

**Breaking the Disaster Cycle:  
Future Directions in Natural Hazard Mitigation**

*Ethics and Hazard Mitigation;  
Applying Ethical Criteria*

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# *Ethics and Hazard Mitigation; Applying Ethical Criteria*

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## ➤ Objectives:

- 14.1 Understand the issues involved in ethical hazard mitigation planning and action.
- 14.2 Identify the types of groups with ethical mitigation responsibilities.
- 14.3 Discuss the competing values that underlie mitigation programs and policies.

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## ➤ Objectives:

14.4 Discuss the ethical principles that apply in mitigation.

14.5 Describe the types of ethical issues that arise in conducting mitigation analyses.

14.6 Participate in an exercise to develop an ethical code of conduct for a local mitigation program.

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## ➤ **Objective 14.1**

- Understand the issues involved in ethical hazard mitigation planning and action:
  - Who is responsible for safety? Is it the government, the private sector, professionals, or individuals?
  - What values should be given priority? Should the emphasis be on public safety, property protection, environmental preservation, property rights, or some other value?
  - What is fair? How do we make equitable decisions about who benefits and who pays?
  - How do values influence analyses? What value assumptions underlie benefit-cost analysis or determination of risk probability?

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## ➤ **Objective 14.2**

- Identify the types of groups with ethical mitigation responsibilities:
  - Government officials
  - Professionals in the design and construction field
  - Builders and developers
  - Building owners and landlords
  - Home and property owners
  - Realtors
  - Politicians and interest groups
  - Businesses and other private sector organizations
  - Utility companies

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## ➤ Objective 14.3

- Discuss the competing values that underlie mitigation programs and policies:
  - public safety
  - property protection
  - environmental preservation
  - historic preservation
  - personal freedom
  - individual property rights

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## ➤ Objective 14.4

- Discuss the ethical principles that apply in mitigation:
  - Fairness:
    - ✓ Equitable processes
    - ✓ Equitable outcomes
  - Who should pay for mitigation?
  - Who is entitled to disaster assistance
  - How should mitigation burdens be shared?
  - Standards:
    - ✓ the *benefit* standard, under which those who benefit most should pay the most,
    - ✓ the *culpability* standard, under which those who create the hazardous circumstances should pay for mitigation

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## ➤ Objective 14.5

- Describe the types of ethical issues that arise in conducting mitigation analyses:
  - How to *quantify* non-market values in monetary terms for benefit cost analyses
    - ✓ Environmental values
    - ✓ Social values

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Quantifying the value of riverine areas like the Lower Patuxent River in Maryland is part of hazard mitigation planning. (Source: NOAA)

