

Regulating Metal Mining in Wisconsin: Perspective on a Complex Resource Policy Issue

2012 Wisconsin Lakes
Partnership Convention

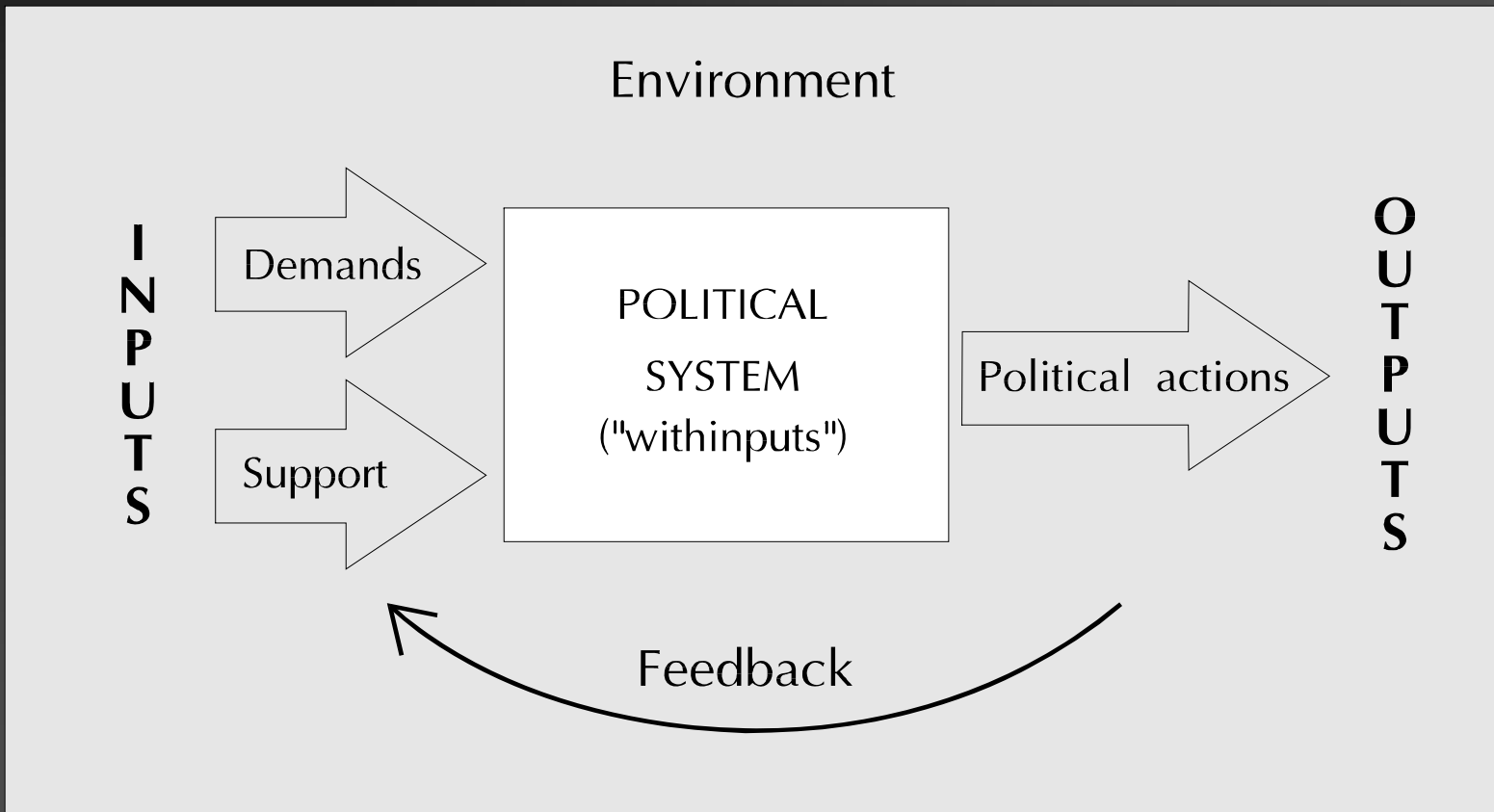
Thomas J. Evans
Wisconsin Geological and
Natural History Survey



Today's presentation ...

