

Part 50 Environmental Review Record

Newtok Relocation Project

Phase I, Phase II & Village Center

Metarvik, Alaska

Environmental Assessment and Compliance Findings for the Related Laws

U.S. Department of Housing and Urban Development

1. Project Number: 55IH0202000
 HUD Program: IHBG/ICDBG
 2. Date Received:

Findings and Recommendations are to be prepared **after** the environmental analysis is completed. Complete items 1 through 15 as appropriate for all projects. For projects requiring an environmental assessment, also complete parts A and B. For projects categorically excluded under 24 CFR 50.20, Complete Part A. Attach notes and source documentation that support the findings.

3. Project Name and Location (Street, City, County, ST): Newtok Relocation Project Phase I and Phase II Housing Development Village Center Development	4. Applicant Name, Address (Street, City, ST, Zip Code), Phone: AVCP Regional Housing Authority PO Box 767, Bethel, Alaska 99559 Newtok Village PO Box 5596, Newtok, Alaska 99559
---	---

5. <input type="checkbox"/> Multifamily <input type="checkbox"/> Elderly <input checked="" type="checkbox"/> Other (Explain) Relocation/New Construction	6. Number of: dwelling units <u>78</u> ; buildings <u>14</u> ; stories <u> </u> ; acres <u>1</u>	7. Displacement: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Explain)
---	--	---

New Construction Rehabilitation Other
 (Explain) Acquisition/Demolition/Relocation

9. Has an Environmental Report (Federal, State, or local) been used in completing this form? No Yes
 (Identify) _____

10. Planning Findings: Is the project in compliance or conformance with the following plans?

Local Zoning: Yes No Not Applicable
 Coastal Zone: Yes No Not Applicable
 Air Quality (SIP): Yes No Not Applicable

Explain any "No" answer: _____
 Are there any unresolved conflicts concerning the use of the site?
 No Yes (explain): _____

11. Environmental Finding: (Check one)
 Categorical Exclusion is made in accordance with § 50.20 or
 Environmental Assessment and **Finding of No Significant Impact (FONSI)** is made in accordance with § 50.33 or

Environmental Assessment and a **Finding of Significant Impact** is made, and an Environmental Impact Statement is required in accordance with §§ 50.33 (d) and § 50.41.

Project is recommended for approval (list any conditions and requirements):

Project is recommended for rejection (state reasons):

General Permit (GP) 2007-541-M1 authorized by the Corp of Engineers (COE) allows for the construction and/or relocation of 15 homes in Metarvik, to include driveways/housepads and 1920 linear feet of roads located within Phase I in Metarvik. Additional housing and/or community development projects will need additional authorization from the COE as projects are identified. Work under the GP is authorized and ends December 10, 2017.

12. Preparer: (Signature) 	Date: <u>9/14/2016</u>	13. Supervisor: (Signature) 	Date: <u>9/14/2016</u>
-------------------------------	---------------------------	---------------------------------	---------------------------

14. Comments by Environmental Clearance Officer: (Required for projects over 200 lots/units)

ECO: (Signature)	Date:
------------------	-------

15. Comments (if any) by HUD Approving Official:

HUD Approving Official: (Signature) 	Date: <u>9/14/16</u>
---	-------------------------

Part A: Compliance Findings for § 50.4 Related Laws and Authorities

§ 50.4 Laws and Authorities	Project is In Compliance		Source Documentation and Requirements for Approval
	Yes	No	
16. Coastal Barrier Resources	X		Alaska has no known or designated Coastal Barrier areas.
17. Floodplain Management (24 CFR Part 55)	X		Metarvik will not be prone to flooding due to the elevations of the proposed development, which vary from 70ft to 180ft. See topo maps; Newtok/Metarvik is not participating in the National Floodplain Insurance Program; undeveloped site is not within a known 100/500 year floodplain and is unmapped by FEMA.
18. Historic Preservation (36 CFR Part 800)	X		State Historic Preservation letter dated 7/29/16 concurring that a finding of "no historic properties affected" will be appropriate for the following project components: Phase I Housing, Phase II Housing and activities planned within the Village Center. As noted by SHPO, project related activities will be conducted to avoid and protect the nearest known site, "XBI-00183", identified in Metarvik.
19. Noise Abatement (24 CFR Part 51 Subpart B)	X		Metarvik sits on largely undeveloped land and does not have any major roads or highways, railroads and/or is located within 15 miles of a civil or military airfield in Newtok. There are no noise sensitive projects that will interfere with the housing development project being proposed. Noise Calculations are not necessary at this time.
20. Hazardous Operations (24 CFR Part 51 Subpart C)	X		Metarvik sits on largely undeveloped land and does not have, nor is it located in close proximity to a bulk fuel storage facility. Future plans for a bulk fuel storage facility in Metarvik will be planned in accordance with 24 CFR Part 51C and located outside of the acceptable separation distance requirements from residential housing and community structures to ensure safety of structures as well as open areas where people will gather outside, such as parks.
21. Airport Hazards (24 CFR Part 51 Subpart D)	X		An airport runway does not currently exist in Metarvik. However, several plans exist and call for a proposed local airport in the future. Based on proposed airport runway maps, proposed project activities will be outside the Airport Runway Zones.
22. Protection of Wetlands (E.O. 11990)	X		Corp of Engineers letter dated 9/8/16 authorizes the construction/relocation of 15 homes in the new community of Metarvik under General Permit 2007-541-M1. The 8-Step process was completed - 1 st Notice posted 8/5/16 pulled 8/24/16 - no comments; 2 nd Notice posted.
23. Toxic Chemicals and Radio-active Materials (§ 50.3(j))	X		Metarvik is not listed or located within one mile of an EPA Superfund Site or within 2000 feet of a site on the CERCLIS List; not located within 3000 feet of a toxic or solid waste land fill. Any future proposed solid waste landfills will be located further than 3000 feet from any properties projected for use in HUD programs.
24. Other § 50.4 authorities (e.g., endangered species, sole source aquifers farmlands protection, flood insurance, environmental justice);	X		<p>Endangered Species - Will have no effect on listed species, per email dated 7/6/16 from Douglas Cooper, Branch Chief - Ecological Services; No effect on species under National Marine Fisheries Services, per email dated 7/27/16 from Jon Kurland, Asst Regional Administrator for Protected Resources; No further permitting required within Yukon Delta National Wildlife Refuge, per email dated 7/22/16 from Kent Stahlnecker, Refuge Manager, Yukon Delta NWR.</p> <p>Wild and Scenic Rivers - Metarvik is not located within 1 mile of any listed Wild and Scenic River system.</p> <p>Farmland Protection - There are no prime, unique or statewide importance farmlands in Alaska</p> <p>Clean Air Act - Metarvik is not located in a designated non-attainment area.</p> <p>Environmental Justice - Proposed housing development sites are being developed so that they will not be located in areas that have a new, continued or historically disproportionate potential for high and adverse effects on minority or low-income populations; and that do not suffer from disproportionate adverse health and environmental effects relative to the community at large.</p> <p>Sole Source Aquifers - There are no Sole Source Aquiferes in the State of Alaska</p> <p>Coastal Zone Management Act - Currently the State of Alaska doe not have a Coastal Zone Management Plan.</p>

