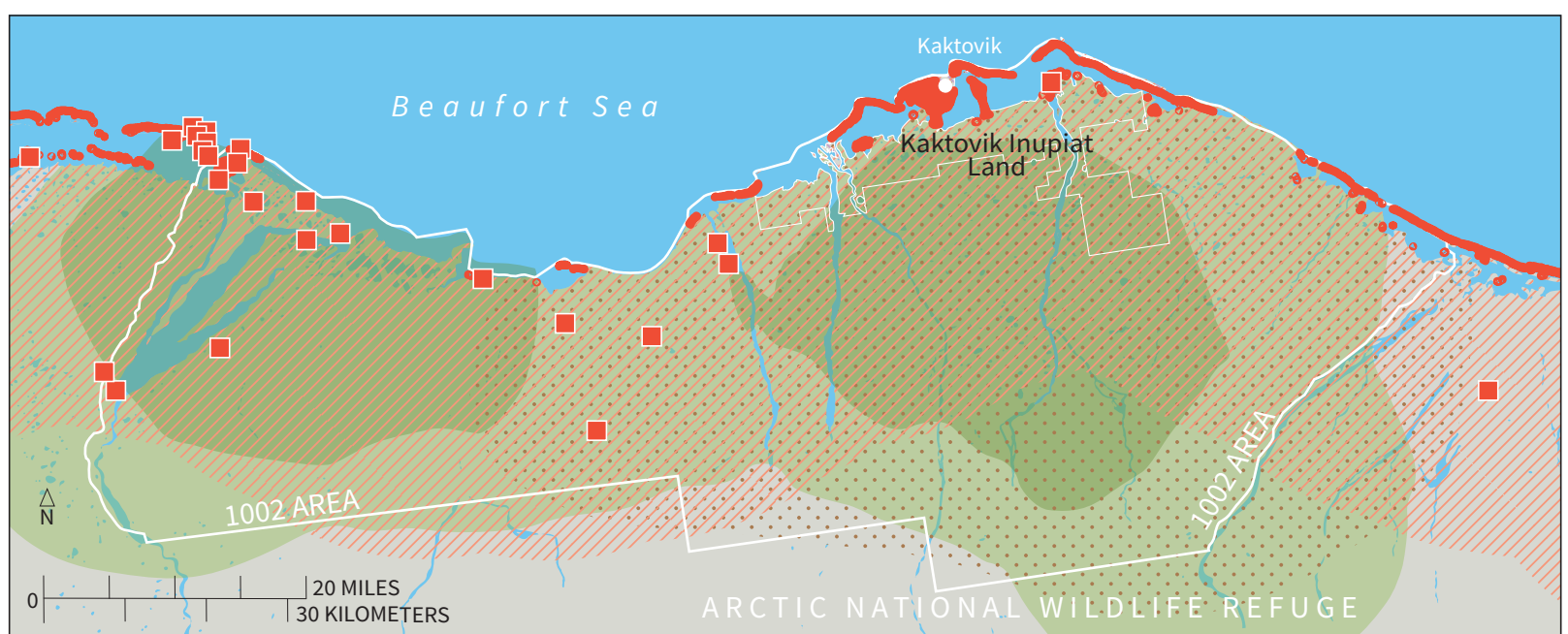
## Visualizing Speculative Development in the Coastal Plain

37 leading Arctic wildlife scientists have united in opposition to drilling in the coastal plain. “Based on our experience in the Arctic, we oppose oil exploration, development and production in the Arctic Refuge. Such activity would be incompatible with the purposes for which the refuge was established, including ‘to conserve fish and wildlife populations and habitats in their natural diversity.’”

Every year 200 species of birds migrate through six continents and all 50 states to breed in the Refuge. The Arctic National Wildlife Refuge is an iconic American treasure on par with the Grand Canyon, Yellowstone and Yosemite. First protected by President Dwight D. Eisenhower, leaders from both parties have worked together for generations to stop attempts to open the biological heart of the Refuge—its pristine coastal plain—to oil and gas drilling. Senator Murkowski introduced legislation to open the Arctic Refuge to drilling in an effort to raise revenue and offset tax cuts as part of the tax package currently making its way through Congress. That bill claims to limit the drilling impact to 2,000 acres, which is a myth. Based on other Arctic oil and gas development, this graphic explains what could happen if we allow this bill to pass.

