STS.011

Science and Public Policy
Overview

• Introduction & CTBT example
• Congress
• Regulatory agencies
• Science advisory panels
• NGOs
• Media
• Courts
Comprehensive Test Ban Treaty

• Verifiable ban? Reliable arsenal?

• Players:
  – Weapons scientists
  – DoD, DOE, OSTP
  – State Department
  – NGOs
  – JASONs, NAS
  – Other countries
  – Congress
Congress

- Little knowledge of science
- “Good” outcomes:
  - Nuclear Waste Policy Act 1982
  - Clean Air Act 1970
  - Clean Water Act 1977
  - National Environmental Policy Act 1970
- “Bad” outcomes:
  - NWPA amendment
  - MTBE
  - CAFÉ standards
Regulatory Agencies

• FDA, EPA, NRC, NTSB etc
• “Good” decisions
  – Thalidomide
• “Bad” decisions:
  – Prozac for teenagers
  – Direct to consumer advertising of drugs
Science advisory panels

- JASONs, NAS, Bioethics advisory panel
- Have looked at:
  - Global warming
  - Nuclear waste disposition
  - CTBT
  - Laser fusion research
  - Diet (Steve Hilgartner, Science on Stage)
NGOs

- Union of Concerned Scientists
  www.ucsusa.org
- Federation of American Scientists
  (www.fas.org)
- Natural Resources Defense Council
  www.nrdc.org
- Council on Responsible Genetics
  (www.gene-watch.org)
NGO projects

• NRDC:
  – Science Based Stockpile Stewardship
  – Nuclear targeting ([www.nrdc.org/nuclear.default.asp](http://www.nrdc.org/nuclear.default.asp))

• UCS:
  – Ballistic Missile Defense
  – Scientists and the election

• FAS:
  Secrecy: mirror site for Los Alamos
  Congressional Research Service reports
Media

• Power to cover or ignore
• Leaks:
  – Charles Bowman & accelerator transmutation
  – Roy Woodruff and SDI
  – Cold fusion
• Soundbiting
• Balance
• Limits to expertise
courts

• DNA & fingerprint evidence
• Woburn cancer cluster
• National Ignition Facility review
• Environmental impact statements

• Daubert 1993 Supreme Court decision