



U.S. Army Corps
of Engineers
Alaska District

Alaska Villages Erosion Technical Assistance

Newtok, Alaska

Preliminary Relocation Planning Analysis

February 2006-revised April 2006

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1.0 INTRODUCTION

1.1 Background

The Alaskan Native Village of Newtok is located on the banks of the Ninglick and Kealavik Rivers, about 90 miles northwest of Bethel, in the Yukon-Kuskokwim Delta Region. The continued existence of the village at its present location is being threatened by advancing erosion caused by the Ninglick River. The Ninglick River connects the Bering Sea with the Baird Inlet.

After twenty years of studying the problem, in 1994 the Newtok Traditional Council concluded that relocation of the entire village was the best solution, and has since been pursuing this action. The Newtok Traditional Council initially considered six sites, and decided on a site known as Takikchak, located on the north end of Nelson Island approximately nine miles southeast of Newtok. In November 2003, Congress approved a land exchange between Newtok Native Corporation and the U.S. Fish and Wildlife Service. Then in April 2004, 10,943 acres at the Takikchak site were conveyed to the Newtok Native Corporation.

1.2 Authorization

In Fiscal Year 2004 Energy and Water Development Act, Congress directed the U.S. Army Corps of Engineers to use funds previously provided under Public Law 108-7 "...to provide technical assistance at full Federal expense, to Alaskan communities to address the erious impacts of coastal erosion. Since that time the U.S. Army Corps of Engineers, Alaska District (COE) has been providing limited technical assistance to Newtok in the relocation efforts.

As part of that assistance, the U.S. Army Corps of Engineers-Alaska District contracted with Tetra Tech, Inc. to assist in the relocation planning effort, by: (a) identifying and describing the conceptual relocation planning activities that would lead to Newtok's relocation to the Takikchak site on Nelson Island; and, (b) organizing and facilitating two Newtok Relocation Planning Workshops with key agencies and other stakeholders. This work was performed from the perspective of the conditions in Newtok prior to the Fall of 2005.

1.3 Purposes of This Document

This document is intended to provide the following:

- Anticipated relocation-planning activities leading up to physical relocation of the community of Newtok to Takikchak site.
- Preliminary timelines and costs associated with these activities.
- Key stakeholder agencies likely participating in these activities.
- General sequencing and interdependencies of these activities.
- Relevant information about Newtok relocation planning from the two Newtok Relocation Planning Workshops.

The ongoing purpose of this planning analysis document is provide the Newtok Traditional Council and stakeholder agencies with a very rough framework and platform for continued discussion about relocation planning, coordination, and funding activities. If the preliminary relocation planning activities identified in Table 1 are completed within the preliminary timeline presented in Table 2, the physical relocation of the entire Newtok community could occur within about 10 years. This relocation planning timeline presented would likely only be possible if new and special funding allocations and implementation programs were developed to respond to the unique situation being faced by Newtok.

This document clearly demonstrates that a typical planning process is not suited to timely relocation of Newtok to Takikchak.

1.4 Urgency of Erosion Problem

In 2000 the Newtok Traditional Council contracted with ASCG Inc. to prepare a report entitled *Newtok-Background for Relocation Report, January 2004*, to document the impacts of erosion on the community and the proactive approach the village has taken in response to the erosion problem and the community’s selection of the Takikchak site on Nelson Island as the preferred relocation site. The report included a summary of previous Newtok studies, and a map showing historical erosion at Newtok. The report indicated that the rapidly-advancing Ninglick River could begin “taking” private and community structures and real holdings in Newtok by 2010 (just four years away). (See Figure 1)

Stanley Tom, volunteer relocation liason for the Newtok Traditional Council reported at the Newtok Relocation Workshop (#1) held December 16, 2004, that the longer periods of permafrost thawing along the Ninglick and Newtok Rivers in recent years are accelerating Newtok's erosion problem. He stated that, for example, the Ninglick River had not yet become frozen as of December 16, 2004, which was unusually late in the year for this to occur.

Stanley subsequently reported at the Newtok Relocation Workshop (#2) on September 21, 2005, that often there are strong winds from the south, and when this occurs, water in the Ninglick River is pushed into Kealavik River, surrounding the community of Newtok with floodwaters. (See Figure 2) With the Ninglick River much closer to the community flooding appears to be occurring more frequently. The most recent flooding occurred in February 2006.

It is anticipated that the relocation planning effort for Newtok could take six years or more to adequately prepare for the physical relocation of the community as a whole.

The ASCG report stated the need for near-term *Interim Relocation Plan*, in addition to the longer-term plan for relocation of the entire community to Takikchak. The interim plan would focus on the relocation of those structures and residents at greatest risk from the advancing Ninglick River. At this time there is no longer-term or near-term relocation plan or any efforts to prepare one by state or Federal agencies.

In a meeting attended by Corps personnel March 2006 the Newtok Traditional Council said that the situation is becoming urgent. They expressed concerns that there is no where for them to go to escape flood water and no emergency plan.

1.5 Constraints on Near-Term Actions

The ASCG background information report includes a site layout and transportation plan for the Takikchak site, and an appendix containing a preliminary geotechnical overview of the Takikchak site (*Preliminary Geotechnical Overview, Village Relocation Site, Newtok, Alaska*, US Army Corps of Engineers, Alaska District, November 2002).

Stanley reported at the December 16, 2004 Relocation Workshop (#1) that the Newtok Traditional Council plans to construct a three-bedroom house at the Takikchak site in the summer of 2005, in a location that would be compatible with the likely layout for the new village identified in the ASCG report. Based on foreseeable available funds, the plan was to construct the exterior of the building first, and then complete the interior in phases as funding became available. The NTC hoped that construction of this home could be done in one building season. At that time, Stanley Tom also reported that there were no funds available to hire engineers to help with the plan, or for a survey, so GPS would have to be used to fix the location. He further shared that permits also would be needed, and that the Newtok Traditional Council was working with the COE Regulatory Office on these.

Stanley Tom also reported at that time that he hoped the appropriate agencies would approve the initial housing construction project at the Takikchak site. He further stated that it appeared that with current funding, only one building per year at the Takikchak site could be developed. He added that help would be needed from mortgage companies and agencies in assembling funding for additional homes.

Stanley Tom subsequently reported at the September 21, 2005 Relocation Workshop (#2) that the NTC still planned to construct one or more new homes at the Takikchak site, but because of the deteriorating condition of the existing Newtok Barge Landing the delivery of the construction materials had not occurred. Stanley also reported that the large rocks that presently exist near-shore and further off-shore at the Takikchak Barge Landing area pose a problem for barge landings, according to the barge company that came out and looked at the site this year.

1.6 Sustainability

The existing infrastructure and utilities at Newtok are not being kept up to standards because of the impending relocation, and because at its present erosion prone site, Newtok is not viewed as a sustainable community by various state and Federal agencies. The continuing “neglect” of needed infrastructure upgrades creates a potential human and environmental health risk in the community.

Gary Hanson, with the Lower Kuskokwim School District, reported at the September 21, 2005, Newtok Relocation Workshop (#2), that in 2003, the Lower Kuskokwim School District and Newtok Traditional Council had prepared a Memorandum of Agreement to facilitate placing sandbags in an effort to repair the leaking sewer lagoon at the school. Gary Hanson said that despite that effort, the lagoon is still leaking today. Gary Hanson also reported that permafrost melting has been and continues to be a major problem for the school, and that the ground at the school has dropped about 12 inches in recent years. Gary Hanson stated that the Lower Kuskokwim School District is in full support of Newtok relocating to higher and firmer ground.

1.7 Contents and Format of this Document

The relevant information about relocation planning for Newtok compiled in this document was gathered from: (a) discussions with the Newtok Traditional Council and stakeholder agencies; (b) the Newtok Relocation Workshop (#1) held in Anchorage on December 16, 2004; (c) the follow-up Newtok Relocation Workshop (#2) held in Anchorage on September 21, 2005; and (d) review of pertinent published and unpublished literature provided by agencies.

