

# **Social and Economic Aspects of Planning Phoenix, AZ**

**Introduction  
10/30/07 ver**

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## **Course Objectives**

- Determine what questions to ask regarding social and economic aspects of each planning step
- Determine how to (and who can) obtain and interpret necessary social and economic information
- Ensure social and economic aspects are integrated into each step of the planning process and used to make sound decisions
- Determine opportunities for collaboration while conducting social and economic analyses

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## Social Science Activities in Land Use Planning

Planning Steps	Social Science Activities
Steps 1 & 2: Identify and Develop Planning Criteria	<ul style="list-style-type: none"> <li>• Identify publics and strategies to reach them</li> <li>• Identify social and economic issues</li> <li>• Identify social and economic planning criteria</li> </ul>
Step 3: Inventory Data	<ul style="list-style-type: none"> <li>• Identify inventory method</li> <li>• Collect necessary social and economic (S/E) data</li> </ul>
Step 4: Analyze Management Situation	<ul style="list-style-type: none"> <li>• Conduct S/E assessment of continuing current management.</li> <li>• Document assessment methods appendix or technical report</li> </ul>
Step 5: Formulate Alternatives	<ul style="list-style-type: none"> <li>• Identify S/E opportunities and constraints to formulate alternatives</li> </ul>
Step 6: Estimate Effects of Alternatives	<ul style="list-style-type: none"> <li>• Identify analysis methods</li> <li>• Analyze S/E effects of alternatives</li> <li>• Document analysis methods in appendix/tech report</li> <li>• Assess mitigation opportunities</li> </ul>
Step 7, 8: Identify Preferred Alternative and finalize Plan	<ul style="list-style-type: none"> <li>• Identify potential S/E factors to help select the preferred alternative</li> </ul>
Step 9: Monitor/evaluate	<ul style="list-style-type: none"> <li>• Track S/E indicators</li> </ul>

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## A Tool Box Approach

- A range of techniques can be used to address different planning issues
- Not every technique will be used in every RMP
- What techniques are applicable and when to apply
- Not our purpose to teach how to do the techniques

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## Scales of Social and Economic Analysis

- Fine scale: individual/household level (required for grazing impacts; psychological impacts)
- Mid scale: community-level analyses
- Broad scale: county-level or regional economic analyses
- National scale: passive use values of national or international publics

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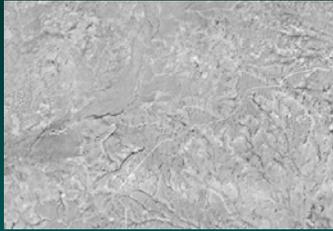
## Why Conduct Social & Economic Analyses?

- Legal/statutory/administrative mandates
  - NEPA: Consider effects on human environment
  - FLPMA: Consider relative values of resources
  - Environmental Justice (Exec. Order 12898)
- Public demand for meaningful social and economic analyses
- There's room for improvement...
- Note as 10/30/07- someone still needs to address: add one more slide –Utah State Review and other examples that demo why soc/econ analyses is in lime light

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# Pinedale Experience Jonah Field *Historical Development*

