

HIA in Environmental Health:

Approaches within and outside of HIA

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A collaboration between Robert Wood Johnson Foundation and The Pew Charitable Trusts.

NEPA:

The National Environmental Policy Act

National Environmental Policy Act of 1969

42 USC § 4321-4375

- Created the Environmental Impact Statement, or EIS process:

An EIS is a comprehensive review of the potential impacts of a proposed decision, undertaken in a publicly transparent and accountable manner.

Why is EIA an important venue for public health?

U.S. Example

Over 500 federal EISs completed annually , and thousands more at the state level.

17 states have NEPA-like laws, resulting in *thousands* more EIAs at the state level

Activity regulated by some form of EIA:

- Agriculture policy
- Large natural resource development projects – mines, oil and gas, refineries, logging
- Urban redevelopment projects
- Setting fuel economy standards
- Highway and other transit corridors
- Housing developments/large construction projects/federal housing programs
- Water resource management
- Many more...

U.S. EIA:

Some differences from international practice

- Federal government responsible for leading EIA
- Federal agencies often do EIA themselves, or hire contractors
- Responsibilities of industry and government:
 - *Project-specific EIA* (e.g. permitting a large mine):
 - proponent pays government, which undertakes HIA or hires contractor.
 - “firewall” between proponent and contractor.
 - *Programmatic EIA* (e.g. leasing land for oil development or logging): government pays, and leads HIA or hires contractor

Health in U.S. EIA—historical perspective

No systematic analysis of public health in EIS process:

Air, Water, Economy often addressed, but...

1. Survey of 45 EIS:

- No discussion of health in 83%
- In the remainder, discussion of health limited to single-substance cancer risk assessment

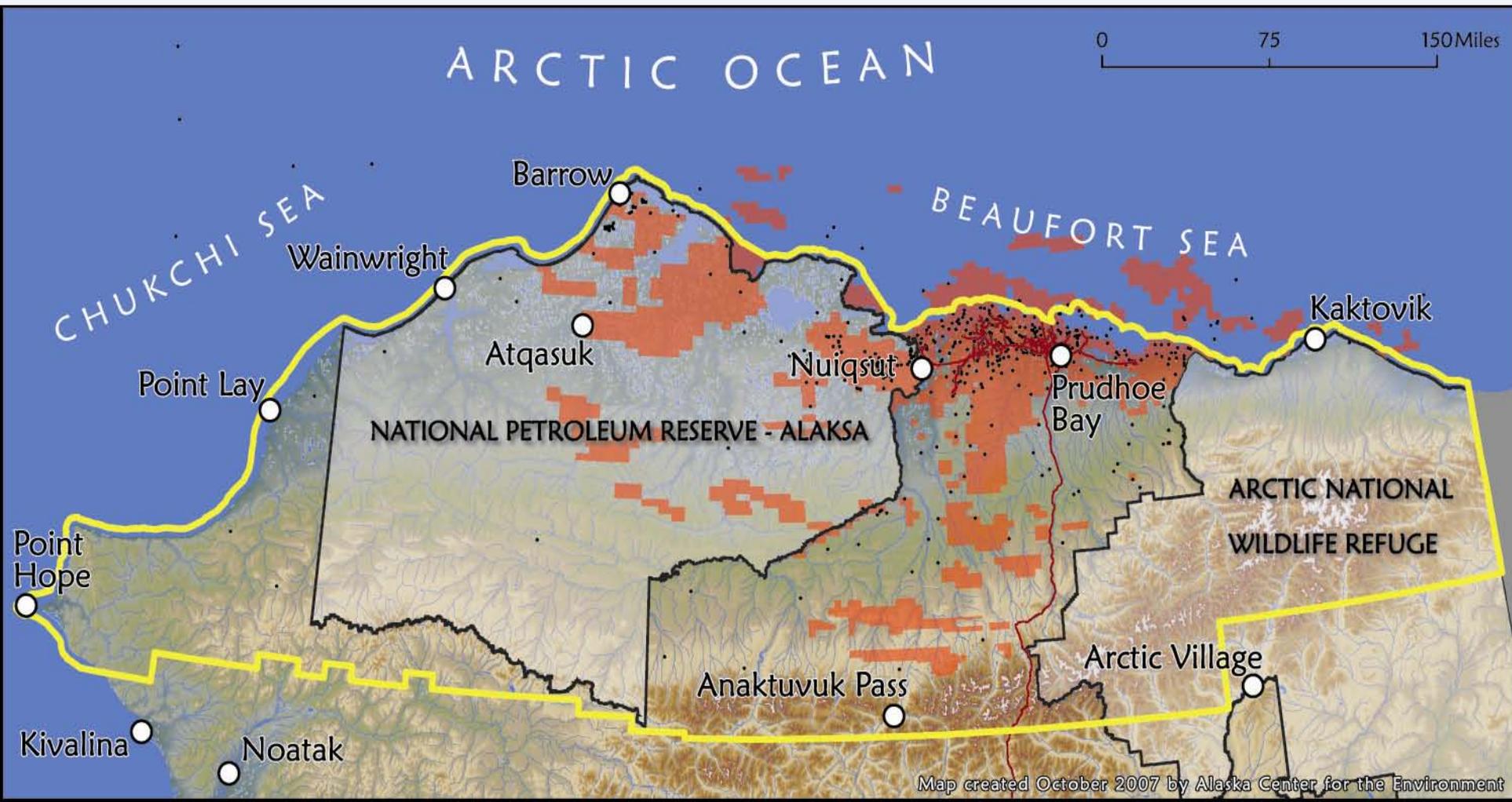
Steinemann, A. 2000. Rethinking Human Health Impact Assessment. Environmental Impact Assessment Review 20: 627-645