In addition to this introduction, which is **Section 1.0**, the remainder of this document includes four additional sections and three appendices. **Section 2.0** presents in table form a synopsis of the preliminary relocation planning activities that have emerged from the analysis and discussion, and includes the preliminary estimated costs associated with these activities, the general interdependencies, and the stakeholder agencies likely to be involved. **Section 3.0** presents the preliminary overall timeline and sequencing for implementing the identified relocation-planning activities, using Microsoft Project software. **Section 4.0** provides highlights of the progress of relocation planning activities that are underway, reported at the Newtok Relocation Workshop (#2) held September 21, 2005. **Section 5.0** discusses limitations inherent in this preliminary relocation planning analysis. **Appendix A** provides a list of key stakeholder agencies and contacts. **Appendix B** presents a summary of the results from Newtok Relocation Workshop (#1) held on December 16, 2004. Finally, **Appendix C** presents a synopsis of the notes taken at Newtok Relocation Workshop (#2) held on September 21, 2005.

2.0 PRELIMINARY RELOCATION PLANNING ACTIVITIES

The preliminary relocation planning activities anticipated in order to adequately prepare for the relocation of Newtok to Takikchak are presented in Table 1. The table includes the preliminary estimated cost and expected duration of each activity, the key stakeholder agencies likely to be involved, and the general interdependencies among activities.

Table 1 has been updated based on agency comments and suggestions provided at the September 21, 2005 Newtok Relocation Workshop #2. A synopsis of the notes taken at Workshop #2 is presented in Appendix C.

TABLE 1: *NEWTOK* PRELIMINARY RELOCATION PLANNING ACTIVITIES

3.0 PRELIMINARY TIMELINE FOR PLANNING ACTIVITIES

A preliminary and generic timeline and sequencing of the anticipated relocation planning activities are illustrated in Table 2 using a Microsoft Project GAANT Chart. The timeline is “generic” in that specific calendar years and dates are not depicted. However, the sequencing and duration of the relocation planning activities described in Table 1 are shown in the schedule.

Since some of the activities (e.g., National Environmental Policy Act Studies - Activity #2; Takikchak Airport Reconnaissance Study - Activity #3; and Aerial Photography Survey - Activity #4) have been initiated during 2005, the timelines for these activities are not depicted in the generic GAANT chart. The status of planning activities that are underway is presented in Section 4.0.

4.0 STATUS OF PLANNING ACTIVITIES UNDERWAY

During 2005, some of the key agency stakeholders (e.g., COE, AK DOT-PF, USGS, USFWS, VSW) began implementing some of the relocation planning activities described in Table 1. The progress made on these activities, and the additional activities planned for 2006 were presented at the Newtok Planning Workshop (#2) on September 21, 2005. Relevant highlights from the reports made by these agencies are presented below, drawn from the notes taken at Workshop #2. A complete set of the notes from Workshop #2 is provided in Appendix C of this document.

4.1 U.S. Army Corps of Engineers (COE), Alaska District

Larry Scudder, Lizette Boyer, and Marcia Heer, with the COE, reported the following:

- The COE was able to piggyback on Coastal Village Regional Fund (CVRF) projects in 2005 to obtain aerial and satellite photography (Activity #4), and topographic mapping of the Takikchak site (Activity #8). The products are now available in draft form. Topographic maps will have 2-foot contours in the proposed village site and 5 foot contours outside of the village site.
- The U.S. Geological Survey (USGS) is doing water testing at Takikchak site (Activity #19). Two years of flow have been measured and water quality tested.
- Initial flow data for Martervick Stream was also collected (Activity #19).
- During 2005 the Corps initiated a Programmatic Environmental Impact Statement (PEIS) (Activity #2). In early 2006 the Corps decided that it was not conducting a PEIS. Environmental studies in the format of a PEIS are being conducted.
- A GIS Database is being developed (Activity #2).
- The Corps performed environmental and engineering fieldwork last summer to collect data to be used in flood analysis and to define parameters for hydrographic surveys for the Takickhak Barge Landing site (Activity #14). Additional data collection will be performed next year.
- The COE performed an Archaeological Survey in 2002 and 2005 (Activity #5). This will be finished in summer '06.

- The U.S. Fish and Wildlife Service did Spectacled and Stellars eider (threatened species under the Endangered Species Act) surveys (Activity #2). There were no Spectacled or Stellars eiders observed. Bird nesting is rare due to tidal inundation.
- In 2005, the COE conducted fish habitat surveys in Takikchak Creek (Activity #2), and found abundant of Dolly Varden, Coho Salmon, and Chum Salmon.
- A Wetland Delineation of the Takikchak site is being prepared by the Corps (Activity #2). The COE will identify future compliance needs. Reports and maps will be prepared.

Proposed FY 2006 efforts for the Corps include: (Changes since last workshop are noted in bold)

- A preliminary flood analysis (Activity #14).
- Bathymetric Surveys of Takikchak Barge Landing area (Activity # 14).
- Continued Environmental and Archaeological Investigations (Activities #2, #5).
- Contracted planning assistance to Newtok in developing the a Community Plan and Land Use Plan (Activity #6). These planning products will conform to the Denali Commission Community Planning standards. Stanley T. added that Newtok School will be doing a science fair this year with the layout of the new community as the topic.
- Juvenile fish distribution surveys in spring and mid summer (Activity #2) and fish habitat assessment of lower reaches (Activity #2). (**Tentative:** the withdrawals for water supply are anticipated to have minor impacts on the Takikchak River. Further studies may be limited to project specific features.)
- Additional bird surveys (Activity #2).
- Evaluation of social, cultural, subsistence impacts of relocating to other communities (Nelson Island) (Activity #2).
- Evaluation of archaeological sites near the mouth of Takikchak Creek for the national register of historic places (Activity #5).
- Assessment of the effects of the new town site on archaeological sites, subsistence and land use (Activity #2).

4.2 Alaska Department of Transportation and Public Facilities (AK DOT&PF)

Rich Sewell, with AK DOT-PF, reported that PDC Inc. had been hired by AK DOT-PF in the late spring of 2005 to conduct an Airport Reconnaissance Study for the Takikchak site (Activity #3). At the public meeting held in Newtok to discuss the project, the Newtok Traditional Council indicated strongly that safety was the most important criteria in choosing a location for a new airport. The study team checked out six or more sites, and narrowed it down to three sites. A draft of the reconnaissance study should be available by the end of in the first quarter of 2006.

An Anemometer (wind evaluation system) is scheduled for installation at the Takikchak site in 2006 (Activity #10). Once data comes in maybe Newtok can figure out what infrastructure could be brought in and use wind power (or figure out some way to generate electricity locally). The Alaska Industrial Development and Export Authority/Alaska Energy Authority (AIDEA/AEA) could help with this.

4.3 Alaska Department of Environmental Conservation -Village Safe Water (VSW)

Jim Patterson, with Village Safe Water, reported that his division has \$175, 000 earmarked for water and soil studies at the Takikchak site (Activity #19).

5.0 LIMITATIONS OF THIS ANALYSIS

The relocation planning analysis presented in this document comprises a “preliminary reconnaissance level” of effort, and as such does not provide a high level of detail such as the specific tasks associated with the identified relocation planning activities. Additional efforts will be required to define the specific tasks and associated costs and timelines within each activity.

This analysis acknowledges that the current thinking about Newtok relocation is still evolving, and events are continually unfolding that will influence the relocation efforts for Newtok and other communities at risk. Therefore, no attempt has been made in this analysis to forecast the effects future events might have on the relocation planning effort.

Pursuing agency endorsement and support for the relocation planning activities and schedule identified in Tables 1 and 2 is beyond the scope of this preliminary analysis. Agency endorsement is an essential element in achieving a successful relocation for Newtok, but it is not clear how this can be obtained.