- Complex resource policy
 - Characteristics of metal mining operations
 - Regulatory process for metal mining
 - What of the future
for this issue in Wisconsin?
-

Policy is a product of a political system

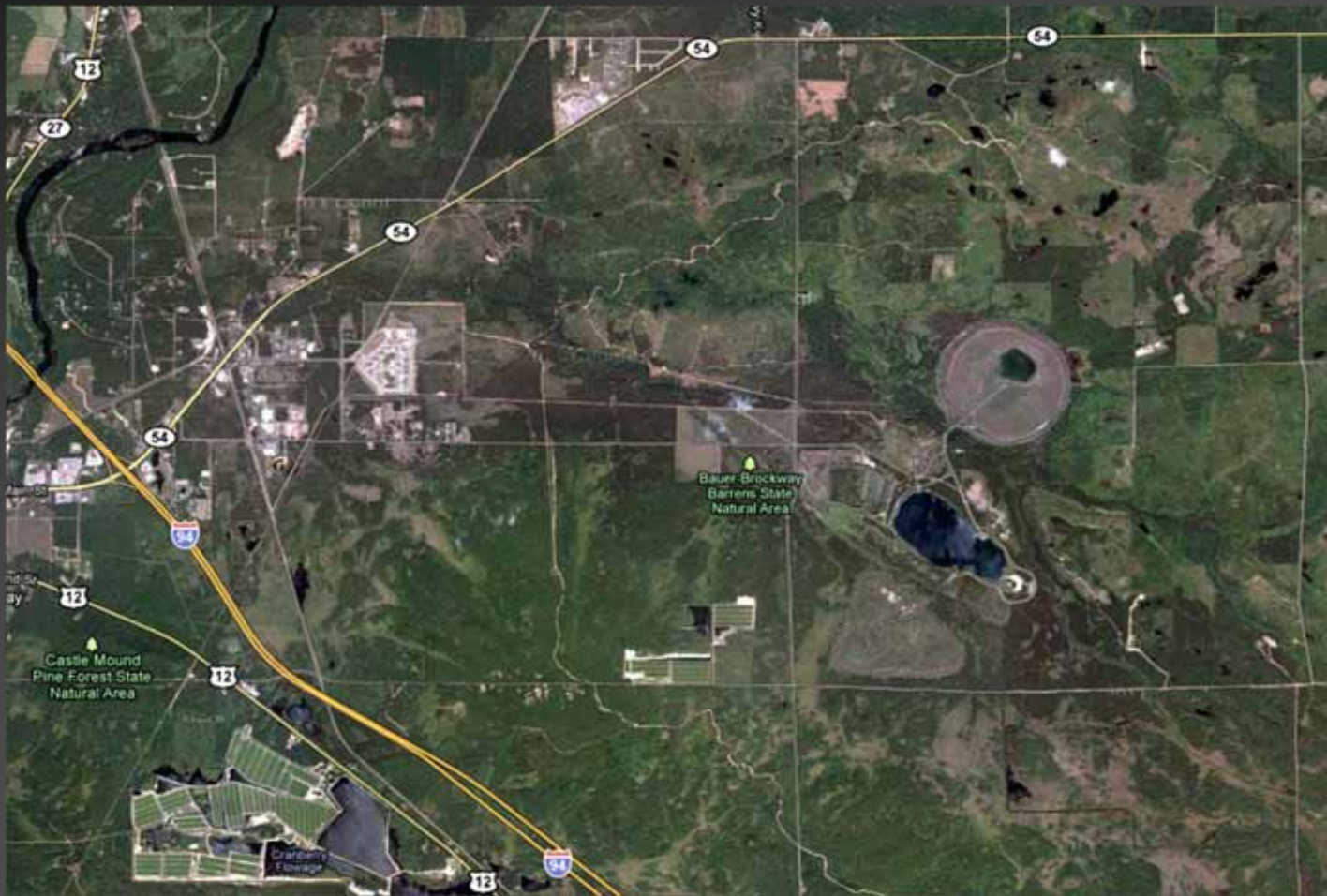


David Easton's writings on political systems

Characteristics of complex resource policy issues

- Conflict between a “need” or a “concern” involving multiple, divergent interests
