

STATEMENT
OF
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AND

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U.S. DEPARTMENT OF HOMELAND SECURITY

BEFORE
THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS
SUBCOMMITTEE ON EMERGENCY MANAGEMENT, INTERGOVERNMENTAL
AFFAIRS AND THE DISTRICT OF COLUMBIA
U.S. SENATE
WASHINGTON, D.C.

**“EXTREME WEATHER IN ALASKA: STATE AND FEDERAL RESPONSE TO
IMMINENT DISASTERS IN THE ARCTIC”**

Submitted
By

Federal Emergency Management Agency
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Washington, D.C. 20472

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Introduction

Chairman Begich, Ranking Member Paul and Members of the Subcommittee, this testimony is submitted jointly by David Miller, Federal Emergency Management Agency's (FEMA) Associate Administrator for the Federal Insurance and Mitigation Administration (FIMA), and Kenneth Murphy, Regional Administrator of FEMA's Region 10. On behalf of FEMA, and the Department of Homeland Security, we welcome and appreciate the invitation to appear before the Subcommittee. It is a distinct honor and privilege to be here today.

The men and women of FEMA Region 10 are dedicated to meeting the pre- and post-disaster needs of the people of Alaska using the programs and authorities provided to us by Congress and the President.

Before I discuss the specific programs applicable to the topic of this hearing, I would like to acknowledge that the success of FEMA and our programs is dependent on strong professional partnerships with state and federal agencies, as well as our local and tribal counterparts. Thanks to the leadership of Major General Thomas H. Katkus, Commissioner of the Alaska Department of Military and Veterans Affairs, and Mr. John Madden, Director of the Alaska Division of Homeland Security and Emergency Management, we have forged a partnership that ensures successful emergency management for Alaskan communities and citizens. FEMA greatly appreciates their leadership, professionalism and dedication.

FEMA's Role and Programs

FEMA is the lead Federal agency responsible for coordinating disaster response, recovery and mitigation efforts following disasters and emergencies declared by the President. Our programs are made available to communities through our state partner organizations, and are intended to supplement the response activities and recovery programs of states and tribes. Most of our assistance programs are authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, commonly referred to as the "Stafford Act." The Stafford Act is widely known as the authority by which programs are made available following disaster declarations. All of these programs support the implementation of the National Mitigation Framework, which is doctrine developed by the whole community to serve as a common

platform for coordinating and addressing how the Nation manages risk. The Framework offers guidance on how the whole community can work together to build resilience and reduce long term vulnerability.

FEMA's programs are designed to assist states, tribes and communities in carrying out their responsibilities and priorities. Our assistance is available in numerous forms, including grants, technical assistance and planning assistance, which addresses the impacts of disasters and takes steps to reduce the potential impacts. Assistance that is made available to states, tribes, territories, communities, cities and individuals following disasters includes:

- The Public Assistance program provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations. The program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process.
- The Individuals and Households program helps ensure the essential needs of individuals and families are met after disasters so they can begin the road to successful recovery; and
- The Hazard Mitigation Grant Program (HMGP) provides grants to states, Indian tribal governments and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the recovery from a disaster.

FEMA also operates pre-disaster programs. We offer the Pre-Disaster Mitigation (PDM) grant program, authorized under the Stafford Act, and the Flood Mitigation Assistance Program, authorized under the National Flood Insurance Reform Act of 1994, as amended. The National Flood Insurance Program (NFIP), authorized by the National Flood Insurance Act of 1968, as amended, is also available.

Three of FEMA's programs are available to the State of Alaska and the Alaskan Native villages in their efforts to address the complex challenges of flooding and erosion. I will also cover the limitations to these programs that results in their being part of the solution, but not the total answer to addressing the flooding and erosion vulnerabilities.

The PDM grant program is available to communities through state emergency management organizations, and is designed to fund nationally competitive mitigation projects and planning efforts on the part of states and communities, as identified and prioritized in state and local mitigation plans. Funding for this competitive grant program is not triggered by a Presidential disaster declaration; rather it is funded through the annual appropriations process.