2. Survey of NEPA professionals:

- Found little understanding, discussion, or analysis of health among EIS professionals

Cole et al. 2004. Prospects for Health Impact Assessment in the United States: New and Improved Environmental Impact Assessment of Something Different? Journal of Health Politics, Policy, and Law 29 (6) 1153-1186

Alaska's North Slope



Nuiqsut, Alaska

Nuiqsut, Alaska: small Inupiat community 7 miles from large oil development.



Communities raised a range of health concerns as proposed development expanded:

- Pollution
- Influx of oil workers exacerbating social change, drug/alcohol problems
- Impacts on local food supply

Community health concerns

“The benefits of oil development are clear -- I don't deny that for a moment. The negative impacts are more subtle. They're also more widespread and more costly than most people realize. We know the human impacts of development are significant and long-term. So far, we've been left to deal with them on our own. *They show up in our health statistics, alcohol treatment programs, emergency service needs, police responses – you name it.*” George Ahmaogak, Former Mayor of North Slope Borough
Keynote Address, Alaska Forum on the Environment 2004.



NEPA and Human Health:

Purpose

The purposes of this Act are: ... to promote efforts which will prevent or eliminate damage to the environment and biosphere and *stimulate the health and welfare of man*; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality. *NEPA Sec. 2 [42 USC § 4321]*

“Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of a proposed agency action.”

NEPA Regulations and Guidance

40 C.F.R. 1508.8 *Effects*:

“Effects” includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.”

40 C.F.R. 1508.27 *Significantly*:

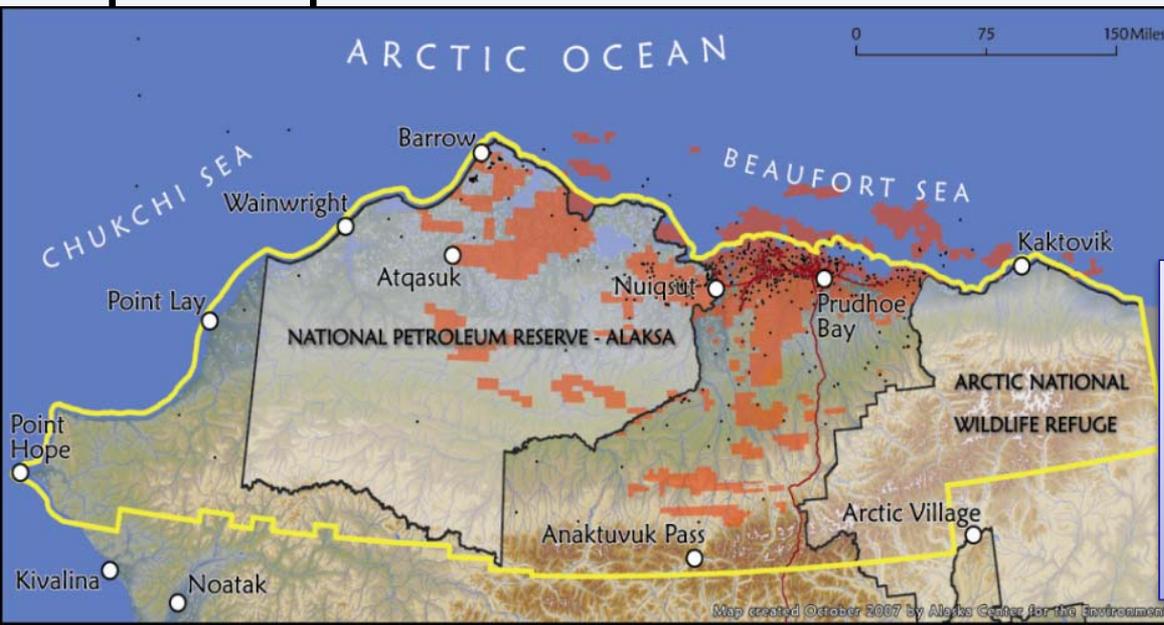
(b) Intensity: includes “ The degree to which the proposed action affects public health or safety.”

