



**Other Economic Activities
Technical Working Group
(EA TWG)**

Presentation for the Adaptation Advisory Group
September 23, 2008

Focus of the EA TWG

- **Impacts of climate change on aspects of the economy that are not directly dependent on living ecosystems**

EA TWG Members

• John Binkley	AK Cruise Association and AK Railroad Corporation
• Tim Bradner	AK Journal of Commerce and AK Economic Report
• Paul Dubuisson	ConocoPhillips
• Ed Fogels	AK Department of Natural Resources
• Stan Foo	Barrick Gold Corp
• Richard Glenn	ASRC and Whaling Captain
• Karl Hanneman	Teck-Cominco Pogo Mine
• John Hellén	Pioneer Natural Resources
• Larry Hinzman	International Arctic Research Center
• Elden Johnson	Alyeska Pipeline
• Tom Krzewinski	Golder & Associates
• Peter Larsen	The Nature Conservancy
• Crawford Patkotak	ASRC, Barrow City Council Member
• Keith Silver	Nana Management Services
• Orson Smith	University of Alaska Anchorage
• Dale Summerlin	ConocoPhillips
• Brad Thomas	ConocoPhillips
• Michael Cerne	Coast Guard District 17

Effects of Climate Change in Alaska

- Shorter winters
- Longer and warmer Arctic summers
- Sea level rise
- Coastal erosion
- Thawing permafrost
- Retreating sea ice/glaciers
- Increased forest fires

Examples of Vulnerabilities, Impacts, and Opportunities

- Reduced operation windows for gas and oil exploration during winter (permafrost thaw)
- Pipeline damage (permafrost thaw)
- Economic activities curtailed due to polar bear denning on land (less ice)
- Waste pits breached (sea level rise)
- Stability and seepage issues for tailings dams (permafrost thaw)
- New shipping lanes (less ice)
- Navigation issues (melting glaciers)
- New tourism possibilities (less ice, higher temperatures)

EA TWG Topic Areas

(# of Options as of Aug 18, 2008)

- Oil & gas (8)
- Mining (9)
- Ocean transportation (6)
- Rural non-road transportation (3)
- Other economic sectors (14)
- Tourism and recreation (11)
- Boundaries and ownership (7)
- Energy demand (1)
- Evolving AK's jobs and economy (4)
- Information collection and dissemination (5)

EXAMPLES of EA TWG Options

- Oil & Gas: Model coastal vulnerability to establish criteria for pipeline coastal transition set-backs and burial depths and develop shoreline change adaptation public policy, guidance for preventive and mitigative measures, and knowledge of who pays for what
- Mining: Review current regulations and compliance criteria for managing tailing dams and disposal sites and determine if changes are necessary

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Examples of EA TWG Options

- Ocean Transportation: Plan, finance, and build basic shipping infrastructure, including port planning and design, to support increased shipping, fishing, mining, offshore drilling, tourism
- Other Economic Sectors: Encourage private insurers, as investors, and the state pension funds to consider climate impact prevention in the prudent investment of portfolios and to invest in climate science as a 'present value of avoided costs' strategy

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Examples of EA TWG Options

- Information Collection and Dissemination: Provide resources for good Digital Elevation Model (DEM) and GIS data, and current and high resolution imagery to establish a more robust information infrastructure to plan and adapt

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EA TWG Next Steps

- **October 14** (Conference call): Discuss aggregation of options and initiate discussion of criteria for priority balloting process
- **Oct 27** (In person meeting): Continue discussion of criteria and conduct initial balloting. Discuss results, integrate options as appropriate, outline next steps, finalize list of options to present to Adaptation Advisory Group on November 7th.

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