

ExhibitDNeed

State of Alaska

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Exhibit D Need

The AVCP, TCC and Kawerak Regions were impacted by three federally declared disasters in the eligible years 2011-2013: DR-4050, DR-4122, and DR-4162. Per the State of Alaska's DHS&EM disaster finance plans, total estimated disaster cost estimates for DR-4050 were \$12.7M (Dropbox EXD/D-1), DR-4122 were \$73.2M (Dropbox EXD/D-2), and DR-4162 were \$24.7M (Dropbox EXD/D-3), totaling \$110.6M in State and Federal disaster response, recovery and mitigation costs. Aside from the disaster impacts to these three target areas, the University of South Carolina's Hazards and Vulnerability Research Institute evaluates all three of these regions as presenting high social vulnerability to environmental hazards (Dropbox EXD/D-156).

Within the AVCP Tribal Region, Goodnews Bay, Tununak, Kotlik, Alakanuk, Emmonak, Nunum Iqua, Scammon Bay, Bill Moore's Slough, and Newtok still have incomplete recovery projects from DR-4050, DR-4122 and DR-4162 as of August of 2015. These projects include local airports, city and community buildings and contents, water and sewer lines, sewage lagoons, pedestrian boardwalks, sea walls, barge landings, roads, housing, and damaged vehicles and equipment. The regional incomplete project totals for DR-4050, DR-4122, and DR-4162 are \$850K (\$212K non-federal share) (Dropbox EXD/D157), \$7.41M (\$1.85M non-federal share) (Dropbox EXD/D158), and \$15.11M (\$3.78M non-federal share) (Dropbox EXD/D159). Incomplete PWs for DR-4050, DR-4122, and DR-4162 are at Dropbox EXD/D-5 through D-45, respectively. In the AVCP region there remains \$23.4M in unaccomplished recovery projects, of which \$5.84M is non-federal share, from the three disasters to date. This qualifies the AVCP region for URN.

Regionally, all of the aforementioned AVCP communities are subject to repetitive local, state and federal-level disaster impacts due to their geographic exposure to seasonally severe arctic environment of Alaska, their relative location to coastlines and rivers (floodplains). DR-4050 was a severe storms and flooding event affecting the West Coast of Alaska (Dropbox EXD/D-70); DR-4122

was a Spring (ice jam) flooding disaster which affected communities along the Yukon, Kuskokwim, Koyukuk and Copper Rivers (Dropbox EXD/D-71); and DR-4162 was the result of a series for four sea storms impacting western coastal Alaska villages (Dropbox EXD/D-72). The AVCP area includes areas of the Lower Yukon and Lower Kuskokwim Regional Education Attendance Areas (REAs) (Dropbox EXD/D-73).

As mentioned in Exhibit A, the AVCP region project communities are Emmonak and Newtok. Both communities are geographically isolated, accessible only by air and boat or barge (and snow machine in winter); predominately tribal; subject to severe weather conditions; and survive via subsistence means. Nelson Frank, a Haida from southeast Alaska is quoted in his testimony before the Alaska Native Review Commission, *“subsistence living, a marginal way of life to most, has no such connotation to the native people of southeast Alaska. The relationship between the Native population and the resources of the land and the sea is so close that an entire culture is reflected...Traditional law...was passed from generation to generation, intact, through repetition of legends and observance of ceremonials which were largely concerned with the use of land, water, and the resources contained therein. Subsistence living was not only a way of life, but also a life-enriching process. Conservation and perpetuation of subsistence resources was part of that life and was mandated by traditional law and custom.”* <http://www.culturalsurvival.org/ourpublications/csq/article/alaska-native-subsistence-a-matter-cultural-survival>. The University of Alaska Institute for Social and Economic Research (ISER) presented the challenge of rural Alaska’s mixed cash, subsistence, sharing and non-cash trading economies in “Understanding Alaska’s Remote Rural Economy” (Dropbox EXD/D-74). These are certainly applicable to all the Alaska Native cultures throughout Alaska.

Emmonak is situated on the mouth of the Yukon River, 10 miles from the Bering Sea, exposed to the effects of severe storms and spring ice jam flooding. See the Emmonak hazard mitigation plan (Dropbox EXD/D-75, page 2-1) and area map (Dropbox EXD/D-84) for location, geography and