Appendix A: List of Key Agencies and Contacts

U.S. Army Corps of Engineers – Alaska District
Alaska Villages Erosion Technical Assistance (AVETA)
Newtok, Alaska

Key Agency Contacts

Organization	Address	Contact(s)
1. Newtok Traditional Council (NTC).	P.O. Box 5545, Newtok, AK 99559	Stanley Tom, 237-2314 or 2610, Stanley_tom2003@yahoo.com
2. Alaska District, U.S. Army Corps of Engineers (COE).	P.O. Box 6898, Elmendorf AFB, AK 99506	Brenda Kerr, 753-5537, Brenda.M.Kerr@poa.02.usace.army.mil Lizette Boyer, 753-2637, Lizette.P.Boyer@poa02.usace.army.mil Margan Grover, 753-5670 Margan.A.Grover@poa02.usace.army.mil Andrea Elconin, 753-5680, Andrea.B.Elconin@poa02.usace.army.mil Ernest Young, 753-5674, Ernest.A.Young@poa02.usace.army.mil Marcia Heer, 753-2716 Marcia.L.Heer@poa02.usace.army.mil Dave Mierzejewski, 753-2670, David.W.Mierzejewski@poa02.usace.army.mil Don Rice, 753-2716, Don.R.Rice@poa02.usace.army.mil Estrella Campellone, 753-2518 Estrella.f.Campellone@poa02.usace.army.mil Chris Hoffman, 753-2634 Christopher.A.Hoffman@poa02.usace.army.mil
3. Alaska Department of Community and Economic Development, Community Advocacy (DCED).	550 W. 7 th Avenue, Suite 1770, Anchorage, AK 99501	Christy Miller, 269-4567, Christy_miller@dced.state.ak.us
4. Denali Commission.	510 L Street, Suite 410, Anchorage, AK 99501	Cindy Roberts, 271-3018, croberts@denali.gov Jamilia George, 271-1425 Jgeorge@denali.gov
5. Alaska Department of Environmental Conservation, Village Safe Water (ADEC-VSW).	555 Cordova Street Anchorage, AK 99501	Jim Patterson, 269-7611, Jim_patterson@dec.state.ak.us

6. Alaska Department of Transportation and Public Facilities (AK DOT/PF) - Central Region.	4111 Aviation Avenue, P.O. Box 198900, Anchorage, AK 99519	Rich Sewell, 269-0516 Rich_sewell@dot.state.ak.us
7. Federal Aviation Administration (FAA).	222 West 7 th Avenue, P.O. Box 14, Anchorage, AK 99513	John Lovett, 271-5446, John.Lovett@faa.gov Gabriel Mahns, 271-3665 Gabriel.mahns@faa.gov
8. Alaska Industrial Development and Export Authority / Alaska Energy Authority (AIDEA/AEA).	813 West Northern Lights Blvd., Anchorage, AK 99503	Chris Mello, 269-3000, cmello@aidea.org
9. Housing and Urban Development (HUD).	3000 C Street, Suite 401, Anchorage, AK 99503	Andy Concepcion, 677-9887 Andy_concepcion@hud.gov David Vought, 677-9862, David_vought@hud.gov Deb Alston, Deb_Alston@hud.gov
10. Rural Alaska Community Action Program (Rural CAP).	731 East 8 th Avenue, P.O. Box 200908, Anchorage, AK 99520	Mitzi Barker, 279-2511 xt425, mbarker@ruralcap.com
11. Association of Village Council Presidents (AVCP).	P.O.Box 219, 101 Main Street Bethel, AK 99559	Myron Naneng, 543-7300, Myron_naneng@avcp.org
12. Association of Village Council Presidents – Housing (AVCP-H).	P.O.Box 767, Bethel, AK 99559	Bosco Hooper, 543-3121, Bosco@avcphousing.org Mark Charlie, 543-3121xt243, Mark@avcphousing.org
13. U.S. Department of Agriculture, Rural Development (USDA-RD).	510 L Street, Suite 410, Anchorage, AK 99501	Merlaine Kruze, 761-7778, Merlaine.Kruze@ak.usda.gov
14. Lower Kuskokwim School Alaska District COE, Plant Facilities/Capital Projects (LKSD).	P.O.Box 305, Bethel, AK 99559	Bill Ferguson, 543-4800, Bill_Ferguson@lkcd.org Gary Hanson, 543-4888 Gary_Hanson@lkcd.org
15. Alaska Army National Guard (AANG).	P.O. Box 5800, Ft Richardson, AK 99505	Mike Grunst, 428-6358, Mike.grunst@ak.ngb.army.mil Michael Coy, 428-6786 Michael.coy@ak.ngb.army.mil

16.U.S. Department of the Interior, Bureau of Indian Affairs, Alaska Region (BIA).	P.O. Box 25520, Juneau, AK 99802	Kristin K'ait, 586-7423 (env'l)
17. Calista Regional Native Corporation (CRNC).	301 Calista Corp. Ste A, Anchorage, AK 99518	Bob Charles, 279-5516 Bcharles@calistacorp.com June Mcatee, 279-5516, Jmcatee@calistacorp.com
18. Yukon-Kuskokwim Health Corporation (YKHC).	P.O. Box 528, Bethel, AK 99559	Anna Simon, 543-6155, Anna_Simon@ykhc.org
19. U.S. Fish and Wildlife Service (USFWS), Anchorage Field Office.	605 West 4 th Avenue, Room G-61, Anchorage, Ak 99501	Greg Risdahl, 271-2807, Greg_Risdahl@fws.gov
20. Alaska Department of Natural Resources (DNR) Office of History and Archaeology (OHA).	550 W. 7 th Avenue, Suite 1310, Anchorage, AK 99501	Margie Goatley, 269-8720, Margie_Goatley@dnr.state.ak.us
21. Yukon-Delta Wildlife Refuge	807 Chief Eddie Hoffman Road, Bethel, AK, 99559	Michael Rearden, 543-3151, yukondelta@fws.gov
22. Alaska Department of Natural Resources (DNR) Office of Project Management and Permitting (OPMP).	550 W 7 th Avenue, Suite 1660, Anchorage, AK 99501	Amanda Henry, 269-7468 Amanda_henry@dnr.state.ak.us
23. Akaska Division of Homeland Security and Emergency Management (HSEM).	P.O. Box 5750, Fort Richardson, AK 99505	Bob Stewart, 428-7060 Bob_Stewart@ak-prepared.com Gary Brown, 428-7036, Gary_Brown@ak-prepared.com

**Appendix B: Results from December 16, 2004 Relocation
Workshop #1**

U.S. Army Corps of Engineers – Alaska District
Alaska Villages Erosion Technical Assistance (AVETA)
Newtok, Alaska

Newtok Relocation Workshop #1
December 16, 2004
Executive Dining Room
Federal Building, 222 W 7th Avenue, Anchorage

WORKSHOP RESULTS

To help identify the conceptual relocation planning activities and timeline for Newtok, Tetra Tech facilitated a workshop with key agencies and stakeholders on Thursday, December 16, 2004. This document presents the highlights of the workshop, based on a logical compilation of the notes taken by the facilitators and notes submitted at the end of the workshop by some of the participants. Because some of the points raised by workshop participants relate to more than one topic, they may appear more than once in this document.

Background Information

Some background information on the Newtok relocation was presented by Stanley Tom, Newtok Traditional Council (NTC) Tribal Liaison, and by representatives of the Alaska District, COE:

- In 1994 Newtok initiated planning for relocation, and considered six sites over several years, finally settling on the Takikchak site.
- In 2000, with some funding provided by COE and the BIA, the NTC contracted with ASCG Inc. to develop some background information in support of the relocation to Takikchak. This information included an unofficial site layout and transportation plan for the Takikchak site; a summary of previous studies; a map showing historical erosion; and a preliminary geotechnical overview of the site (performed in 2002 by the COE). The information was published in a report in January 2004.
- In 2003 Congress legislated a land swap between the NTC and the U.S. Fish and Wildlife Service for the Takikchak site.
- During 2003 and 2004 Congress requested the COE to come up with comparative cost estimates for Newtok relocation to the Takikchak site and a collocation to an existing community. Tetra Tech, Inc. was contracted by the COE in 2004 to develop these cost estimates (in progress).
- Based on the recent federal appropriations, over the next few years the COE expects to have \$2 million available to continue work on relocation with seven villages, and \$2 million available for continued baseline research on erosion management.
- The existing infrastructure and utilities at Newtok are not being kept up to standards because of the impending relocation, and at its present site, Newtok is not viewed as a sustainable community by funding sources.

