

NEPA and the Dynamics of Public Participation in the Environmental Review Process

An Analysis of the NorthMet (PolyMet) Mining
Project near Hoyt Lakes Minnesota

By Amber Neumann

Technocracy vs. Participation

- “One of the penalties for refusing to participate in politics is that you end up being governed by your inferiors.” Plato.
- “This is a policy issue and not something for citizens to decide.” Rep. Tom Ruckavina, DFL-Virginia, in letter contesting review of Minnesota laws regarding Sulfide mining.

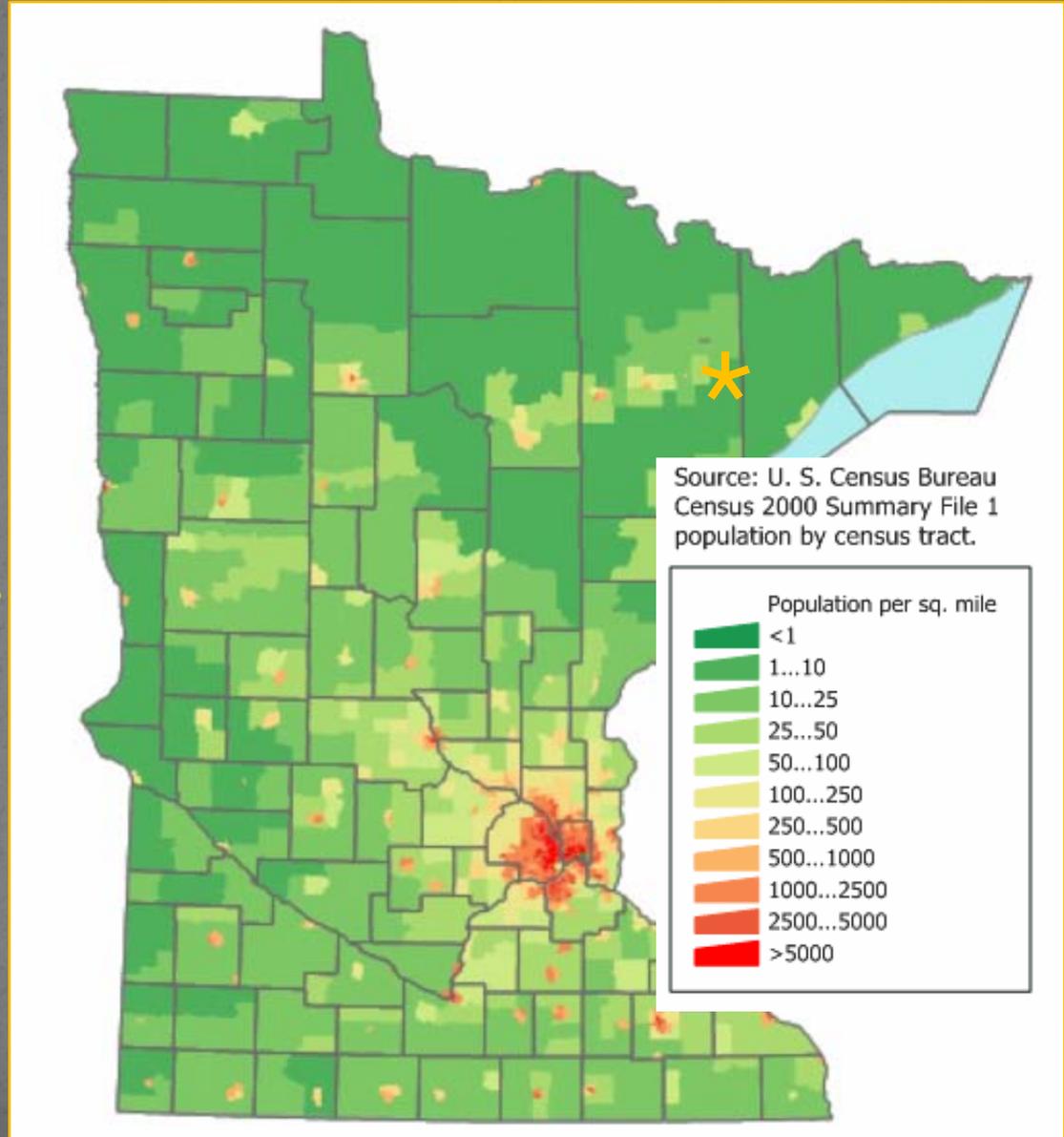
The National Environmental Policy Act (1969)

- Law that gives the public an opportunity to participate in environmental policy making.
- Purpose is to anticipate environmental harm, so that harm can be eliminated or at least mitigated prior to destroying public resources.
- Primary tool is lengthy document required for major projects, called the Environmental Impact Statement (EIS).
- Includes public hearings and comment periods, called the scoping process.