Part B: Environmental/Program Factors:

Factors	Anticipated Impact/Deficiencies			Source Documentation and Requirements for Approval
	None	Minor	Major	
25. Unique natural features and areas	X			No unique natural features are present in Mertarvik (Source: Newtok Village/DOWL Eng.)
26. Site suitability, access, and compatibility with surrounding development	X			<p>Although a comprehensive plan has not been developed for the Mertarvik site, in March of 2012 the Tribe adopted Guiding Principles (Maligtaquyarat) and developed a Strategic Management Plan which are considered the guiding documents for development at Mertarvik. No current zoning applies to this project. It has not been determined if this project will result in zoning regulations.</p> <p>The proposed one-story, single-family units are compatible with the proposed village layout and are typical of village housing units. The project is not sited within an urban environment and will not result in an urban environment. (Source: Newtok Village/DOWL Engineering)</p>
27. Soil stability, erosion, and drainage	X			<p>Surface rock in the vicinity of the project site is vascular basalt. The soil in most areas is basalt weathered to sand and gravel. The surface of the unweathered basalt ranged from 7 to more than 31.5 feet below the ground surface. The ground surface has a layer of organics that varies in depth, but is generally 1 to 2 feet thick. Below the surface organics there is a transition layer of silt that contains roots and organics. The volume of organics decreases with depth.</p> <p>Permafrost in the general project area was and the depth to permafrost in most areas is probably about 18 to 24 inches. The permafrost is ice rich and has moisture content (on the basis of weight) of 20 to 30 percent. There is surface evidence that ice wedges are present in the area, although none was observed. (Source: Newtok Village/DOWL Engineering)</p>
28. Nuisances and hazards (natural and built)	X			<p>No natural hazards have been identified at the project site. A hazard mitigation plan for Newtok was updated in 2015 and evaluated hazards at Mertarvik. The project site also shares the following hazard type with Newtok: earthquake, ground failure, severe weather, and tundra fire. The Newtok Village Council supports all projects that provide mitigation measures from all natural hazards of earthquake, ground failure, severe weather, and tundra fire at the current as well as the new Mertarvik Village site (2015 Newtok HMP).</p> <p>For safety, residents will likely move back to Newtok during the spring and fall when movement back and forth from Newtok to Mertarvik would be too risky (2012 SMP background report).</p>
29. Water supply/sanitary sewers	X			<p>Water is currently available through access to a local spring, a well, or through rainwater catchment. Residents will select their source and then point-source water treatment plants will treat water in homes. After the initial phase, a washeteria/water plant will be constructed. (Source: Newtok Village/DOWL Engineering)</p> <p>Mertarvik residents will gather their water from multiple sources: from the nearby spring, from rainwater off the roof in summer, and from ice chipped and carried from ponds in the winter.</p> <p>The demonstration home currently being built in Mertarvik will contain the PASS (Portable Arctic Sanitation System) model, which is an in-house water treatment plant to bring water to potable standards whatever the source. The system pulls water through a set of 5 micron and .5 micron filters through either an electric pump or a hand pump up to a holding tank, where it can gravity feed back down into a sink. The filters clean the water of common contaminants such as giardia and other bacteria. If viruses are a concern, chlorine can be added to the tank at the top of the system. See attached the schematic drawings and a few pictures of the system. (Cold Climate Housing Research Center - email dated 9/6/16 from Aaron Cooke, Architectural Researcher)</p>
30. Solid waste disposal	X			<p>A burn unit will be available to manage solid waste during the initial phase of relocation; a "mini dump" is planned. (Source: Newtok Village/DOWL Engineering)</p> <p>The first phase of housing would use the existing septic field that has already been constructed at the MEC Site. As of yet, the interface point between the haul-distribution point and this septic system has not been designed. The draft housing plan will focus on a community-wide waste system. (Source: Newtok Village/DOWL Engineering)</p> <p>The demonstration home currently being built in Mertarvik will utilize a separating toilet to provide a cleaner and more sanitary way of disposing of human waste in the absence of conventional sewer. The toilet separates solid waste from liquid waste through its geometry. The liquid waste is stored in an airlocked container so as to minimize any spillage or odor. The solid waste is kept in a holding container in the toilet. The demonstration house uses the toilet as the exhaust port for its ventilation system, running stale air on its way out of the</p>

house over the solid waste and desiccating it. This guarantees that odor isn't getting into the house. A ventilation diagram and a photo are attached to this email. The desiccated waste is able to be burned in the local incinerator.

When more families come across the water, it is the intent the septic field below the MEC can be used as the second-stage interim system for village relocation. The septic field has already been constructed and could support dozens of households. (Cold Climate Housing Research Center - email dated 9/6/16 from Aaron Cooke, Architectural Researcher)

31. Schools, parks, recreation,	X	An Education Action Plan was developed to ensure sufficient educational opportunities for school-age children prior to school building. Children will be home-schooled or be given distance learning opportunities and if needed, a temporary teaching facility could be built if needed; Social services will be accessed in Newtok; Due to the remote location, open space and outdoor recreational facilities are not currently planned during the initial phase. (Source: Newtok Village/DOWL Engineering)
and social services		
32. Emergency health care, fire	X	During the initial phase, health care and police services will be provided primarily in Newtok. A MASH unit will be established to provide first aid and limited health care service at the new village site. After the initial phase, a public safety building (for police and fire) and clinic will be constructed at the new village site. Initially homes in the new village site will also be provided with fire suppression equipment. (Source: Newtok Village/DOWL Engineering)
and police services		
33. Commercial/retail and	X	All goods and services will be obtained in Newtok. After the initial phase, a store will be constructed (Source: Newtok Village/DOWL Engineering)
transportation		
34. Other	X	<p>Energy Consumption - The average modern home in Newtok uses 300 gallons of heating fuel every 1-2 weeks. In light of this, housing in Phase I will be 6-star rated homes.</p> <p>Heat will be provided to Phase 1 residents through wood stoves with individual generators providing electricity. Energy consumption by residents in Phase II has not been established. The first homes will have their own generators that feed into battery banks and are solar/wind ready as well as ready to plug into a conventional grid. Current design is focused on self-contained pioneer units that can tie into an electrical grid when a grid is created.</p> <p>Current plans exceed property and energy-efficiency standards currently established in Alaska. The home is modeled to use approximately 250-300 gallons of heating oil annually. Currently, the average usage in the region is around 800 gallons annually.</p> <p>There are currently three storage containers for heating oil and gasoline (two near the barge landing and another one up near the MEC). A 350kw generator will be used to operate the rock crusher and electricity from it will be provided to residents and other buildings during the initial phase using a 480V line. A #2 diesel tank will be used to store diesel for heavy equipment use and for heating. After the initial phase, a fuel tank farm and power plant will be constructed (Source: Newtok Village/DOWL Engineering)</p> <p>Demographic Character Changes - No demographic data for the project site exists. The project would not change the demographics of the area. An Elder Housing Model is being developed to accommodate the needs of elderly residents. (Source: Newtok Village/DOWL Engineering)</p> <p>Displacement - The eventual relocation of all of the residents of Newtok to the new site in Metarvik will result in zero displacement. As additional housing units are constructed, and families from Newtok relocate to Metarvik; activities will be done in accordance with the Uniform Relocation Act to ensure displacement issues, if any, are properly addressed. (AKONAP HUD)</p> <p>Employment and Income Patterns - The school, clinic, village services and commercial fishing provide employment. Subsistence activities and trapping supplement income. In 2009, 17 residents held commercial fishing permits. The project is not anticipated to affect employment or income patterns. (Source: Newtok Village/DOWL Engineering)</p> <p>Open Space, Recreation and Cultural Facilities - Due to the remote location, open space and outdoor recreational facilities are not currently planned. No organized recreational opportunities will exist for the initial phase. After the initial phase, a multi-purpose building and/or community gym will be constructed. The Metarvik Evacuation Center will serve as a community space and would host a variety of cultural events, such as also be Traditional Eskimo Dance, Community meetings and other activities. After the initial phase, a tribal hall, library, and church will be constructed. (Source: Newtok Village/DOWL Engineering)</p> <p>Transportation - A Long Range Transportation Plan (LRTP) developed in accordance with 25 C.F.R. Part 170 for the Newtok Traditional Council will guide transportation-related decisions. All transportation off-site is currently by boat. Travel within the project site is by 4-wheeler or by foot. An airport serving future residents is anticipated but has not yet been designed. (Source: Newtok Village/DOWL Engineering)</p>