 - Sense of “powerlessness” for some participating interests
 - Uncertain benefits and uncertain costs
 - Decision-makers appear remote from the specific local issues
 - Decision-making process unclear
-

Characteristics of metal-mining operations: JCIC overview ...



Jackson County Iron Company: '68-'83

Wetlands

Pelletizing plant

Water settling
ponds

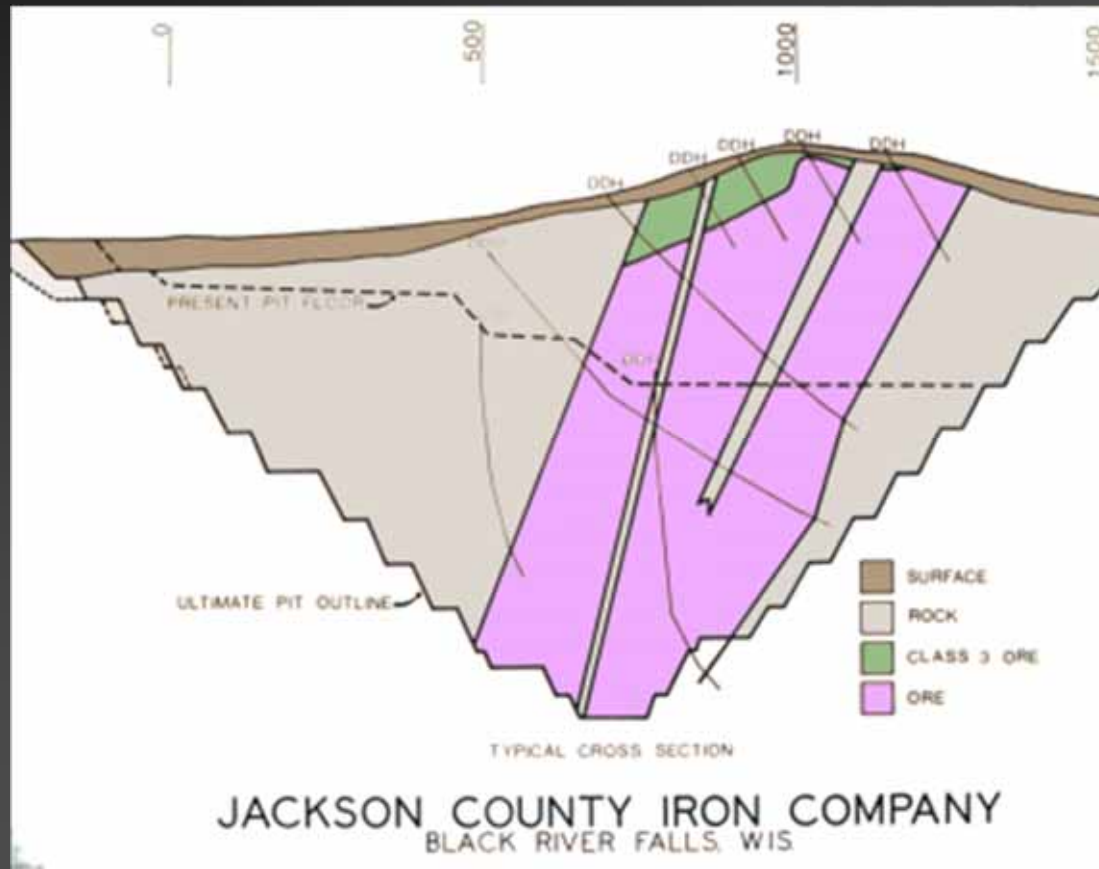


Tailings basin 320 ac.

