

ExhibitDNeed

State of Alaska

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Exhibit D Need

The AVCP Region was impacted by three federally declared disasters in the eligible years 2011-2013: DR-4050, DR-4122, DR-4162. There was a total of \$65.4M of damages documented by State and FEMA Individual Assistance and Public Assistance programs. (Ref) DR 4050 applicants: Goodnews Bay, Nunum Iqua, Tununak, Kotlik. The DR-4050 DHS&EM Finance Plan indicates Total estimated FEMA costs for PA, IA and HMGP of \$8.1M and State costs of \$4.5M (reference DR 4050 West Coast Storm Finance Plan). Per the Aug 2015 EMMIE Summary (ref) \$9.3M of damages/costs have been identified and are being assessed for eligibility, \$1.7M of which have been approved and obligated. The Goodnews Bay Airport (\$515,682) and Community Center (\$2,083), Erosion, water and sewer lines (\$32,714), lagoon retaining embankment (\$3,845); Kotlik pedestrian boardwalk (\$5802), city hall building (\$1482), teen center foundation (\$39,927) and city shop (\$177,420); Tununak sea wall erosion (\$72,945) projects remain incomplete as of August 2015. In the AVCP region there remain \$851,900 (ref) of unaccomplished recovery projects to date.

In the AVCP region DR-4122 applicants included the Cities of Alakanuk and Emmonak. The DR-4122 Finance Plan indicates a total estimated FEMA costs to be \$9.75M and state costs to be (\$3.25M). Per the August 2015 EMMIE summary, \$30.2M of damage costs has been identified, of which \$22.3M has been obligated by FEMA. Incomplete projects include Alakanuk Citywide road (\$1.4M), mooring point (\$242K), Arctic Pipe (\$4.2M), City Buildings (\$35K) repair; and Emmonak Airport runway (\$786K), city-wide road (\$682K), onak road damage (\$50K), In the AVCP region there remains \$3,195,000 (ref) of unaccomplished recovery projects to date.

DR-4162 applicants included AVCP housing (Kotlik), City of Kotlik, Nunum Iqua, Scammon Bay, Kotlik Native Village, Bill Moore's Slough, Native Village of Nunum iqua, Newtok Village Council, and the Yukon-Kuskokwim Health Corporation. Unaccomplished projects to date include AVCP damaged homes (40.4K), Bill Moore's damaged equipment (\$21.7K), DOT airport taxiway-Scammon Bay (\$3.0M), Nunum Iqua boardwalk (183.6K), DOT trailmarkers-Nunum Iqua (\$147.4K); Nunum Iqua airport (\$893K); Kotlik honey pot basin (\$5K), utiliador (\$5.5M), barge dock (\$165K), dump (\$404k), tribal building \$28K, damaged ATV (\$37K), and boardwalk (\$507.3K); Newtok Fence dump (\$88.6K), boardwalk (\$689K), and docks (\$304K); Nunum Iqua city snow machine (\$12.5K), powerpole (7.3K), lost City items (\$40K), road (\$435K), boardwalk (\$1.1M), and City vehicles (\$25.4K); Scammon Bay barge landing (177.5K); and Tununak sea wall (\$1.18M). In the AVCP region there remains \$14,991,700 (ref) of unaccomplished recovery projects to date

DR-4050 was a severe storms and flooding event affecting the West Coast of Alaska (ref FEMA declaration DR 4050.pdf); DR-4122 was a Spring flooding disaster which affected communities along the Yukon, Kuskokwim, Koyukuk and Copper Rivers; DR-4162 was a result of a series for four sea storms impacting the western coastal Alaska villages all the into interior Alaska's

Fairbanks Northstar Borough. The AVCP area includes areas of the Lower Yukon and Lower Kuskokwim Regional Education Attendance Areas (REAs). (Declaration FEMA-4050-DR map.pdf).