- Newtok is currently receiving funding from AVCP Housing at approximately \$55,000 per year.
- In addition to the Ninglick River erosion, other strong influences supporting Newtok's relocation include flooding, and the need for infrastructure and utilities upgrades.
- The thawing permafrost along the Ninglick and Newtok Rivers is accelerating Newtok's erosion problem.
- The Ninglick River is not frozen yet this year (as of December 16th), which is unusual.
- The owner of the new land is the Newtok Corporation, and ownership includes surface and underground rights.
- The Takikchak site has more upland areas than the present (old) site, so erosion and flooding shouldn't be a problem.
- The Newtok community has used the Takikchak site for traditional uses for many years.

Sharing Some Near-Term Plans – Stanley Tom (NTC)

Stanley Tom presented some information, and a request for agency support regarding some things he feels need to get done in the near future to further the relocation process:

- In 2005 Stanley plans to construct a three-bedroom house at the new site, in a location that will be compatible with the likely layout for the new village.
- Based on his available funds, he plans to do the exterior of the building, and will have to complete the structure in phases because of funding. Hopefully, he can get it done in two phases, and in one building season.
- Stanley has no money for a survey, so he will need to use GPS to pinpoint the location.
- Stanley has no money to hire engineers to help with the plan.
- He will need to get the necessary permits. He is working with the COE (so far) on these.
- Stanley hopes that all agencies will approve of the project.
- With available funding so far, he can see developing only one building per year at the new site.
- Stanley is looking for help from mortgage companies and agencies to assemble funding for more homes.

Regarding the Basic Approach to the Pre-Relocation Planning

Some suggestions, issues and concerns, and other relevant thoughts were offered by workshop participants regarding the approach to pre-relocation planning required for Newtok:

- Verify that the Takikchak site is a safe place to locate the village.
- A community-based development plan should be developed, identifying specific sites for all necessary community elements, e.g., houses, community buildings, school, store, lagoons, landfill, barge landing site, etc.
- Draw upon what has been already done (e.g., Kivalina relocation discussions). Consider using the same process, timeline and ideas as the Kivalina efforts.
- Look at successful examples of village relocation(s). Consider combining the best from all relocation projects and consolidate what has already taken place into the Newtok relocation plan.
- Newtok should consider asserting its self determination (e.g., Kasigluk relocation).
- Coordinate what has already been accomplished with respect to Newtok planning, including what studies already exist.
- Let financing follow the planning. Get the planning mapped out first.
- Planning Objectives should be developed for the relocation, including the following:

1. Community will be relocated as a whole.
 2. The new community site will be “sustainable/affordable” with regard to flooding and erosion. This means that a site is able to withstand a severe natural event or a number of less severe events without incurring permanent degradation of property, diminished productivity, or reduced quality of life, and can afford locally to manage the level of damage that may occur.
 3. The new village site will have all the elements of the original community.
 4. The new site will protect relocated residents from experiencing a recurring emergency situation.
 5. Remove the “Catch-22” situation that Newtok has been in for the past 20 years, where agencies have been reluctant to fund upgrades needed there because of the pending relocation, and because there is no plan for the relocation.
- Determine how the “old” Newtok site would be used following the relocation to the Takikchak site.
 - Establish and define what the community will need to have developed at the new site in order that the actual physical relocation can commence. This should include determining the basic level of services required at the new site. A flush tank and haul system is a good basic stage for the sewage system, and a watering point is a good basic stage for the water system.
 - The appropriate agencies should be asked to define “sustainability” for the utility and infrastructure elements of the planned community.
 - Site parameters need to be developed for all infrastructure and utilities, and this information needs to be conveyed to agencies.
 - Newtok is likely to receive federal disaster funds if they apply for them.
 - There needs to be a special funding authorization to deal with Newtok’s relocation (and others).
 - Agencies need to help the State identify how money could be set aside for villages needing relocation, and for needed upgrades to existing utilities until relocation occurs. Consider building a “trust fund” of agency funds to be used by villages such as Newtok that are planning to relocate.
 - Identify and develop the key funding initiatives needed in 2005.
 - Identify who can provide specific help to Newtok to get grants and funds.
 - Identify the resources in the community that can be brought forward to help.
 - Look into tapping private money sources, e.g., foundations, donations. For example, a village in Montana reportedly lives off of interest from these donations. Look for foundations for cultural preservation. Many grants need matching funds, and these foundations may be able to provide this.
 - Some Lower 48 sources apparently want to donate, as Newtok is already getting calls. Canada is also showing interest.
 - Consider getting private foundation funding to create a documentary about Newtok, to promote obtaining further assistance.
 - Grant opportunities for Newtok only come up annually and are very competitive. Some agency or agencies should provide Newtok with help in applying for these grants.
 - Identify key funding initiatives for current legislative session. Develop and provide area representatives with information as a basis to support obtaining these funds. Coordinate with the stakeholder agencies to dissuade resisting these initiatives, in order to allow the critical relocation funding plans to unfold.
 - Grants are for normal situations, and Newtok is an emergency and a special-case situation. Therefore, the state and federal governments need to authorize agencies to treat Newtok differently.
 - Determine if NEPA is required for the Newtok relocation, and if the COE is the logical lead agency. NEPA efforts that may be required for relocation actions should be consolidated under one NEPA document.

- With respect to a timeline for planning, consider the erosion timeline for taking out the community as the outside time frame. However, since the Ninglick River is connected to the Baird Inlet, Newtok gets the worst possible erosion, made up of coastal events, weather events, and river events. For this reason a shorter timeline may be in order.
- Determine if there are other factors that contribute to a shorter pre-relocation planning timeline, e.g., the contamination of Newtok's fresh water drinking supplies with salt water brought in by storm surges that are occurring more frequently.
- Because Nelson Island has other communities, consider discussing with other Nelson Island communities the potential for Newtok collocation, or the potential for sharing infrastructure and utilities, e.g., major roads, airport, sewer system, and electricity.

Meeting the Physical Community Requirements at the New Village Site

A list was developed by workshop participants of the minimum physical components that would likely comprise the new community site at Takikchak. Each component was then discussed, and suggestions, relevant issues and concerns, and other helpful thoughts were offered by workshop participants. These are highlighted below for each component.

Housing:

- The community is currently receiving funding from AVCP Housing at approximately \$55,000 per year.
- Administration for Native Americans could potentially fund Newtok \$175,000 per year for three years.
- The Newtok community could take responsibility for housing, i.e., self-determination.
- Regarding HUD Block Grant Funds, AVCP typically determines how to allocate the money to the community.
- Newtok may be eligible for a \$30K CDB grant. This may be able to be combined with a VSW utility feasibility study.
- USDA-RD can make low-interest housing loans available to individual purchasers.
- It has been reported that about 23 houses may be movable, which means that about 50 homes will need to be replaced. This needs to be verified as part of a comprehensive housing needs study that should be prepared for Newtok.
- It needs to be determined who would pay for the comprehensive housing study.
- The Army National Guard may be able to help with diverting excess military housing to Newtok.
- HUD, National Guard and other agencies cannot participate if property is owned by a for-profit organization.
- The need for NEPA documentation should be determined.
- Developing a housing funding plan and program requires a community plan and real estate plan that show the layout of the lots.

School:

- A feasibility planning study is required to determine if it is more feasible to relocate the school or to develop a new one. Structurally, moving the gymnasium would be difficult.
- Any school CIP application must include a timeline for the relocation. YKSD needs to be assured that the community will move to the new site.
- There are two primary funding processes for developing a school at the new site: one covering design, the other covering construction.
- Moving the school to the new site could cost at least \$5,000,000, and take up to five years.

