

# Site Specific - Short Term Response Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58 June 2020

**Akiak Home Relocation and Managed Retreat Project** 

# **Project Information**

**Project Name:** Akiak Home Relocation and Managed Retreat Project

**Responsible Entity:** Akiak Native Community

**Grant Recipient** (if different than Responsible Entity):

State/Local Identifier: Alaska

**Preparer:** Joel Neimeyer, P.E. & Sheila Carl

**Certifying Officer Name and Title:** Mike Williams, Chief, ANC

**Grant Recipient** (if different than Responsible Entity):

Consultant (if applicable): Joel Neimeyer, P.E.

### **Direct Comments to:**

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**Project Location:** Akiak, Alaska

**Tiered Environmental Review** (see 24 CFR Part 58.15 Tiering): This document is the second environmental review document of what is envisioned to be five documents that will communicate the potential environmental impacts associated with the Akiak Home Relocation and Managed Retreat Project (Project). This document provides broad Project descriptions, so that this information does not have to be repeated in subsequent site-specific environmental review documents. While the Project construction proposed is work commonly carried out in rural Alaska villages, the complexity for Akiak comes from the many different funding and regulatory agencies currently, and potentially, involved in the community's response to a new natural hazard (i.e. spring time high water / river bank destabilization). The five environmental review documents follow:

- 1. Broad Review Environmental Assessment Akiak Home Relocation and Managed Retreat Project.
- 2. **Short-Term Response:** Infrastructure Less Than 200 Feet from the River. This includes six home relocations and assorted "out buildings", riverbank stabilization and building a seventh home. **This document.**
- 3. New Housing Subdivision Improvements.

- 4. Solid Waste Site, Honey-bucket Lagoon, and Sewage Lagoon Improvements.
- 5. Long-Term Response: Infrastructure Less Than 600 Feet from the River. This includes contaminated sites, a commercial store, the City building, Head Start building, the old BIA School (unused), National Guard building, bulk fuel farm and marine fuel header, roads, utilities, and additional home relocations. Given how critical the bulk fuel farm is to the community for electrical power and heating, this infrastructure is included in the long-term response despite being 650 feet from the river's edge (as of June 2019).

# **Description of the Proposed Project** [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

Short-Term Response Project tasks are generally those that will be carried out in 2020/21, and will relocate or reclaim existing infrastructure within 200 feet of the Kuskokwim River. Of note, additional Project work may be carried out in 2020/21 that are part of New Housing Subdivision Improvements or Solid Waste Site, Honey-bucket Lagoon, and Sewage Lagoon Improvements, and these tasks will be considered in other tiered environmental review documents.

The Natural Resources Conservation Service (NRCS) has funded a portion of the Short-Term Response Project tasks including moving six existing houses and outbuildings within 200 feet of the river's edge. Please see the Broad Review Environmental Assessment - Akiak Home Relocation and Managed Retreat Project, which includes in the appendix, the NRCS completed environmental review documents for relocating six homes and outbuildings. Accordingly, this Site-Specific - Short Term Response Environmental Assessment document addresses those tasks not covered by the prior NRCS document.

- 1. Clearing and grubbing of six vacant lots is required for relocating six homes. In addition, out-buildings within the 200-foot zone from the river's edge (i.e. storage sheds and fish drying racks) will be relocated or demolished with debris taken to the existing solid waste site. This will improve access with heavy equipment to the six homes to be relocated, as well as, remove the outbuildings from the flood plain. Vacant lots were selected that are near water mains, sewer collection mains, electrical power grid and roads.
- 2. Relocate six homes, identified by the Natural Resources Conservation Service (NRCS) as threatened (see aerial below). Utility connections to the existing homes will be disconnected. The homes will be jacked up from their post and pad foundations, then lowered onto house moving equipment consisting of structural steel beams and a "tricycle" wheeled dolly system. The homes will then be wheeled on Akiak gravel roads to a vacant lot. This effort may disrupt local traffic while the houses are being relocated.



Houses labeled 578, 574, 559, 558, 555, and 554 have been identified by NRCS as structurally sound for relocation and facing imminent threat from the river.



3. In the new location (selected vacant lots shown in yellow dots) connect the six relocated homes to nearby power, water and sewer in the new locations. Additional sand fill will be required for most of the lots with the relocated homes, along with new porches, stairs and post and pad foundations.

