

Guiding uncomfortable decisions while defining Public Health Ethics

The divisive debate over nuclear
waste storage at Yucca Mountain



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The Greatest Justice

“The greatest justice will be served by saving the environment out of fairness to those yet to be born, while the greatest mercy will be to provide for those who are suffering today”

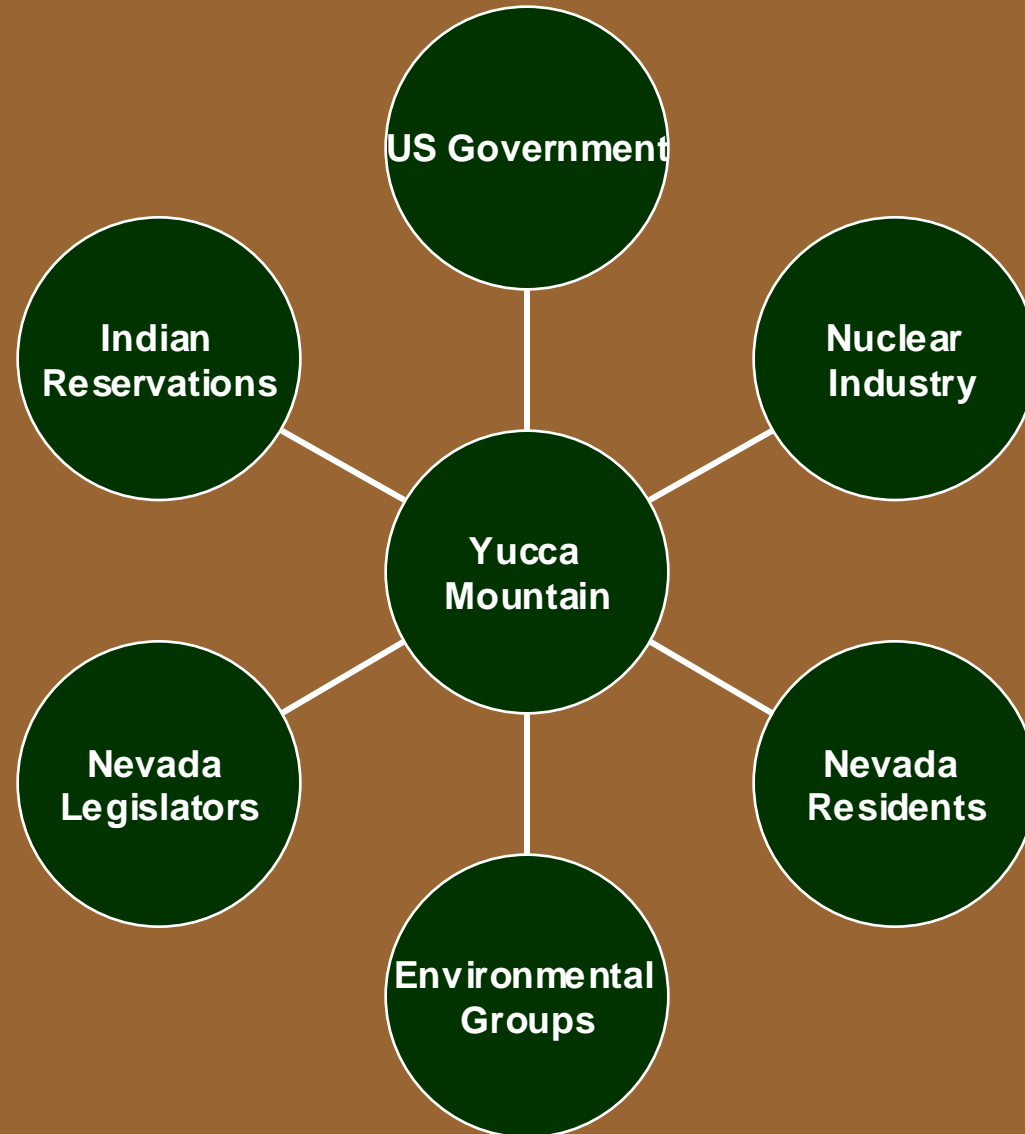
Rushworth Kidder, 1995

How Good People Make Tough Choices: Resolving the Dilemmas of Ethical Living