history. See Dropbox EXD/D-75 page 5-1 for Emmonak hazard profile and Table 5-5 for risk index. These denote that erosion and flooding are the most likely hazards to occur with the most severity. Per the USACE Baseline Erosion Assessment, August 5, 2007 (Drop box EXD/D-77), spring floods caused major erosion in 1972, 1985, 1989, 1992, and 2005. The report further states that Airport Way remains threatened by active erosion, and that a 3200-foot armoring project is recommended. Photos from DR-1843 in 2009 and DR-4122 in 2013 show flooding and progressive erosion in Emmonak along the Yukon River (Drop box EXD/D-78). The following FEMA PWs document repetitive damage to airport, road, and dock facilities along the River in Emmonak, supporting a need for resilient community transportation infrastructure: DR-4122 PW 65 (Dropbox EXD/D-45) for repairs on the Emmonak Airport taxiway due to flooding; DR-4122 PW 51 for repairs to Yukon Way (Dropbox EXD/D-44); DR-1843 PW 127) (Dropbox EXD/D79) for repairs to Yukon Way (100ft by 14ft section); DR- 1843 PW 136V1 (Drop box EXD/D-80) for repairs to frontage road (airport access); and DR- 1843 PW 169V1 (Dropbox EXD/D-81) for repairs and mitigation to the Emmonak City Dock. Further, Section 5.3.3.2 of the Emmonak LHMP (Dropbox EXD/D-75) provides a history of previous flood events in Emmonak and Table 6-1 lists the City's infrastructure vulnerability to hazards. Note that 100% of the community is vulnerable to the flood hazard, and 30% to erosion. Table 6-5 indicates 70 residential and community structures vulnerable to erosion, for a total loss value of \$19.3M (table values are miscalculated) and 228 total structures vulnerable to flooding for a total loss value of \$54M. Included amount the vulnerable (to erosion) critical facilities are the City Women's shelter, two churches, the Lower Yukon School District Pre-school, the health clinic, and the Yukon Delta Fisheries Development Association Facilities. As well as being economically and socially distressed, Emmonak is in a continual cycle of local, state and federal-level disaster impacts and recovery. Funding for resilience activities in this community builds local and regional socio-economic resilience.

Although largely based on subsistence, Emmonak has a seasonal economy based on commercial fishing and processing. In September 2015, the Alaska Department of Labor reported a 6.4% unemployment rate in Alaska, with the Kusilvak (formerly Wade-Hampton) Census Area of which Emmonak is a part, reporting the highest rate of 19.5% (Dropbox EXD/D-82). 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 (Dropbox EXD/D-83) or natural disasters, Emmonak can support its region by distributing goods, services and fuel at lower cost; providing economic stability through employment in commercial fisheries and enhanced port operations; and providing workforce development training. Emmonak is already considered a regional transportation hub community in the Lower Yukon River. 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 (Dropbox EXD/D-76). As previously noted, Emmonak suffers repetitive and significant damage to their transportation facilities (roads and airport) during flooding events. Emmonak is still undergoing recovery from its qualifying event, DR-4122. 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 by providing local employment, workforce training, and income for the City to provide services to its residents.

Emmonak is a National Flood Insurance Program (NFIP) participating community. However due to seasonal employment and its subsistence economy, many of its residents are unable to afford flood insurance. This inability of residents to purchase flood insurance has impacted the city's ability to apply for federal and state mitigation project funding to accomplish residential elevations. For instance, Galena, another NFIP participating community, recently received over \$8M state and federal recovery and mitigation funding to complete 51 residential elevations (Dropbox EXD/D-86 through D-88). Many

of Emmonak's residences and infrastructure are in the A-zone (Dropbox EXD/D-85). Improving local employment through the regional port project would provide local residents financial means to mitigate risk by purchasing flood insurance and participate in grant programs to elevate their residences.

The Native Village of Newtok, also within the AVCP Tribal Area, 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 is a Tribal community with an active subsistence economy.

Historically, Newtok has been affected by flooding 2002, 2004, 2005, 2006, 2011 and 2013 (Drop box EXD/D-89). As previously noted in Exhibit B, \$993K of repairs to the Newtok boardwalk, dump and barge landings from DR-4162 have yet to be completed. Newtok is distressed by poverty and lack of employment. Compared to the 2014 national average in which 65% of workers earned over \$20K annually, in Newtok that percentage was 17%, (Dropbox EXD/D-90). Newtok, as described in Phase 1 Exhibit B and further described below, is environmentally distressed by enhanced and cyclic impacts of permafrost melt, erosion, decrease in seas ice, and severe storms and flooding.

The health and safety of Newtok is threatened by severe riverine erosion and flooding. Per the USACE, the Ninglick River is eroding toward Newtok at an average rate of 71 feet per year (1957 to 2003) with a maximum yearly observed rate of erosion of 113 feet per year between 1977 and 1983 (Drop box EXD/D-91). In an updated study in 2008, the USACE referencing bank erosion of the Ninglick River between 1954-2007 states, "The Ninglick River is eroding toward Newtok at an average rate of 72 feet per year. The maximum yearly observed rate of erosion is 300 feet per year." (Dropbox EXD/D-68). 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 (Dropbox EXD/D-67), followed by the loss of the rest of the community's infrastructure.