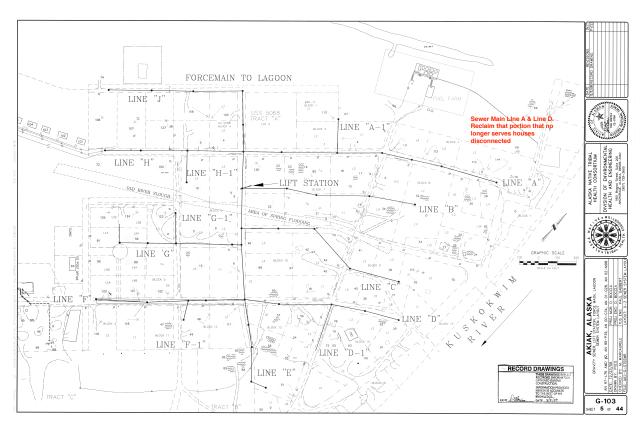
- 4. Demolish one home that cannot be relocated, due to structural issues, and replace it with a new home.
- 5. Brush and tree clearing to 200 feet of the river's edge. Tree roots allow for some erosive resistance from the river, however, the trees topple over when the riverbank is undercut and the "sweepers" become a safety hazard to boaters.
- 6. Riverbank stabilization, see figure and photo below, includes paring back the extreme riverbank from vertical to a minimum 30-degree angle of repose. The recent erosion pattern results in a nearly vertical riverbank face from five to ten feet, perpendicular to the river. This may be an annual exercise depending upon the magnitude of future riverine erosion and bank destabilization.

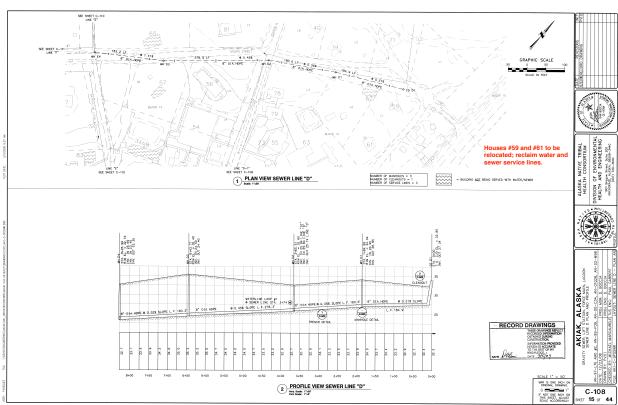


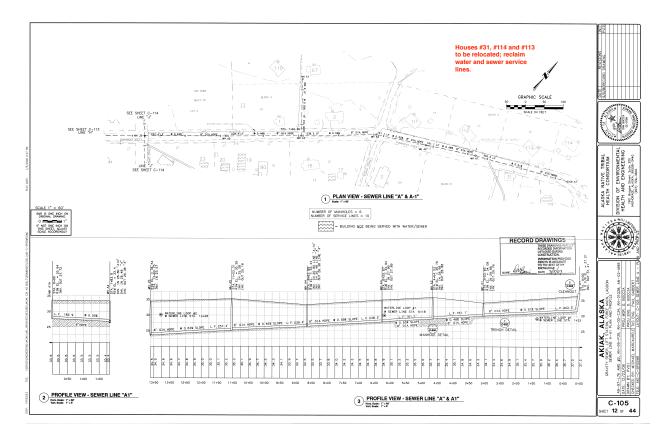


Photo: May 30, 2019

7. Reclaim buried arctic water and sewer service line piping and sewer mains (see annotated record drawings on following pages). The sewer system layout near the river's edge is perpendicular to the river. The sewer piping must be removed so that, when, the river erosion reaches the piping the river does not flood into the community sewer collection system. If possible, the arctic piping, which was installed ten years ago, will be reclaimed and reused.







## **Statement of Purpose and Need for the Proposal** [40 CFR 1508.9(b)]:

Akiak is facing a new environmental threat from spring time / high water riverbank degradation that puts seven existing homes near the Kuskokwim River at risk. The Short-Term Relocation Project tasks will relocate six existing homes, demolish and build seventh home. In addition, additional work is proposed within 200 feet of the river including relocation or demolishing outbuildings, and excavating and reclaiming arctic pipe sewer mains and water and sewer service lines. Lastly, riverbank stabilization will be undertaken to protect boaters from toppled trees in the river and from falling in the river in the event the vertical riverbank becomes unstable and collapses into the river.

# Existing Conditions and Trends [24 CFR 58.40(a)]:

All of the work within 200 feet of the river is on disturbed ground from the prior development of housing, roads, and utilities. The seven vacant lots proposed for relocated homes or a new home are near existing roads, water and sewer mains and the electrical power grid as to lower development costs. In general, the vacant lots are adjacent to existing housing and will require some modest site clearing and removal of trees and brush. Upon relocating the homes additional sand fill material will be required for a smooth lot free of heavy equipment ruts. As the vacant lots are among other housing the impact to the environment is not significant.