Airfield:

- Either as part of the preliminary airport study or as a separate study, it should be determined if a regional approach to airfield use is feasible. The nearest existing airfield is 25-30 miles away from the Takikchak site, which may be too far away for safety and road maintenance reasons.
- The FAA has provided AK DOT-PF with \$90, 000 to conduct a preliminary planning study for Newtok Airport, which has not yet begun. Also, wind data has not yet been collected. The project manager for this planned effort is Mark Mayo, DOT-PF, at 269-0519. The study will most likely begin when they get DCED mapping.
- The preliminary airport study to be conducted by ADOT-PF is intended to be a guide to Newtok in planning where the lagoon, landfill, and housing should be located at the new community site.
- FAA gives grant to AK DOT for airport planning and development, but only to a community that is established. Once the community has homes, school, Post Office, they are able to fund.
- FAA and DOT-PF need to be provided with a detailed community design before detailed airport planning can commence. Once begun, the detailed airport planning process would take approximately five years. They will also need a final EIS during this process.
- The development of the new site should be planned so that the FAA does not have to operate two airports for Newtok, one at the old site and one at the new site.

Roads:

- The new roads needed to serve the Takikchak site need to be planned and designed as part of the development of the community and subdivision plans.
- The AK DOT-PF is the agency responsible for roads.

Fuel Storage Tanks:

- Feasibility and design studies are required.
- AIDEA/AEA is the responsible agency.

Water and Sewer Systems:

- For planning and preliminary engineering, VSW needs a map of the community plan for the new site with a scale of at least 1" to 200" showing the housing plan and where utilities and infrastructure would be located.
- A water source study is needed for the new site.
- VSW has \$175K to do master plan to "relocate solid waste". VSW could likely do soils work and water investigation.
- Feasibility studies and preliminary engineering would be conducted for water and sewer utilities by VSW.
- The VSW planning process must be started 5 to 10 years in advance of when these facilities would be needed.
- VSW has new mandate from Senator Stevens to provide funding for projects in Hub villages, and provide less funding for small villages.

Barge Landing Area:

- Feasibility and design studies are required, including bathymetry. NEPA would also be required.
- The barge landing would be a good thing to establish early at the new site.

Small Boat Harbor:

- Feasibility and design studies are required, including bathymetry. NEPA would also be required.
- Denali Commission has money for port facilities that may be applicable.

Power System:

- Feasibility and design studies are required.
- AIDEA/AEA is the responsible agency.

Clinic:

- The clinic is new and it should be determined if it can be moved to the new site.
- The YKHC is the responsible agency.

Store:

- A new store would have to be developed at the new site.

Community Buildings (Church, Tribal Office, Community Hall):

- New community buildings would have to be planned and designed for the new village site.

Post Office:

- A new post office would also have to be planned and designed for the new village site.

Landfill:

- For planning and preliminary engineering, VSW would need a map of the community plan for the new site with a scale of at least 1" to 200" showing where the houses, school, other buildings, utilities and infrastructure would be located.
- A feasibility study and preliminary engineering for a new landfill would be conducted by VSW.
- As with the water and sewer systems, the VSW planning process for a landfill must be started 5 to 10 years in advance of when this facility would begin operation.

Studies, Information, Surveys Needed During Pre-Relocation Planning Period

The following suggestions were offered by workshop participants for activities needed during the pre-relocation planning period:

- One coordinated master soils investigation should be conducted, covering construction criteria for utilities, infrastructure, and buildings.
- A materials borrow site needs to be picked for the new development.
- A preliminary geotechnical survey has been done at the new site, but drilling has yet to be done.
- A preliminary archeological survey has already been done. One overall coordinated survey should be conducted, so each agency doesn't have to do it individually.
- The USGS is presently undertaking surface water flow and water quality studies for potential water sources at the new site.
- A comprehensive and coordinated environmental survey of the new site should be done by the COE, including wildlife, a migratory bird study, and "reconnaissance-level" wetland identification. The DCED may be able to do a preliminary wetlands identification from their information on hand.

- Aerial photography of the new site, at a scale of 1" to 100', including ground control, is needed for planning purposes.
- A survey of the new community plan area at a scale of at least 1" to 200' is required for utility planning purposes.
- Rights-of-entry for utility access, planning, and surveying will be needed.
- Most agencies need an approved community plan that has community buy-in.

- From the community plan, a subdivision plan should be developed, and this should be a community effort also.

Legislative/Administrative

The following suggestions were made by workshop participants regarding changing administrative rules and agency procedures to accommodate the unique needs of relocating communities such as Newtok:

- Grant opportunities for Newtok only come up annually and are very competitive. Some agency or agencies should provide Newtok with help in applying for these grants.
- Identify key funding initiatives for current legislative session. Develop and provide area representatives with information as a basis to support obtaining these funds. Coordinate with the stakeholder agencies to dissuade resisting these initiatives, in order to allow the critical relocation funding plans to unfold.
- Grants are for normal situations, and Newtok is an emergency and a special-case situation. Therefore, the state and federal governments need to authorize agencies to treat Newtok differently.

Timeline for Relocation Planning

Workshop participants offered the following suggestions regarding the timeline for relocation planning:

- With respect to a timeline for planning, consider the erosion timeline for taking out the community as the outside time frame. However, since the Ninglick River is connected to the Baird Inlet, Newtok gets the worst possible erosion, made up of coastal events, weather events, and river events. For this reason a shorter timeline may be in order.
- Determine if there are other factors that contribute to a shorter relocation planning timeline, e.g., the contamination of Newtok's fresh water drinking supplies with salt water brought in by storm surges that are occurring more frequently.
- Because Nelson Island has other communities, consider discussing with other Nelson Island communities the potential for Newtok collocation, or the potential for sharing infrastructure and utilities, e.g., major roads, airport, sewer system, and electricity.

Relocation Funding

It was agreed upon by workshop participants at the beginning of the workshop that this workshop would focus on identifying relocation-planning activities, rather than on funding. However, the topic did come up occasionally during the workshop. Some of the funding suggestions were incorporated into the list of **“Priority Activities for 2005”** presented in the next section. Other funding suggestions offered by workshop participants included the following:

- It needs to be determined who would pay for the Comprehensive Housing Study.
- If Newtok sustained damage in the recent Bering Strait Sea Storm, they are likely to be eligible to receive federal disaster funds to repair damages, if they apply for them.
- There needs to be a special funding authorization to deal with Newtok's relocation (and others).

- Agencies need to help the State identify how money could be set aside for villages needing relocation, and for related upgrades to existing utilities.
- Identify and develop the key funding initiatives needed in 2005.
- Identify who can provide specific help to Newtok to get grants and funds.
- Identify the resources in the community that can be brought forward to help.
- Look into tapping private money sources, e.g., foundations, donations. For example, a village in Montana reportedly lives off of interest from these donations. Look for foundations for cultural preservation. Many grants need matching funds, and these foundations may be able to provide this.
- Newtok would have to hold title to or own (i.e., be responsible for) the community facilities and infrastructure at the new location in order to be eligible for future disaster funds.
- Some Lower 48 funding sources apparently want to donate, as Newtok is already getting calls. Canada is also showing interest.
- Consider getting private foundation funding to create a documentary about Newtok, to promote obtaining further assistance.
- Consider building a “trust fund” of agency funds to be used by villages such as Newtok that are planning to relocate.

Priorities in 2005 to Begin the Pre-Relocation Planning Process

The following ideas and suggestions were offered by workshop participants regarding activities that should take place or at least get started in 2005, in order to begin a concerted, comprehensive, and coordinated pre-relocation planning effort for Newtok. Where applicable, the lead agencies for activities are identified below in (parens):

- Because grant opportunities for Newtok only come up annually and are very competitive, those agencies that could provide Newtok with help in applying for these grants should be identified (NTC, COE, DCED).
- Determine if new funding sources and avenues need to be developed for Newtok’s situation. If new funding measures are needed, develop key funding initiatives for the current legislative session to enact. Develop and provide area representatives with information as a basis to advocate for these funds. Then coordinate with the stakeholder agencies to muster support for these initiatives, to allow the critical relocation funding plans to unfold (DCED, NTC, COE).
- With the assumption that grants are for normal situations, and that Newtok is an emergency and a special-case situation, determine how to have state and federal governments authorize agencies to treat Newtok differently (TBD).
- Determine if water quality testing in the Ninglick River is needed because the old dumpsite is now under water. If needed, conduct such tests as deemed necessary to ensure community health (COE, USGS).
- Determine if NEPA is required for the Newtok relocation, and if the COE is the logical lead agency. Inter-agency coordination should be established for ensuring NEPA efforts that may be required for relocation actions are consolidated under one NEPA document (COE).
- Identify the agencies and resources that can be brought forward to help in the relocation planning efforts and near-term activities (COE, NTC, DCED).
- Identify, prioritize, and respond to the immediate and pressing needs of Newtok (TBD).
- Determine if the COE can have a preliminary survey prepared on an aerial photo (COE).