Open pit
180 ac.

Waste rock
dump #2
155 ac.

Fixed location; fixed geometry



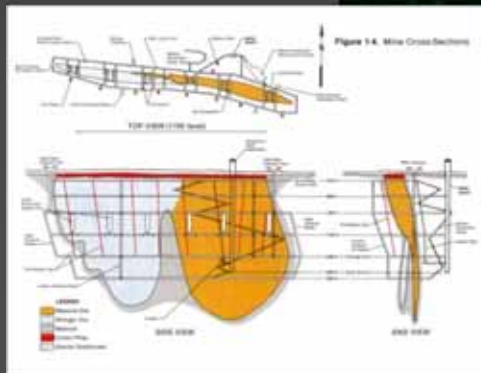
Companies explore ...

- Odds for a discovery are low ... Perhaps 1 in a 1000 for general targets; About 1 in 100 for drilled targets; and about 1 in 10 that are drilled are economic.
- Public information and private information



Companies mine ...

- Surface mines
- Underground mines



Ore is processed (beneficiated) ...



Waste is managed ...

Temporary ore storage >



Tailings



Temporary
Class III "ore"

Permanent
waste rock
storage

Product is shipped...



Processing plant to rail loadout

Rail loadout for final shipment



Mining site is reclaimed ...

- Approximate original contour
- Substantially beneficial condition

GOAL: functional, environmentally stable land use



Mining operations have socio-economic dimensions ...

- Jobs
 - Generally well paid
 - Training usually necessary
 - Commonly a mix of external (out of area) and in-area workforces
 - Population growth and costs
 - Housing
 - Schools
 - Social Services
 - Fire/Police
- Planning for economic cycles and ultimate closure is key for local communities.
-

How the current Wisconsin metal-mining policy works

- Philosophy,
leads to developing ...
 - Policy,
which creates a ...
 - Process for making decisions.
 - The consensus approach of the 1970s
was the principal source of policy outputs.
-

The Philosophy behind the State's Metal Mining Policy

- Responsible mining is acceptable.
 - Reclamation – is the near-term – is the goal.
 - Environmental impacts are inevitable, so they are to regulated, minimized, and mitigated.
 - Variances and exemptions are allowed under certain conditions as minerals are fixed in location.
-

Wisconsin's metal mine policy elements (statutes and rules)

- Ch. 293 Metallic Mining
 - NR 130 ... Exploration; NR 131 ... Prospecting
 - NR 132 ... Mining; NR 182 ... Wastes
 - Ch. 70.37–70.3965 ... Net Proceeds Tax
 - Tax 13 ... Investment and Local Impact Fund
-

Other Specific Features

- **Notice** is required
 - **State costs** must be reimbursed for permitting and environmental assessment
 - **Special taxes** are assessed w/ specified distribution to state and local governments
 - **Long-term financial guarantees** are required “up front”: bonds and fees, irrevocable trust agreement
 - **Special liability** applies to metal mining
-

Environmental protection ...

- **Environmental impact statement** required;
state and applicant do parallel data collection and environmental monitoring
 - **Special rules** apply to metal mining operations:
locational requirements, wetlands evaluation and protection, waste disposal requirements, others
 - **Multiple permits and approvals**
approximately a dozen different state permits, plans, and approvals necessary (in addition to federal and local approvals)
 - **Master Hearing**
testimony under oath, cross-examination, permit evaluation, and independent judgment of adequacy of permit submittals
-

Public input on the decisions ...



FORMAL OPPORTUNITIES:

1. Notice of intent hearing
2. Draft environmental impact statement hearing
3. Master hearing

INFORMAL OPPORTUNITIES:

1. Local leaders, citizen groups, elected representatives
2. Local Mining Impact Committee meetings
3. Applicant, DNR, UW-Extension



Additional Criteria ...

