

Memorandum

To: Akiak Native Community, Kokarmiut Corporation and City of Akiak
From: Joel Neimeyer, P.E., Consultant to Akiak Native Community
Subject: Status Report on Akiak Organized Retreat Projects
Date: July 19, 2019

This memo is a status report to the three parties to the May 2019 Akiak [Tri-Party-Agreement](#) on a suite of potential projects as part of an organized retreat. In addition, the report will serve to inform Federal, State and other participants in advance of the July 23, 2019 Anchorage meeting on the draft Akiak 2019 [Hazard Mitigation Plan](#) (HMP) and Akiak community members in advance of the July 29, 2019 Akiak meeting on the draft HMP. I have been in routine contact with LeMay Engineering (Akiak Native Community [ANC] consultant) who is drafting the HMP and they are presently on schedule to complete the report for ANC submission to the Federal Emergency Management Administration (FEMA) for approval later this summer. As noted in prior discussions, FEMA funding is not available to the community until the draft HMP has been approved. This is important as the Alaska Division of Homeland Security and Emergency Management has a competitive grant funding [opening](#) that closes in late October.

As documented previously, the May 19/20, 2019 high water / spring melt [event](#) claimed up to 75 feet of riverbank over two days along 1200 lineal feet of river frontage. Historically, Akiak experiences river erosion during fall storms when waves on the Kuskokwim River can get up to two feet. A spring erosion of the magnitude in 2019 has not happened before in recent memory.

A. **River Morphology**: central to the managed retreat is the question of where the river will stop, or how far must the community plan to move from the river. Akiak has collaborated with the Yukon-Kuskokwim Health Corporation (YKHC) in submitting a grant application to the Bureau of Indian Affairs (BIA) Tribal Resilience program to undertake a preliminary assessment of the river morphology changes for the Kuskokwim River from the mouth up to Akiak and the mouth of the Yukon River. The outcome of this effort, if funded, will not result in an answer to the question noted above, however it will identify known data and missing data that would lead to this prediction.

The draft HMP notes the 2013 Natural Resources Conservation Services (NRCS) [report](#) that identifies an \$80M+ rock revetment project to protect the community from further erosion. Though the draft HMP, Akiak has concluded that funding of this amount will never be appropriated; therefore, the community has accepted a managed retreat from the river as the appropriate course of action. Of note, NRCS carried out a bathymetric survey of the river in 2013 and most recently in June 2019. In 2013 the survey found a deep trough of 60 feet located about a half mile upriver from the village. In 2019, this 60-foot deep trough is now in front of the village and approximately 100 to 150 feet from the riverbank. Of note, NRCS is the first agency to come to the community in response to the May 19/20 event.

Alaska Division of Geological and Geophysical Surveys has been contacted and provided information that was instrumental in the YKHC application to BIA. The Army Corps of Engineers has been contacted and as far as I know has not responded to the May 22, 2019 letter requesting assistance.

- B. Home Relocation Project & Bank Stabilization:** Kokarmiut Corporation has recently committed vacant lots that are near the power distribution system and for some lots near water and sewer mains. The community is working with homeowners on voluntarily relocating their homes to these lots. A selection process is yet to be developed for assignment of the vacant lots – likely a lottery.

Discussions are underway for NRCS Emergency Watershed Protection program funding for the relocation of structures near the river's edge (see June 24, 2019 [NRCS trip report](#)). The proposed NRCS cooperative agreement will allow up to 220 days to complete the entire home relocation effort, at which point Akiak is eligible for reimbursement. Akiak must come up with interim financing to carry out the work and some home structural work that is not covered by NRCS (i.e. disassembling houses and home additions for a move and then bolting them back together in a new location).