- It is likely that there are already some surveys, photos, wetland delineations, maps, and plans for the new site, because this refuge area was being managed by USFW. This should be determined, and copies obtained (COE, USFWS).
- A site specific comprehensive NEPA EIS should be started, which could take at least two years.
- Determine if the COE has the authority to do a combined coordinated environmental review for the new site (COE). If it does, then begin this effort, including documenting avian migration routes (COE).
- Undertake a planning effort to refine and finalize a Community Layout for the Takikchak site. Get input from the Newtok community, and solidify their requirements for the new site (NTC, COE, TBD).
- Determine how the Army National guard could be involved in a housing project to support the Newtok relocation (ANG, NTC, TBD).
- The preliminary airport study should be started as a first step in beginning the Airport Master Plan Process (DOT-PF, NTC, FAA).
- Get aerial mapping done (DCED, COE).
- Develop staff capacity of Community Advocacy Groups to assist Newtok. Consolidate services on a regional level in support of relocation of Newtok (DCED, COE, NTC).
- Develop a Regional Task Force in Bethel to include (at least) the COE and Homeland Security (COE, HS, NTC).
- Transfer land from Newtok Village Corporation (NVC) into private ownership through 14 (c) 3 settlement process (NVC, NTC, DCED).
- Develop documentary on Newtok and get out to foundations and other private funding sources (TBD).
- Identify sources of funding for this 2005 list of priorities (COE).
- Undertake a Wetland Identification Study (COE).
- Develop a geotechnical exploration plan for drilling in 2006 (COE, DCED).
- Undertake a Comprehensive Housing Needs Study (NTC, AVCP, HUD).
- Apply for IRA Assistance to do specific tasks (ANG, NTC, AVCP COE, DCED).
- Apply for all applicable grants (NTC, COE).

**Appendix C: Results from September 21, 2005, Relocation
Workshop #2**

TETRA TECH, INC. (on behalf of Army Corps of Engineers – Alaska District)
Alaska Villages Erosion Technical Assistance (AVETA)
Newtok, Alaska

September 21, 2005 – Newtok Relocation Workshop #2
Robert Atwood Building, 550 W. 7th Avenue, Anchorage
Suite 240 – Conference Room

Notes from Workshop #2
Wednesday, September 21, 2005

OPENING REMARKS

- ***Dave Broadfoot, Facilitator, Tetra Tech:*** The primary purpose of this workshop is to discuss the Newtok relocation planning activities and timeline contained in Tables 1 and 2, provided by email and handed out today. These tables are from the Pre-Final *Newtok Relocation Planning Analysis* previously sent to workshop participants. Comments on the pre-final planning analysis document are also being sought from this group. The final document will be prepared and distributed following the receipt of comments. Note: The background sounds of the meeting are being recorded by Aliza Sherman-Risdahl for a documentary being made about Newtok for an NPR radio program called Marketplace.
- ***Jim Patterson, VSW:*** VSW already has \$175,000 earmarked for water and soil studies at the new Site (Takikchak).
- ***Gary Hanson, LKSD:*** In 2003 the Lower Kuskokwim School District and NTC developed an MOA to place sandbags to help repair the leaking sewer lagoon. The lagoon is still leaking today. Permafrost melting is also a major problem for the school, and the ground at the school has dropped about 12 inches. The LKSD is in full support of Newtok relocating to higher and firmer ground.
- ***Gary Brown, HSEM:*** The Alaska Division of Homeland Security and Emergency Management gets involved when there are disasters. He is attending this workshop for the long-term outlook.
- ***Christy Miller, DCED:*** The Alaska Department of Community and Economic Development, Community Advocacy was involved from the first efforts on these erosion problems in 1982. A study was done at that time with legislative grant funds that looked at long-term erosion rates.
- ***Larry Scudder, Newtok Project Coordinator, COE:*** Larry is overseeing the environmental resource efforts, together with Andrea Elconin, Project Manager. Aerial photographs of Takikchak will be available to COE soon. Topographic mapping will be done later this year or next year.

RELOCATION PLANNING PROGRESS REPORTS

Stanley Tom (Newtok Traditional Council):

- Presented powerpoint photos taken in 2005 at Newtok, Takikchak, and the Takikchak Barge Landing area. Some copies of these photos were made during the workshop by Cindy Roberts (Denali Commission) and passed around. Contact Cindy for additional copies.
- There are large boulders around the Takikchak Barge Landing area. Similar rocks are also found further out into the channel. Northland Marine (a barge company) came out to inspect the site and did not like these rocks.
- Also, because of the deteriorating condition of the existing Newtok Barge Landing area, Northland Marine is unwilling to deliver materials. So a different transport company with lighter barges will do this.
- Drums of waste oil, glycol, and oil solvents located on existing Barge Landing site will have to be flown out due to barge landing problems. The yellow container at barge site borrowed from Northland to hold hazardous containers was originally 32 feet from river but now is much less. So time is short.
- Waste left behind by contractors has been sitting at the Newtok barge landing site for around 10 years. NTC now in the process of contacting responsible parties. Contractors come out and perform work at the village and leave waste on barge site to be shipped out, but no one follows up.
- Newtok wants to use the old BIA school, but request has been on hold for a long time. It is currently owned by the school district, and the BIA is investigating asbestos in the buildings and hopefully will remove the asbestos.
- Spring water has been found at Takikchak site, and Newtok community wants to leave that area undisturbed. The spring does not freeze in winter.
- When there are strong south winds (often), water is pushed towards the existing Newtok village site, which accelerates the erosion.

Larry Scudder (COE):

- COE is coordinating with Newtok Community to pull all agencies together to get support for this project. This workshop is a follow-up to the December 2004 workshop.
- The COE was able to piggy-back on Coastal Village Regional Fund (CVRF) projects in 2005 to obtain aerial and satellite photography, and topographic mapping of the Takikchak site. Aerial photography is finished and COE is waiting to receive product. The mapping should be finished within about 6 months. Topographic maps will have 2-foot contours in the proposed village site and 5 foot contours outside of the village site.
- U.S. Geological Survey (USGS) is doing water testing at Takikchak site. They are measuring flow and water quality. Larry Scudder (COE) has the website address that has all of the water testing information. (IAW 18 AAC 80.205, Table B provides minimum raw water testing requirements for new water sources). Water quality testing of the spring (mentioned by Stanley Tom) was also done.

- Initial flow data for Martervick Stream was also collected.
- During 2005 the COE initiated a Programmatic Environmental Impact Statement (PEIS). A PEIS is more of a broad study. Agencies will be able to tier off the PEIS to prepare NEPA documents for their specific facilities.
- A GIS Database is under development.
- The COE performed environmental and engineering fieldwork last summer to collect data to be used in flood analysis and to define parameters for hydrographic surveys for the Takichak Barge Landing site. Additional data collection will be performed next year.

Proposed FY 2006 efforts for COE:

- A preliminary flood analysis.
- Bathometric Surveys of Takikchak Barge Landing area.
- Continued Environmental and Archaeological Investigations.
- Assistance to Newtok in developing the Takikchak community layout, if requested. Stanley T. added that Newtok School will be doing a science fair this year with the layout of the new community as the topic. COE is offering to provide assistance.