The AVCP region project communities are Emmonak and Newtok. Both communities are geographically isolated, accessible only by air and boat or barge (and snowmachine in winter); predominately tribal; subject to severe weather conditions; and have subsistence and economies. A subsistence economy, as defined by Wikipedia, is a “non-monetary economy which relies on natural resources to provide for basic needs, through hunting, gathering, and subsistence agriculture. “Subsistence” means supporting oneself at a minimum level. Economic surplus is minimal and only used to trade for basic goods.” The subsistence economy is consistent with Alaska Native culture (Yup’ik Eskimo) and lifestyle.

Emmonak, is less isolated than Newtok, being situated on the mouth of the Yukon River. Although largely based on subsistence, Emmonak has a seasonal economy based on commercial fishing and processing. In April 2014, the Alaska Department of Labor reported a 24% unemployment rate in the Wade-Hampton census area of which Emmonak is a part. Increasing Emmonak’s role as a natural regional transportation hub increases the local and regional resilience, as it provides an additional source of employment and resources. Instead of being subject to disastrous fish runs or natural disasters, Emmonak can support its region by distributing resources at lower cost throughout the region, providing regional economic stability through employment in commercial fisheries and an enhanced regional port employment; and providing workforce development training. Emmonak is already considered a regional transportation hub community in the Lower Yukon River (ref-DCRA online data-map). Alakanuk and Nunum Iqua are in its vicinity, and it is the gateway to other inland villages along the Yukon River in the AVCP Tribal Area. As noted from the above information Emmonak suffered significant damage to their transportation facilities (roads and airport). Emmonak is still undergoing repairs to recovery from damages, as noted in the EMMIE reports (unclosed projects). See Exhibit E pages 52-61 for Emmonak project description. Emmonak is subject to repetitive flooding with noted impacts to its roads and airport facilities. Resilient projects in relation to Emmonak’s transportation facilities would not only mitigate loss of services and damage to facilities during flooding events, but these projects would bolster the socio-economic resilience of the community and surrounding area beyond simple repairs for recovery. These projects would improve the socio-economic resilience of the community and region by providing local employment, workforce training, and income for the City. Being a regional hub, particularly a transportation hub, for other geographically isolated communities gives also Emmonak the capability to decrease the significantly high cost of goods, services and fuel in the region.

Emmonak is a NFIP participating community, however due to seasonal employment its subsistence economy, many of its residents are unable to pay flood insurance. This inability to

purchase flood insurance has impacted the City's ability to apply for federal and state mitigation project funding to accomplish residential elevations. Many of its residences and infrastructure are in the A-zone (ref Flood map). Improving local employment through the regional port project would provide local residents financial means to not only pay for flood insurance, but participate in federal and state elevation projects. Additionally, per the Emmonak hazard mitigation plan (p.63-64), critical facilities at risk from erosion include the City Women's Shelter.

So, as well as being economically and socially distressed, Emmonak is in a continual cycle of local, state and federal-level disaster impacts and recovery. Page 45-46 of Emmonak's HMP describes disasters impacting the community from 1984 through 2013. Funding for resilience activities in this community builds socio-economic resilience, but those effects can lead to enabling the community to leverage government and other funding to perform much-needed elevation of residential structures.

Newtok, is more isolated than Emmonak, not being situated on a major river system. Rather Newtok shares a heritage with five Nelson Island communities. Its hub community is Bethel, located 95 miles southeast of Newtok. Newtok has an active subsistence economy. In 2014, 65% of workers earned over \$20,000 annually, while in Newtok that percentage was 17%.

Health and Safety Needs and Risk: The health and safety of the Native Village of Newtok is threatened by severe riverine erosion and flooding. The Ninglick River is eroding toward Newtok at an average rate of 72 feet per year and a maximum yearly observed rate of erosion is 300 feet per year. Since 1954, approximately one mile of land fronting the village has been lost to the Ninglick River. This land was an important buffer that in the past protected the village from Bering Sea storms. As a result, the community has become increasingly vulnerable to coastal storms and its survival at the current village is extremely limited. Historical and projected erosion rates of the Ninglick River toward Newtok indicate that the Ninglick River will reach the community school by 2017, followed by the loss of the rest of community infrastructure.