Jonah - 1994



Jonah - 2001



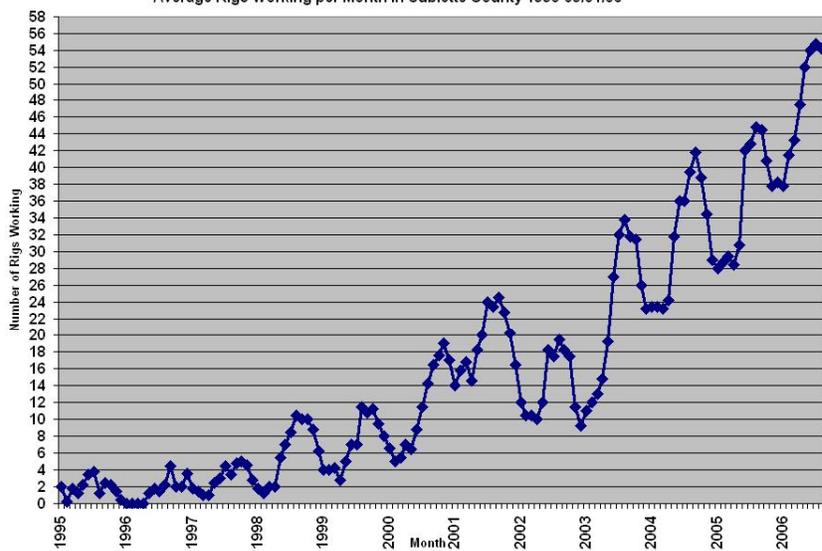
Jonah - 2005

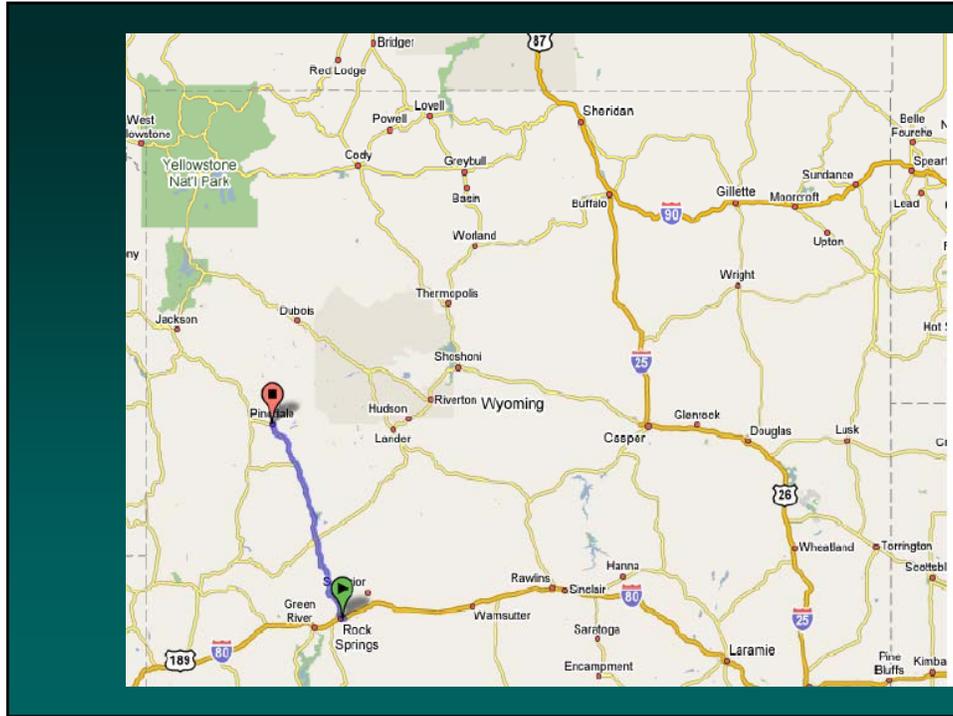


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# Pinedale Oil & Gas Boom

Average Rigs Working per Month in Sublette County 1995-09/01/06





### **Socioeconomic Hit List: Impacts of the Sublette County, Wyoming Gas Boom**

- **Economic Effects of Energy Industry Growth:**
  - How The Rig Count drives industrialization, workforce, and revenue.
  - Workforce Shortages
  - Transient Workforces
  - Housing Costs
  - Gilmore’s “Problem Triangle”

**Hundreds of Different Worksites Hundreds of Different Companies**



**The Rig Count Drives Everything**



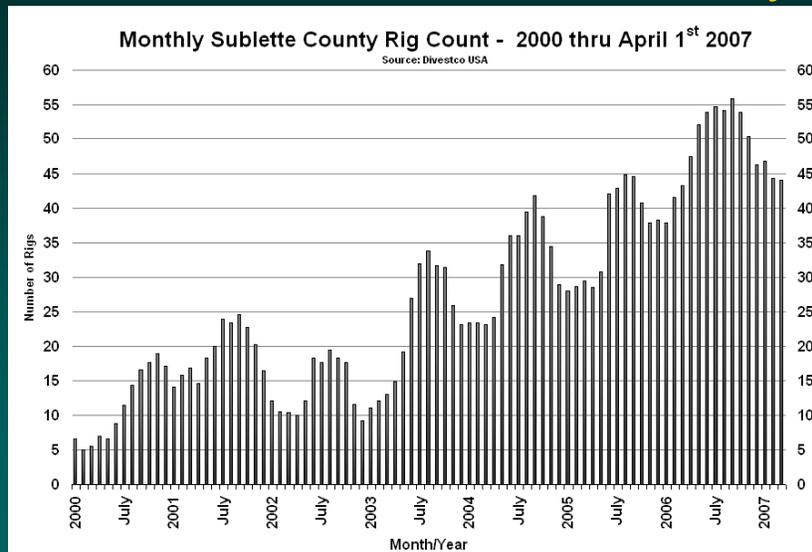
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## The Rig Count – About 40 Workers Per Rig