Excerpt from Minnesota Environmental Policy Act:

Minnesota Statute 116D.04, Environmental Impact Statements, Subd. 6.

Prohibitions: "No state action significantly affecting the quality of the environment shall be allowed,...has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state,...Economic considerations alone shall not justify such conduct."

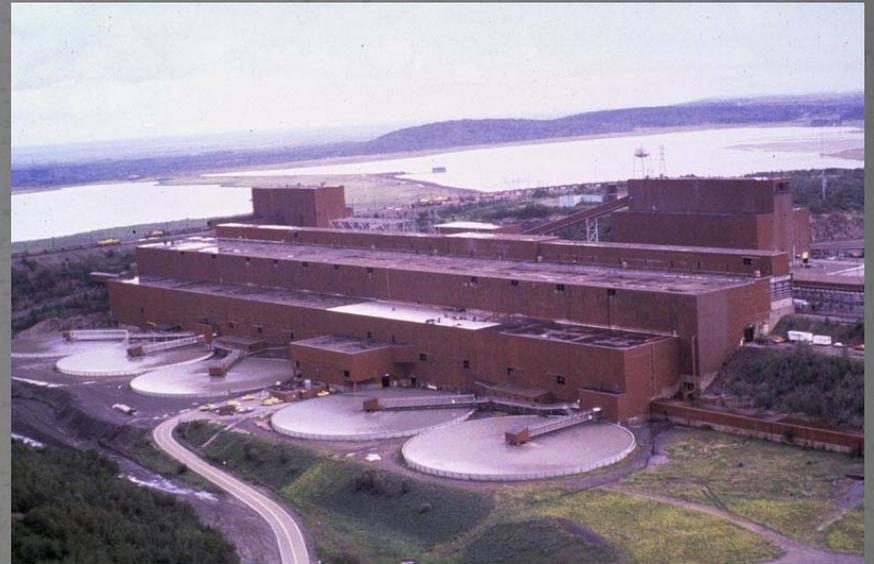


NorthMet (PolyMet)

- Controversial potential Copper, Nickel, and precious metals mine located in Northeastern Minnesota.
- Near: Iron Range, Superior National Forest and Boundary Waters Canoe Area.
- Began environmental review process in 2003.
- First draft EIS was released for public review in 2005.
- Currently in the final stages of its' environmental scoping process.
- Has already invested over \$50 million on project.

What is the Controversy?

- Large investment in economically depressed area.
- Possible source of major tax revenue.
- Sulfide mining may cause catastrophic environmental harm.
- Precedent.





1 mile

Hoyt Lakes Hoyt Lakes, MN

© 2009 Europa Technologies
Imago © 2009 DigitalGlobe

© 2009 Tele Atlas
elev. 455 m

Jun 2003

© 2008 Google™

Eye alt 13.77 km



1 mile

CAMP

Google

© 2009 Tele Atlas
elev. 487 m

Jun 2003

Eye alt 6.92 km

47°36'23.77" N 92°07'51.09" W

Previous Studies

- The National Environmental Policy Act: A Study of Its Effectiveness After Twenty-Five Years; Council on Environmental Quality. (1997).
- Characterizing Environmental Impact Statements for Road Projects in North Carolina, USA. Carrasco, L. E. (2006).
- Federal Environmental Impact Statements: Overly Inflated Needs Result in Needless Environmental Harm; Steinhoff, G. (2006).
- Citizen Participation and the NIMBY Syndrome: Public Response to Radioactive Waste Disposal; Kraft & Clary (1991)
- Controlling Technocracy; McAvoy (1999)

Hypothesis

- That comments collected from agency “experts” during the scoping phase of the National Environmental Policy Act (NEPA) process would be disproportionately represented as changes in subsequent drafts of NorthMet’s Environmental Impact Statement (EIS).

Methods

- Tabular analysis of data collected from the Minnesota DNR publication: Response to Public Scoping Projects PolyMet Mining Inc.; NorthMet Project. 2005
- Data from draft EIS statement was itemized based upon: issue category, comment, identity of testifier(s), number of testifiers and whether or not comment manifested future changes to the EIS.
- All data was entered into statistical software SPSS to simplify analysis.

Independent Variables

- Who participated?

There were 132 different issues testified on by 29 participants.

Participants were categorized based upon whether he/she was part of an agency, an interest group or was a non-affiliated individual.

- How many participants commented on a particular issue?