[\[Dropbox Reference Newtok Erosion Map\]](#)

These changes, likely exacerbated by climate change and associated thawing permafrost, have increased the frequency and severity of flooding in Newtok during the last decade. According to local residents, the coastal storm season has become longer in recent years. A powerful storm surge can raise tide levels 10 to 15 feet above normal, and severe flood events, such as the 20-year flood of 2005 and the lesser flood of 2006, permeate the village water supply, spread contaminated waters through the community, displace residents from homes, destroy subsistence food storage, and shut down essential utilities. USACE predicts the 50-year flood would inundate almost the entire community.

Newtok's unsustainability due to erosion and flooding, its increased vulnerability to coastal storms, and the community's decision to relocate because of these impacts have led to broad disinvestment by funding agencies at the current village site. In 2006, a comprehensive environmental public health assessment conducted jointly by the Yukon-Kuskokwim Health Corporation and ANTHC made a direct link between this disinvestment in community

infrastructure and the significant public health issues in the village. The assessment found that during the study period, 29% of Newtok infants were hospitalized with lower respiratory tract infections, including 20% for pneumonia, 18% for respiratory syncytial virus, and 11% for pneumonia respiratory syncytial virus, nearly twice the national average for these diseases. These conditions appear to result from an initial lack of infrastructure development and failure to properly maintain existing infrastructure.

The assessment concluded that, *“sanitation conditions in Newtok are grossly inadequate for public health protection. The situation appears to be one of compounding deficiencies, high levels of community contamination, little potable water for drinking and hygiene/sanitation practices, and household crowding. While it is true that sanitation conditions in the [Yukon-Kuskokwim] Delta region as a whole lag well behind those of other regions of the U.S., most all communities in Alaska have access to a year-round potable water supply, a contained location to dump raw sewage, and reasonable access to a solid waste disposal site. We know of no U.S. community other than Newtok that lacks all three.”* [\[Dropbox Reference YKHC Health Assessment\]](#)

As discussed in Phase 1, Newtok’s resilience action is a long-planned village relocation to the site Mertarvik on Nelson Island. Most recently, the NPG has been engaged in a FEMA HMGP application development effort with the State of Alaska’s DHS&EM. DHS&EM has submitted two project applications to FEMA Region X for over \$3.5M funding to relocate 12 homes to Mertarvik and acquire five homes in Newtok for demolition and debris removal, providing homeowners funding to build homes in Mertarvik. Completion of these projects will move 13 school-aged children to Mertarvik, triggering the Yukon Kuskokwim School District to move forward with interim plans for distance learning, but more importantly plans to build a new school facility in Mertarvik. In order to support the relocation and build of residential infrastructure in Mertarvik, a subdivision design and record must be completed. A 35% plat was completed (ref) by DEC/VSW to support the aforementioned FEMA HMGP applications. The final design and record will leverage to preliminary design, but is a key pre-requisite to any substantial residential relocation/build effort in Mertarvik.

To support the relocation effort, the community needs funding for the design and construction of the Mertarvik Multi-use (Community) Center. It can serve as an interim school and clinic facility, as well as community meeting place. There is a strong need for residential housing at the new site. The Newtok project proposes a prototype 65-home acquisition, demolition and debris removal and build program. Finally, to sustain local homes and infrastructure, the community needs a workforce development and training program.

While not a hub community, Newtok represents a group of small, isolated Alaska Native Villages which are imperiled due to the effects of climate change and erosion. These communities are challenged with the dilemma of relocate or “protect in place”. Regardless of the community’s elected option, the NPG structure and implemented planning processes represent a replicable model other endangered communities can follow. Newtok’s assessed risk

from erosion; history of disaster impacts (ref THMP, page 49-51); and distressed conditions support the acceleration of the relocation effort through CDBG-NDR funding.