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## Workforce Fluctuates Widely



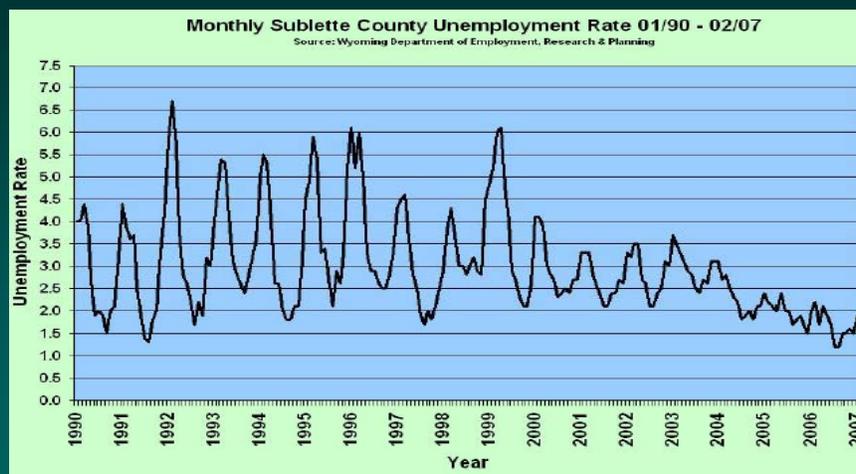
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## Socioeconomic Hit List: Impacts of the Sublette County, Wyoming Gas Boom

- **Economic Effects of Energy Industry Growth:**
  - How The Rig Count drives industrialization, workforce, and revenue.
  - **Workforce Shortages**
  - **Transient Workforces**
  - **Housing Costs & Population Increases**
  - Gilmore’s “Problem Triangle”

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## Good For Local Workers



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### Temporary

They Strain Local Services – But Don't provide service industry workforce: Growth is one-sided. Food, entertainment, recreation industries stagnate despite huge demand and

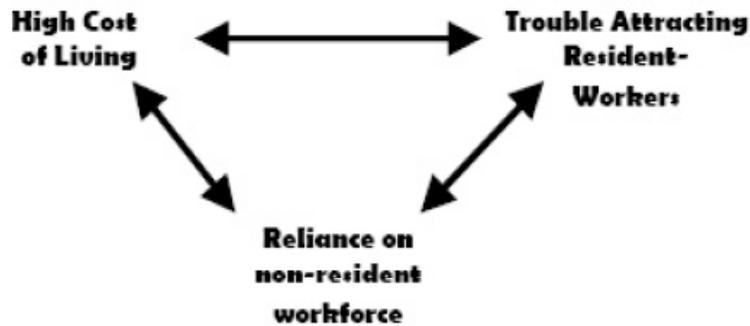


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## John S. Gilmore's Problem Triangle:



Sublette County's Boomtown Problem Triangle

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### Socioeconomic Hit List: Impacts of the Sublette County, Wyoming Gas Boom-Cont.

- **Social Effects of Growth:**
  - Moving from an amenity-led community to a wage-earning community
    - Loss of community feeling
    - Social Issues with in-migrants
    - Crime
    - Education
    - Infrastructure
    - Work Schedules
    - Worker relocation plans
    - Connections to the Study Area
    - Deaths & Injuries on the job
    - Per capita income
    - Family income
    - Local gov't and local low-paying businesses struggle to compete with oilfield wages

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## **Huge Impacts to a Small Town**



