

The Significance of Political Trust in Mined Land Reclamation and Reforestation Efforts

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Overview

- Study explores levels of political trust among WY and WV reclamation stakeholders.
- Findings indicate a lack trust in the fairness, legitimacy and inclusiveness of the reclamation process *and* in other reclamation stakeholders.
- Reclamation involves more than science; political trust should not be undervalued.

Road Map of Presentation

- Literature Review
- Hypotheses
- Measuring Political Trust
- Survey Design
- Response Rates and Survey Bias
- Results and Discussion
- Conclusion

Literature Review

- Few attempts have been made to empirically measure the views of SMCRA stakeholders (e.g., Scheberle 2004).
- Few have examined the social and political elements of SMCRA reclamation (e.g., Box 1978; Vogel & Curtis 1978; Maguire 1988).
- Recent efforts by ARRI highlight the need to reexamine these elements of reclamation.

Hypotheses

- H1: Many SMCRA stakeholders lack trust in the fairness, legitimacy, and inclusiveness of the reclamation process.
- H2: Many SMCRA stakeholders lack trust in other SMCRA stakeholders.

Measuring Political Trust

- Most widely used index of political trust originates from the 1964 American National Election Studies (ANES), University of Michigan.
- Scholars have successfully tailored the ANES index to address trust issues in other policy areas (e.g., Parker and Parker 1993).

Dimensions of Political Trust

Process	How often do you think decisions are made in a fair and legitimate manner? (Leach & Sabatier 2005) How often do you think decisions have included the viewpoints of all interested parties? (Yang & Holzer 2006, Wolfe & Bjornstad 2002)
People	In general, how often can you trust particular stakeholders to do what is right? (Citrin & Muste 1999, Parker & Parker 1993, Fenno 1978, Miller 1974)

**Origins from ANES, University of Michigan

Survey Design

- Drew a representative, stratified sample.
 - By region (WY and WV)
 - By stakeholder type (coal representatives, agency regulators, scientists, and environmentalists)
 - Excluded the general public and aimed to survey those primarily responsible for designing, studying and implementing reclamation.
 - Looked at reclamation on active working surface coal mines sites (not abandoned or underground)

Survey Design

- This was part of a larger survey. Political trust questions were only one component.
- An open-ended question was also used.
- Survey was pre-tested.
- Delivered the survey via mixed-mode (internet and postal mail).

Response Rates and Survey Bias

- Four hundred survey responses were received (172 by internet, 228 by posted mail) from a starting sample of 978 SMCRA stakeholders.
- Response rate of 41%.
- Looked at potential survey bias
 - Triangulation (survey, interviews, archival data)
 - Assessed survey responses (i.e., demographics)
 - Post-stratification weighting (Groves et. al., 2004)

Results and Discussion

- H1: Many SMCRA stakeholders lack trust in the fairness, legitimacy, and inclusiveness of the reclamation process.
 - Environmentalists hold the most negative views about the reclamation process.
 - Coal industry and agency stakeholders are most likely to have the favorable opinions of the reclamation process.
 - Many scientists also view the process negatively.

Table 1. In general, how often do you think decisions about reclamation are made in fair and legitimate manner?

	Total N=383	Stakeholders				Total WV	Stakeholders				Total WY
		Envir	Sci	Coal	Agency		Envir	Sci	Coal	Agency	
All the Time	3.3%	0.0%	3.3%	8.8%	6.5%	4.1%	0.0%	0.0%	8.9%	0.0%	2.4%
Most of the Time	32.8%	1.9%	25.3%	55.9%	64.5%	34.4%	13.6%	29.5%	60.0%	67.7%	40.9%
Some of the Time	36.4%	16.7%	49.5%	26.5%	24.2%	32.4%	68.2%	52.3%	22.2%	25.8%	43.3%
Seldom	23.1%	59.3%	22.0%	8.8%	4.8%	24.1%	18.2%	18.2%	8.9%	6.5%	13.4%
Never	4.3%	22.2%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 2. In general, how often do you think decisions about reclamation have included the viewpoints of all interested parties?

	Total N=378	Stakeholders				Total WV	Stakeholders				Total WY
		Envir	Sci	Coal	Agency		Envir	Sci	Coal	Agency	
All the Time	2.2%	0.0%	2.2%	9.1%	1.6%	2.6%	0.0%	0.0%	4.4%	0.0%	1.2%
Most of the Time	30.0%	3.9%	25.6%	51.5%	59.0%	33.2%	13.6%	20.0%	55.6%	51.6%	33.9%
Some of the Time	30.8%	9.8%	35.6%	24.2%	29.5%	26.8%	45.5%	51.1%	22.2%	38.7%	39.4%
Seldom	27.3%	41.2%	33.3%	15.2%	9.8%	26.4%	40.9%	24.4%	17.8%	9.7%	24.2%
Never	9.7%	45.1%	3.3%	0.0%	0.0%	11.1%	0.0%	4.4%	0.0%	0.0%	1.2%

Results and Discussion

- H2: Many SMCRA stakeholders lack trust in other SMCRA stakeholders.
 - The stakeholders that are clearly the most trusted are academic researchers from universities.
 - Survey respondents reported a substantial lack of trust in three sets of stakeholders: legislators, coal industry officials and environmentalists.
 - Respondents didn't appear to differentiate in terms of trust between state and federal officials.

Table 3. In general, how often can you trust the following stakeholders to do what is right about reclamation?

	All the Time	Most of the Time	Some of the Time	Seldom	Never
1. Coal Executives	2.6%	27.0%	31.3%	25.8%	13.3%
2. Coal Operators	1.9%	38.1%	29.7%	20.2%	10.1%
3. Federal Mine Inspectors Office of Surface Mining (OSM)	5.6%	42.2%	35.4%	12.1%	4.7%
4. State Mine Inspectors from West Virginia/Wyoming	6.5%	42.9%	33.8%	12.4%	4.4%
5. Environmental Group Leaders and their Members	10.0%	29.8%	36.6%	18.2%	5.4%
6. Civil/Mining Engineers	4.1%	40.6%	41.1%	10.0%	4.2%
7. Environmental Science Researcher from Universities	8.8%	62.1%	25.4%	3.7%	0.0%
8. Members of Congress	<1.0%	6.6%	43.3%	40.4%	9.5%
9. Member of State Legislatures	<1.0%	14.3%	35.7%	36.0%	13.5%

Conclusion

- An initial attempt at measuring the attitudes of SMCRA stakeholders to determine the degree to which these stakeholders have trust in the reclamation process and other stakeholders.
- Findings should be read with some caution.
- Future research will look at the underlying reasons for these attitudes in greater depth and assess their impact on SMCRA reclamation.