TCC Region was impacted by the federally declared disaster DR-4122 in 2013. DR-4122 applicants included Big River Publishing (Galena) –closed, City of Galena, Louden Tribal Council, Yukon Elder Assisted Living Facility, Circle Alaska Native Village, Eagle, City of Fort Yukon, Fort Yukon ANV, City of Hughes, Galena City School District, Steven Village, Tanana, Yukon Flats School District (Hughes), and The Yukon Kuskokwim Health Corporation. The DR-4122 Finance Plan indicates a total estimated FEMA costs to be \$9.75M and state costs to be (\$3.25M). Per the August 2015 EMMIE summary, \$30.2M of damage costs have been identified, of which \$22.3M has been obligated by FEMA. DR-4122 was a Spring flooding disaster which affected communities along the Yukon, Kuskokwim, Koyukuk and Copper Rivers

Incomplete projects include Circle youth camp (\$106K), campground (\$11K), clinic building (\$309K), bulkhead and sinkholes (\$210K), gravel road (\$25K), and damaged vehicle (\$31K); Campion Road (DOT&PF Galena) mile 3.9 (\$2.4M) and Campion Road (DOT&PF) repair (\$1.7M); Eagle safety rail posts (\$2.4K); Fort Yukon road (\$252K), lift station (\$14.7K), seawall (\$213K), finger dike (\$21.7K), and village roads (\$242K); Galena Ball field (\$52K), Fire Department (\$8K), First Avenue (\$124K), City (\$36K), DPW bldg. (\$1.4K), public roads (\$1M), city vehicles (\$70K), sewage lagoon (\$26K), power generation (\$125K), city hall/clinic (\$2.7K), power distribution system (129K), pool house (2.6K), switchgear (\$5.1K), heat transfer system (\$461K), City building contents (\$0.5K), fuel tanks (\$3.5K), water wastewater system (\$1.2M), and Alexander Lake power distribution (\$160K); Hughes community store (\$6.3K) and community hall building (\$4.1K); Louden Tribal Hall (\$88K), rental housing (\$188K), and tribal office bldg. (\$95.4k); Stevens Village fuel line (\$101K), road repair (\$74K), and barge landing (\$11.5K); Yukon Elder Assisted Living Facility (\$22.4K) and boiler building (\$249.7K); Hughes school building (\$22.9K) and airport (\$607K). In the TCC Region there remains \$10,414,900 (ref) of unaccomplished recovery projects to date.

The TCC region project community is Galena. Galena is geographically isolated, accessible only by air and boat or barge (and snowmachine in winter), 270 air miles west of Fairbanks; predominately tribal; subject to severe weather conditions; and has a subsistence economy. Galena is a regional hub for Middle Yukon River communities. It has some infrastructure capacity due to transferred Air Force facilities. The community houses the Galena Interior Learning Academy (GILA), a statewide boarding school. In addition to a rigorous academic curriculum, GILA offers vocational training in automotive technology, aviation, cosmetology and culinary arts (<http://gila.galenaalaska.org/about.html>). It recently registered 177 students. Due to its infrastructure, long (old air Force) runway, and centralized location, Galena is also a popular site for traditional festivals, guided big game hunting, and the annual Iditarod Dog Sled race. Galena is relatively resilient economically, with 63% of its workers earning over \$50,000. With its transportation, school, city, Tribal, and local business infrastructure, Galena is a model

hub community upon which other communities in the region can rely. Therefore, it is critical for the resilience of the region, to assist this community in becoming more physically resistant to the effects of flooding, but to enhance its socio-economic resilience as well, as reflected in the project activities described in Exhibit C.