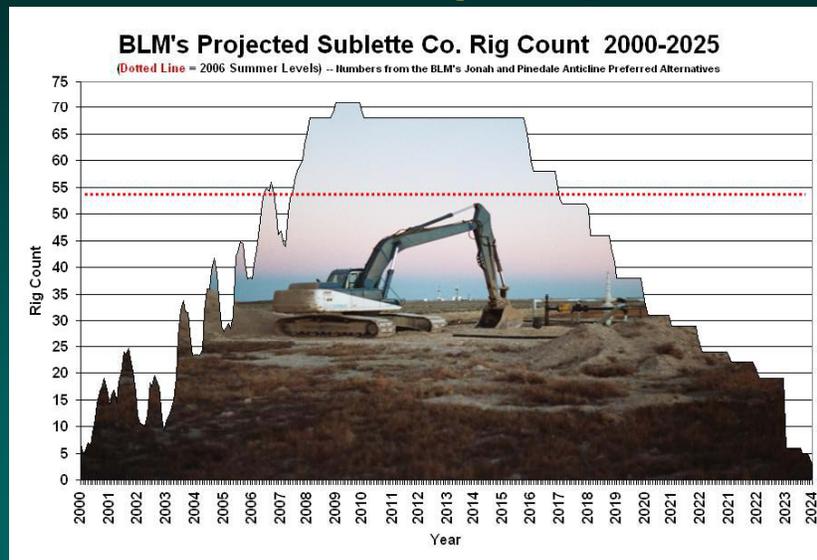
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## Socioeconomic Hit List: Impacts of the Sublette County, Wyoming Gas Boom - Cont.

- **Distribution of Revenue**
  - Revenue stream
    - Royalties
    - Severance Taxes
  - Local tax revenues
    - \$14 Million (FY-06 in Sublette County)
      - Use Taxes
        - » Supplies purchased elsewhere
      - Sales Taxes
    - Property Taxes (Driven by valuable gas properties)
      - School District (Extra \$ redistributed by the State)
- **What's Next:**
  - Plans for new oil & gas development
    - Need for providing the proposal using maps combined with industry presentations to inform the public on the development being proposed
  - Pace of Development Discussions

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## Sustained Development Then Big Drop Off



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## **The Bust - Socioeconomic Impacts of O&G Busts: What they are, and 'Are we learning anything?'**

- **Planning for the pattern of Boom/Bust**
  - **Drilling (and assoc expanded workforce)**
    - Anticipated to last for 12 years, requiring housing and medical, retail etc. services for same 12 years, then move on
      - The more imminent bust is in 12 years, and can be quantified by:
        - » The amount 'overbuilt' which will depress other real estate for 10 years (a boon to outsiders wanting to move in, a bane to locals)
        - » Drop in local economy volume (motel rooms, restaurants)
    - **Overbuilding concern**
  - **Gas production and associated royalties**
    - Related revenue to Fed, State, County & School Dist
      - Anticipated to last for 40 years
      - Local economy fueled by public sector \$
      - Expected to drop off over the last 10 year period

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## Accurate Social Impact Assessment Tips - Lessons Learned in Sublette County

- Get involved with the locals if at all possible
- Don't rely on outdated census data
  - Obtain current local data & information by meeting with
    - Sheriff's Department
    - Health Care personnel
    - District Attorney
    - Company spokesmen
    - Mayor
    - County Commissioners
    - local leaders
    - Other Federal, State and Local agencies
    - Planners
    - School Boards
    - Realtors
    - Etc.
- Focus on key impacts
  - Substance use
  - Crime
  - Social Services
  - Domestic Violence
  - Housing
  - Job safety
    - deaths and serious work related injuries occurring on the job
  - Etc.
- Second home sales and changes in nonearned income

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## Accurate Social Impact Assessment Tips - Lessons Learned in Sublette County - Cont.

- Express offsite mitigation proposals in terms of dollars per well to put these dollars in a perspective that the public can relate to
- Express the development costs in a payoff per well so the public gets a clearer understanding of the financial considerations involved in, for example, the development of a major oil & gas field
- Include a discussion of the life cycle of the field
- Compute the taxes and other revenues that will be generated and try to balance this against the resultant new demand for services
- Quantify the market activity (earnings and employment) – input output analysis
  - Include use values – travel cost analysis
  - Do not ignore the non-market affects of a major oil and gas field ( this may be only a qualitative discussion in the absence of a non-market study but it still needs to be addressed)
  - Make sure the Reasonable and Foreseeable Development Scenario “makes sense”
  - Use a common basis of comparison to describe the national importance of the fields anticipated production
    - % of national demand
- Include a discussion of the affects of a "boom bust" scenario

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## Accurate Social Impact Assessment Tips - Lessons Learned in Sublette County - Cont.