A Village Safe Water (VSW) [Infrastructure Protection Program](#) application was submitted on July 11th for a closing date of July 26th. VSW funding is sought for disconnecting water and sewer service lines, excavating the arctic pipe for future use, and installing water and sewer services for the vacant lots near water and sewer mains. In recent meetings, VSW staff was not supportive of using this program for the installation portion of the grant request, however, they have not declined this portion of the application, yet. Of note, an incomplete application was submitted as it lacks approval of the proposed cost estimate from the Alaska Native Tribal Health Consortium (ANTHC) as required by VSW. ANTHC has provided some feedback on the cost estimate but has not yet approved the materials submitted. This VSW program has a one-year performance period. Still to be negotiated is a VSW required project management support from YKHC remote maintenance worker program.

Discussions are underway with US Housing and Urban Development (HUD) staff regarding the agency's [Imminent Threat](#) Program. HUD funding will be sought for civil earthwork at the rivers edge to make it safe for the community (paring back the extreme bank slope); preliminary work at the new housing subdivision (including road and power distribution expansion); and home relocation costs that NRCS cannot fund. This program has a one-year performance period. HUD staff stress that the program is meant to serve the entire community and not just a few. They understand that homes must be relocated in order to do the riverbank stabilization work (i.e. 30% slope as opposed to the current 60% slopes). The HUD – IT program also has a one-year performance period.

Although progress is made on home relocation efforts, no progress has been made on the one home that is near the rivers edge and cannot be moved. Funding sources for a new home must be identified. Sheila Carl and I met with staff at the Association of Village Council Presidents Housing Authority (AVCPHA) in early July to discuss the currently open nationwide HUD competition for Indian Homes. AVCPHA staff shared with us that the board had

already prioritized other new housing construction in the region. However, if AVCPHA is successful this means that Akiak's current housing needs will go up in priority.

- C. **New Housing Subdivision:** With the relocation of six or seven homes from the riverbank, it appears to me that every vacant lot that is near the power distribution system will have been utilized. For future housing growth and relocation of homes not yet threatened, the new housing subdivision must be developed, in general, as described in the 2018 [Preliminary Engineering Report](#) prepared by ANTHC.

In my opinion, the proposed subdivision as envisioned in the report is insufficient for long term housing growth and home relocation (given the uncertainty of where the Kuskokwim River will stop). Two existing ground features constrain the development of the new housing subdivision. First is the existing solid waste site (30 years old) and a slough that runs between the proposed subdivision and the existing school. Clearly, building homes near the existing solid waste site is not a reasonable or healthy solution. Attached is a proposed community layout including the new housing subdivision and new solid waste site.

Kokarmiut Corporation, as I understand it, has recently dedicated land for future 14c3 conveyance for a new solid waste site and approximately 3000 feet of access road. By closing the existing solid waste site, this will allow Akiak to develop the new housing subdivision with only the constraint of the natural slough.

Tasks to undertake to begin the development of the new subdivision and solid waste site include the following.

1. Complete land conveyance documents and associated professional land surveying. Staff with the Alaska Division of Community and Regional Affairs are currently supporting Akiak on this and identification of land ownership through out the community.
2. Issue an indefinite delivery / indefinite quantity (IDIQ) contract solicitation for a multi-disciplinary architectural and engineering design firm to carry out pre-construction activities. A chief concern I have is that agencies may not accept this solicitation as meeting their competitive requirements set forth in grant requirements. An ideal situation would be to get the prospective funding agencies to pre-approve the solicitation even if they have not yet issued a grant.
3. Obtain funding for road, power and sanitation design and other pre-construction activities. Discussions with the BIA Tribal Transportation Program (TTP) appear promising for identifying design funding by reallocating existing Akiak TTP funding allocations. Discussions with the sanitation funders has not been fruitful as the process for 2019 allocation of sanitation funding closed in mid-May. Discussions about Akiak's plight with senior leadership at VSW and the US Department of Agriculture – Rural Development (USDA-RD) was not sufficiently convincing to get the agencies to allow for a late application. A further complication is that the sanitation funders require a minimum score on utility operation and maintenance. Akiak does not score high on the O&M checklist and has administrative work to complete which must be completed by