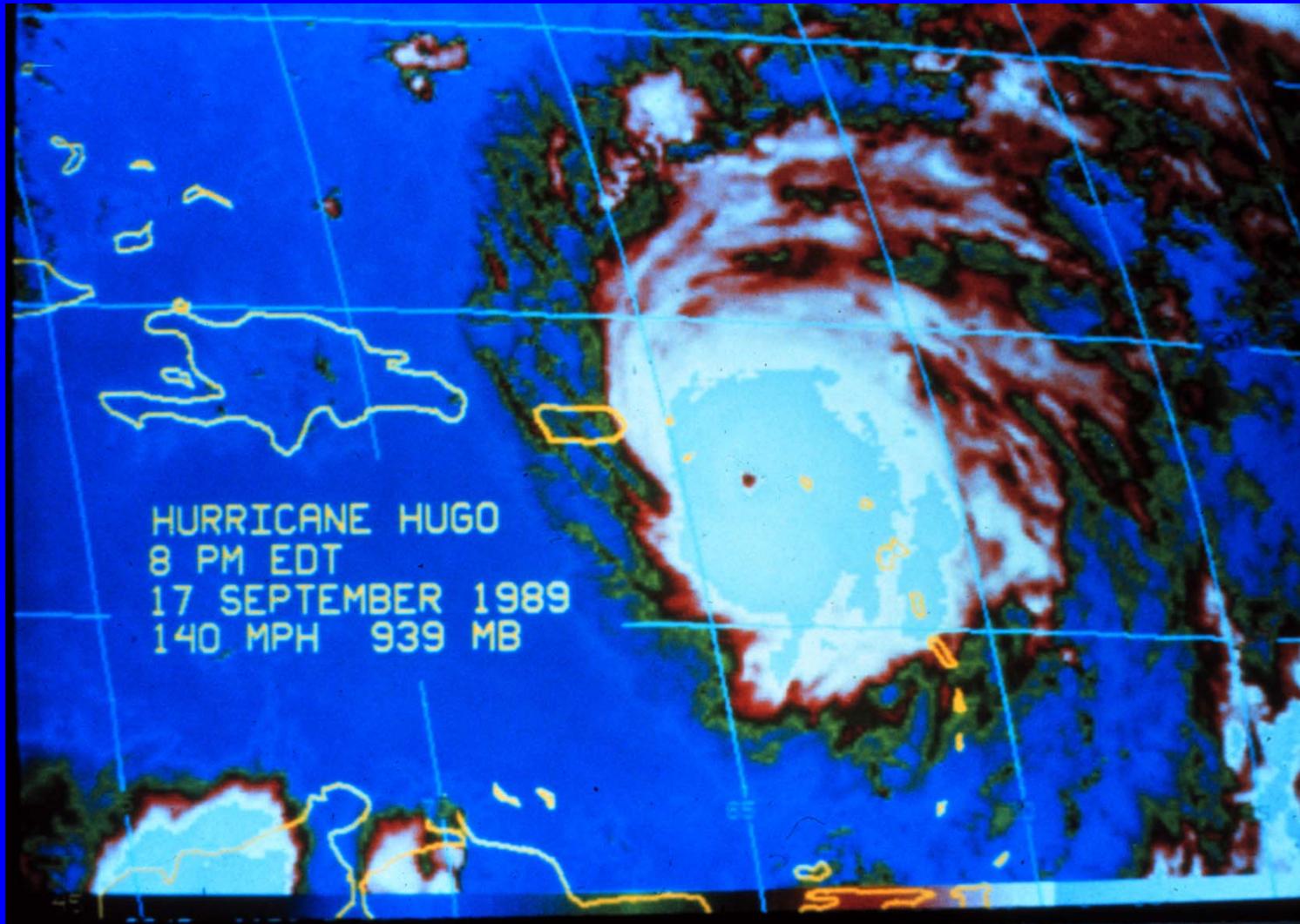
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## ➤ Objective 14.5

- Describe the types of ethical issues that arise in conducting mitigation analyses:
  - How to deal with scientific and technical *uncertainty* in hazard analyses:
    - ✓ Inaccurate hazard maps may create false sense of security
    - ✓ Imprecise hazard forecasts may generate unnecessary responses (e.g., evacuations)

## Storm track of Hurricane Hugo (Source: NOAA)



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## ➤ Objective 14.6

- Participate in an exercise to develop an ethical code of conduct for a local mitigation program.

- Key questions:

- ✓ What are the practical implications of your proposals? Who will monitor behaviors and decide whether they meet the ethical standards of the code? Will there be penalties for unethical behavior?
- ✓ What are the legal implications of your proposals? If you provide special benefits to lower income households, will these be subject to constitutional challenges on unequal treatment?
- ✓ Can you give an example of the application of your code in a specific circumstance, such a recovery from a flood, hurricane, or earthquake?

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## ➤ **Figure 14.6 Guidelines for Ethical Hazard Mitigation**

- Discuss ethical choices
- Consider full range of moral issues
- Involve those affected in mitigation decisions
- Give public needs priority over individual wants
- Be honest about risks
- Encourage individual, group, & governmental responsibility for safety and hazard reduction
- Apply mitigation rules & standards fairly & consistently
- Treat similarly situated individuals similarly
- Obey & enforce the law
- Demand professional accountability for public safety

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Survivors of Super Typhoon Pongsona in Guam. (Source: FEMA)

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## ➤ **Figure 14.6 Guidelines for Ethical Hazard Mitigation**

- Give protection of life priority over property protection
- Preserve & restore the natural environment
- Protect & preserve historic buildings
- Develop mitigation alternatives that satisfy multiple values
- Minimize negative side effects of mitigation
- Avoid burdening least advantaged
- Ensure equal access to mitigation benefits
- Consider interests of future generations
- Minimize negative effects on neighboring communities
- Provide benefits based on need, not citizenship

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Cupola House, Edenton, NC. (Source: North Carolina Department of Tourism.)

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## ➤ **Figure 14.6 Guidelines for Ethical Hazard Mitigation**

- Respect personal freedom & life choices
- Respect private property
- Encourage land & property owners to minimize hazards and protect public values
- Hold culpable those who contribute to disaster
- Require those who benefit from risky behavior to assume some mitigation costs
- Modify expectations about public disaster assistance
- Clarify ethical assumptions of mitigation analyses
- Convey uncertainties of science

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**Beachfront homes in North Carolina.** (Source: FEMA)