- Get a feel for the trade-offs
  - Air quality changes
  - Water quality changes
  - Transportation issues
  - Open space issues
  - Changes in recreational opportunities
  - Impacts on grazing
  - Difficulty in acquiring service employees
  - Impacts on critical wildlife habitat
  - Impacts on wildlife populations
  - Impacts on threatened and/or endangered species
  - Etc.
- Present per capita income and family income (constant dollars using a locally derived cost of living index)
- Be aware of the challenges associated with contracted socioeconomic input under tight schedules

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## Accurate Social Impact Assessment Tips - Lessons Learned in Sublette County - Cont.

### – Data Sources

- State government data bases
- BLM Specialists
- Clipping Services like the Headwaters News
- High County News
- Industry publications
- Local newspapers
- Local Universities
- Sublette Socioeconomics: [www.sublette-se.org](http://www.sublette-se.org)
- Etc.

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## Why It's Hard to Get Mitigation: Politics and Power

- **Direction of Revenue**
  - Why Local Government \$\$\$ alone cannot always mitigate problems :
  - Staff/Expertise Shortages – Learning Curve
    - Local Governments
    - Non-Profits/Community Organizations
  - Relationship with Federal Agencies
  - Governmental Costs of Growth
- **The Role of Federal Agencies in Federal Land Actions**
  - Offsite Mitigation – BLM's position of what qualifies
  - The “Adaptive Management” Process
  - Other Federal Examples of Socioeconomic Mitigation
- **The Role of Companies**
  - Historical Review
  - Gillette, Evanston, etc.
  - experiences,
  - decisions / actions,
  - subsequent recommendations.
  - Compare with our actions