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 (Dropbox EXD/D-92). 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. The 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 (Drop box EXD/D-89). In 2006, a comprehensive environmental public health assessment conducted 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 EXD/D-93)

As discussed in Phase 1 and documented in the Mertarvik Strategic Management Plan (Dropbox EXD/D-155), Newtok’s resilience action is long-planned village relocation to the site Mertarvik on Nelson Island. The mitigation and resilience need is the physical relocation and/or build of residential housing and infrastructure at the new site. Although some state and federal funding is available for leverage, significant funding gaps for these activities exist. Most recently, with technical assistance from DHS&EM, the Newtok Village Council (NVC) has submitted two mitigation project applications to FEMA 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 (Drop box EXD/D-94 through D-97). Completion of these projects will move 27 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 by Department of Environmental Conservation (DEC)/Village Safe Water (VSW) to support the aforementioned FEMA mitigation applications. The final design and record will leverage preliminary design, but is a key pre-requisite to any substantial residential relocation/build effort in Mertarvik. There is a strong need for residential housing at the new site. The Newtok project proposes a prototype 66-home acquisition, demolition and debris removal and build program. The acquisition project would fund resilient residential infrastructure builds in Mertarvik, essentially completing community relocation. 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” (Drop box EXD/D-98). Regardless of the community’s elected option, the Newtok Planning Group (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; 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. Regionally, DR-4122 sub-applicants include the City of Galena, Louden Tribal Council, Yukon Elder Assisted Living Facility, Circle Alaska Native Village (ANV), Eagle, City of Fort Yukon, Fort Yukon ANV, City of Hughes, Galena City School District, Stevens Village, Tanana, Yukon Flats School District, and the Yukon Kuskokwim Health Corporation. The DR-4122 Finance Plan indicates a total estimated disaster costs to FEMA of \$44M and the State of \$29.1M (Dropbox EXD/D-2). Per the DR-4122 August 2015 EMMIE summary (Dropbox EXD/D158), in the TCC Region, \$10.4M of recovery projects remain incomplete of which \$2.6M is non-federal share. Incomplete projects include campgrounds; clinics; roads; city vehicles; safety rail posts; lift station; seawall; dike; ball field; city, Tribal and school buildings; sewage lagoon; pool house; heat transfer system; fuel tanks; water wastewater system; community store; rental housing; fuel line; barge landing; assisted living facility; and airport facilities. PW’s are in Dropbox EXD/D-100 through D-143.

The TCC region project community is Galena. Galena is geographically isolated, accessible only by air and boat or barge (and snow machine 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 infrastructure capacity due to transferred U.S. 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 230 students. Due to its infrastructure, long runway, and centralized location, Galena is also a popular site for traditional festivals, guided big game hunting, and the annual Iditarod and Iron Dog Sled races. Galena has a relatively resilient economy, with 63% of its workers earning over \$50K (Dropbox EXD/D-99). With its location, 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, and to enhance its socio-economic resilience as well, as reflected in the project activities described in Exhibit E.

Galena was the most impacted community in the region from the 2013 disaster, and is 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 for elevation through State and FEMA mitigation programs and are largely complete (Dropbox EXD/D-86 through D-88). Per discussions with the FEMA elevation grant sub-applicant, Loudon Tribal Council, Galena's unmet recovery needs include 35 additional residential elevations. The city's power and water treatment plant repairs lacked basic mitigation and resilience options (such as green energy) due to insurance funding of repairs, leaving these critical facilities at risk from flooding. Resiliency level activities involve increasing efficiency by utilizing waste heat and biomass energy, and decreasing the cost of providing energy to residents and infrastructure. These factors are critical for residents living in a seasonally harsh and isolated arctic environment. Mitigating critical infrastructure is fundamental to reducing risk to the local and regional population, and especially so for vulnerable populations. There are also health and environmental health-related needs. 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, but the resilient solution is a chip seal project which would be more resilient to flooding than gravel roads, and would address the common environmental health issues in Alaska rural villages of dust abatement. This activity has particular benefits to the young, elderly and health-sensitive. Another health issue in the community is the lack of a washeteria or public laundry and shower facility. The community considers this to be a basic resilience need, not only for its resident population, but its recreational, family, and business-related visitors. The City Fire Hall received some damage during the flood (Dropbox EXD/D-116), but since insurance funded most of the repairs, no mitigation was addressed and this critical facility remains just at-risk. The community also has a pre-disaster, disaster, post-disaster need for demolition and debris-removal of abandoned buildings. This is an ongoing health and safety issue. Removing these properties from the watershed in the event of future flooding is also an environmental benefit. Additionally, for the future resilience of the community, these lands can be developed with structures meeting the most recent flood-related City ordinances. The Galena City Landfill has been cited by the Alaska DEC for areas of landfill improvement (Dropbox EXD/D-144 and D-145). One of these deficiencies is derived from an expansion area that was developed in response to 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 Loudon Tribe have combined to form a non-profit timber harvest entity, called Sustainable Energy for Galena Alaska, Inc. They have been awarded a state grant of \$447K (Dropbox EXD/D-146) to purchase equipment for providing sustainable fuel for wood boilers; \$100K from the City (Dropbox EXD/D-147) and the \$100K from GILA Minutes, paragraph 9 (Dropbox EXD/D-148) for funding to implement the harvest plan. The venture requires startup capital to bridge the transition from diesel to wood fire boilers.