Sec. 1508.14 *Human environment*:

"Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.

The First U.S. Federal HIA/EIS: 2004: Oil and Gas Leasing in the National Petroleum Reserve

- Local (county) government became a “cooperating agency” – a role defined by NEPA through which local governments can formally participate in an EIS
- The community health agency drafted an HIA through this role
- The lead federal agency (BLM) incorporated the HIA into the EIS



<http://www.healthimpactproject.org/hia/us/northeast-national-petroleum-reserve-supplemental-environmental-impact-statement>

Health Determinants included in the HIA

Air quality

Water quality

Noise

Wild foods/ Diet

Demographic change/influx of workers

Traffic patterns

Revenues

Employment and Income

Note: many of these factors are commonly considered in baseline studies, permit applications, and EIA

Result of the NPR-A HIA

General Outcome:

This was a contentious leasing proposal.

Community engagement via the cooperating agency relationship and HIA process contributed to:

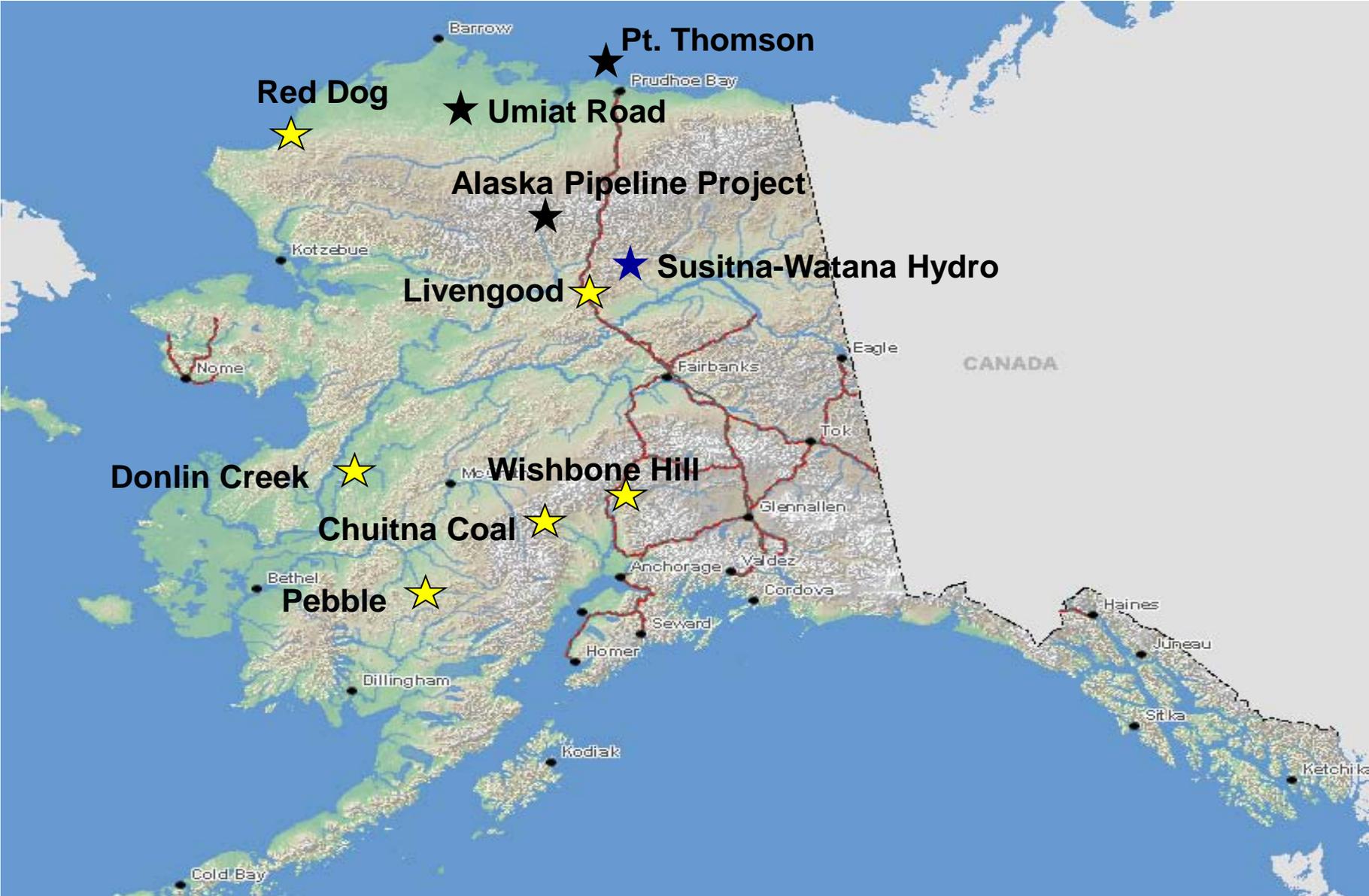
- Improved relationships between the community and the agency
- A compromise leasing plan that was widely accepted on both sides