Examples of projects funded under the PDM program include the development of all-hazard mitigation plans, seismic retrofitting of critical public buildings, and acquisition or relocation of flood-prone properties located in the floodplain, among others. All projects submitted are developed at the state or local level, must be cost-effective and technically feasible, and are selected based on national priorities. Annual appropriations are \$25 million nationwide in fiscal year 2013. Specific project applications are capped at a Federal share of \$3 million per project. Since the program's inception in 2003, Alaska has received \$1.9 million to address several local and state-wide planning projects and seismic retrofits of schools in Anchorage and Kodiak Island. The PDM standard cost share requirement is 75 percent Federal and 25 percent local, state, tribal or other contributions. At present, the State of Alaska does not provide the cost share for PDM projects. The PDM also offers a 90/10 cost share incentive to communities that meet the definition of "small and impoverished," which is determined by criteria addressing community population, per capita income and unemployment rates.

The HMGP is available to states, tribes and local governments following Presidential Disaster Declarations as requested by a state's governor or chief executive of a tribe. This program has similar requirements as the PDM grant program, though funds become available only after a disaster is declared, and are available anywhere within the state or tribe in which the declaration was made. The amount of assistance available under the HMGP is a percentage of FEMA's

assistance made available under the response and recovery programs for the declared major disaster. HMGP funds are generally 15 percent of assistance under these programs for states with a Standard State Mitigation Plan and 20 percent of assistance under these programs for those with an Enhanced State Mitigation Plans.

Over the last five years there have been eight Presidentially declared disasters in Alaska. Disaster declarations that occurred between 2008 and February of 2012 have resulted in over \$7.6 million in HMGP funds used statewide. The HMGP cost share requirement is 75 percent federal contribution to 25 percent non-federal, as provided in the Stafford Act. For many years the State of Alaska has paid the 25 percent match on behalf of local subgrantees. Non-federal cost share can be comprised of state or local community match; private property owners, in-kind work and certain other federal program contributions when the eligibility requirements of both programs can be met.

Of the \$29.6 million in HMGP funds obligated in Alaska since the inception of the program, \$7.5 million or 25 percent has been spent on relocation projects for Alaskan Native Villages. Specifically, over \$6.3 million in Federal funding was provided to relocate 11 structures to higher and safer ground, including three public buildings in Alatna; \$900,000 in Federal funding was provided to relocate 27 homes in Allakaket; and \$200,000 in Federal funds was provided for relocating and elevating homes and a municipal building in Alakanuk. For all of these projects, the State of Alaska provided the 25 percent match funding. A large majority of projects and funding have been targeted to inland communities prone to riverine flooding or damage by ice jams. Very few projects related to coastal erosion have been submitted to FEMA for funding.

As with the PDM grant program, all projects are developed at the state, tribal or local level and submitted to the state. The state prioritizes and selects the projects that best fit the Tribal/State Mitigation Plan and recovery priorities. All projects must be cost-effective and meet all other program eligibility requirements. Some examples of projects eligible for HMGP and the PDM grant funds include the development of all-hazards mitigation plans at the tribal, state and local levels, the seismic retrofitting of critical public buildings, and acquisition, relocation or elevation of flood-prone properties located in the floodplain. While erosion control may be an eligible

project under HMGP, if the scope of the erosion is severe, a major project is generally implemented by agencies such as the U.S. Army Corps of Engineers, which has specific authority for these types of projects. FEMA does not fund major flood control projects or provide assistance for activities for which another Federal program has a more specific or primary authority to provide.

FEMA's Flood Mitigation Assistance (FMA) Program is authorized for mitigating structures insured by the NFIP, which are located within a community participating in the NFIP. Projects include the elevation, relocation and acquisition of flood prone structures, and projects to address minor, localized flooding issues, such as upgrading culverts, building detention ponds, and otherwise improving local stormwater management facilities. The standard Federal cost share requirement for the FMA is 75 percent federal contribution to 25 percent non-federal. The current version of the FMA grant program represents a consolidation of three separate grant programs: the Flood Mitigation Assistance Program, the Repetitive Flood Claims Program and the Severe Repetitive Loss Program. In FY 2013, \$120 million was appropriated for the FMA program nationwide. Because this program is funded by resources collected from NFIP policyholders, the recent focus of the program has been on mitigating repetitive loss structures in order to reduce the drain on the National Flood Insurance Fund. Projects are ranked and selected nationwide based on the greatest benefit to the Fund.

