# The Economics of Critical Habitat Designation

Presented to:
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Presented by:
McDowell Group, Inc.
Anchorage · Juneau



### The project team

- McDowell Group, Inc.
- Evergreen Economics
- Dr. Andrew Plantinga



### The Assignment

## Identify and analyze economic impacts from critical habitat designations under the ESA

- Costs to businesses and investors
  - Additional studies
  - Mitigation costs
  - Other Section 7-related costs
  - Litigation expenses
  - Other transaction costs
- Impact of CHDs on business activity and investment decisions



# Recent Economic Analyses of Proposed CHD in Alaska

- Recent Federal economic analyses have raised questions...
  - EA for Cook Inlet beluga whale CHD reported \$157,000-\$571,000 in total costs over a 10-year period
  - EA for the 187,000 sq mile polar bear CHD reported \$669,000 in total costs over a 30-year period
- Studies funded by the State and others found...
  - Cook Inlet beluga CHD could have economic costs of \$67.2 to \$816.2 million.
  - Polar bear CHD generate billions in economic impacts

## ESA Listing and Designation of Critical Habitat

- Listing under ESA
  - Economics do <u>not</u> factor into the decision to list a species as endangered or threatened
- Critical habitat designation (CHD)
  - Secretary directed to consider economic impacts when designating critical habitat
  - Secretary may exclude any area from critical habitat if the benefits of exclusion outweigh the benefits of inclusion



## "Baseline" and "Co-Extensive" approaches

#### Baseline

 How the economy would look absent CHD, but with the ESA listing. Baseline is compared to an assessment of the the economy with CHD to identify "incremental costs"

#### Co-Extensive

 All economic impacts associated with CHD, whether or not they are "co-extensive" with the impacts from the ESA listing or other factors (such as other federal regulations)



# Incremental impacts are a small portion of overall baseline Impacts

Species	Baseline	Incremental CH impacts
Northern sea otter	\$37,791,510	\$622,981
Canada lynx	\$10,848,500	\$769,840
Sierra Nevada bighorn sheep	\$15,521,190	\$94,880

## What are the incremental costs of CHD?

- Additional Section 7 Consultation costs
- Project modifications
- Triggering effects
- Stigma effects
- Increased risk/uncertainty
- Project delay
- Litigation



### The research challenge....

- CHD is interwoven in a regulatory environment that can impose a range of costs on industry
  - Costs associated with listing
  - Costs associated with MMPA, Clean Water Act, other local, state, and federal conservation measures
- CHD may be one of several factors driving investment decisions



## Review of 13 Economic Analyses Related to CHD

- Criteria for selecting critical habitat designations:
  - Potentially significant economic impacts
  - Designation covers a large area
  - Likely conflict with future natural resource development



### What we've learned....

- EAs don't fully capture potential economic effects of CHD
  - Many impacts are difficult to quantify, thus they are implicitly set at zero
  - Dependent on best "commercially available data"
- EAs do little to inform the Secretary about potential exclusions
  - "Micro-level" information is necessary to inform the Secretary on areas to consider for exclusion
  - EA budget likely not sufficient to consider "micro-level" analysis



### Next steps in our research.....

- Additional research on Lower 48 CHD economic outcomes
- Meet with agency staff involved in the development and use of EAs
- Further outreach to business, industry, communities
- Report preparation (draft by year-end)



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