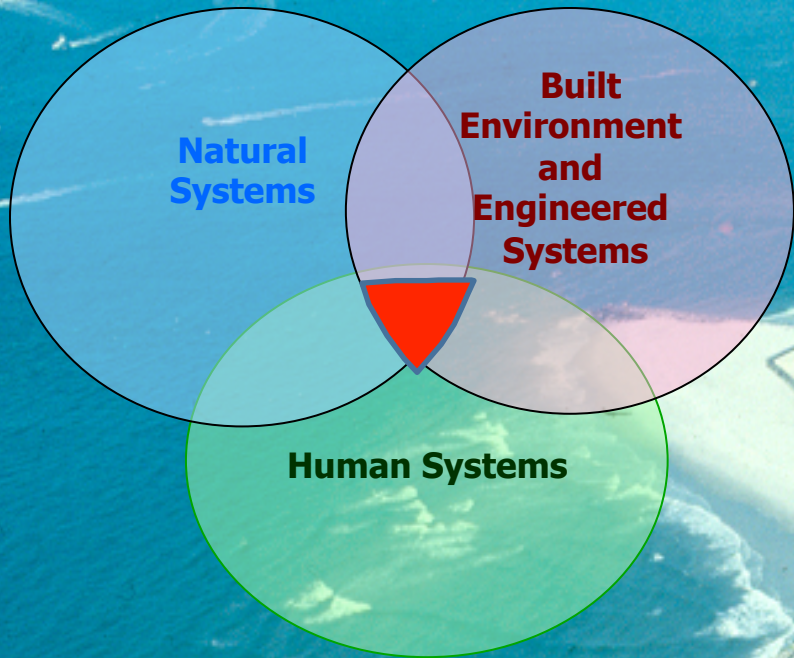


Social Science Perspectives on Disaster Resilience

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Resilience: Ability to prepare and plan for, absorb, recover from or more successfully adapt to actual or potential adverse events

At what level:

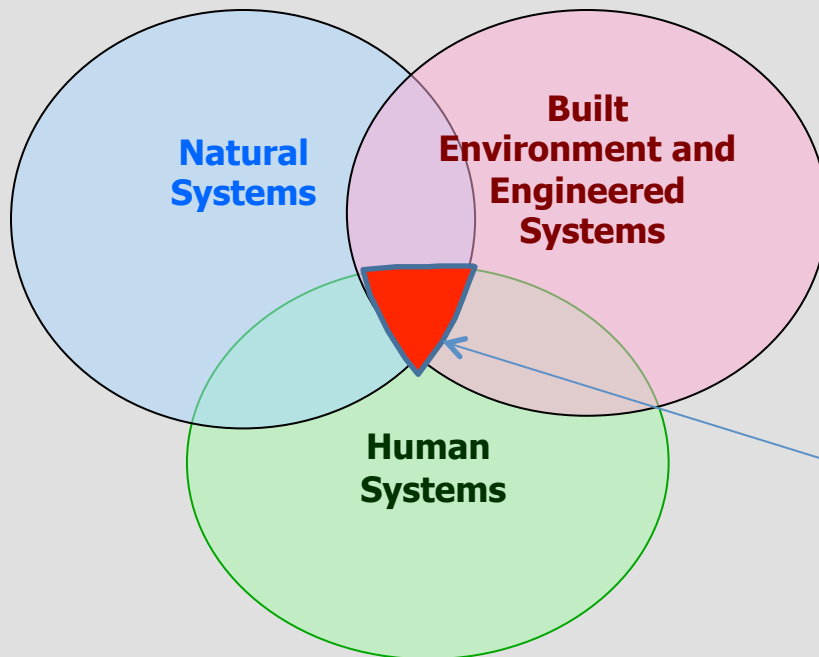
- **Individual** (person, household, structures)
- **Group** (social groups, sectors, infrastructure)
- **Spatial** (place-specific systems, intersection of physical and social)

Three perspectives:

Resilience as a process, capacity building

Resilience as an outcome

Resilience as both a process and an outcome



Placed-based (neighborhoods, communities, regions, counties, states)

Resilience Components: Communities

Type of Resilience	Explanation of concept at community level	Sample Supporting Research *
Social	Social characteristics enhancing access to resources, capacity to prepare, respond, recover, mitigate	Morrow, Tierney, Norris
Economic	Economic vitality, role in loss reduction	Rose, Chang
Institutional	Organizational structures, planning, how organizations respond to changing conditions	Burby, Tierney, Godschalk
Infrastructure	Physical systems, interdependence, redundancies, cascading impacts	Perrow, Chang
Community	Sense of community functioning, community ties, participation in governance, place attachment	Vale and Campanella
Environmental	Biodiversity, ecosystem health, management plans, wetlands preservation, etc.	Gunderson, Laska

* In addition to Norris et al. 2008, Cutter et al. 2008, CARRI articles

Sample Resilience Indices

Name	Author	Geographic Region	Attributes
ResilUS	Renchler et al.	SW Louisiana	Multi-attribute including physical, quantitative, spatial
Community Disaster Resilience Indicators (CDRI)	Peacock et al.	Gulf Coast	Multi-attribute (social, economic, physical, human) within disaster cycle, quantitative, spatial
Coastal Resilience Index (CRI)	Emmer et al.	LA-MS-AL	Multi-attribute, qualitative self report
Community Resilience Index	Sherrieb, Norris, Galea	MS	Dual attribute (economic development, social capital), qualitative, spatial
Baseline Resilience Indicators for Communities (BRIC)	Cutter et al.	Southeast US	Multi-attribute (social, economic, institutional, infrastructure, community competence), quantitative, spatial

Resilience: Key Issues

- Theory and conceptualization—just beginning; practice is ahead of the science
- Data availability (type, scale, frequency)
- Measurement and comparability
- Model and index construction (qualitative, quantitative; single indicator vs. composite indicator; unit of analysis; validation)
- Sensitivity and uncertainty—do we have it right?
- Application to community and policy makers—resilience to what? resilience for whom?