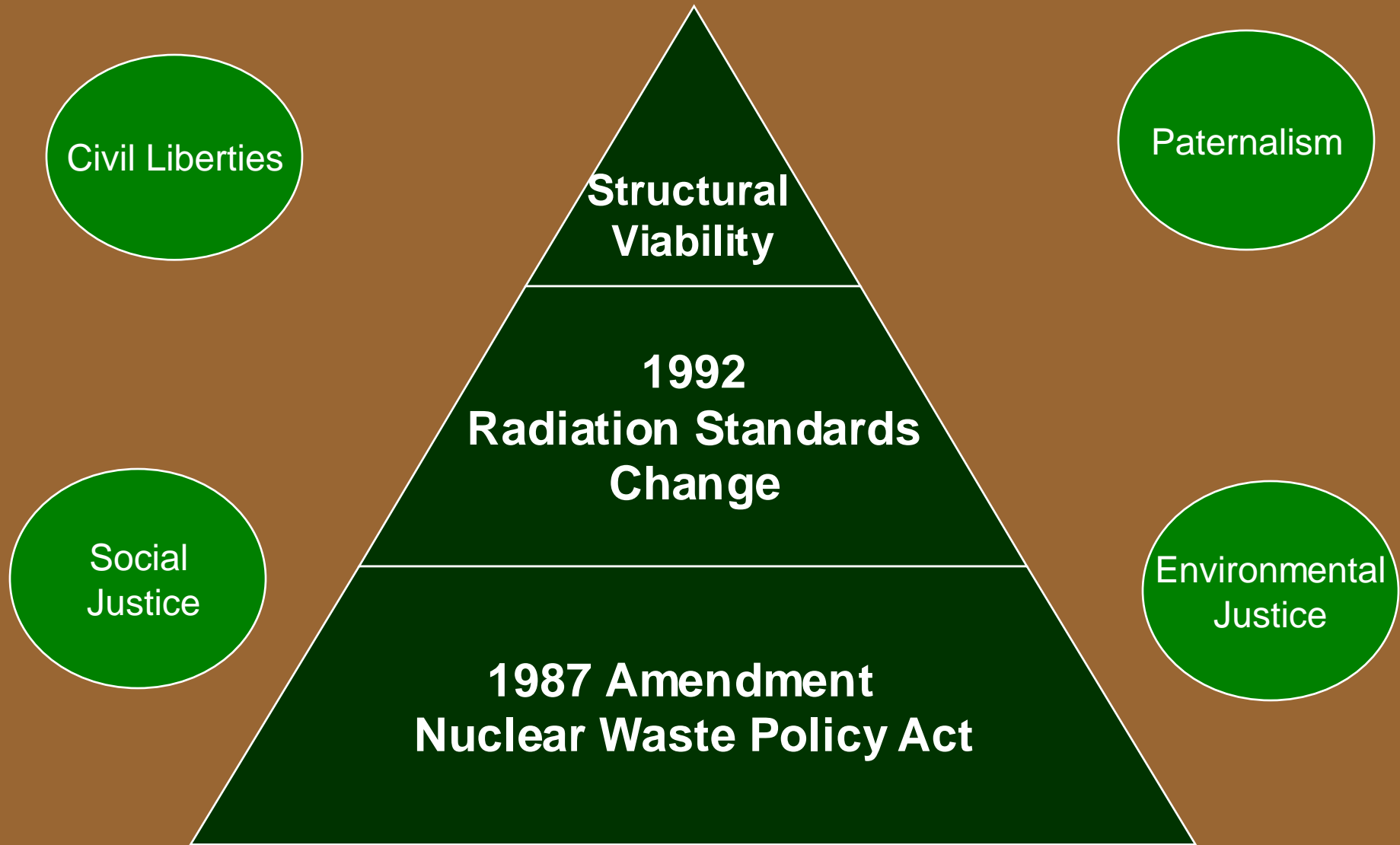
Yucca Mountain



Conflicting Histories – Multiple Stakeholders



Yucca Mountain Ethical Violations



Define Public Health Ethics

- **Public health ethics a recent focus in academic literature**
- **Autonomy focused approach of bioethics does not address population focus of public health**
- **Not necessarily dependent upon legal interventions**
 - **Most of the time PH work does not require legal interventions**
- **Competing visions of PH ethics**
 - **Protect the common good**
 - **social justice**

