

CITIZENS AND SCIENCE ADVICE

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WHY SHOULD CITIZENS BE INVOLVED IN SCIENCE ADVICE?

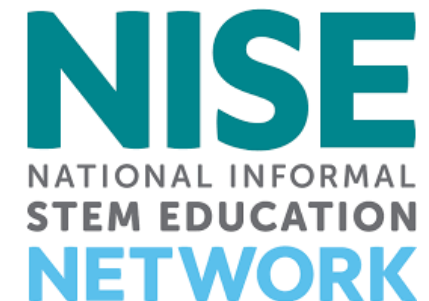
Standard democratic mechanisms inadequate because:

1. Citizens often don't have informed preferences about topics.
1. Science advice requires value judgments.
For both the framing of advice (what is relevant to consider, what is important) and for deciding when the evidence is sufficient for a claim.
1. Citizens can have knowledge relevant for advice.



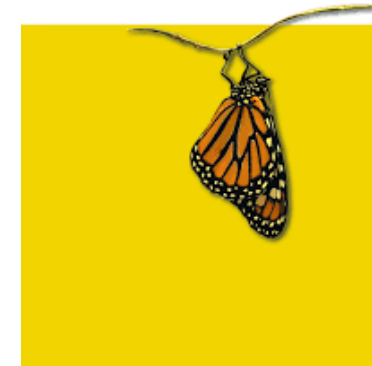
GENERATING INFORMED CITIZEN PREFERENCES

- Representative Sample Techniques
 - Consensus conference (Danish model)
 - Deliberative polls (Fishkin's model)
 - World Wide Views
- Informal Education Techniques
 - Science museum public engagement
 - Material deliberation (ASU)
 - Good science journalism
- What is not sufficient:
 - Formal (K-12) education
 - Surveys (phone, internet)
 - Town hall meetings (in person or online)



SAMPLES VS. STAKEHOLDERS

- Stakeholder Characteristics
 - Already informed citizens
 - Represent civil society interests
 - Already have a position
- Valuable Stakeholder Processes
 - Participatory research (or collaborative analysis)
 - Standing advisory bodies
 - Ad hoc stakeholder input



CITIZEN VALUES AND SCIENCE ADVICE

Key value judgments:

1. What is relevant or salient?
 - What do citizens care about?
 - What possible causal relationships need to be addressed?
 2. When is the evidence strong enough?
 - How much uncertainty is tolerable?
 - Which risks are more worrisome?
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- We can't have value-free advice, but we can still have robust, reliable advice.



CITIZEN INVOLVEMENT MECHANISMS

- Formal Science Advice or Regulatory Advice:
 - Advisory body (stakeholders)
 - Stakeholder consultations
 - Informed representative samples of citizens for key value judgments
- Informal Science Advice?
 - Accountability mechanisms through elected officials directly
 - Recommend to advisee that citizen engagement be pursued
- Crisis Science Advice?
 - Need to know citizen values before crisis arises

- Also, participatory research & analysis can generate evidence and advice for contested issues that will be trusted for policy-making.