Environmental Track Record

- + no **forfeiture** of mine-reclamation bond in last 10 yrs
- + “no more than one” **felony conviction** in last 10 yrs
- + no declaration of **bankruptcy** or corporate **dissolution** resulting in a failure to reclaim a mining site

Moratorium : permit condition

- Documented examples of US or Canadian sulfide ore bodies
- +10-years **operating** without pollution of groundwater or surface waters related to tailings site or mine site
 - +10-years **closed** without “significant environmental pollution” as defined in statute
 - + **both** must be satisfied; can use more than one site

Economic issues and mine permitting / 1

- Socio-economic assessment necessary to determine net economic benefit
 - NOI payments to support early local involvement
 - **Optional development of a Local Agreement**
mining company and local governments were the mining is proposed and which have zoning or land-use controls
-

Economic issues and mine permitting / 2

- Applicant pays for EIS costs and permit-review costs
- Net Proceeds Occupation Tax
 - graduated income tax based on net proceeds (~ profits)

One recent example: Flambeau Mine payments

- Review/permit costs (87-93); income taxes (93-97)
 - > EIS fees \$1.625 million; Permit fees \$222,380
 - > Net Proceeds tax: \$14.049 million (state) + \$2.652 (local)



Master Hearing / 1

A contested-case hearing – under oath and subject to cross-examination – leading to independent decisions on permit applications and necessary plans and approvals

Findings of Fact, Conclusions of Law, and establishes conditions on permits issued

Master Hearing / 2

Permit must be **granted** if:

proposed operation complies w/ environmental regulations

Mining Plan and Reclamation Plan can result in reclamation

mine will not endanger public health, safety, and welfare

mine will result in net economic benefit

mine will conform with all applicable zoning and land-use ordinances

Master Hearing / 3

Permit must be **denied** if:

proposed mine site is unsuitable for a surface mine

permit applicant is currently in violation of applicable mining laws and rules

applicant cannot comply with environmental track record requirements

applicant cannot meet the requirements of the moratorium law

Role of a Master Hearing process in a “CRP” issue like mining

- Turns emotions into informed perspectives
 - Turns untested statements into verifiable facts
 - Turns the intentions of both operators and regulators into measurable, accountable behaviors
 - Turns accepted facts, legal process, and legal decisions into legal standards that are, in turn, quantifiable, subject to monitoring, and enforceable
-

The roles of politics, science, and the legal process in “CPR” issues

- Politics provides the legal framework (the policy) for making complex, inherently controversial, decisions
 - Science and engineering provides a factual basis for making complex, inherently controversial, decisions
 - The Master Hearing is a mechanism to make legal judgments, subject to judicial review, for resolving issues about complex, inherently controversial, decisions
-

The Gtac proposal ...