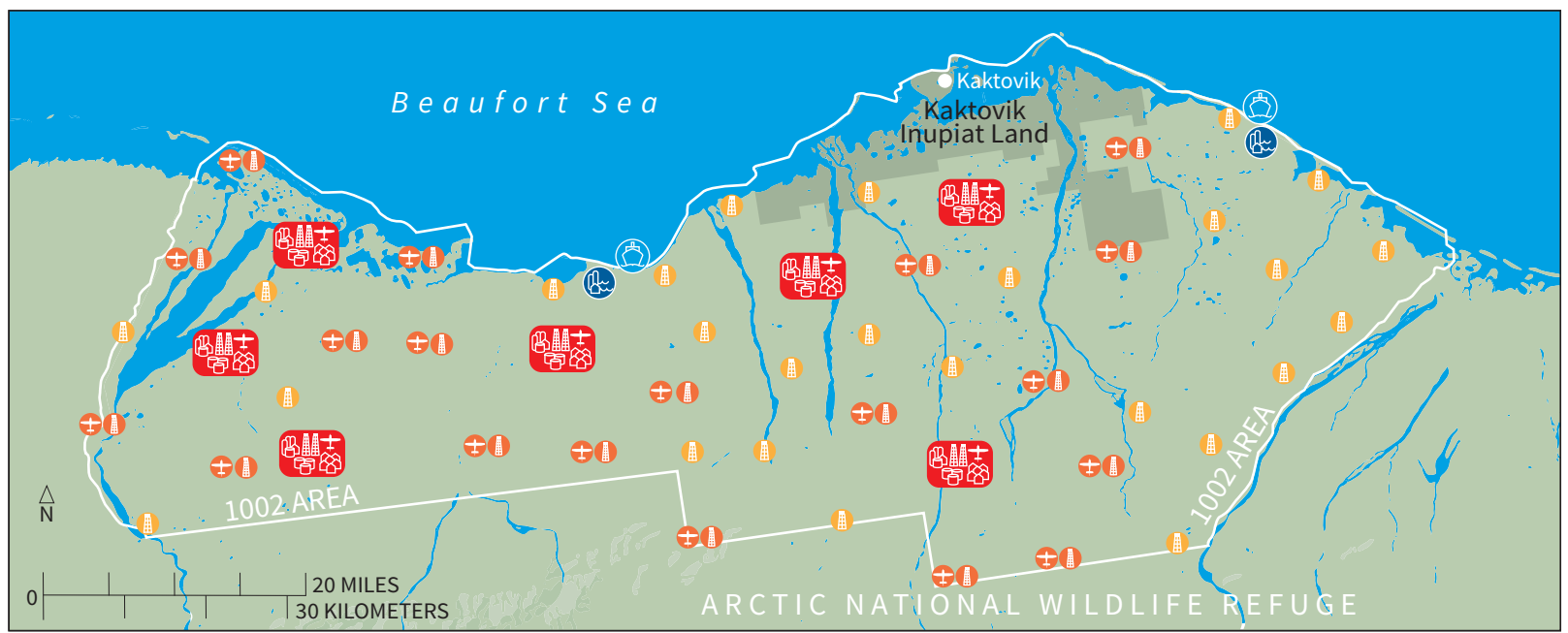
### What is at risk?

- Shorebird density**
  - moderate
  - high
- Birds that depend on the Coastal Plain include American Golden-Plover, Dunlin, Semipalmated Sandpiper, Whimbrel and other shorebirds
- Polar bear habitat**
  - Barrier islands
  - Maternal denning area
  - Maternal dens 2000–2015
- Caribou habitat**
  - Calving area