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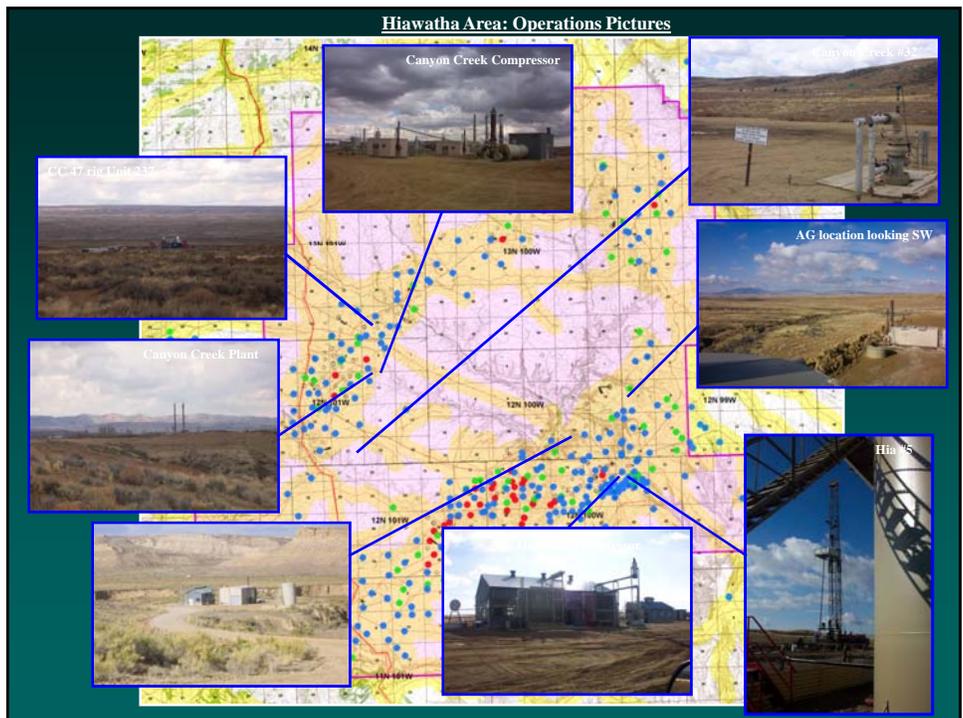
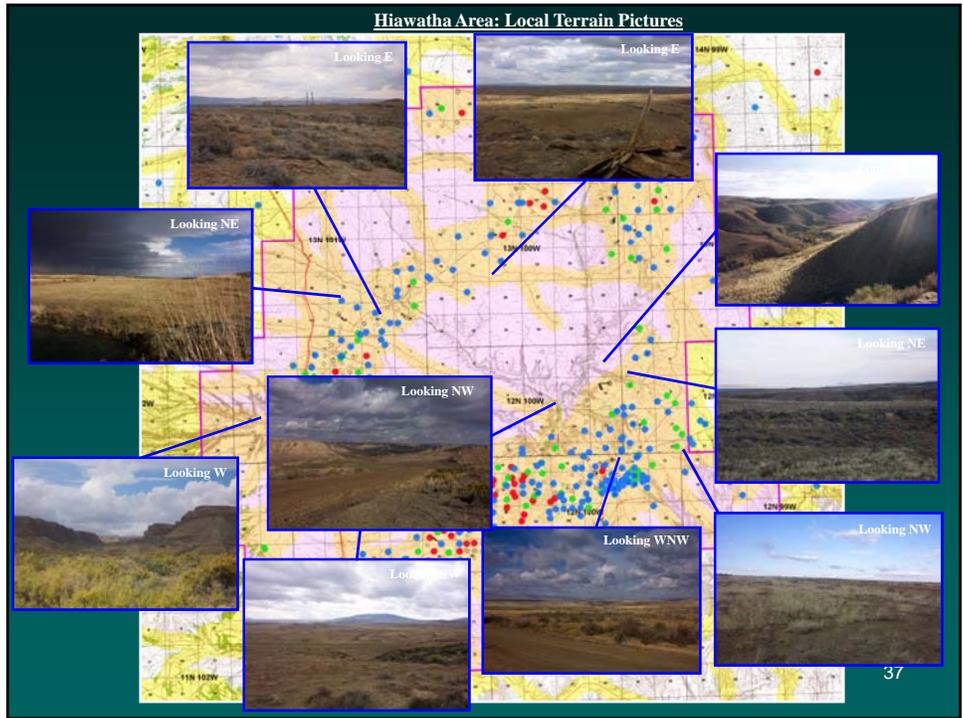
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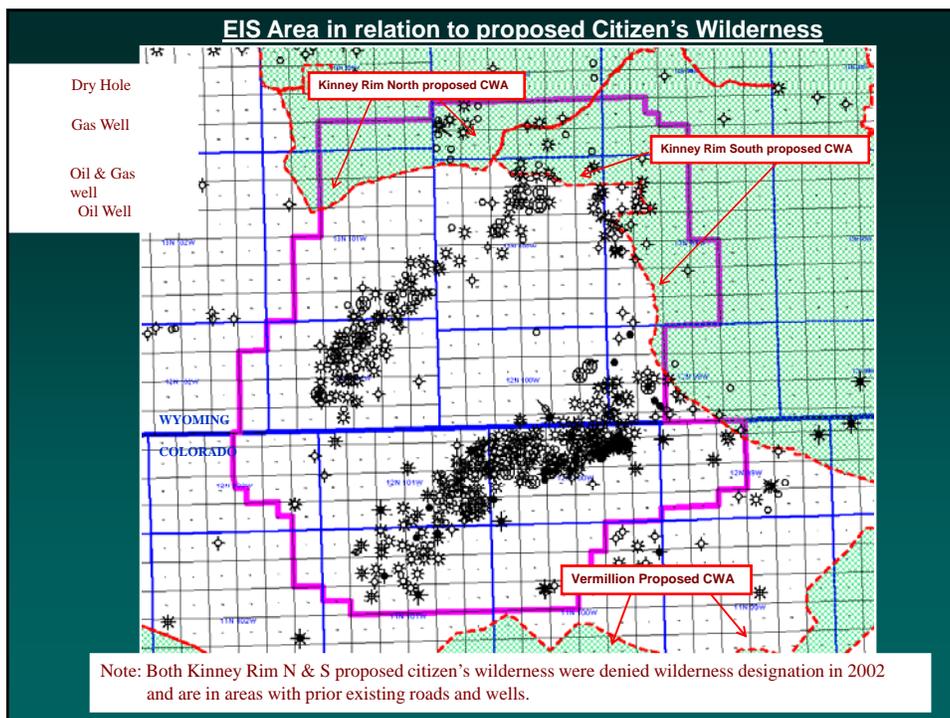
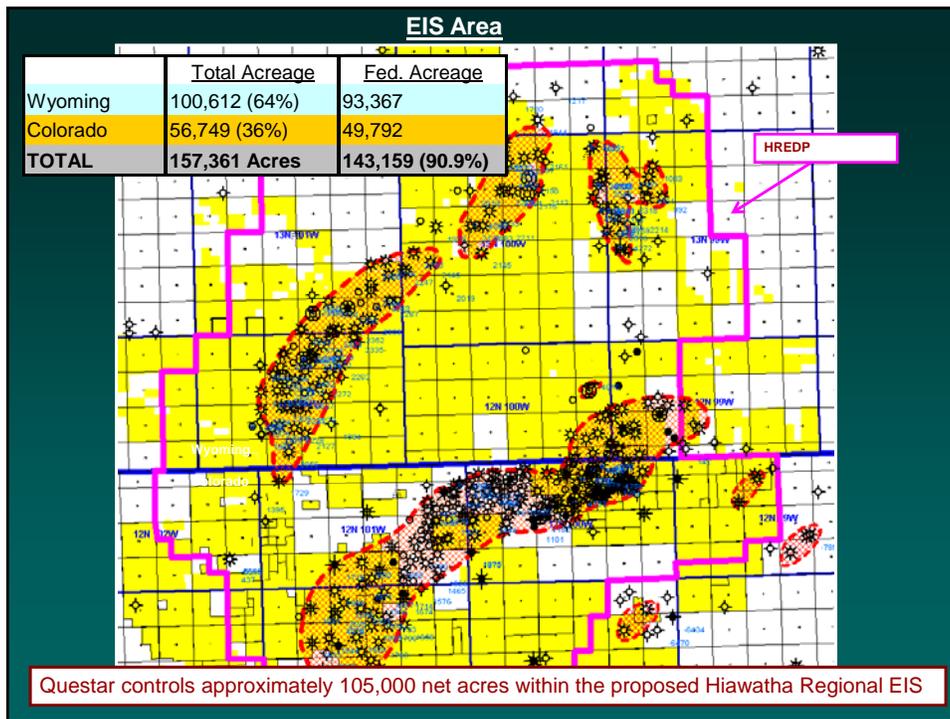
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## Excerpts From a Company's Oil & Gas Proposal