# **Funding Information** (pertaining to Short Term Response Project Tasks)

Grant Number	HUD Program (or other source)	Funding Amount	Status
Alaska VSW funding	Infrastructure Protection Funding (for disconnecting water and sewer services to 6 homes and a portion of two sewer mains)	\$68,159	Approved
NRCS	Emergency Watershed Protection (EWP) Program (for relocation of 6 homes)	\$134,831	Approved
FR-6200-N-23	Community Development Block Grant Program for Indian Tribes and Alaska Native Villages	\$449,697	Requested November 2019
Alaska Division of Homeland Security	Pre-disaster Mitigation Program (for sanitation, and power extension and other ancillary infrastructure needs for moving 5 of the 6 homes, noted above).	\$393,628	Requested in January 2020
BIA-Housing Improvement Program	For a new home for the seventh homeowner living within 200 feet of the river, and whose home is structurally unsound for moving.	To be identified by the agency	Requested in December 2019
BIA - Tribal Resilience	Pre-construction activities for managed retreat project elements	\$149,815	Requested in March 2020
IHS/USDA-Rural Development/ EPA/VSW	Akiak Scattered Site sanitation funding for the six homes to be relocated and the seventh existing home that is not connected to sanitation service.	\$711,369	Requested in April 2020
USDA - Housing Preservation	Electrical service connection and foundation improvements for the six homes to be relocated	\$50,000	May 2020

**Estimated Total HUD Funded Amount:** For this site specific environmental assessment a portion of the \$449,697 for the HUD-IT application would be for short term response.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$6.5M

# Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTI 58.6	VE ORDER	S, AND REGULATIONS LISTED AT 24 CFR 50.4 and
Airport Hazards	No	No issues associated with short term response tasks.
24 CFR Part 51 Subpart D		
Coastal Barrier Resources	No	Alaska is not one of the States that are part of the Act.
Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]		
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	No	Akiak does not participate in the National Flood Insurance Program (NFIP). From the Federal Emergency Management Administration website, for Akiak, Alaska: "FEMA has not completed a study to determine flood hazard for the selected location; therefore, a flood map has not been published at this time." Consequently, Akiak is not in a Special Flood Hazard Area as identified by FEMA.
STATUTES, EXECUTIVE	VE ORDER	S, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	No	Consultation with Mr. Adeyemi Alimi (Yemi) State of Alaska, Department of Environmental Conservation, Air Quality Division. June 4, 2020. Akiak is not in an attainment or maintenance area.
Coastal Zone Management	No	Alaska does not participate in this Act.
Coastal Zone Management Act, sections 307(c) & (d)		
Contamination and Toxic Substances	No	No issues associated with short term response tasks.
24 CFR Part 50.3(i) & 58.5(i)(2)		

Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	No	From the US Fish and Wildlife website it reports that there are no migratory birds of conservation concern or endangered species in Akiak. This was confirmed via phone call with Douglass Cooper on June 4, 2020.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart	No	No issues associated with short term response tasks.
С		
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	No	There are no farms or farmland in Akiak.
Floodplain Management	No	No issues associated with short term response tasks.
Executive Order 11988, particularly section 2(a); 24 CFR Part 55		
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	No	See NRCS 9/26/2019 letter to Alaska State Historic Preservation Office that confirms there are no known historic sites in Akiak (in the Broad Environmental Assessment).
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	No	Akiak is not within 1000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated civil airfield.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	No	Akiak is not over a sole source aquifer.
Wetlands Protection	No	No issues associated with short term response tasks.
Executive Order 11990, particularly sections 2 and 5		

Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	No	The Kuskokwim River is not listed as a Wild and Scenic River.
ENVIRONMENTAL JU	STICE	
Environmental Justice Executive Order 12898	No	Most of the residents of Akiak are low-income Alaska Natives. All the seven homeowners facing relocation in 2020 are Alaska Natives, and they are being relocated due to natural events as opposed to community project needs.

**Environmental Assessment Factors** [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.** 

**Impact Codes**: Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELO	PMEN	T
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	No issues associated with short term response tasks.

Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	3	The soils in Akiak are generally silty sands which do not offer much structural strength against riverine erosion. Furthermore, as the riverbank is destabilized the result is often a vertical riverbank which is unsafe to residents. Stabilizing the riverbank will be an important managed retreat objective to protect residents from falling in the river in the event there is a bank failure.
Hazards and Nuisances including Site Safety and Noise	2	As with all construction projects the tribe must be mindful of site safety for residents moving construction equipment.
Energy Consumption	2	Demand for electrical power or heating fuel is expected as a result of the managed retreat objectives.