Result of the NPR-A HIA?

Mitigation measures in the Northeast NPR-A EIS

Health Concern	Mitigation Measure
Need to address health in planning future projects	BLM will consult with relevant health agencies in the development of future proposals in Northeast NPR-A
“Social ills”: alcohol, STIs, violence	Expand cultural orientation for workers
Air pollution	Additional baseline, modeling, and monitoring above CAA requirements.
Contamination of local food sources	Baseline levels and ongoing monitoring

Alaska now: HIA/EIA Integration in 2012



Alaska now: HIA/EIA Integration in 2012

1. State established new HIA program—more than 10 HIAs now in progress (one for every large project in Alaska)
2. BLM working on another HIA, and now recommending HIA to other agencies
3. Joint Tribal-federal-state working group on HIA in Alaska— developed guidance for HIA in the state
4. EPA contracted with tribal health agency to do HIA

Technical Guidance for Health
Impact Assessment (HIA) in
Alaska

July 2011
Version 1.0

Prepared by:
State of Alaska HIA Program
Department of Health and Social Services

Integrating HIA and EIA: considerations

1. *Is it worth the time and resources?*

- A. Baseline data: HIA in Alaska has led to funding for a number of baseline data collection efforts (diet surveys, air and contaminant monitoring), funded through permit fees.
- B. New mitigation measures: new pollution monitoring and control measures; employee orientations;
- C. New & more effective cross-agency partnerships
- D. Better Projects...? (too early to know)

Integrating HIA and EIA: considerations

2. *Funding and structure of the HIA/EIA team*

- A. State permit fees: Dept of Natural Resources charges applicant a permit fee, and this now covers Health Dept, which uses fees to pay its own staff, and hire an HIA contractor.
- B. “Cooperating Agency” agreements between state, tribal, or municipal health department and EIA lead agency
- C. Contracting:
 - Subcontractor to lead agency’s EIA contractor
 - Subcontractor to private company proponent’s contractor

Integrating HIA and EIA: considerations

3. *Integrated HIA/EIA vs. separate HIA*

Integrated HIA/EIA

- Access to data (air, water, economic)
- Narrower scope? (not in our experience...)
- Collaboration with decision maker may increase credibility of results/ attention to recs
- Enforceable mitigation
- Limited authority of decision maker to mitigate many identified concerns
- Sometimes, more challenging relationship with industry

Separate HIA

- More control over scope of the HIA, final product
- No “cover” if results are called into question (e.g. Alaska Wishbone Hill)
- More flexibility in relationships—eg, can collaborate with industry to develop voluntary mitigation
- More chance for redundancy—re-doing air analysis, for example. And, more chance for inconsistent findings

Challenges & Lessons Learned

- Transparency and public engagement are a strength of U.S. EIA
- U.S. law confers strong EIA requirements, yet agencies often have limited authority to impose mitigation for health impacts
- Industry is an essential partner: many mitigation measures for health will not be implemented as regulatory requirements.
- EIA legal requirements & “firewalls” between the EIA team and the proponent can make effective collaboration more challenging
- EIA is not yet viewed as a central part of a health agency’s mission
- Staffing and funding shortfalls make greater participation in EIA by U.S. health agencies more difficult

Discussion

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