Vegetation and Wildlife -The site is dominated by wetlands with vegetation typical of western Alaska and the lowlands of the Yukon-Kuskokwim Delta. Upgradient of the project site, the vegetation changes to heath tundra, a complex of vegetative associations that vary according to small differences in exposure, drainage, and disturbance. Heath tundra is characterized by a moss and lichen mat on which other plants grow. Sedges and grasses are abundant. In drier areas, woody plants consisting primarily of prostrate or low-growing shrubs are common. In 2005 the Corps of Engineers refined the delineation of wetland and vegetation types around the project site. Wetland vegetation at the project site is composed mostly of palustrine emergent persistent/scrub-shrub evergreen/moss and palustrine emergent persistent/scrub-shrub broad-leaved deciduous wetland. Vegetation types are mostly mesic shrub-birch ericaceous and tussock tundra interspersed with low, open willow shrub and blue joint herb shrub complex patches. These wetland and vegetation types are typical and widespread throughout higher ground on Nelson Island and are not unique to the project site.

Small mammals, including voles, shrews, lemmings, short-tailed weasels, and mink, range across much of Nelson Island and could be present throughout the project area.

Fish and Wildlife Service biologists noted an abundance of voles and lemmings during an August 2006 field study of the area (USFWS 2006). Reindeer were introduced to Nelson Island in 1934, but there are no reindeer on the island today. There are also no caribou on Nelson Island. Caribou range to north, east, and southeast of Nelson Island, but their range does not extend to the island. The Mulchatna herd, which ranges south of the Kuskokwim River, possibly comes closest to Nelson Island.

The Yukon-Kuskokwim Delta is rich in bird species diversity, especially during the summer when the delta hosts large numbers of nesting waterfowl. It is one of the most productive areas in the world for geese. Baird Inlet Island, about 5 miles southwest of Newtok and 4 miles north of the project site, is home to a colony of about 4,500 to 10,122 nesting pairs of Pacific black brant. The sea bird colony closest to the project site is on the outer coast of Nelson Island, approximately 40 miles from the site. (Source: 2008 EA)