Flood grant projects in Alaska include \$600,000 provided to Shishmaref in 1998 for relocation of nine homes to a former airstrip located inland on higher ground. The FMA program has also funded buyout or elevation of several individual structures in various communities since the program's inception in 1997.

In addition to consolidating the three former flood mitigation grant programs into the FMA Program, the Biggert-Waters Flood Insurance Reform Act of 2012 created funding incentives for two classes of NFIP-insured structures that have been flooded on more than one occasion. Newly defined "Repetitive Loss" properties are eligible for 90/10 federal/non-federal cost share. Repetitive Loss structures are those that have experienced at least two flood losses in which the cost to repair the damage in each flood was 25 percent or more of the market value of the

structure. At present, the State of Alaska does not have any documented properties that meet this new definition. The second category of incentive properties is Severe Repetitive Loss (SRL) structures that are eligible for 100 percent Federal funding; i.e., no match is required. SRL structures are those that have experienced four or more flood losses of exceeding \$5,000 each, with the total claims paid exceeding \$20,000, or properties that have received at least two separate flood claims payments, where the cumulative flood claims payments exceed the Fair Market Value of the insured structure. Of the two SRL properties validated in Alaska, one has recently been mitigated through elevation of the structure.

The NFIP currently has 32 participating communities in Alaska, representing boroughs, cities, towns, and Alaska Native village municipalities. Collectively they maintain \$735 million in flood insurance coverage. Since 1978, the NFIP has paid 581 claims for \$5.9 million to Alaska residents. Twenty-eight of the 3,022 policies statewide are subject to coastal flooding and erosion hazards.

Many of the remote Alaskan communities vulnerable to flooding and coastal erosion still do not have their flood hazard areas mapped and are not participating in the NFIP, which is a requirement for consideration under the FMA program, even in unmapped areas. In 1998, Shishmaref joined the NFIP and as a result of that was eligible for a Flood Mitigation Assistance grant to relocate some of their structures. In 2001, the Municipality of Shishmaref received their first published Flood Insurance Rate Map (FIRM) followed by a modernized digital FIRM in 2010. Similarly, Nome also received their first digital firm in 2010. However, many Alaska Native Villages are not in the NFIP because they do not have the land use authority to pass and enforce a floodplain management ordinance required for participation.

There are significant eligibility and funding challenges to FEMA and its state partner in developing successful mitigation projects, including relocation, in Alaska Native Villages. With respect to eligibility, projects that receive FEMA grant funding must demonstrate “cost effectiveness,” through a positive comparison of project benefits to costs, the benefit-cost ratio. OMB Circular A-94 (*Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*) requires that FEMA apply a benefit-cost analysis to its grants programs to promote

efficient resource allocation. FEMA provides specialized software tools to perform these analyses. Essentially, an applicant must demonstrate that the annualized benefit of the project is the same or greater than the current project cost. With the high construction costs in rural Alaska and low population benefited, developing a project or relocation effort with a positive benefit-to-cost ratio is challenging. A project must be cost-effective to be eligible for funding consideration.

Fortunately, due to recent efforts to streamline the implementation of FEMA's various hazard mitigation grant programs, two Benefit-Cost policies have been enacted that will assist many communities in demonstrating the cost-effectiveness of their projects. First, if a residential structure located in a riverine floodplain or floodway is substantially-damaged by flood, meaning the cost to repair is 50 percent or more of the depreciated value of the structure, no further analysis is required. Experience has shown, and data supports that such projects are cost-effective. Secondly, FEMA just released "Pre-calculated Benefits" for flood acquisition and elevation projects based on an analysis of over 11,000 structures. This means that if the project cost for an individual structure, or the average of all the structures in a project, is at or below a certain threshold, that mitigation activity is cost effective. Property acquisitions costing less than \$276,000 and for elevations less than \$175,000 are determined to be cost-effective, and no further review is required. Structures costing more than these threshold values may be cost-effective based on standard BC analysis.

