Impact Analysis of the Maryland Marcellus Shale Safe Drilling Initiative

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Overview

• Review of Study Goals
• Review of Work Plan and Timeline
• Overview of Analyses and Tools
• Questions
Review of Study Goals

1. Quantify the economic and community impacts
2. Deliver analyses and associated findings
3. Acknowledge and understand the local context
Review of Work Plan and Timeline

Delivered

- Stakeholder Engagement June 14 & 15, 2013
- Draft Outline August 9, 2013
- In-Person Survey August 13 – 15, 2013

Due

- Final Outline September 9, 2013
- Online Survey End of September
- Survey Analysis End of October
- Hedonic Price Analysis End of November
- Economic Impact Analysis End of January
- Fiscal Impact Analysis End of January
- Community Impact Analysis End of January
- Draft Report March 14, 2014
- Final Outline May 9, 2014
Stakeholder Engagement: Purpose

• To learn more about the local economy and what might be impacted
  - RESI met with 42 individuals representing 24 groups and businesses from Allegany and Garrett Counties
  - Groups represented local government, property owners, tourism, recreation, agriculture, and other impacted groups

• To identify major concerns of the local community
Stakeholder Engagement:
Major Concerns

**Infrastructure**
- Education, Public Health & Safety, and Roads

**Local Economy**
- Regulation, Local Business, Property Rights, and Housing

**Environment**
- Watersheds, Forest Area, Viewsheds, and Wildlife Habitat
Community Survey

• **Purpose:** To provide RESI with variables to quantify nonmarket impacts of potential drilling in Garrett and Allegany Counties

• **Administration:** online and in-person

• **Progress:** 150 responses to date

• **Goal:** 300 to 500 responses by end of September
Survey Format

30 Questions

- Environmental Usage
- Residence
- Hypothetical Scenario
- Demographic Information
Survey Locations

Garrett County
- Oakland Farmers’ Market
- Shop n Save Fresh
- Swallow Falls State Park
- Deep Creek Lake
- Wisp Adventure Park
- Downtown Oakland

Allegany County
- Cumberland Farmers’ Market
- Downtown Cumberland
Online Survey

The online survey is **LIVE** and available on the Garrett County website and at this hyperlink

http://resisurvey.resiusa.org/surveydata/ContingentValuation.htm
Impacts

- Impacts of shale gas drilling experienced by other states
- Impacts of special interest identified by residents
- Potential community impacts
- Potential economic and fiscal impacts
Community Impacts Discussed

- Housing
- Transportation
- Recreation/tourism
- Land use
- Rural character
Community Impacts Quantified

Changes in demand resulting from permanent and transitory workers impacting

- Housing
- Truck traffic on local roadways
- Public health services
- Infrastructure
Community Impact Mapping: Constraints Map

GIS-based map used to depict constraints

- Existing wells
- Historic lease data
- Sensitive lands
- Setbacks
Economic and Fiscal Impacts

Economic Impact Analysis
• Three key factors will be quantified for three scenarios: low, mid, high
  o Employment
  o Wages
  o Output
• Inputs: Nonmarket and Market Values

Fiscal Impact Analysis
• State and Local tax impacts
  o Investment phase
  o Operation phase
Market vs. Nonmarket Impacts

Market Impacts
• Values that can be readily observed in the marketplace
• Measures the reduction or benefit from Shale Drilling in the area

Nonmarket Impacts
• Values cannot be readily observed
• Measures the reduction in environmental goods resulting from natural gas production
• “Willingness-to-pay”
Scenarios and Tools

• Low, mid, and high drilling scenario
  o Low – no drilling, preliminary baseline
  o Mid – medium level of drilling extraction, based on averages
  o High – highest level of drilling extraction

• IMPLAN and REMI PI+

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Assumptions

• Production potential
• Number of wells and wells per pad
• Location of well pads and well infrastructure
• Production curve/well lifespan
• Rate and pace of drilling
Question & Answer