Disaster Policy and Rural Development Briefing

Prepared for Senator Lisa Murkowski's Office by
Drs. Elizabeth Marino and Alessandra Jerolleman and Julie Raymond-Yakoubian

General conclusions from 50 years of disaster research and applied work with impacted communities:

1. Disasters affect populations inequitably. It is predictable that places that are removed from centers of governance (often rural and/or minority communities), have less economic power, and less knowledge of how to navigate federal assistance systems, will suffer disproportionately from ecological shifts and/or disaster events.

2. Federal disaster funding is primarily made available following a disaster, and not prior to the event. Furthermore, when money is made available, the process of accessing the funds and implementing the projects can take several years.

3. Policies and regulations which impact disaster recovery, response, and mitigation can be amended to better address the needs of these vulnerable populations and allow for more realistic risk reduction and recovery strategies. For example, over reliance on benefit cost mechanisms privileges higher value assets and more populated areas.

4. Rural Alaska communities are particularly vulnerable to suffering inequitably when ecological change or disasters occur because of their remoteness, limited market economy, reliance on direct harvest of natural resources for food security, and cultural needs, which are distinct from majority populations, and not accounted for in regulations and policy.

Problems and Solutions that would support risk reduction in rural Alaska, especially risk associated with repetitive flooding.

1. Problem: Voluntary buyouts are a critical part of relocation and resettlement in the US, but they have been leveraged in comparatively economically wealthier counties. In Alaska, when used, they have not covered the replacement costs of homes in rural communities that need to relocate, such as Newtok. Furthermore, buyouts are conducted through several programs managed by different agencies, adding to the complexity of projects.

Solution: We recommend revisiting the buyout programs, which may include creating mechanisms for buyout funds to be bundled and used to relocate communities collectively, to include funding for community-based infrastructure, and to pay for the true costs of rebuilding in the Arctic and sub-Arctic.

2.Problem: Rural Alaska villages are sparsely populated, making matching grants prohibitively expensive, even at the rural and impoverished level of 90%/10%.

Solution: The Building Resilient Infrastructure and Communities (BRIC) program, currently being written under FEMA and DHS, could eliminate matching requirements for rural and impoverished communities.

3. Problem: The Cost-benefit model, used for federally-funded infrastructure projects, and the Benefit-Cost model, used for disaster mitigation projects, may pose significant obstacles for rural communities and tribes.

Solution: We recommend identifying alternative economic models for instances in which long histories of damages to housing and other built infrastructure preclude the possibility of a positive cost-benefit calculation. In cases of tribes and other culturally-significant and historically marginalized communities, we also suggest including non-material costs and benefits, including cultural heritage and subsistence access and rights in the calculation. The latter is applicable to many rural infrastructure projects, as well as disaster mitigation funding. This can be modeled upon the ways in which environmental benefits have recently begun to be more fully considered.

4. Problem: Slow-onset disasters, especially erosion, are not eligible for federal declarations under the Stafford Act and thus cannot trigger disaster response and funding for recovery. This presents multiple problems for rural Alaska communities. For example, in Shishmaref there is critical infrastructure, such as the paved road that leads to the landfill, which is eroding into the ocean. The pace of infrastructure replacement is too slow to handle what is, in fact, an emergency. Thus we see a gap in disaster policies which do not catch these slow-onset events. At a larger scale, communities such as Newtok who have attempted to file for a federally-declared disaster to help fund community-relocation because of the current and future threats of erosion, have not qualified for a federally declared disaster.

Solution: Amend the Stafford Act, if possible, to include erosion. Also of note, the Disaster Recovery and Reform Act of 2018 included a provision (Section 1232) that is titled: Disaster Relief Hazards (Local Impact and Multiple Recent Disasters), and states: "Directs the FEMA Administrator to give greater consideration to local impacts when the Agency provides its recommendation to the President on whether to issue a Major Disaster Declaration." It has yet to be seen if "multiple disasters" and "local impacts" could take into account the impacts of erosion. We recommend clear policy guidance that supports this interpretation of Section 1232 in DRRA 2018.

5. Problem: Emergency preparedness is limited in Alaska compared to the lower 48. According to the non-profit Kawerak, there is only one staff to assist 100+ second class cities to develop Small Community Emergency Response Plans.

Solution: We recommend further staffing for DHS to accommodate for the needs of small communities in designing and implementing an Emergency Response Plan.

This brief came from over a decade of work by Dr. Marino (PhD at UAF) in rural Alaska. Her research sought to understand the dynamics between policy, disaster, and the lived experience of repetitive flooding in Shishmaref and other communities on the Seward Peninsula. Dr. Alessandra Jerolleman (PhD at UNO) has spent over fifteen years studying policy agendas around disaster and the inequitable distribution of disaster assistance and mitigation funding to rural and marginalized communities. She has spent over a decade working directly with impacted communities along the Gulf Coast. Dr. Julie Raymond-Yakoubian (PhD at UAF) has spent over ten years working with Bering Strait region communities to document and apply Traditional and Indigenous Knowledge to issues of climate change and community adaptations, and to facilitate a broader understanding of the value and importance of community knowledge and experiences to policy and resource management issues.