As a remote, rural community in the Yukon River floodplain (Dropbox EXD/D-149), 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 sees this as a limiting factor in assisting in their own recovery from the disaster. The community needs assistance in establishing a program, program planning, manning and early sustainment. The community has a facility which can be leveraged for the program. This program would address to care of the young, and would provide education and local socio-economic benefits. Food security is also a local and regional population resilience issue, critically so for communities subsistence economies. While Galena has more income than other regional villages, 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 well-being. 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 Loudon Tribal Office was over 50% damaged by the 2013 flood. The facility has not yet been rebuilt. The Yukon Koyukuk Elder Assisted Living Facility was damaged during the 2013 flood. It is the only facility of its kind in the area and is currently at maximum capacity of residents, and needs to be expanded. The community considers it a resilience need to service the needs of the elderly.

In a separate activity, one section of the Yukon River bank have been identified as areas of erosion which would eventually impact roads, 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 (Drop box EXD/D-150).

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). This upgrade would leverage a State of Alaska grant to replace the boiler portion of the steam system. The new system is green, higher efficiency and lower maintenance.

Kawerak Region was impacted by two federally declared disasters in the eligible years 2011-2013: DR-4050 and DR-4162. The DHS&EM Disaster Finance Plans for DR-4050 and DR-4162 estimate a total of \$8.1M and \$11.3M in FEMA and \$4.5M and \$13.5M of State recovery costs, respectively (Drop box EXD/D-1 and D-3). Kawerak Region applicants with incomplete recovery costs are AVEC, Elim, Golovin, Nome, Shaktoolik, Shishmaref, Stebbins, Teller, and Unalakleet. For DR-4050, \$7.8M of projects from DR-4050 remain incomplete, of which \$1.9M is non-federal share (Dropbox EXD/D157). For DR-4162, \$7.0M of projects remain incomplete, of which \$1.7M is non-federal share (Dropbox EXD/D159). Incomplete projects include a community power inter-tie, docks, boat ramp, septic systems, seawalls, airports, roads, dumps, and city buildings. PWs are located at Dropbox EXD/D-46 through D-60.

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 snow machine 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 the neighboring community of Brevig Mission. It has close cultural and subsistence ties to the village of Mary's Igloo and Brevig Mission. Teller is predominately tribal (Eskimo); subject to severe weather conditions; and has a subsistence economy. Teller is economically challenged with a September 2015 unemployment rate (Nome Census Area) of 10.4% (Dropbox EXD/D-82) and only 33% of its workers earning over \$50K (Dropbox EXD/D-151).

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 (Dropbox EXD/D-61 and D-53). 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, 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. The seawall was originally reported damaged in 2004 Bering Strait Fall Storm (Dropbox EXD/D-62). The community lacked the administrative capacity to complete the project and the PW was subsequently de-obligated by FEMA. The community reported damages to the seawall after eligible disaster DR-4050 (Dropbox EXD/D-63), but the project was deemed ineligible by FEMA as damage from the 2011 storm (eligible disaster) could not be discerned from the 2004 storm since repair work was never completed (Dropbox EXD/D-64). Therefore, this important infrastructure protecting the community remains an unmet recovery need. If funded, this activity would be managed by the State of Alaska, which has a history of successfully completing such projects. The seawall has been identified as the community's first priority in its economic development plan on the cover of its most recent Economic Development Plan (Dropbox EXD/D-66). 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 (Dropbox EXD/D-65). 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 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 and subsequent local events, the community has an unmet recovery need for debris removal. Debris is a natural consequence of storm surge and flooding, continues to have recovery impacts on the community, and poses health and safety issues for the community and local wildlife. The community has \$93K of leverage (Dropbox EXD/D-152 and D-153), 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 ANVs without sewer and water services and among a smaller group which does not have a functioning washeteria. Toilet services are by honey bucket with no means (running water) to wash ones hands. The community has \$2.7M of committed leverage from USDA (Dropbox EXD/D-154) 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 ANVs, resilience in food security is a primary issue for subsistence cultures. The community is requesting start-up program funding for 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 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.