Lizette Boyer, (NEPA Specialist, COE):

- The COE performed an Archaeological Survey in 2002 and 2005. This will be finished in summer '06.
- There are known cultural resources located near the mouth of Takikchak Creek and near the Barge Landing area.
- Areas examined that have no cultural resources include the proposed community site and the potential airport sites.
- Takikchak Creek is the potential water source. The area is a feeding and resting area for many species of waterfowl.
- The U.S. Fish and Wildlife Service (USFWS) did Spectacled and Stellars eider (threatened species under ESA) surveys. There were no Spectacled or Stellars eiders observed. Bird nesting is rare due to tidal inundation.
- Large numbers of several different species of waterfowl use the coastal wetlands for foraging and nesting.
- In 2005 the COE conducted fish habitat surveys in Takikchak Creek, and found lots of Dolly Varden, Coho Salmon, and Chum Salmon. Need to evaluate habitat needs if going to use creek for water source. This will probably be done next summer.
- A Wetland Delineation of the Takikchak site is being undertaken by the COE. COE will identify future compliance needs. Reports and maps will be prepared.

- Wetland indicators have been found in many areas. *Marcia H. with COE, modified/expanded this entry during her review: Depending on the activity, projects in these areas may require a Department of the Army permit. ~~so permitting will need to be done.~~ Some projects can likely be permitted under a General Permit, other projects such as airports, barge landings, and roads will require a 404 or Section 10 individual permit. ~~General permits could suffice if creatively prepared.~~ Typically, compensatory mitigation is not required for projects issued under a general permit. Under a current Memorandum of Understanding, compensatory mitigation is required for Alaska airport upgrade and relocation projects funded by FAA.*
- Most common wetland types are palustrine/emergent/scrub-shrub wetlands.
- Barge Site has estuarine/emergent/scrub shrub/ and willow.
- Top of borrow site is probably wetlands
- Some areas definitely need to be protected. Wetlands serve primarily as bird habitat and there are lots of beavers along streams.

In 2002 the potential borrow site was visited and visually inspected. The rock is hard basalt and in the opinion of the engineer performing the inspection it is present in sufficient quantity and quality to be a potential construction materials source for the development of infrastructure at the relocation site. The potential borrow source was visited in 2005 by a geologist during the reconnaissance of the potential airport sites for ADOT. That geologist has confirmed that the site appears to contain rock of sufficient quality and quantity to be used in the development of the relocation site.

- The PEIS will map wetlands for the agencies to use for planning and permitting. *Marcia H. modified/expanded this entry during her review: The Regulatory Branch-Corps of Engineers is evaluating if a General Permit for the Village of Newtok is appropriate. ~~A General Permit can hopefully be developed to cover the village as a whole. Recommendations will also involve mitigation; but likely only for the airport area.~~*
- Department of Defense (DOD) Permit Process- Nationwide permits (make permit process easier), maybe special permit for relocation, general permit 89-03N authorizes fill for projects related to residential construction.
- General Permit 96-7M authorizes fill discharge.
- Question was asked: “What would emergency status do for permitting timeline?” Gary B. answered that FEMA might be involved if a catastrophic event happened, for example if all or part of the village were to be wiped out. FEMA may help fund but don’t know for how much.
- The longest permitting process would likely be the airport. The airport is not currently on the Statewide Transportation Improvement Plan (STIP) List.

Additional FY 2006 Plans for COE:

- Juvenile fish distribution surveys in spring and mid summer;

- Fish habitat assessment of lower reaches;
- Additional bird surveys;
- Evaluate social, cultural, subsistence impacts of relocating to other communities (Nelson Island);
- Evaluate archaeological sites near the mouth of Takikchak Creek for the national register of historic places; and
- Assess the effects of the new town site on archaeological sites, subsistence and land use.

Rich Sewell, AK DOT-PF Area Planner for Kuskokwim Area:

- AK DOT-PF has policies in place that say how, when and where they can build airports. There was a discussion that conditions may be met for developing an airport if 25 or more people identified Takikchak as their official residence; and a post office and a school were to be built at this new site. The AK DOT-PF is trying to move project forward, but difficult if no people at new site, etc. The short-term action being taken is an airport reconnaissance study for the new site.
- PDC Inc. was hired by DOT-PF to conduct the reconnaissance study, under PDC project manager Royce Conlan. The Newtok elders indicated strongly at the public meeting that safety was the most important criteria in choosing a location for a new airport. The study team checked out six or more sites, and narrowed it down to three sites. Runway site #4 is the flattest and the best site. A draft of the reconnaissance study should be done by the end of October '05, and a final report should be done in January 2006. Cannot give a definitive site at this point but will have a great idea.
- Reconnaissance team saw a herd of Musk Ox out at proposed airport sites. New airport site will most likely need a fence around it to keep them out.
- Also saw 8 or 10 sandhill cranes in V formation around 20 feet over their heads. This will cause problems with the proposed airport site.
- ADOT-PF is planning on a 3,300-foot runway, which is the community class airport standard.
- Question was asked about how deep tundra is before coming to a solid base. Answer given was that no subsurface surveys done yet. The School District was interested in knowing if they would be dealing with permafrost. (*Lizette B. added during her review of these notes that there is permafrost throughout Nelson Island*).
- ADOT/PF took a geologist with them this summer, who took some hand samples.
- Questions were asked: “Is anything being done to put this project on the books with the State?” Q: “Should we encourage people to move there?” Ans: “Yes, there needs to be people on the site.” Q: “Is this a requirement in Statute?” Ans: “Don’t know for sure, but do not believe so”. The political reality is that everybody in entire state is competing for these dollars.

- STIP evaluates projects and lists them according to priority. Fifteen criteria areas are used to grade projects. Projects compete statewide. “Earmarked” funding is also available.
- Question was asked: “When funding comes available, what are the next planning activities for AK DOT-PF?” Ans: “It goes from reconnaissance studies to topographic maps, to wind studies, to refining location, and geologic studies. Next step then is to prepare a Master Plan, which can take 3 to 4 years to complete, then a NEPA document.

ADDITIONAL DISCUSSION FOLLOWING PROGRESS REPORTS

- The PEIS covers as much environmental baseline as possible, and other agencies branch off of the PEIS and do a shortened NEPA process for future projects. The Cultural Resources Survey has done 100% of proposed community site and the PEIS will be evaluating these resources, and then there is consultation with State Historic Preservation Officer (SHPO).
- It would be worthwhile for agencies to approve of a PEIS draft outline to help ensure that the PEIS will include items to address their needs. A Draft of the PEIS should be done by January 2007. The cultural resources and wetland delineation mapping section of the PEIS is mostly completed. Endangered species studies are on-going, and more bird and fish studies will be done. The FAA will send Lizette B. an environmental checklist of what needs to be accomplished to satisfy FAA NEPA.
- Agencies need a community layout before work can be done. Minimum detail needed include a plan, survey, houses, school, sewage lagoon, and a dumpsite. VSW also needs the community plan. They have already been funded and can start process as soon as a community plan is made.
- The suggestion was made to have an agency scoping meeting to identify environmental issues and studies to assure that all agencies’ needs are addressed, or at least known.
- Question was asked: “What would define a catastrophic disaster?” Gary B. answered that it would take something that the state and FEMA would agree that the community is not habitable again. A significant part of the community would need to be destroyed (somewhere between 20% and 80%).
- The first step is when the Governor designates a disaster, and then asks the president to declare it a national disaster, and then FEMA gets involved.

DISCUSSION OF NEWTOK RELOCATION PLANNING ANALYSIS TABLE 1: “RELOCATION PLANNING ACTIVITIES” AND TABLE 2: “TIMELINE”

- Key relocation planning milestones include: (a) aerial photos and topographic mapping; (b) 25+ people declaring Takikchak as home; (c) an approved community plan; (d) agency coordination; and (e) legislative involvement (State, Federal, and Governor).
- The Planning Activities Timeline (Table 2) takes us to the physical start of relocation (planning shown taking ideally about 6 years, assuming all funding is available). No actual years or dates are given; the timeline is done generically (year 1, year 2 etc...). *So we should*

not think that the clock has started on the ideal 6-year timeline. It could take many years longer with present programs and funding.