Defining Public Health Ethics

Principles

Values

Social Justice

Communitarian
Ethics

Obligations

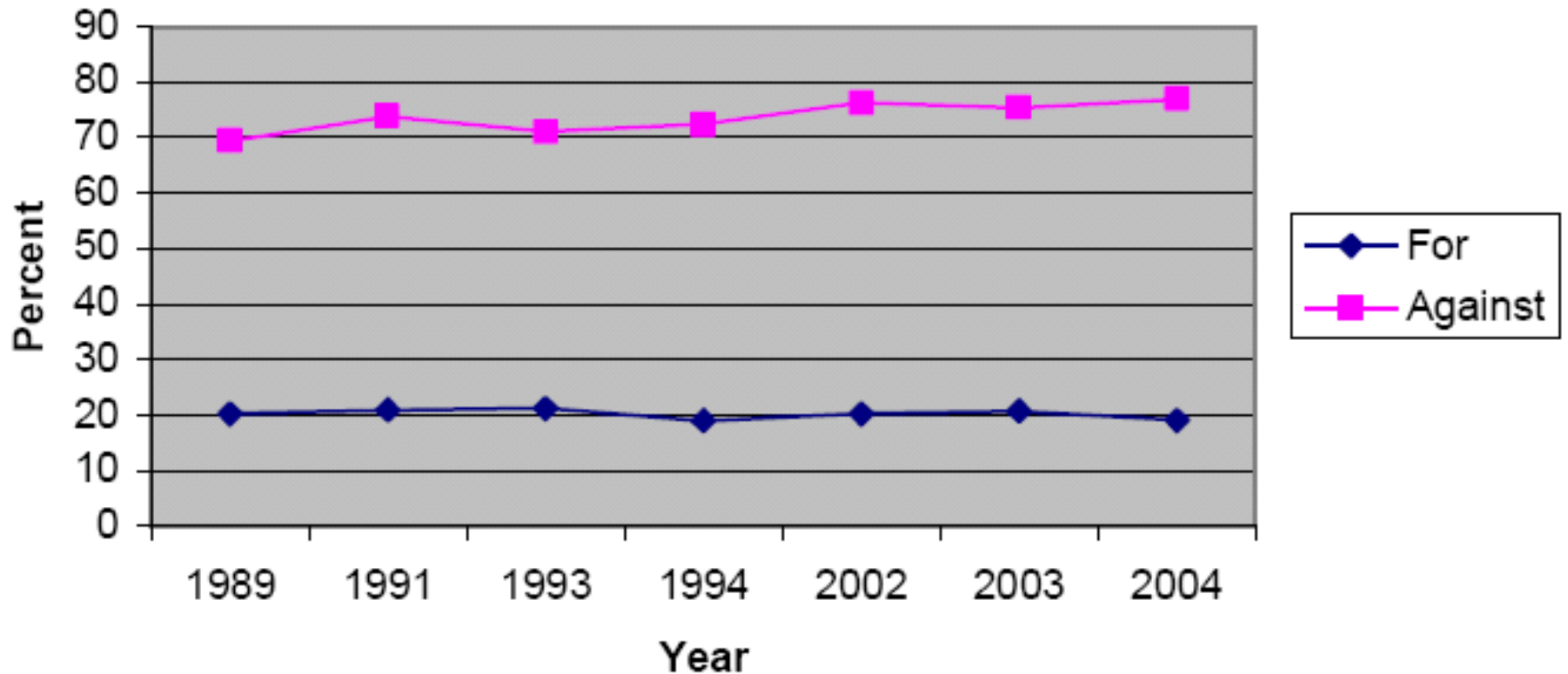
Human Rights

Rules

Yucca Mountain: A Serious Challenge to Public Health Ethics

- **Indefinite Time-Horizon**
 - **Climate change**
 - **Population shifts**
 - **Technological change**
 - **Unpredictable Natural disasters**
- **Long, bitter dispute over Yucca has created entrenched adversarial stakeholders**
- **Pushes the definition of Population Health to the limit**
- **Problematic relationship between science and decision-making**
- **Who is the “public” in public health ethics in this case?**

Support - Oppose Yucca Mountain



NNWPO survey from 2004 – State of Nevada Yucca Mountain Survey Summary Report –
October, 2004

Yucca Mountain Ethical Considerations

- **What are the public health goals of the proposed program?**
 - To store HLNW
- **How effective is the program in achieving its stated goals?**
 - Not achieved goals due to ongoing debate
- **What are the known or potential burdens of the program?**
 - Radiation exposure
 - Sacrificed present and future population health
 - Economic burden to tourism in Nevada

Yucca Mountain Ethical Considerations

- **Can burdens be minimized – alternative approaches?**
 - Several plans that have been suggested
- **Is the program implemented fairly?**
 - Quality of the scientific data about potential burden to population and environmental health
- **How can the benefits and burdens of a program be fairly balanced?**
 - Need to safeguard the present and future from radiation exposure

“The greater the burden posed by a program – for example, in terms of cost, constraints on liberty, or targeting particular already vulnerable...populations – the stronger the evidence must be to demonstrate that the program will achieve its goals.”

Kass, N.E. (2001).

An Ethics Framework for Public Health.

The Future

- **Keep the waste where it is under Federal ownership (Reid plan)**
- **Start the process over (Host of stakeholders)**
- **Use Yucca as a research center to investigate challenges of storage (IEER)**
- **Push Ahead with Licensing (Bush Administration)**
- **International Lessons**
- **Health Effects Institute Model**
- **National conversation on nuclear power and its risks**
- **Alternative energy investment**

Balancing Public Health Ethics

- **There are no absolutes in the debate over spent nuclear waste**
- **Approach decisions with humility in order to protect future generations**
- **The magnitude of risk posed by storage of nuclear waste and potential radiation exposure must be balanced between what is known about spent nuclear waste and what the community deems acceptable.**

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