

Holistic Disaster Recovery

Objectives:

- 2.1 Define sustainable recovery, including related terms
- 2.2 Begin to describe the impacts of disasters and the complexities of recovery
- 2.3 Revisit principles discussed to this point and introduce session 3

Disaster Recovery

- Definition #1
- Definition #2

Disaster Recovery

Reconstruction

Restoration

Rebuilding

Reshaping

Restoration

- Repair of damaged housing, infrastructure, commercial buildings, etc.
- Restoring the psychological well being of the community
 - Reconstructing community icons
 - Reconstructing places of worship, community centers, sports facilities, etc.
- Economic restoration
- Restoration of natural systems

Rebuilding

- Rebuilding or repairing of damaged infrastructure
- Rebuilding or repairing of damaged homes
- Rebuilding or repairing of businesses and related distributional systems
- Rebuilding or repairing of community assets

Reshaping

- Playing an active role in recovery
- Land-use planning
- Wise use of federal, state and local funding and expenditures

Class Discussion

- Critiquing the definitions of disaster recovery
 - Definition #1
 - Definition #2

Sustainable Disaster Recovery

- Definition of Sustainability
- Sustainability and Disaster Recovery
 - Environmental
 - Economic
 - Social

Sustainability Principles

- Environmental quality
- Quality of life
- Local resiliency to and responsibility for disasters
- Sustainable economies
- Inter and intra-generational equity
- Consensus-based decision making

See Disasters by Design (1999), pp. 30-35

Key Terms

- Hazard mitigation
- Post-disaster opportunities
- Multi-objective planning
- Self reliance

Class Discussion

- Discuss the role of self-reliance versus taking advantage of post-disaster financial opportunities
 - Post-disaster funding and reshaping a community
 - Disaster recovery programs as an entitlement
 - Comprehensive pre-disaster participatory planning process

Key Terms

- Disaster recovery plan
- Hazard
 - Natural hazard
 - Part of a larger natural system
 - Hazards and the built environment
 - Benefits and costs of hazards

Class Discussion

- There is no such thing as a “Natural Disaster”
 - Natural hazards as part of a sustainable ecosystem
 - Environmental disasters
 - Humans as part of the natural order

Key Terms

- Disaster
 - Scale and time
 - State and federal disaster declarations
 - Politicizing disasters
- Emergency
 - Localized events
 - Disaster versus emergency

Class Discussion

- Disasters versus emergencies
 - Emergencies
 - Localized events
 - Short-term response
 - Lack of state or federal assistance
 - Assistance from adjacent jurisdictions
 - Disasters
 - Exceeding the capacity of a defined governmental unit
 - Long-term recovery
 - Affecting multiple jurisdictions

Four Phases of Emergency Management

- Preparedness
- Response
- Mitigation
- Recovery

Class Discussion

- Strengths and weaknesses of the four phases of emergency management
 - Disaster recovery “process”
 - Explaining the key functions of emergency management
 - Hazards management

Disaster Impacts

- Psycho-social
- Housing
- Community
- Economic
- Environmental/Public Health
- Political

Psycho-social Impacts

- Stress
 - Deaths or injuries
 - Sense of guilt
 - Disruption of daily activities
 - Damages to property
 - Disruption of a community's sense of place
 - Disruption of public services
 - Living in a shelter or temporary housing

Psycho-social Impacts

- Undermining or strengthening social networks
 - Physical dislocation of neighbors
 - Disasters as a unifying event
 - Neighbors helping neighbors
 - Church and non-profit leadership

Housing Impacts

- Public shelter
- Temporary housing
- Condemnation of housing
- Building moratorium
- Acquisition or elevation of flood-damaged housing
- Equitable recovery assistance
- Mobile home issues
- Substantially damaged housing
- Equitable reconstruction practices

Community Impacts

- Public infrastructure
- Transportation networks
- Businesses
- Public services

Economic Impacts

- Factors hindering economic recovery
 - Lack of insurance
 - Inability to qualify for recovery loan programs
 - An unwillingness to acquire additional debt
 - Difficulty finding work
 - Lack of adequate savings
- Business-related impacts
- Agricultural economies

Economic Impacts

- Infrastructure
- Temporary or permanent loss of jobs
- Industry-specific impacts
- Indirect economic impacts

Environmental / Public Health Impacts

- Contaminated drinking water
- Disaster debris
- Damages to public facilities

Environmental / Public Health Impacts

- Hazards as part of the natural system
 - Environmentally sensitive, high hazard areas
 - Wetlands
 - Floodplains
 - Steep-sloped areas
 - Wildland urban fire interface
 - Barrier islands

Environmental / Public Health Impacts

- Hazards and environmental equilibrium
 - Floods transport topsoil
 - Hurricanes transfer heat and water
 - Earthquakes release pent up energy
 - Volcanoes release pent up energy, ash and magma, fertilizing adjacent areas, altering existing landscapes and forming new land masses
 - Regularly occurring wildfires are part of a healthy forest ecosystem

Environmental / Public Health Impacts

- Positive environmental impacts
 - Recharging aquifers alleviate drought
 - High winds topple exotic species
 - Coastal island migration
 - Wildfires burn undergrowth and add nutrients

Environmental / Public Health Impacts

- Negative environmental impacts
 - Release of household chemicals into the environment
 - Public health issues
 - Contamination of drinking water
 - Asbestos
 - Mold
 - Human and animal waste
 - Animal carcasses
 - Hazardous materials spills
 - Mixed debris

Political Impacts

- Public expectations
- Perceived inequitable distribution of disaster assistance
- Role of the media
- Political capital

Class Discussion

- Interrelationships of disaster impacts
 - Psycho-social attachment to one's place of residence or community
 - Economy and sense of community
 - Healthy environment and economy
 - Political nature of housing repair

Case Study Exercise

- Physical, economic and social impacts of a disaster
- Emergency response as a prelude to recovery
- Temporal nature of recovery
- Role of hazard mitigation in recovery
- Politics of recovery
- Lessons learned

Revisit Principles

- Summarize Session 2
- Session 3 Dimensions of Recovery
 - Disaster recovery process
 - Disasters as opportunity
 - Short versus long-term perspectives
 - Disasters as a clarifying agent