Galena was, by far the most impacted community in the region from the 2013 disaster, and is in fact, still recovering. It has been subject to a cycle of seasonal ice jam flooding with varied levels of impact to the community. The 2013 event affected 80% of the structures in the community. 51 residential structures were funded through State and FEMA HMGP programs and are largely complete. Galena unmet recovery needs include the following: The community still has 35 homeowners who desire to have assistance in elevating their residences. The leverage is \$9M in state-and FEMA/State HMGP-funded elevations (ref). City infrastructure, as detailed by the project worksheets (ref), was significantly damaged by the 2013 event. While some of those projects are completed, some projects, as detailed above remain to be completed, and some did not include mitigation and resilience options. This is particularly true for some infrastructure such as the power plant, water plant, and sewage lagoon. Those critical facilities remain at risk from flooding. Mitigation and resilience options are presented in Exhibit C. The infrastructure protection and green energy project relate to unaddressed mitigation in critical facilities. Mitigation actions were unaddressed in these facilities due to the nature of insurance-related restrictions to repairs. Resiliency level activities address not only mitigating flood risk, but also increasing efficiency of utilizing waster heat, biomass energy and decreasing the cost of providing energy to residents and infrastructure. All of these factors are critical for residents living in a seasonally harsh arctic environment. Mitigation activities in critical infrastructure including power generation and grid, water and wastewater treatment facilities are fundamental to reducing risk to the local and regional population, and especially so for vulnerable populations. There also remain human and environmental health-related projects. A dust control activity is submitted with road damage from flooding being the tie back. Roads were/are essentially being repaired to pre-disaster condition, per FEMA PA programmatic guidelines, but the resilient solution put forth is a chip seal project which would be more resilient flooding than gravel roads, and would address a common environmental health issues in Alaska rural villages if dust abatement. This activity benefits not only the entire population, but especially the vulnerable populations of the young, elderly and health-sensitive. Another health issue in the community, as a result of the flood is the lack of a washeteria or public laundry and shower facility. The local business did not reopen due to the flood. The community considers this to be a basic need, not only for its resident population, but it's visitors-recreational, family, and business-related. The City Fire Hall received some damage during the flood (PW 5V2), but since insurance funded most of the repairs, no mitigation was addressed and this critical facility remains just as at-risk as prior to the flood. The community has a pre-disaster, disaster, post-disaster need which can be perceived as a resilience, health and safety issue-that of abandoned building remediation. This project would be to accomplish demolition and debris removal of abandoned structures. Removing these properties from the watershed in the event of future

flooding is an environmental benefit and is fundamental to the health and safety of the community. Additionally, for the future resilience of the community, these lands can be developed with structures meeting the most recent flood-related City ordinances (elevated). The Galena City landfill has been cited for numerous violations by the Alaska Department of Environmental Conservation (ref). Many of these violations stem from disaster recovery efforts from the flood. The community considers this to be an unmet need stemming from the disaster. In a joint venture, the City, the School, and the Louden Tribe have combined to form a non-profit timber harvest entity, called Sustainable Energy for Galena Alaska, Inc. (SEGA). They have been awarded a state grant of \$447k to purchase equipment for providing sustainable fuel for wood boilers, and \$200K of funding to implement the harvest plan. The venture requires \$250K of operating capital to bridge the transition from diesel to wood fire boilers.

As a remote, rural community in the Yukon River floodplain, the community sees a need for professional land development and protection, and community development planning. They envision a growth in population due to the GILA and their role as a regional and cultural transportation hub. The community has a need to develop an early childhood development program. This facility would include a daycare facility. The community saw this as a limiting factor in assisting in their own recovery from the disaster. The community needs assistance in re-establishing a program and in program planning, manning and early sustainment. The community has a facility which can be leveraged for the program. This program would contribute to vulnerable populations of the young, and would provide education and local socio-economic benefits. Food security is a local and regional population resilience issue, critically so for communities subsistence economies. While Galena has more income than other regional villages, and do relatively well comparatively statewide, as noted, it is still rural and isolated and fresh food is expensive to fly in from logistical centers such as Fairbanks or Anchorage. The community sees the improvement and protection of its community garden to be instrumental to its health. As well as complementing their self-reliant culture, this activity would provide direct benefits to vulnerable populations in the schools and the Elder Facility. The Louden Tribal Office was over 50% damaged by the 2013 flood. The facility has not yet been rebuilt. The Louden Tribal Council requested that CDBG-NDR leverage the FEMA project worksheet amount of \$203K (ref) to replace the old facility with a new combined Tribal Office and Cultural Center. The sustainment of the regional Koyukon Athabascan culture is a key component of regional Tribal resilience. The new proposed facility would meet a need for conducting cultural arts and crafts, meetings and activities. The tribal office is used to support the vulnerable population of the Tribe, its elders, children and 773 tribal members statewide. The Yukon Koyukuk Elder Assisted Living Facility was damaged during the 2013 flood. Facility repairs are in progress. The facility is a statewide assisted living facility and is not limited to serving the tribal population. The facility is currently at maximum capacity of residents. It is the only facility of its kind in the area. The community considers it a resilience need to service the needs of the elderly. The expansion would include a youth/elder interaction/library and staff interaction area, which does not exist in the current facility.