NEWTOK RELOCATION PROJECT





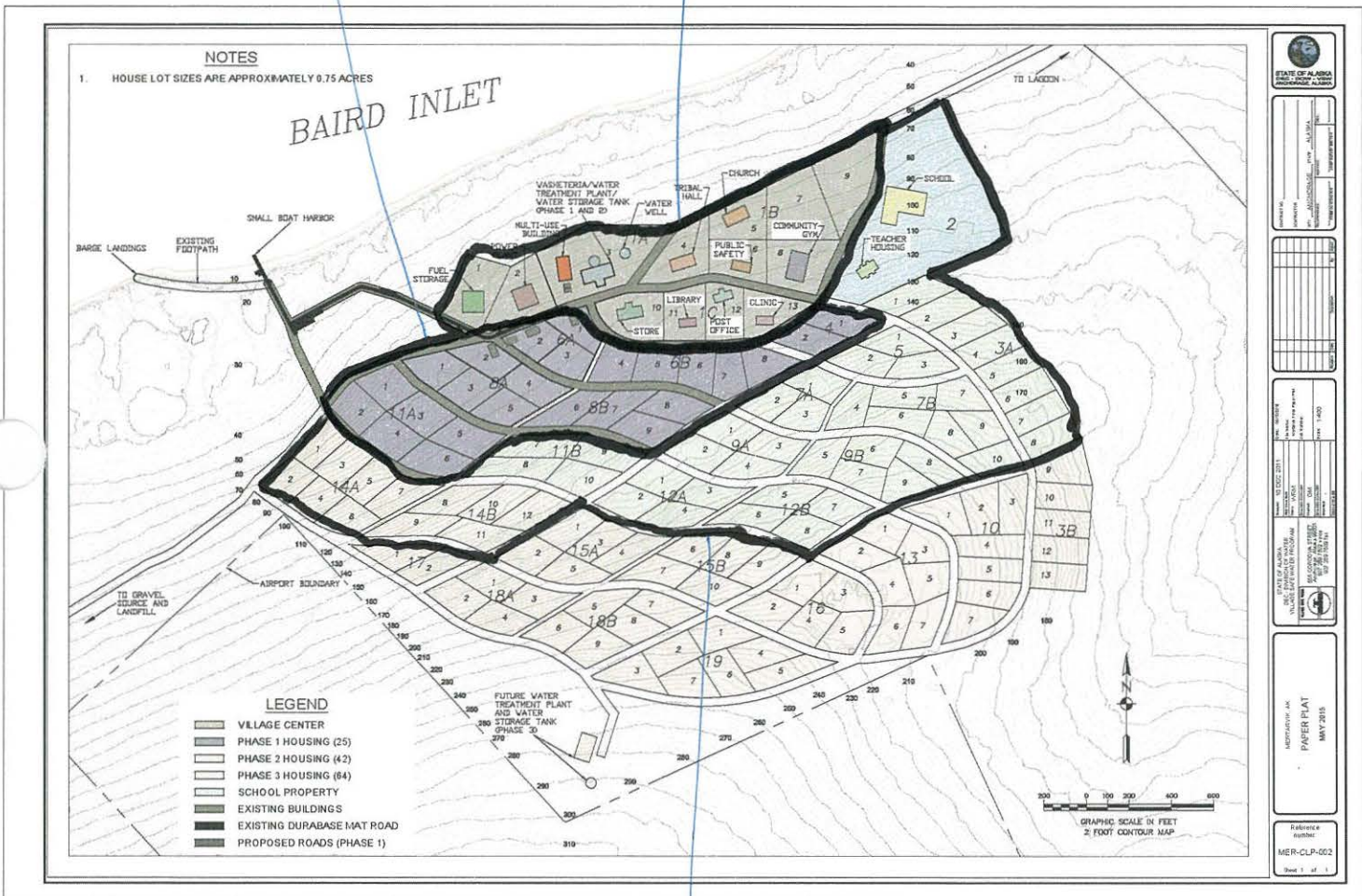




Phase I Housing

Village Center

Phase II Housing

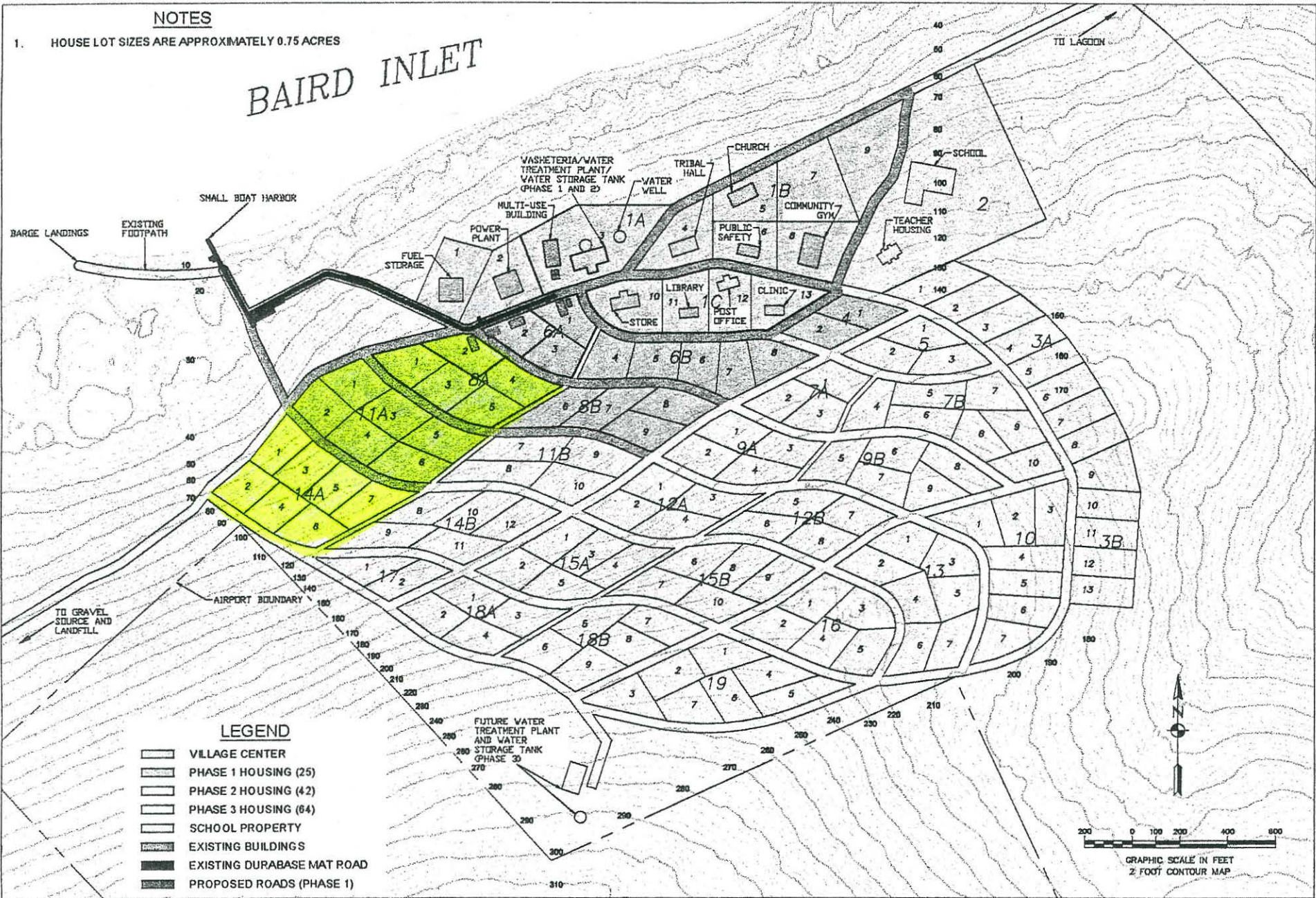


[Yellow Box] = site & activities covered under the Corp. of Engineers General Permit #2007-541-M1

NOTES

1. HOUSE LOT SIZES ARE APPROXIMATELY 0.75 ACRES

BAIRD INLET



LEGEND

- VILLAGE CENTER
- PHASE 1 HOUSING (25)
- PHASE 2 HOUSING (42)
- PHASE 3 HOUSING (64)
- SCHOOL PROPERTY
- EXISTING BUILDINGS
- EXISTING DURABASE MAT ROAD
- PROPOSED ROADS (PHASE 1)



STATE OF ALASKA	DATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION	PROJECT
PROJECT NO.	SCALE
PROJECT NAME	DATE
PROJECT LOCATION	PROJECT NO.

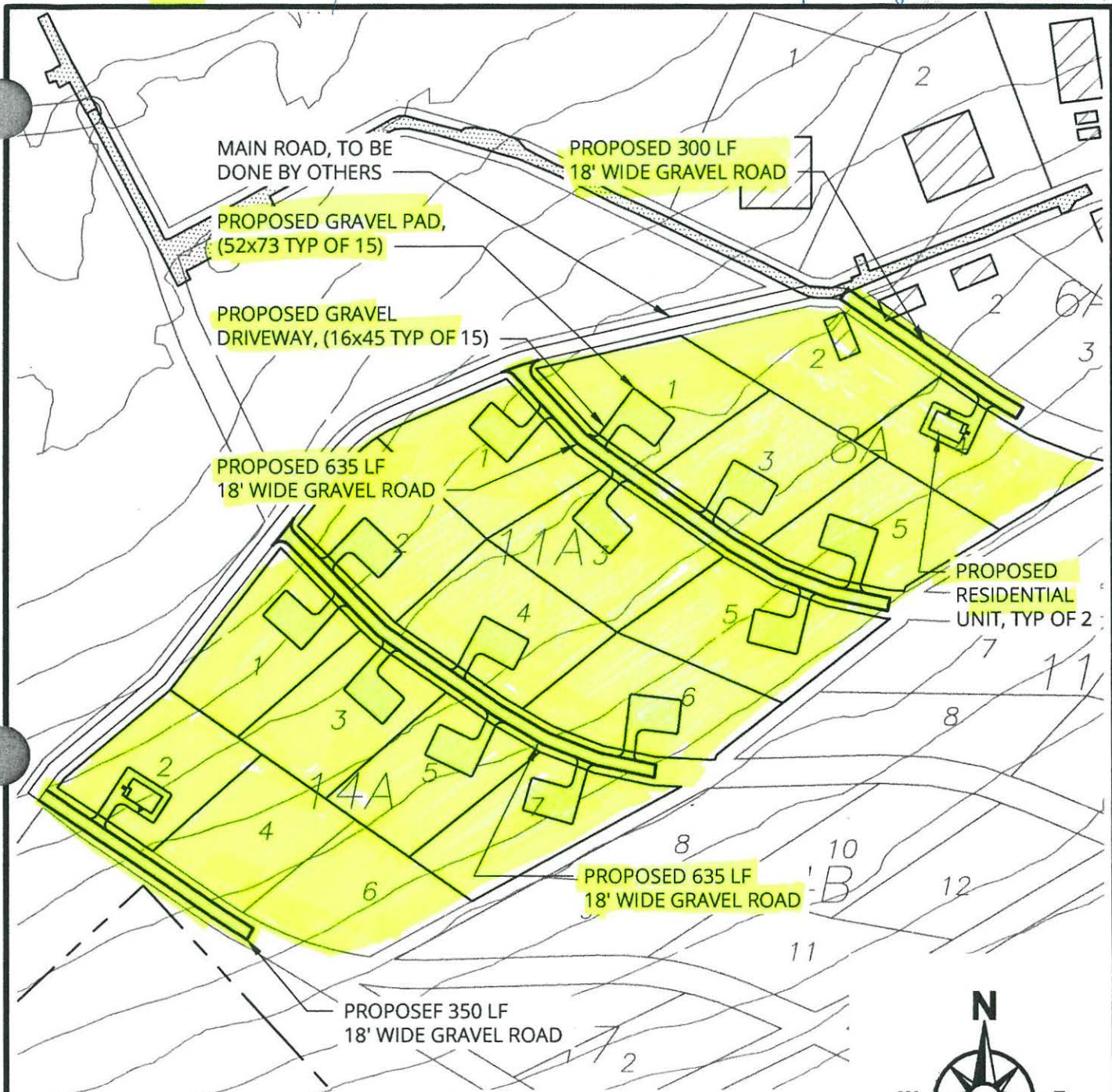
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