SOCIOECONOMIC		
Employment and Income Patterns	1	Construction projects will result in short term jobs in the community.
Demographic Character Changes, Displacement	3	At least seven families will be impacted and will have to relocate their homes. While their homes are being relocated, these families will be displaced and living in the tribe's village protection safety officer housing until they can occupy their relocated home.

COMMUNITY FA	COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	No issues associated with short term response tasks.	
Commercial Facilities	2	No issues associated with short term response tasks.	
Health Care and Social Services	2	No issues associated with short term response tasks.	
Solid Waste Disposal / Recycling	3	One of the seven homes that are within 200 feet of the river's edge connect be relocated due to structural reasons. The home will need to be demolished and removed when a new home is built for the homeowner.	

Waste Water / Sanitary Sewers	3	Two existing sewer mains are parallel to the rivers edge. If the river erodes to where these mains are located, during high water events river water will flood into the sewer mains and overwhelm the main lift station. The sewer mains must be pulled up once the houses are relocated and before the river erodes further.
Water Supply	2	No work is anticipated near the community groundwater wells.
Public Safety - Police, Fire and Emergency Medical	3	Mitigation is recommended to pare back the riverbank slopes from a vertical face to a 30-degree angle of repose.  Otherwise, there are no other public safety concerns associated with the managed retreat tasks.
Parks, Open Space and Recreation	2	No issues associated with short term response tasks.
Transportation and Accessibility	3	While moving houses there will be minor impact to traffic patterns.

NATURAL FEATU	RES	
Unique Natural Features, Water Resources	2	No issues associated with short term response tasks.
Vegetation, Wildlife	2	No issues associated with short term response tasks.
Other Factors	3	This broad environmental assessment is drafted during a time of the COVID-19 pandemic. The timing of carrying out construction work in Akiak and ensuring the safety of the community is made more complicated by the pandemic.

# **List of Permits Obtained:**

None to date

Anticipated:

1. Permit to Construct from Alaska Department of Environmental Conservation for Water and Sewer Main Improvements

**Cumulative Impact Analysis** [24 CFR 58.32]: Short Term Response Project Tasks are a subset of the larger Akiak Home Relocation and Managed Retreat Project and the cumulative impact analysis for the full project is discussed in the Broad Environmental Assessment document.

**Alternatives** [24 CFR 58.40(e); 40 CFR 1508.9]

Alternatives for relocating the six threatened homes mainly centers on where to place them. Two general choices are available to the community. The first is to identify vacant lots within the community that are near existing roads, power, water and sewer infrastructure facilities to reduce development costs. The second alternative is to relocate the six existing homes to undeveloped property, west of the Akiak Subdivision (see Broad Environmental Assessment for further information on the subdivision). This alternative will result in higher development costs for extending a gravel road, power line and sewer and water mains. The community decided it best to relocate the homes to vacant lots that can be more readily developed.

# **No Action Alternative** [24 CFR 58.40(e)]:

Akiak is already facing housing shortages and the no action alternative will lead to greater crowding in remaining homes if the river were to claim the seven homes within 200 feet of the river. The community voted on the priority Project task was to relocate six of the homes, in question, to safe ground and build a new home for the seventh home that cannot be relocated.

The no action alternative will also place boaters and residents at risk from the unstable and vertical riverbank and sweepers in the river.

# **Summary of Findings and Conclusions:**

- 1. Relocating six homes and building a new seventh home on vacant lots within the community and near existing roads, and utilities is the preferred alternative. As these vacant lots are adjacent to lots that have already been developed for residential construction, the relocated houses are compatible with current use.
- 2. Associated with the relocation of the six homes will be the excavation and possible reclaiming of arctic pipe.
- 3. Riverbank stabilization may be an annual exercise.

# Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Operating Heavy Equipment and moving homes on the roads	Construction crews will ensure residents are not nearby while operating heavy equipment, and the community will be informed when homes are to be relocated on the community roads.
Temporary Housing	Relocation of homes will be carried out in a sequential manner that will include moving the family out, housing them in temporary housing, relocate the house, and connect to the power grid. At that point the homeowner will relocate into their relocated home and then the next house will be relocated.

### Determination:

Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.27] The project will not result in a significant impact on the quality of the human environment.

Preparer Signature: Date: 6/18/2020

Name/Title/Organization: Joel Neimeyer, P.E., Consultant to Akiak Native Community

Certifying Officer Signature: September 128/2020

Name/Title: Michael P. Williams, Sr., Tribal Chief, Akiak Native Community

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).