There continues to be an unmet need in addressing an evacuation route for the Crow Creek Subdivision. The Subdivision was cut-off and isolated from the rest of the City during the 2013 flood. While the road has been restored, there has been no mitigation or alternate route created to reconnect the subdivision to services and support of the city. The evacuation route would be a ½ mile section of road connecting the subdivision to higher ground. In a separate activity, four sections of the Yukon River bank have been identified by the community as areas of erosion which would eventually impact roads (see map) cutting off services to parts of the community and exacerbating seasonal flooding conditions and impacts. These activities may also be considered watershed protection, preventing road contaminants from entering the watershed. Current work by USDA NRCS \$8.1M EWP project may be considered as leverage.

GILA facilities and functions are a key component of the community and its resilience. GILA facilities located on the old Air Force base played a key role in protecting and sheltering the local population and responders during the flood. Resilience of these facilities would decrease the local and regional risk to population during Yukon River seasonal flooding events, as well as serve their daily function as an educational facility. GILA officials proposed an activity to upgrade their energy production systems (biomass glycol). The upgrade would leveraged a State of Alaska grant to replace the boiler portion of the steam system. The new system is green, higher efficiency and lower maintenance. GILA officials propose to upgrade the Math and Science Building. The original facility was constructed in 1984, and was heavily leveraged during Local-State-FEMA Joint Field Office recovery operations from 2013-2015.

Kawerak Region was impacted by two federally declared disasters in the eligible years 2011-2013: DR-4050 and DR-4162. There was a total of \$65.4M of damages documented by State and FEMA Individual Assistance and Public Assistance programs. (Ref) DR 4050 applicants: Diomedes, Elim, Golovin, Nome, Shaktoolik and Shishmaref, Teller, and Unalakleet. The DR-4050 DHS&EM Finance Plan indicates Total estimated FEMA costs for PA, IA and HMGP of \$8.1M and State costs of \$4.5M (reference DR 4050 West Coast Storm Finance Plan). Per the Aug 2015 EMMIE Summary (ref) \$9.3M of damages/costs have been identified and are being assessed for eligibility, \$1.7M of which have been approved and obligated. The AVEC Inter-tie (\$6.8M), Golovin floating dock (\$27.5K), boat ramp (\$6,6K) and septic system (\$22K); Cape Nome quarry dock (\$538K); and Unalakleet seawall damage (\$81.2K) projects remain incomplete as of August 2015. In the Kawerak Region there remain \$7,475,300 (ref) of unaccomplished recovery projects to date.

DR-4162 Kawerak Region applicants reporting damages and requesting assistance included Stebbins, Unalakleet, Shaktoolik and DOT&PF Unaccomplished projects to date include the AVEC Teller tieline (\$3.9M), Shaktoolik airport (\$60K); Shishmaref dump road (\$1.79M); Shaktoolik septic (\$11.1K) and evacuation road (\$1.1M); Stebbins sewage and garbage (\$29K), waterline damage (\$2.4K), city roads (\$8.5K), and City building damage (\$25.1K); Unalakleet

arctic pipe (\$110K) and airport road (\$15.7K). In the AVCP region there remains \$7,051,800 (ref) of unaccomplished recovery projects to date.