[Yellow Highlight] = Sites/activities covered under the Corp. of Engineers General Perm. #2007-541-M1



NOTES:

1. FINAL CONFIGURATION OF ROADS AND PADS MAY VARY FROM THOSE SHOWN.
2. CULVERTS WILL BE PROVIDED AS REQUIRED TO PROVIDE TO MAINTAIN NATURAL DRAINAGE



P:\1000-1049\1000 AVCPRHA 3 YR IDIQ\1000.26 MERTARVIK USACE PERMIT_CIVIL\DWG\1000.26_DSI_MERTARVIK ACOE FIGURES.DWG

ICG
Lantech Inc
architecture · engineering · surveying
 250 H Street
 Anchorage, AK 99501
 P (907) 243-8985
 F (907) 243-5629
 www.lgak.com

**AVCP RHA FY 2017 HOUSING
 MERTARVIK, AK**

COE PERMIT# POA-_____
 JOB NO: 100.26
 LOCATION: T 8 & 9 N, R 87 W, SEC. 2 & 34

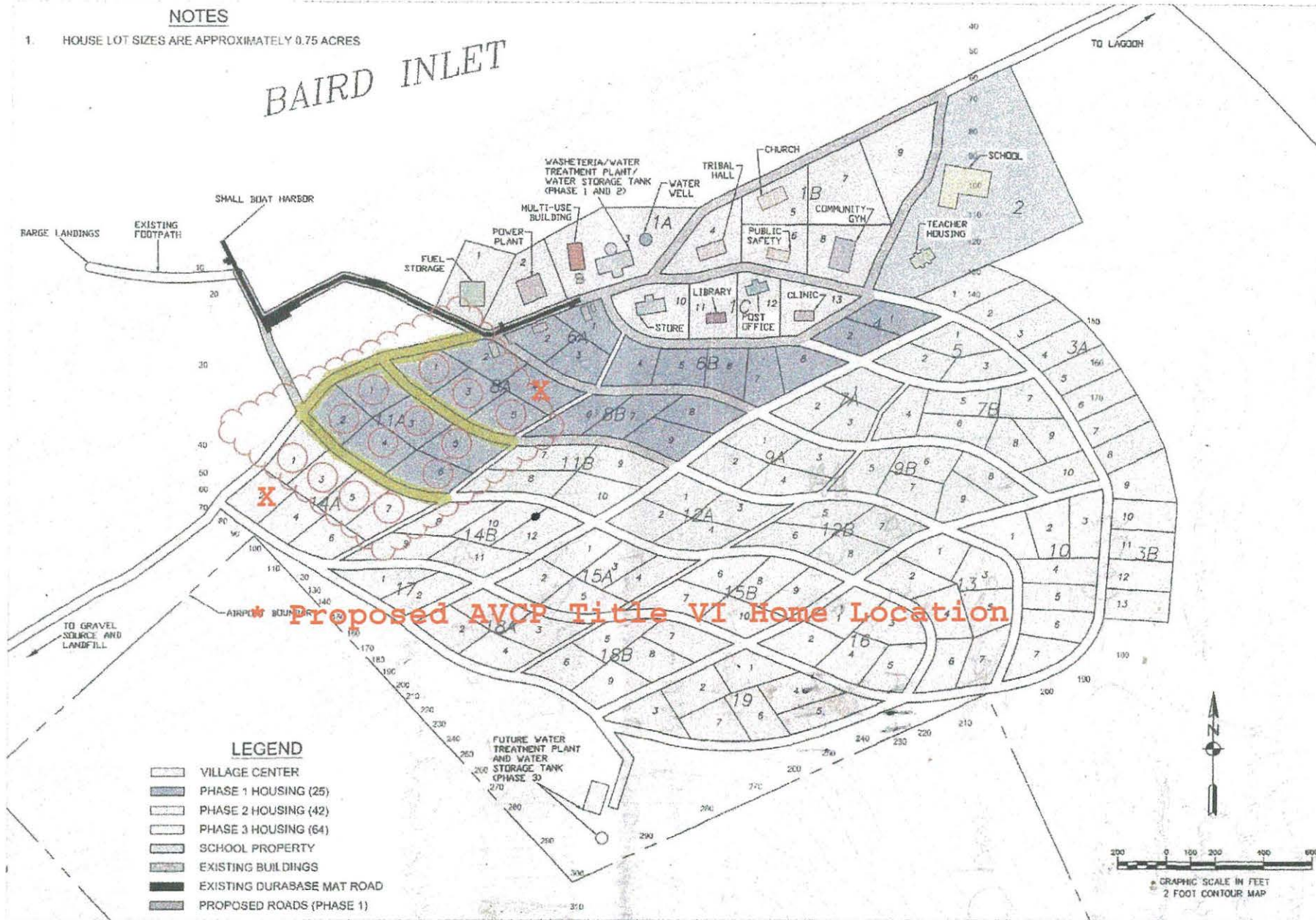
SITE PLAN

POA-2016-329, Baird Inlet
 AVCP RHA, Newtok relocation - Mertarvik
 Drawings dated September 7, 2016
 Sheet 2 of 6

NOTES

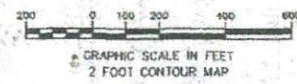
1. HOUSE LOT SIZES ARE APPROXIMATELY 0.75 ACRES