FEMA's programs have other eligibility requirements that most Alaska Native Villages currently do not meet, including a FEMA-approved mitigation plan. Mitigation plans are critical in identifying the risks and assessing the vulnerabilities facing Alaska Native Villages and other communities, and then identifying a range of strategies and projects to reduce those risks. The plans ensure that the public is involved in the process and potential mitigation solutions have the support necessary for successful implementation. However, the State of Alaska embarked on a major initiative in 2005 to assist small rural communities throughout the State to assess their hazard vulnerability and develop local hazard mitigation plans compliant with FEMA standards. FEMA has been actively supporting the State to address this eligibility requirement. The State has received planning project awards to contract for direct provision of planning technical assistance to these rural communities. As a result, over 50 rural villages have been certified as

having FEMA-compliant hazard mitigation plans, and planning efforts are currently underway to assist 22 additional rural villages. Over the last five years, FEMA has provided over \$2 million in funding for planning through the PDM grant program, plus additional funding through the HMGP, to support local planning in Alaska. We will continue to support the State's efforts to assist their local communities and Alaska Native Villages to develop and regularly update mitigation plans to expand eligibility for project funding.

As previously stated, funding challenges do exist. Since the HMGP's funding availability is based on declared disaster losses, it would take a catastrophic disaster or many disasters for the state to receive the level of mitigation funds needed to address the full relocation needs of the Alaska Native Villages. For example, the Newtok relocation currently underway is forecast to cost \$400 million, or roughly \$1 million per resident. HMGP funds resulting from the event in November 2012 are approximately \$1.6 million. The most recent event has not yet been calculated, but early estimates indicate it is at least as much as the November 2012 declaration. Funding from previous events in recent years ranges from \$200,000 to \$312,000.

Within the context of these obstacles, FEMA has worked with our Alaskan State partners on the challenge of flooding and erosion in Alaska Native Villages.

To address coastal erosion, in 1998 the Flood Mitigation Assistance program funded \$600,000 of an \$800,000 project to relocate nine private structures within Shishmaref. More recently, in 2006, FEMA funded a \$46,000 project through the HMGP program to relocate Shishmaref's computer cottage.

After the Yukon River flooded in June of 2009, a disaster declaration was issued, making residents eligible for financial assistance from FEMA. With assistance from FEMA, the Village of Eagle moved away from the water's edge in an effort to stop the repetitive losses from annual spring flooding with assistance from FEMA. Today after the move to higher ground, the mitigation effort has reduced the loss of property and the loss of lives for this community during this year's flooding.

Conclusion

FEMA is looking at the issue of coastal erosion through the establishment of the Technical Mapping Advisory Council (TMAC), which was mandated as part of the Biggert-Waters Flood Insurance Reform Act of 2012. Specifically, the Act requires the Administrator to include coastal erosion areas when updating maps. FEMA is actively working to establish the Council as a Federal Advisory Committee.

FEMA will continue to be an active partner in efforts to address the Alaska Native Villages' vulnerabilities. We will continue to work with the State of Alaska on defining mitigation planning priorities and in direct partnership with tribal nations and Native Villages, in a Federal-to-tribal relationship when applicable, and we will provide technical assistance within our areas of expertise.

We have worked hard to adapt our programs to meet the needs of communities in Alaska and we are committed to providing quality information, programs and products that give communities the information they need to make informed decisions about risk and demonstrative risk reduction.

In closing, if one or more communities experience significant flooding and a Major Disaster is declared, please be assured that the full breadth of appropriate Stafford Act capabilities and programs will be made available. FEMA will ensure the response, recovery and mitigation programs are provided with the greatest of coordination and allowable flexibility to ensure long-term plans of the communities are considered, to include the potential relocation of certain structures and facilities.

We appreciate the opportunity to represent the Federal Emergency Management Agency and the Department of Homeland Security before the Subcommittee on Emergency Management, Intergovernmental Relations and the District of Columbia. We would be pleased to answer any questions you may have.