93 Issues had single testifiers.

18 Issues had 2 testifiers.

21 Issues had 3 or more testifiers.

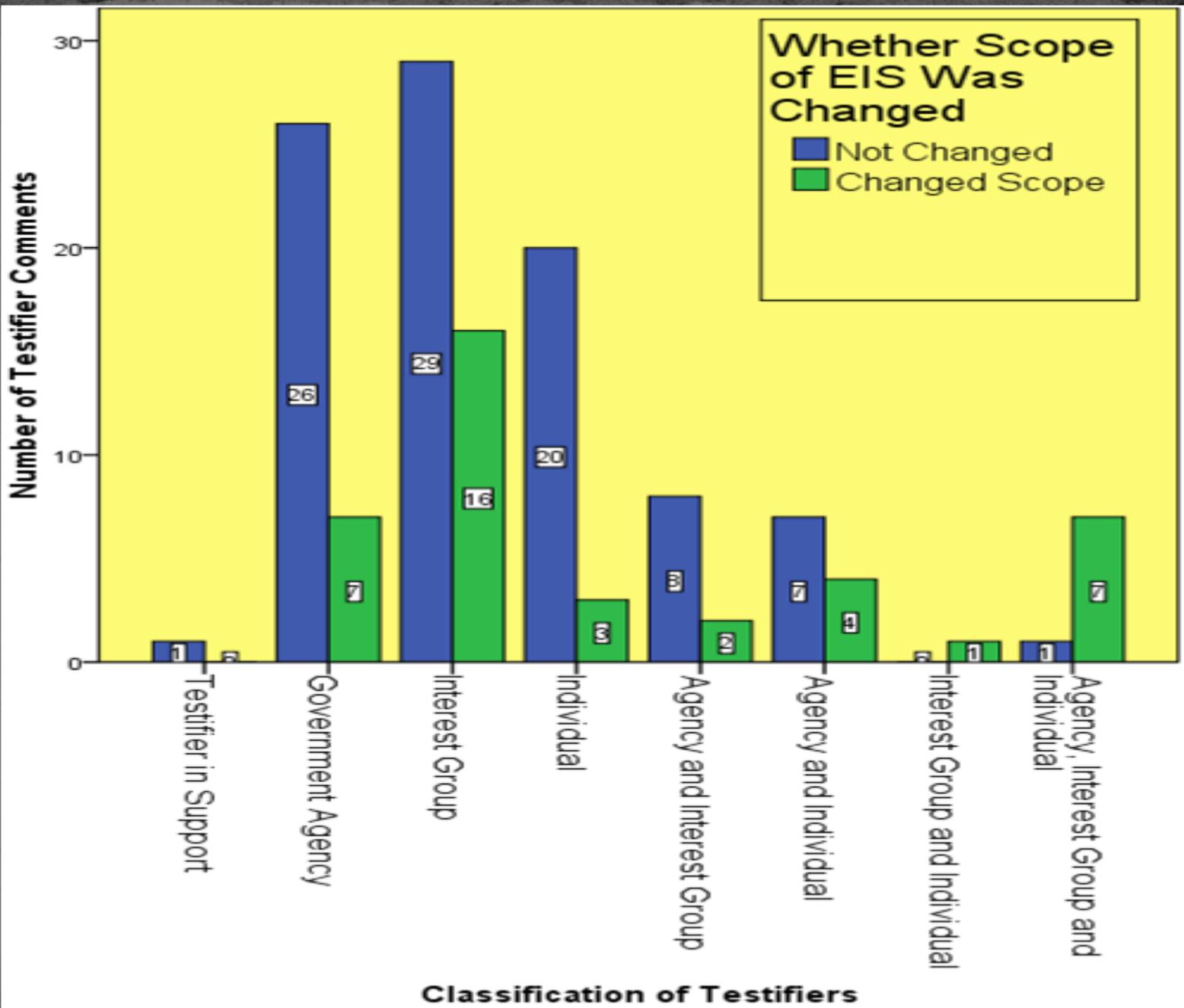
- What issue was commented on?

Dependent Variable

- Whether or not there was a change in the scope of the review.
- Of the 132 issues testified on, 40 of these resulted in changes to the scope of the environmental review.

Results of cross-tabulation analyzing relationship between Who testified and Whether Scope Changed.