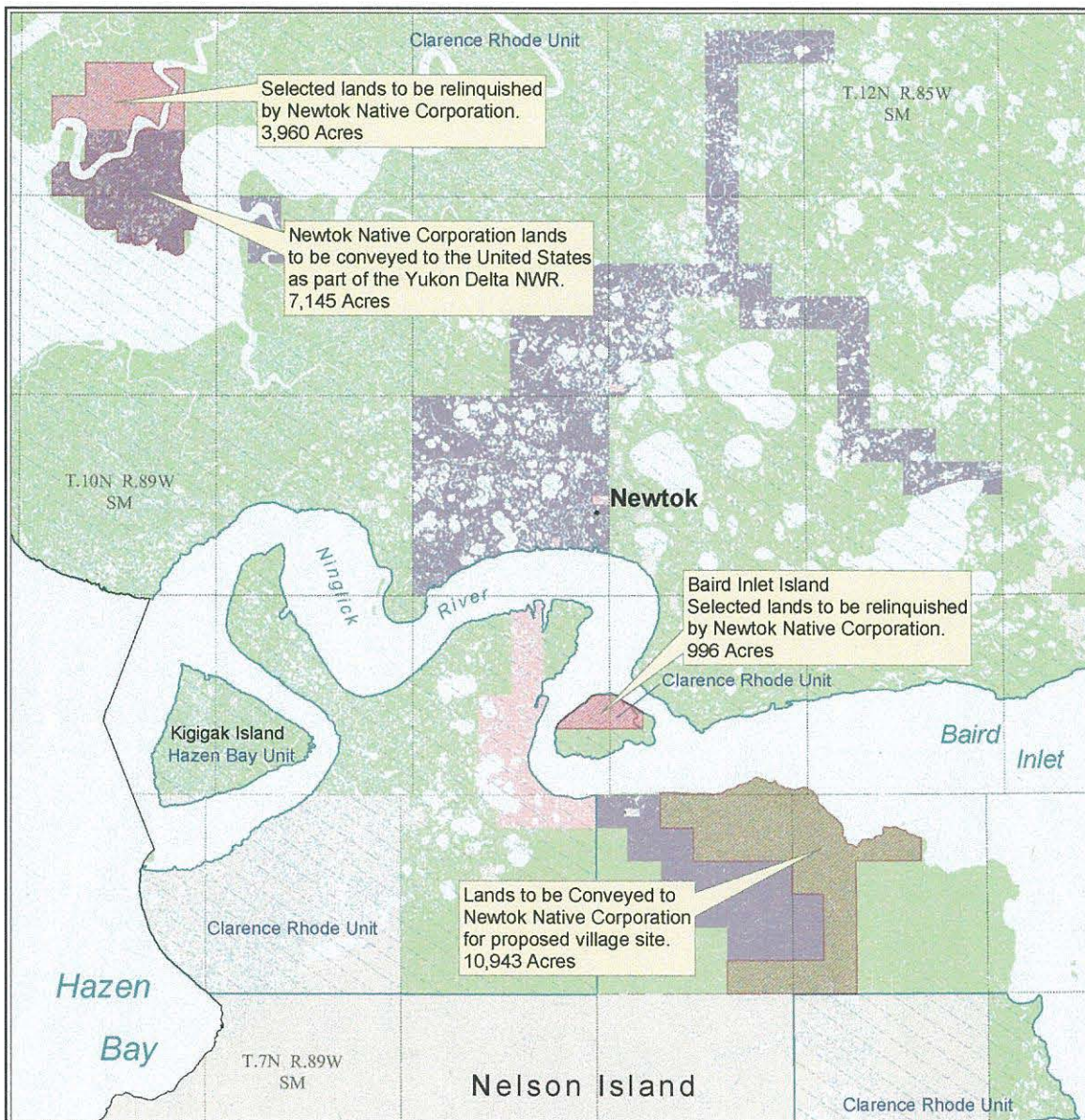
BAIRD INLET



LEGEND

- VILLAGE CENTER
- PHASE 1 HOUSING (25)
- PHASE 2 HOUSING (42)
- PHASE 3 HOUSING (64)
- SCHOOL PROPERTY
- EXISTING BUILDINGS
- EXISTING DURABASE MAT ROAD
- PROPOSED ROADS (PHASE 1)





Newtok Exchange
 U.S. Fish & Wildlife Service
 Yukon Delta National Wildlife Refuge

- Newtok Conveyed
- Newtok Selected
- Other Status



April, 2004

Land status represents USFWS interpretation of BLM records. Land status current to 05/21/2003.



TZW 15-0283

Introduction

Newtok is a community of approximately 325 residents in the Yukon-Kuskokwim Delta, situated between the Newtok and Ninglick rivers (figure 1). In 1954, the Ninglick River was about 4,000 feet south of the community, but by 2006, the river had moved to within 800 feet of the nearest structures. Over the last 50 years, the erosion problem has been addressed unsuccessfully in many ways. Relocating the community has been proposed as the best solution to the problem. The Newtok Traditional Council (the federally recognized tribe) evaluated six relocation sites through polls of residents in 1996, 2001, and 2003, and the preferred location was Mertarvik on Nelson Island (92% for Mertarvik, 3% for other locations, 5% for other solutions, no votes for relocating to one of the other area communities). Congress approved a land exchange between the Newtok Village Corporation and the U.S. Fish and Wildlife Service in 2003, under the Alaskan Native Village and the Interior Department Land Exchange Act of November 17, 2003 (Public Law 108-129, 117 Stat. 1358). The Department of Interior conveyed 10,943 acres at Mertarvik to the Newtok Village Corporation on April 28, 2004.

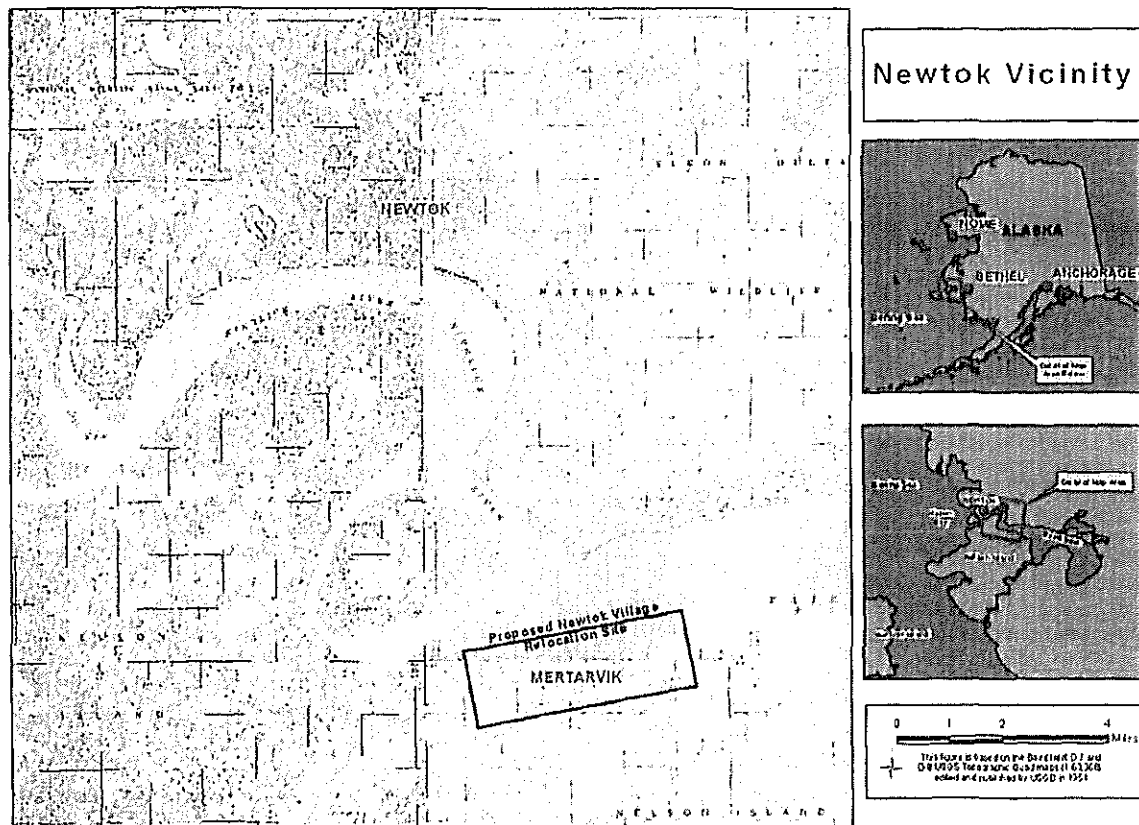


Figure 1. Location and vicinity.

