

Summary of Dissertation

Title:	Resilience to Climate Change: an Ethnographic Approach
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Topic:	How resilience and vulnerability to climate change are understood and perceived across a social-ecological system network in a rural coastal community in the United State's Chesapeake Bay region.
Contents:	Introduction (Ch. 1); area history (Ch. 2); climate change at the international, state, and local level (Ch. 3); engaged environmental anthropology, the Deal Island Marsh and Community Project, collaborative learning (Ch. 4); theory related to the anthropology of climate change, social-ecological systems, and resilience (Ch. 5); research methodologies (Ch. 6); local insight on vulnerability (Ch. 7); local insight on resilience (Ch. 8); nonlocal insights on vulnerability and resilience (Ch. 9); understanding on a social-ecological system level (Ch. 10); Conclusion (Ch. 11)

Key Vulnerability Findings:

- Local residents perceive many vulnerabilities including: the low-lying nature of the area, sea level rise, land sinking, rising water table, erosion, disappearance of fisheries, changes in weather, and changing community composition. These are all ongoing changes that are understood to (or are expected to) accelerate with climate change impacts. Many residents stressed the practical view that sometimes you just have to deal with changes that are happening.
- Population and financial security continues to decline for area communities
- Shoreline erosion and land subsidence are scientifically documented and understood on a larger scale and localized effects are less well known
- 3 primary concerns are introduced by nonlocal project stakeholders including marsh degradation, flooding, and lack of environmental governance
- Key vulnerability priorities for our network to work on include: adaptability to change, ethic of cooperation, and protected shorelines

Key Resilience Findings:

- Local residents identified many important resiliencies including: marsh and marsh grass, protected shorelines, blue crab fishery, ability to handle flooding and storms, faith and closeness to nature, independence and resourcefulness, social networks and community, and resilience as a state of mind. Many of these resiliencies are localized in the Deal Island Peninsula area and may not be readily recognizable to community outsiders.
- Local residents should be recognized for their significant experience and skill in adapting to the local environment, resilience is essentially a cultural trait of their long-standing existence there.
- Nonlocal project stakeholders introduced one resilience related to the project's ability to function as a mechanism for "facing future challenges together"

- Key resilience priorities for our network to work on include: deny vulnerability, rising sea levels/ rising tides, erosion, distant management and governance, and storms

Additional Key Points:

- Vulnerability and resilience are clearly used as separate categories for characterizing information related to climate change by stakeholders
- Stakeholders organize vulnerability and resilience attributes in a spectrum ranging from more environmental to more social attributes
- Environmental vulnerabilities are the most closely associated with one another, rather than with social vulnerabilities or social or environmental resiliencies.
- Nonlocal's concerns for the Deal Island Peninsula area relate both to the local population as well as in promoting conservation and environmental restoration concerns for the area.
- Resilience is the positive antidote to vulnerability's negativity and is an important starting point for optimistic climate change adaptation planning and strategies to improve and strengthen the community's ability to maintain their way of life as long as they are feasibly able.
- Collaborative learning is a key methodology for ensuring the involvement of multiple and cross-system constituents in adaptation planning efforts
- Ethnographic methods play an important role in providing detail to vulnerability and resilience information, and particularly in highlighting social resiliencies that are less apparent than the commonly identified environmental vulnerabilities.

Sample Excerpts:

“Analysis of this information tends to lead to the conclusion that multiple trajectories of long-term change will soon coincide with insurmountable environmental impacts via climate change. And this is to a great extent true. The Deal Island Peninsula area’s population will continue to decline as periodic and/or permanent flooding claims marshes and low-lying lands. Area residents know this and describe their predicament well through their identification of vulnerability items. For many local residents, a primary concern is in maintaining their landscape, homes, and communities into the future and protecting them from threats such as sea erosion, economic decline, and sea level rise. Their ability to remain in place is integral to the sustainability of their communities into the future. Many understand that the low-lying nature of the Deal Island Peninsula area means that the future will be far less like the past than has been expected through the generations. This is why focus on resilience within the Deal Island Peninsula area is important and necessary for work related to climate change.”

“There is continuity in the way that Deal Island Peninsula area communities have been resilient over time. The resiliencies have aided their ability to adapt to changing environmental and social conditions through history. For many residents who are not come-heres this relationship is also historic—extending back through the generations. Resiliencies have developed alongside experience living in the area and are seen in their ‘ability to handle flooding and storms,’ work with the ‘blue crab fishery,’ and maintain a ‘resilience state of mind.’ For local residents, resilience to climate change is the character, strengths, skills, and persistent features of the environment that help them to endure in a changing culture and landscape.”