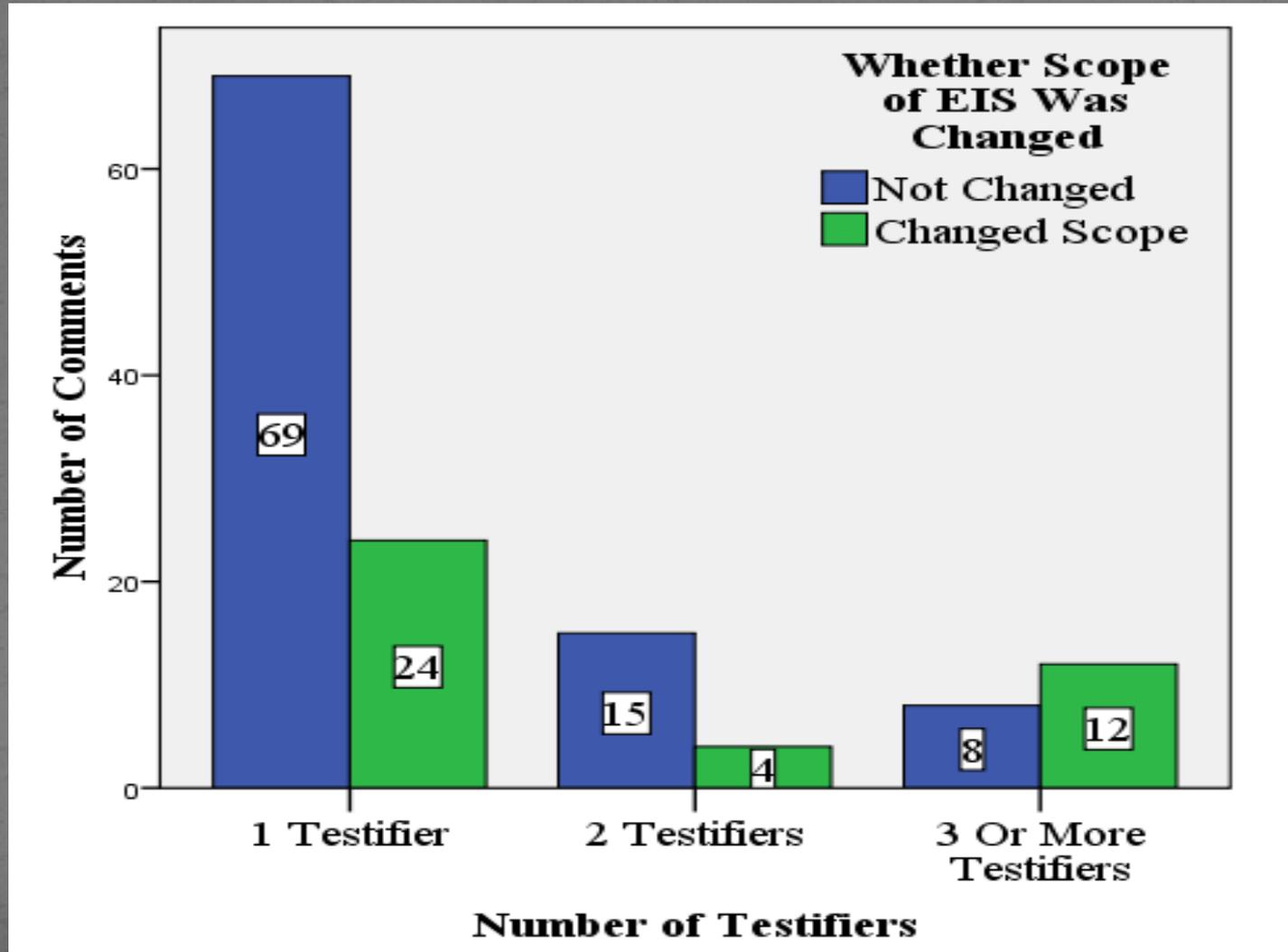
Whether Scope of EIS Changed Cross Tabulated with Type of Testifier.		Government Agency	Interest Group	Individual	Agency and Interest Group	Agency and Individual	Interest Group and Individual	Agency, Interest Group and Individual	Total
Not Changed	Count	26	29	20	8	7	0	1	92
	% Un-Successful	78.8%	64.4%	87.0%	80.0%	63.6%	.0%	12.5%	69.7%
Changed Scope	Count	7	16	3	2	4	1	7	40
	% Successful	21.2%	35.6%	13.0%	20.0%	36.4%	100.0%	87.5%	30.3%
Total	Count	33	45	23	10	11	1	8	132



Results of cross-tabulation analyzing relationship between Number of Testifiers and Whether Scope Changed.