The environment around Newtok is similar to many portions of the lower Yukon-Kuskokwim Delta – a moist low lying plain with little elevation change, a great deal of surface water, and many lakes (figure 2). In contrast, Mertarvik gently slopes to the toe of the Kaluyut Mountains on the north shore of Nelson Island. The underlying basaltic bedrock is volcanic in



2004-000727-0

Recording Dist: 402 - Bethel
5/17/2004 1:24 PM Pages: 1 of 3

A
L
A
S
K
A



CCC x2

The United States of America

Interim Conveyance

AA-85363

This Interim Conveyance is issued by the UNITED STATES, Department of the Interior, Bureau of Land Management, 222 West Seventh Avenue, #13, Anchorage, Alaska 99513-7599, as GRANTOR, to Newtok Native Corporation, P.O. Box 5528, Newtok, Alaska, 99559, as GRANTEE, for lands in the Bethel Recording District.

WHEREAS

Newtok Native Corporation

is entitled to a conveyance pursuant to the Alaskan Native Village and the Interior Department Land Exchange Act of November 17, 2003, Pub. L. 108-129, 117 Stat. 1358, of the surface and subsurface estates in the following-described lands, designated as Proposed Village Site on the map entitled Proposed Newtok Exchange, dated September 2002, referenced in the Act:

Seward Meridian, Alaska

T. 9 N., R. 85 W.,
That portion of Nelson Island lying within:

Sec. 31.

Containing approximately 0 acres.

T. 8 N., R. 86 W.,
Those portions of Nelson Island lying within:

Secs. 3 to 10, inclusive;
Secs. 17 and 18;
Secs. 20 and 29;
Secs. 31 and 32.

1876

Interim Conveyance No. _____

Containing approximately 5,563 acres.

T. 9 N., R. 86 W.,
Those portions of Nelson Island lying within:

Secs. 32 to 36, inclusive.

Containing approximately 70 acres.

T. 8 N., R. 87 W.,
Those portions of Nelson Island lying within:

Secs. 1 to 4, inclusive;
Secs. 10, 11, and 12;
Secs. 35 and 36.

Containing approximately 5,310 acres.

Aggregating approximately 10,943 acres.

Excluded from the above-described lands herein conveyed are the submerged lands, if any, up to the ordinary high water mark, beneath rivers or streams 3 chains wide (198 feet) and wider, and lakes 50 acres in size and larger, which are meanderable according to the 1973 Bureau of Land Management *Manual of Surveying Instructions*, as modified by Departmental regulation 43 CFR § 2650.5-1, and navigable waters, if any, of lesser size. These submerged lands will be identified at the time of survey. Also excluded from the above-described lands herein conveyed are lands covered by tidal waters up to the line of mean high tide. The actual limits of tidal influence for those water bodies, if any, will be determined at the time of survey.

NOW KNOW YE, that there is, therefore, granted by the UNITED STATES OF AMERICA, unto the above-named corporation the surface and subsurface estates in the lands above described; TO HAVE AND TO HOLD the said lands with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto belonging, unto the said corporation, its successors and assigns, forever.

THE GRANT OF THE ABOVE-DESCRIBED LANDS IS SUBJECT TO:

1. Issuance of a patent after approval and filing by the Bureau of Land Management of the official plat of survey confirming the boundary description and acreage of the lands hereinabove granted;

Interim Conveyance No. _____

1876

Page 2 of 3



2 of 3

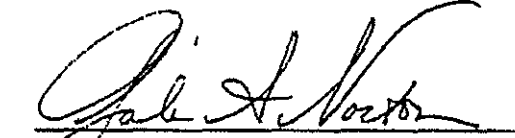
2004-000727-0

2. The provisions, conditions, and limitations of the Alaskan Native Village and the Interior Department Land Exchange Act of November 17, 2003, 117 Stat. 1358; and
3. Valid existing rights therein, if any.

IN WITNESS WHEREOF, the Secretary of the Interior has, in the name of the United States, set her hand and caused the seal of the Bureau of Land Management to be hereunto affixed on this 28th day of April, 2004, in Anchorage, Alaska.



UNITED STATES OF AMERICA


Gale A. Norton
Secretary of the Interior

Return recorded document to:

LAW OFFICE OF GLEN PRICE
P.O. BOX 4739
PALMER, ALASKA 99645
(907) 746-5970

Interim Conveyance No. 1876

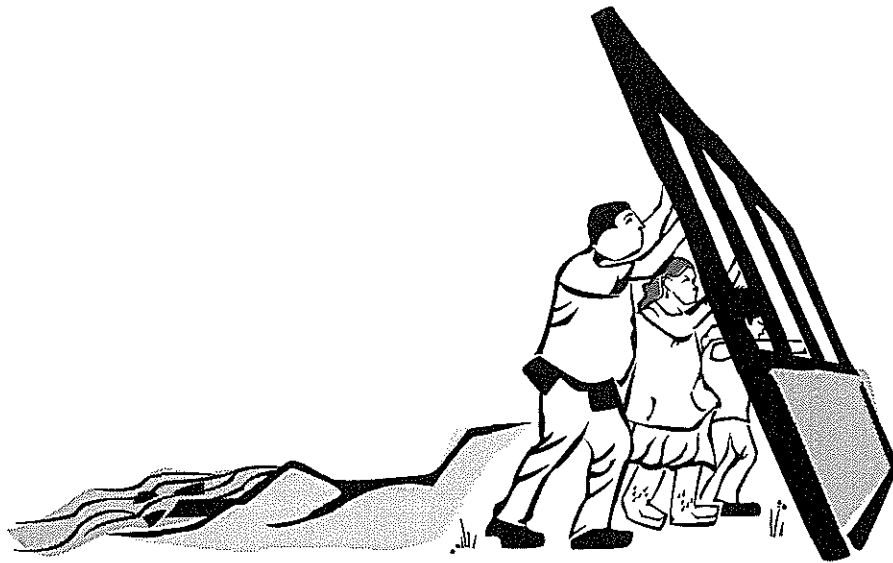
Page 3 of 3


3 of 3
2004-000727-0

Strategic Management Plan

Newtok to Mertarvik

March 2012



MERTARVIK

**Nunaullemteggun ikayuqulluta tamamta,
assirluta aknirtenritellerkamtenun,
nuggtarllemtenun ciunerkamteni**

*a community that builds together
for the safe and healthy future of Newtok*

This page is intentionally left blank

STRATEGIC MANAGEMENT PLAN :: Newtok to Mertarvik FINAL DRAFT

Prepared for the State of Alaska Department of Commerce, Community, and Economic Development (DCCED)
Division of Community and Regional Affairs by Agnew::Beck Consulting.