The Kawerak Region project community is Teller. Teller is located on a spit between Port Clarence and Grantley Harbor, 72 miles northwest of Nome. Teller is geographically isolated, accessible by air and boat or barge (and snowmachine in winter). It is accessible by road from the regional hub community of Nome. Teller's access to Nome decreases the cost of services and goods to Brevig Mission. It has close cultural and subsistence ties to the village of Mary's Igloo and Brevig Mission. It is predominately tribal (Eskimo); subject to severe weather conditions; and has a subsistence economy. Teller is economically challenged with an unemployment rate of 55% and only 33% of its workers earning over \$50,000.

Teller and the Kawerak region's recovery, mitigation and resilience needs from its two federal disasters include the following: Teller's location on a spit on northwestern coastal Alaska make it highly susceptible to the effect of rising sea level, decreasing sea ice contributing to increased impacts from severe winter storms, storm surges and high tides, and winds and flooding from storms. The 2013 storm caused \$6.7M of damage in Teller. The main damage was to an electrical intertie system which as yet remains unrepaired. The city relies on a dilapidated power plant to provide the community energy. The system experiences frequent outages and while some residents are able to purchase generators, the cost of fuel is high to this remote community. The AVEC has proposed an alternate project (\$6.8M) with FEMA funding (PW) but due to funding restrictions, does not include a renewable energy option which would help decrease the cost of energy to this community. The community proposes a wind generation system to address this need. This is certainly an appropriate alternative given its coastal location and persistent wind flow. The Teller Seawall experienced multiple events which damaged it. Despite a FEMA project worksheet to repair damages from the 2011 storm, the community was unable to complete the project due to lack of administrative capacity. The project worksheet was subsequently de-obligated. The seawall was reported by the community as damaged again in the 2013 storm (eligible disaster). However the project worksheet was deemed ineligible by FEMA due to lack of repairs from the previous event, and their FEMA's inability to discern damages from the two distinct events. Therefore, this important infrastructure protecting the community remains and unmet recovery need. If funded, this activity would be managed by the applicant (State of Alaska), which has a history of successfully completing projects. The seawall has been identified as the community's first priority in its economic development plan (ref). The community proposes two road elevation projects as mitigation against flooding events. DR-4162 was a flooding event which caused the City to take emergency protective measures (PW). The Nome Highway connects Teller to Nome, connecting the newest residential subdivision with local critical infrastructure. This area is noted for flooding and should be elevated as effective mitigation which contributes to the community's resiliency to these rather common occurrences. Additionally, Front Avenue should be elevated to provide safe evacuation for residents during flooding events. The elevation of these roads would not only protect the population in general,

but ensure continuation of critical services to vulnerable populations. As a part of recovery from DR-4162, the community has an unmet recovery need for debris removal. Debris is a natural consequence of storm surge and flooding, and continues to have recovery impacts on the community, and poses health and safety issues for the community and local wildlife. The community has \$90K of leverage, but seeks additional funding to complete a debris removal activity to resilient levels. As a condition of distress exacerbated by flooding and disasters, the community is one of three dozen Alaska Native Village without sewer and water services and among a smaller group which does not have a functioning washeteria. Toilet services are by honeybucket with no means (running water) to wash ones hands. The community has \$2.7M of committed leverage from USDA but requires additional funding to provide complete services to any standard. Finally, the community proposes an elder food pantry and community garden activity. As is common in rural Alaskan Native Villages, resilience in food security is a primary issue for subsistence cultures. The community is requesting start-up program funding to start an elder food pantry program which provides not only food for elders, but prepares traditional meals for them. The community garden would provide locals a secure (from animals) garden area for locals to grow non-processed and fresh food, both of which are expensive due to logistical issues. The program would also provide seeds for community members and collect excess food for the community at large. These projects have direct impacts to the vulnerable populations of the elderly and the young.