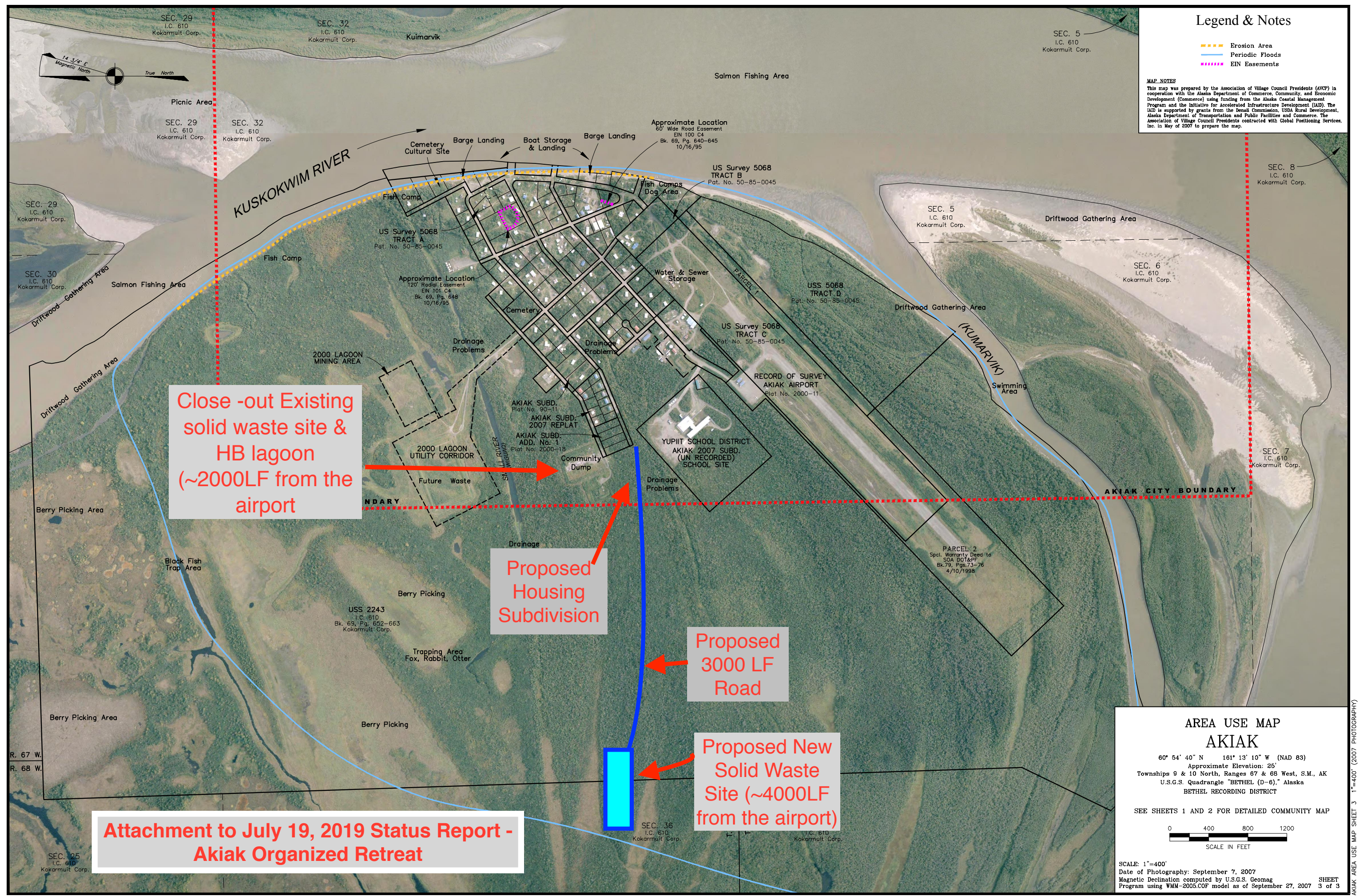
December 2019 in order to be scored before the 2020 allocation. As for power distribution funding preliminary discussions have occurred with staff at the Alaska Energy Authority (AEA). AEA staff have offered support in a site visit for the home relocations and reconnections and cost estimating for the new subdivision. However, the current state of capital funding by the State of Alaska to AEA is unknown until the state legislature and the governor reach a budget agreement.