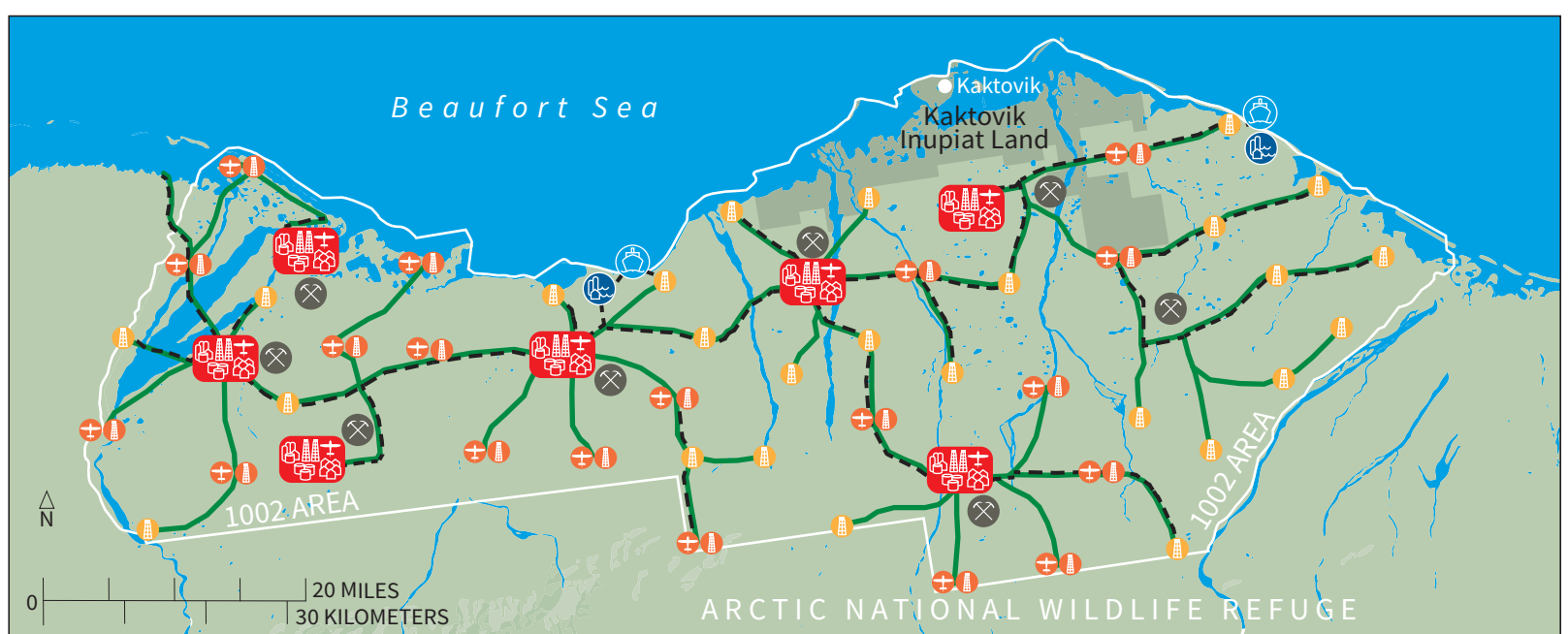
### What is included in the 2,000-acre “limitation”

- 8 main production pads**  
82 acres each
  - Housing
  - Storage
  - Two drill sites
  - Airstrip
- 19 satellite fields**  
37 acres each
  - One drill site
  - Airstrip or storage pad
- 26 satellite fields**  
11 acres each
- 2 seawater treatment plants**  
100 acres each
- 2 docks**  
5 acres each
- Support pads for pipeline**  
0.008 acres per mile