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# Jonah Field



# Google Image



# Economic Concepts

- Economic value
- Jobs and income vs. benefits and costs
- Economic impact analysis

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# Economic Value

- A Resource has economic value if:
  - Scarce
  - Provides enjoyment and satisfaction
- No actual payment is required
  - Hence economic value broader than price, cash flow, revenues, taxes, etc.
- Economic value measured by the maximum a user would pay if payment is required (willingness to pay-WTP)

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# Social Concepts

“Social” refers to the *meaning* of BLM-managed lands, resources and opportunities to people. It overlaps with economics but is distinct in many ways...



# Community



- Territory (place, local ecology) where people live and meet their daily needs together
- Local society: comprehensive network of associations for meeting common needs and expressing common interests
- Community field: process of collective actions for improving common life

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# Quality of Life



- Culture-specific norms of desired individual and social experience
- Often measured using a set of indicators, including economic variables
- How do *you* define it? What portion of it relates to public land management?

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# Sense of Place



- The attachment people feel to a setting , typically through repeated experience
- Attachments can be spiritual, cultural, aesthetic, economic, recreational, social

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# Equity

- People and communities are affected in different ways by management of public lands
- There will typically be winners and losers, over the short term and long term
- Equity--and perceptions of the fairness of the planning process and the distribution of effects--is an important social consideration
- Environmental justice is an equity issue

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# Environmental Justice



The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

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# Key Points

- Social and economic variables should be incorporated into every planning step
  - Like biophysical variables, social and economic variables can be measured at a variety of scales
  - The social and economic sciences have their own language and frameworks for studying people and the environment
  - Consider social and economics information and analyses as separate (but related) topics
- 
- Socioeconomics

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