4. Start the process for a [Programmatic NEPA Review](#) for work associated with Akiak Managed Retreat efforts, including the following projects and issues:
 - a. Proposed 3000-foot access road to a new solid waste site (which would also serve to support a new housing subdivision)
 - b. Proposed solid waste site (4000 feet from the airport and away from a new housing subdivision)
 - c. Close-out of existing solid waste site (2000 feet from the airport) that is adjacent to the proposed new housing subdivision
 - d. Expansion of water and sewer mains to a new housing subdivision
 - e. Expansion of power distribution system to a new housing subdivision
 - f. New Housing in a new housing subdivision
 - g. Relocated existing homes in a new housing subdivision
 - h. Riverbank civil earthwork (paring back the extreme slope and vegetation clearing)
 - i. Removal of existing utilities and other infrastructure near the riverbank
 - j. Tiered Federal Agency review of specific projects, identified above – how do we streamline this process?
 - k. Akiak Native Community as a Cooperating Agency
 - l. Who is the Lead Federal Agency?
5. Start the process for Alaska Department of Environmental Conservation (A-DEC) [permitting](#) for proposed solid waste site and close out of solid waste site including design documents.
6. Confirm if a Federal Aviation Administration waiver for the proposed solid waste site (less than 5000 feet separation) is required.
7. Akiak should consider submitting a \$50K grant proposal to the USDA-RD [community facilities](#) program for construction equipment (i.e. a dump truck). It is my understanding that the BIA-TTP program can also support the purchase of a dump truck as it will be needed build the new solid waste access road as well as close out the existing solid waste site.
8. Akiak should consider submitting a proposal to the US Department of Defense – [Innovative Readiness Training](#) (IRT) program which closes on September 30, 2019 for construction of the new solid waste site, access road and close out of the existing solid waste site.

Legend & Notes

- Erosion Area
- Periodic Floods
- EIN Easements

MAP NOTES
 This map was prepared by the Association of Village Council Presidents (AVCP) in cooperation with the Alaska Department of Commerce, Community, and Economic Development (Commerce) using funding from the Alaska Coastal Management Program and the Initiative for Accelerated Infrastructure Development (IAID). The IAID is supported by grants from the Denali Commission, USDA Rural Development, Alaska Department of Transportation and Public Facilities and Commerce. The Association of Village Council Presidents contracted with Global Positioning Services, Inc. in May of 2007 to prepare the map.



Close-out Existing solid waste site & HB lagoon (~2000LF from the airport)

Proposed Housing Subdivision

Proposed 3000 LF Road

Proposed New Solid Waste Site (~4000LF from the airport)

Attachment to July 19, 2019 Status Report - Akiak Organized Retreat

**AREA USE MAP
AKIAK**

60° 54' 40" N 161° 13' 10" W (NAD 83)
 Approximate Elevation: 25'
 Townships 9 & 10 North, Ranges 67 & 68 West, S.M., AK
 U.S.G.S. Quadrangle "BETHEL (D-6)," Alaska
 BETHEL RECORDING DISTRICT

SEE SHEETS 1 AND 2 FOR DETAILED COMMUNITY MAP



SCALE: 1"=400'
 Date of Photography: September 7, 2007
 Magnetic Declination computed by U.S.G.S. Geomag
 Program using WMM-2005.COF model as of September 27, 2007

AKIAK AREA USE MAP SHEET 3 1"=400' (2007 PHOTOGRAPHY)