- Senator Ted Steven's new commission would help with funding but it also might be a step back because it might cause the focus to shift from Newtok to many communities with erosion problems. Newtok would still be a priority because of the high risk to the community as a whole.
- It would be helpful for PEIS to address all the elements of the community, and to maybe even look at potential impacts of building an airport or barge landing. This would make the other Agencies jobs easier. There are not a lot of endangered species issues but there are birds flying in the potential flight paths. (*Lizette B. added during her review of these notes that this is true for most airports in the state, and is unavoidable.*)
- The ASCG Report about Newtok relocation is a good background document.
- In order to get materials and structures to Takikchak, a Barge Landing area is needed. Also, if Newtok had a tractor they could start moving over some houses in the winter. John L. (FAA) mentioned the possibility of blending the barge landing costs with the airport costs because a barge landing is needed to be able to get equipment to new site.
- It was suggested that perhaps the military could be approached to donate a tractor. Rich Sewell agreed to look into procedure for obtaining a surplus bulldozer.
- It was also suggested that perhaps private industries/corporations could get involved and help out. They might get involved when they could potentially receive good press for helping. The story Aliza Sherman-Risdahl is preparing for NPR Market Place may suggest that if a tractor company gets involved the company may get good press or some sort of benefit for helping. Also, Newtok could call tractor companies and let them know that the story is being done and that Newtok needs a tractor.
- Maybe there could be some potential funding from a State Agency to set up a business venture to get a tractor. Stanley T. should check with Christy M. and Aliza S-R. to see about having a discussion about setting up a business venture with private industries (e.g. a tractor company)
- Maybe use Tununak as a port for the tractor and move it up to Newtok during winter.
- A recent article in Alaska Planning News entitled: "Rural Sprawl" was about designing communities with sustainability in mind.
- An Anemometer (wind evaluation system) is scheduled to be installed at new site this year or next. Once data comes in maybe Newtok can figure out what infrastructure could be brought in and use wind power (or figure out some way to generate electricity locally). Alaska Industrial Development and Export Authority/Alaska Energy Authority (AIDEA/AEA) could help with this.
- Maybe have ADOT/PF and AIDEA/AEA coordinate wind surveys.
- Question was raised: "If there are people willing to declare Takikchak their home, is their physical presence there needed?" Ans: Slippery issue. Q: "Is a Special Census needed to declare residency?"

- Looking at implementing Tables 1 and 2 is daunting, but by continuing to undertake activities that can be accomplished with available funds by individual agencies and the NTC, and through fostering agency cooperation, this will help Newtok move closer to relocation.
- There is a need for an interim plan for the community also, to cover current issues with sewage, waste, drinking water.
- At Takikchak, there might not be the need for full services initially, but start out with a camp setting. Q: “But how long can you live in a camp atmosphere?”
- Cindy R. (Denali Commission) noted that in 13 out of 35 activities, the Denali Commission is mentioned and has a role to play.
- Dave B (facilitator) reminded the group that we do not need all input today. For many this may be the first time looking at this information. The COE would like to receive additional comments within a week from the Workshop date.

LINE-BY-LINE REVIEW OF RELOCATION PLANNING ACTIVITIES (TABLE 1), AND TIMELINE (TABLE 2)

Questions for Agencies to be asking of Table 1 and Table 2:

- Are the right activities shown?
- Are the activities shown in proper sequence?
- Is my agency represented?
- Is my agency in the right place, at the right time, and are the right things being said about my agency’s role in the Newtok Relocation planning?
- Do I agree with my agency’s involvement?

Comments During Review of Timeline (Table 2) Line by Line:

(Note: Many of following comments affect both Tables 1 and 2.)

Editor’s Note: Since the time of Workshop#2, some of the activities in Table 1 have been deleted, and the activities’ numbering has been changed in the latest version of Table 1 that appears in Section 3.0 of this document. The most current status/numbering of the following activities are provided in parenthesis below.

Activity #1 (has been deleted): Year 1 State Funding, DCED should not be lead agency for this.

Activity #2 (has been deleted): Year 1 Federal Funding, COE- Aerial photography and Topographic Mapping of Takikchak already funded and waiting on aerial photographs from CVRF contractor.

Activity #3 (has been deleted): Newtok Self-Determination Decision, NTC- Already Done. Already independent Public Law 93-638. Remove from tables.

Activity #4 (now Activity #1): Legislative Funding Initiatives to Support the Relocation of Newtok to Takikchak. Need to groom one of state legislatures to push these through. Make it Governor’s priority. DCED has no staff in the erosion program. DCED can try to help to put

together a legislative request. NTC is most likely not eligible for BIA block grants. Need someone to step up (except COE). Christy Miller (DCED) does not think that this is something the DCED can lead but will put together another conference call (as part of AFN) saying they are not staffed to do this, and that Newtok needs some special legislation. The Tribe should contact the Governor (would be much more effective than Christy M. doing it. She will give an email address to Stanley T. and help him draft it up. Any one who works for a state department works for the governor indirectly so have to be careful about becoming politically involved. Would work better if NTC contacted the Governor and followed up on this. Christy M. and Stanley T. will talk about this and see what can be done. Maybe the \$50,000 indicated in Table 1 can be used to allocate staff for DCED to be able to do this task.

Activity #5 (now Activity #2): Probably more like \$600,000 not \$400,000.

Activity #7 (now Activity #4): In progress, should be available soon (COE employees can not approach congress, must come from constituents).

Activity #8 (now Activity #5): Margan Grover with COE needs to get to allotments to finish archaeological study next summer.

Activity #9 (has been deleted): Year 2 State Funding, NTC, DCED- Issue of quality of water taking place. Newtok's landfill is underwater and has been causing water quality problems. What is the quality of Newtok's water? They are doing a great job on staying on top of quality of their water. Problem is the quantity of water not quality, even with the well. Note: This item will be deleted from the Tables 1 and 2 because it is not an element leading to the relocation.

Activity #11 (now Activity #7): Sounds like a great activity. If SB 49 gets implemented, the think tank to line this up is there. Christy M. and Stanley T. should add this to their discussions. Department of Interior came out against SB 49 because they opposed mixing federal and state funding. Saw it as an un-funded mandate. Probably need a different agency separate from Denali Commission to over-see. Not easy to put Newtok on top of list if new bill passes. Governor Murkowski's new Transportation Advisory Committee might be able to help with this (make decisions about recommending priorities for construction and maintenance). Maybe Christy M. could advise Stanley T. on how to go about this.

Activity #12 (now Activity #8): Change dollar amount.

Activity #13 (now Activity #9): Association of Village Council Presidents (AVCP) receive formula funding and submit changes in housing needs. Scheduled to take place in Year 1 and Year 2. \$150,000 is most likely high. Add Rural Cap and Native American Housing Council (NAHC) to this task.

Activity #14 (now Activity #10): As early as next year this might be funded. AIDEA/AEA needs to be added as an agency.

Activity #16 (now Activity #11): A physical relocation plan needs to be developed on moving from point A to point B. Should probably occur after Task #17.

Activity #17 (now Activity #6): Should be titled "Community Layout". Add in an interim operating plan (sewage, water, etc...), how do you maintain physical infrastructure (could be built in to #17). COE might be able to start assisting Newtok with plan this winter. Move this up to year 1 and add COE with NTC.

Activity #18 (still Activity #18): Too early on schedule, should come after feasibility studies. Good to do airport drilling, borrow drilling, and other drilling at one time, but would be hard to coordinate. Once the community plan gets to VSW then work on the water and sewer systems can be moved up on the list. VSW also needs geotechnical info for sewage and landfill. Move back from year 2 to year 3.

Activity #28 (has been deleted): Remove this task.

Activity #31(now Activity #19): Move up from year 3 to year 2.

Activity #33 (now Activity #22): Real Estate Plan for Takikchak Site. This is a standard procedure that needs to be done, Brenda Kerr (COE), (replaced by Larry S), had said at December '04 workshop that she would look into this. Larry S. to check on.

PARTING SUGGESTION (*Larry S*):

COE proposes to coordinate a follow-up meeting (like this) of stakeholders every six months, to foster cooperation and information exchange. The group seems amenable to this suggestion, but some would have to attend via telecom due to funding constraints.