### What is NOT included in the 2,000-acre “limitation”

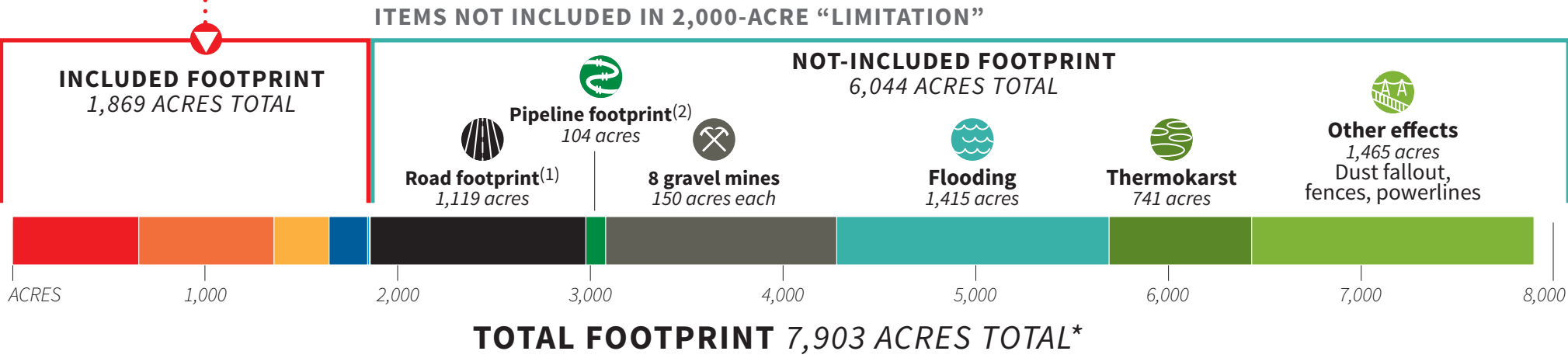
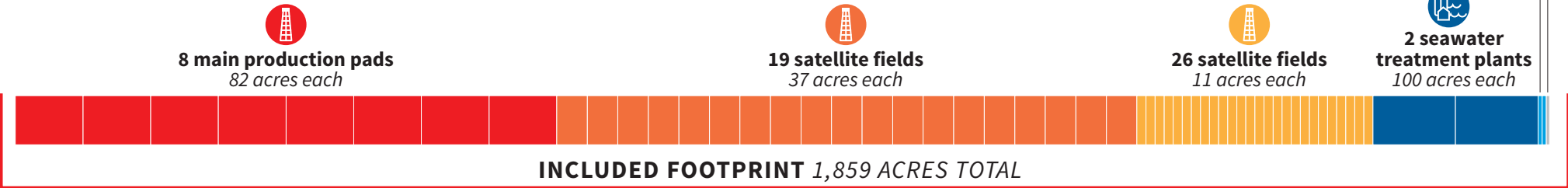
- Road footprint (264 miles)**  
1,119 acres  
In-field road, main road to docks, etc.
- Pipeline footprint (428 miles)**  
104 acres  
Main trunk and sales lines, feeder lines; except negligible amount for support posts (VSMs)
- 8 gravel mines**  
150 acres each
- Also not included**  
Not included in “limitation” areas and not shown on map
- Flooding** 1,415 acres
- Thermokarst** 741 acres
- Other effects**  
1,465 acres  
Dust fallout, fences, powerlines