Whether Scope of EIS Was Changed		Number of Testifiers			
		1 Testifier	2 Testifiers	3 Or More Testifiers	Total
Not Changed	Count	69	15	8	92
	% Un-Successful	74.2%	78.9%	40.0%	69.7%
Changed Scope	Count	24	4	12	40
	% Successful	25.8%	21.1%	60.0%	30.3%
Total	Count	93	19	20	132

Bar Graph Results of Number of Testifiers and Whether Scope Changed:

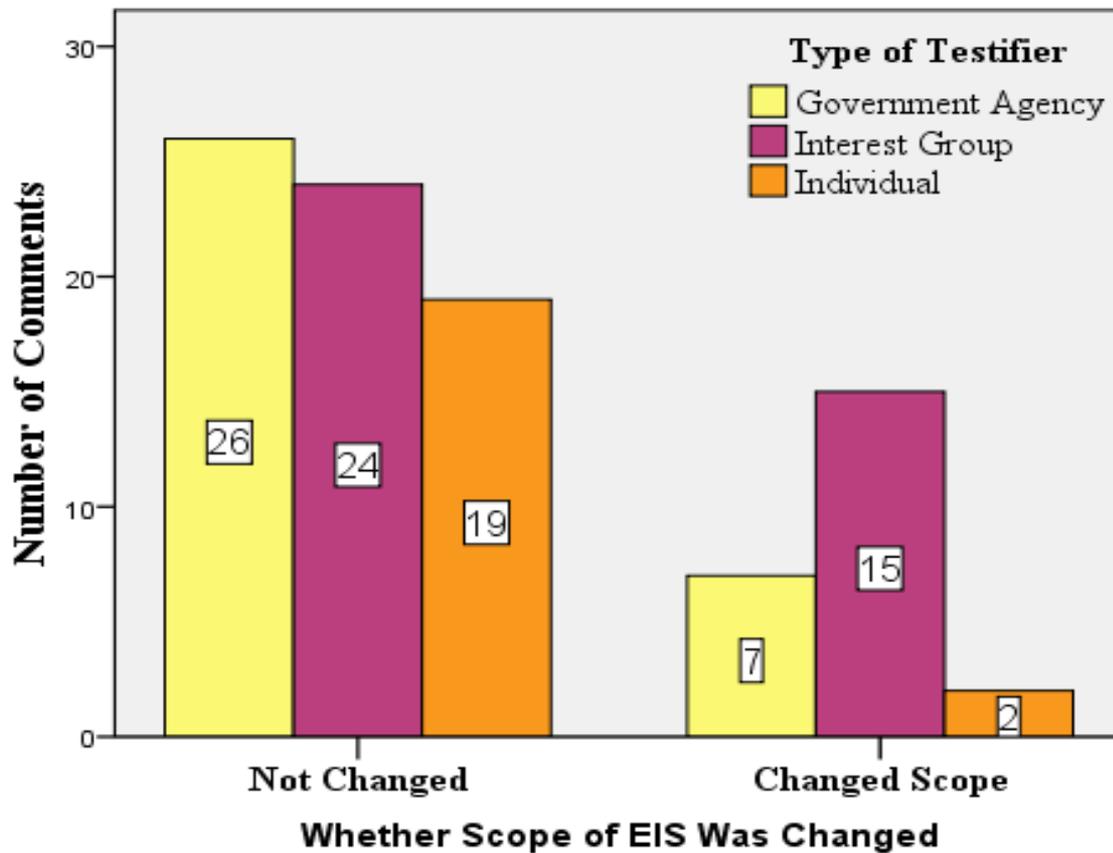


Results of cross-tabulation analyzing relationship between Who testified and Whether Scope Changed; Single Testifier:

Whether Scope of EIS Was Changed and Type of Single Testifier Cross- tabulation					
Whether Scope of EIS Was Changed		Type of Testifier			
		Government Agency	Interest Group	Individual	Total
Not Changed	Count	26	24	19	69
	% Un-Successful	78.8%	61.5%	90.5%	74.2%
Changed Scope	Count	7	15	2	24
	% Successful	21.2%	38.5%	9.5%	25.8%
Total	Count	33	39	21	93

Bar Graph Results of Single Testifier Comments:

Single Testifier Comments and whether Scope of EIS Changed



Implications:

- Hypothesis is wrong and there is not a bias towards agency contributions.
- Interest Groups and Comments by 3 or more Testifiers were most influential.
- This study implies that environmental review is improved by lay person oversight.
- NEPA is effective at improving policy through citizen participation.
- Results could improve strategy for future grass roots efforts to improve environmental policy.

Further Research

- Wait and see whether or not NorthMet gets permitted.
- Closely watch the “Safe Mines to Protect Our Waters” legislation recently introduced by Rep. Alice Housman, DFL- St. Paul, and Sen. Jim Carlson, DFL-Eagan. (S.F. 845 and H.F 916)
- Run analysis on multiple projects in order to see if the results are similar.