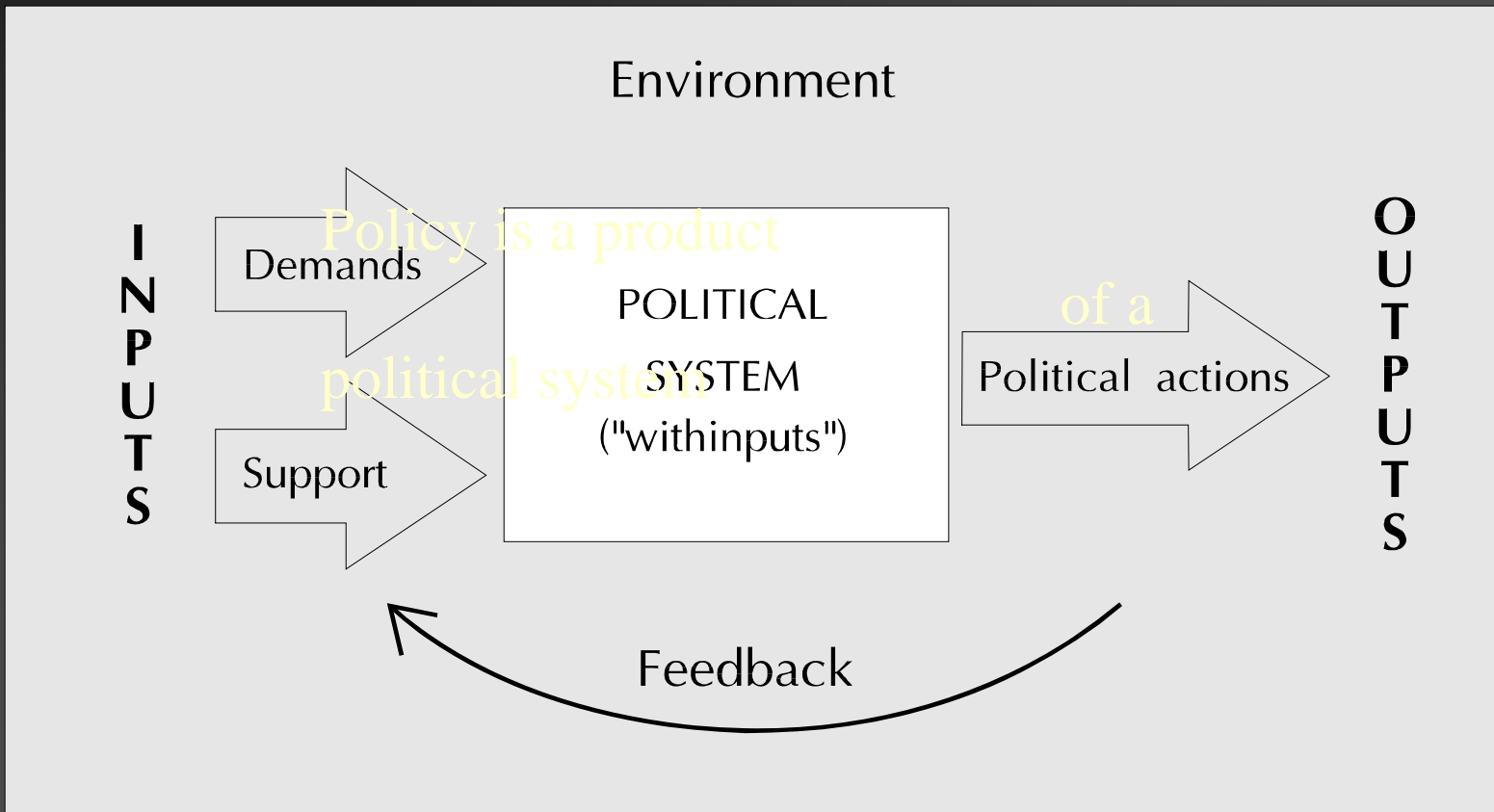


- <http://www.jsonline.com/news/wisconsin/108584724.html>; 107 posts total;
>70 “unique” in first 24 hours

Gtac's mining policy initiatives / 2011-2012

- Distinguish iron mining from other metal mining; categorical variances
- Create a shorter timeline to a more certain decision; no “Crandon repeat”
- Minimize the local presence in decision-making (committees OK, but no NOI \$\$\$)
- Eliminate master hearing; force DNR to make the final decisions on permits

Policy is a product of a political system



David Easton's writings on political systems

A system view of political process

- Environment
 - Inputs
 - Political System and “withinputs”
 - Political actions ... LRB 3065/3 -- AB426, SB488, SB542
 - Outputs
 - Feedback
-

Proposed policy “outputs”

- LRB 3065/ver.3 (summer and fall '11)
 - AB 426 (1/26/12)

 - SB 488 (2/16/12)
 - SB 542 (3/5/12)
-

What of the future?

- Wisconsin's metallic mineral endowment is significant
 - Demand for metallic minerals is large
 - Desire to create good jobs remains
 - Desire to "fix" the permitting process remains ... Jauch, Schultz, and Walker?
-