# 2,000-acre “limitation” does not reflect the whole picture

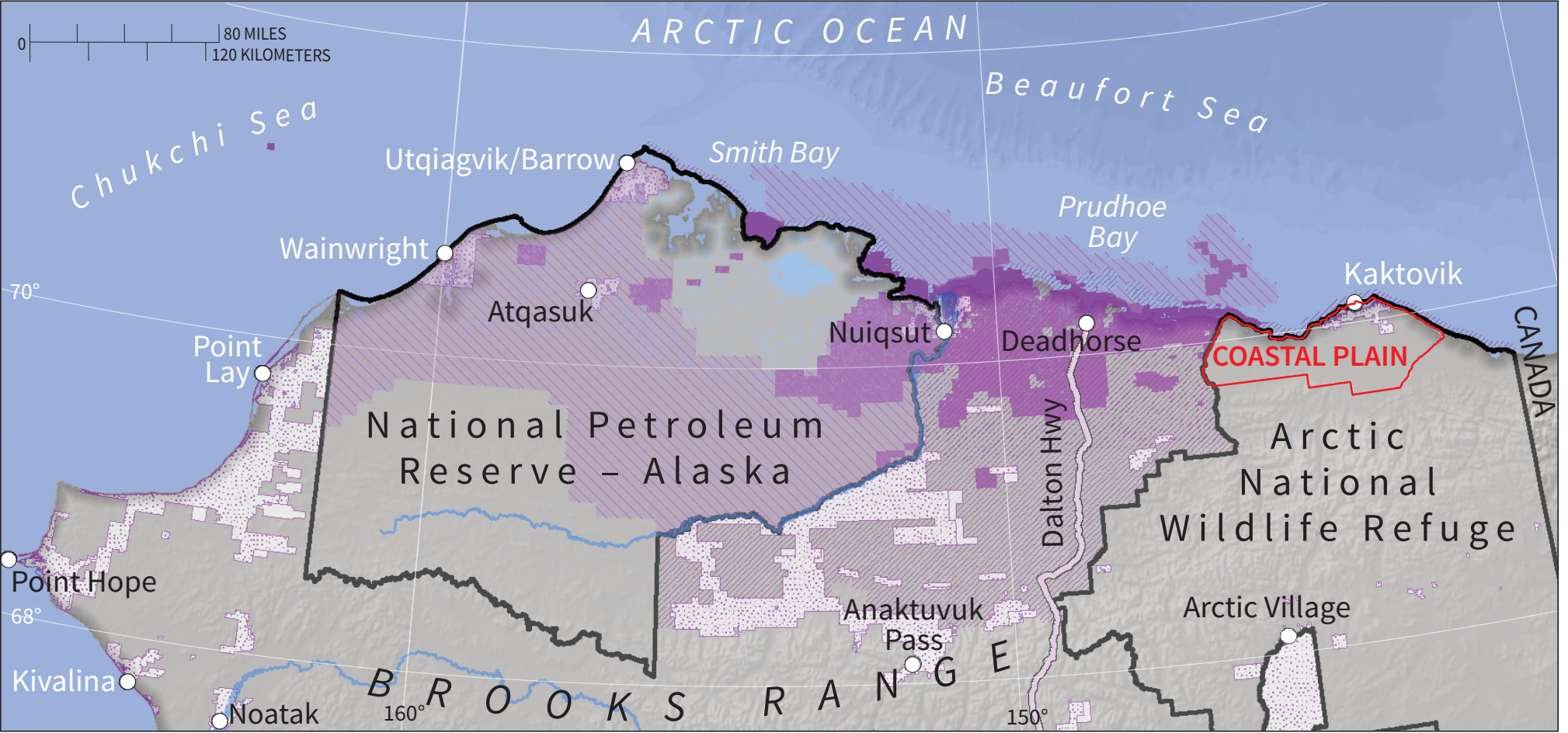
## ITEMS INCLUDED IN 2,000-ACRE “LIMITATION”



## How much is enough?

Nearly all of the northern coast of Alaska is already open to drilling. The Arctic National Wildlife Refuge has been set aside for wildlife because it is the key to survival for birds, polar bears, caribou, and other wildlife.

- Sold federal and state leases
- Active state lease area
- Conveyed federal lease area
- Active federal lease area
- Selected native lands



**Tundra Swan**  
William Pohley/Audubon Photography Awards

Included footprint calculations based on latest available documentation from Greater Mooses Tooth 1 Final SEIS (Bureau of Land Management 2014). Road gravel footprint calculation based on 32 foot crown width and pipeline footprint calculation based on 0.008 acres of vertical support member pad per mile of pipeline (Bureau of Land Management 2014). Pipeline included footprint based on average width of 2 feet, from Reynolds et al. (2014).

Not-included impacts based on methods in Reynolds et al. (2014), extrapolated to speculative development map's use of 1859 acres of direct footprint.

Raynolds, M. K., D. A. Walker, K. J. Ambrosius, J. Brown, K. R. Everett, M. Kanevskiy, G. P. Kofinas, V. E. Romanovsky, Y. Shur, and P. J. Webber. 2014. Cumulative geoecological effects of 62 years of infrastructure and climate change in ice-rich permafrost landscapes, Prudhoe Bay Oilfield, Alaska. *Global Change Biology* 20:1211-1224.

Bureau of Land Management. 2014. Final Supplemental Environmental Impact Statement for the Alpine Satellite Development Plan for the Proposed Greater Mooses Tooth One Development Project. Department of the Interior, Anchorage, AK.

\*This estimate doesn't include other immeasurable and significant indirect and cumulative effects on wildlife, subsistence, and other important values.