This report is funded with qualified outer continental shelf oil and gas revenues by the Coastal Impact Assistance Program, U.S. Fish and Wildlife Service, U.S. Department of the Interior.

DCCED Project Manager:

Sally Russell Cox, Planner, Division of Community and Regional Affairs

Project Advisors:

Stanley Tom, Tribal Administrator, Newtok Traditional Council

George Tom, President, Newtok Native Corporation

Greg Magee, Program Manager, Village Safe Water Program, Alaska Department of Environmental Conservation

**With special acknowledgement to
the Newtok Community and the Newtok Planning Group**



Additional Editorial Contributions from:

Andrea Elconin, Program Manager, U.S. Army Corps of Engineers

Carolyn George, Secretary, Newtok Traditional Council

David Vought, Sustainability Officer, Alaska HUD Office of Native American Programs

Dan Boccia, Alaska Native Tribal Health Consortium, Lead Civil Engineer

George Owletuck, MA CEO Mertarvik Community Development Corporation

Grant Kashatok, Principal, Ayaprun School and Newtok Youth

Guy McConnell, Biologist, U.S. Army Corps of Engineers

Mike Black, Director of Program Development, Alaska Native Tribal Health Consortium

Newtok Traditional Council

Newtok Native Corporation

PDC Engineering

Participants of the October 21, 2011 Newtok Planning Group Meeting

Robin Bronen, University of Alaska Fairbanks, Resilience and Adaption Program

USKH, Inc.

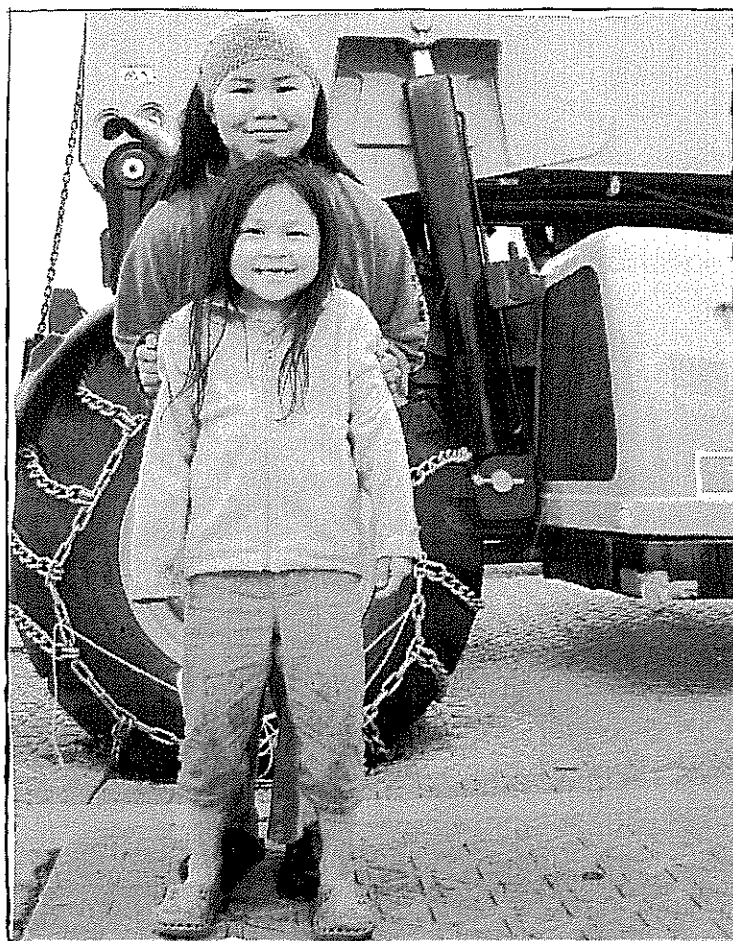
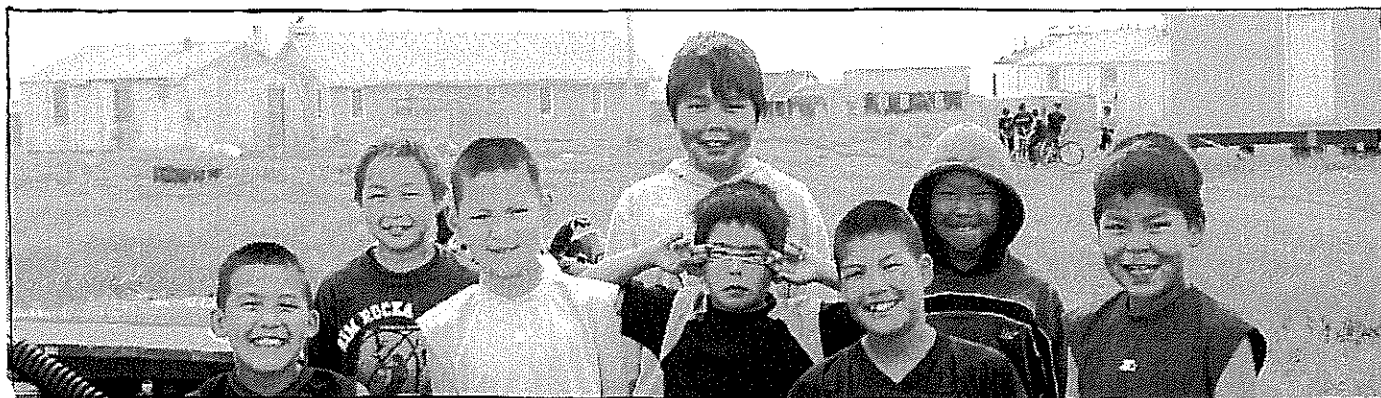


Table of Contents

A Message from the Community	ii
Introduction	1
Why Develop a Strategic Management Plan?.....	3
Mission Statement + Guiding Principles	4
Vision: Relocation Plan to Mertarvik.....	5
Strategic Focus Areas	8
Site Preparation	9
Building Capacity	10
Emergency Response + Public Health.....	12
Housing	13
Drinking Water + Sanitation	14
Transportation.....	15
Energy.....	16
Education	17
Communications + Community Resources.....	18
Newtok Closure + Restoration.....	19
2012-2015 Action Plan + Proposed Schedule	21
Permitting + Why It's Important.....	23
Next Steps.....	25
Newtok Traditional Council Resolution 12-12.....	26



Cover photo of Mertarvik site by Agnew::Beck Consulting. Photo of Newtok children by PDC Engineers. Report photos by Agnew::Beck Consulting, or PDC Engineers unless otherwise noted.

This page is intentionally left blank

A Message from the Community

March 9, 2012

It is with excitement and great pride that we share with you our *Strategic Management Plan – Newtok to Mertarvik*. This document will chart the course of our future, which is to relocate as a community to Mertarvik. We will not be separated. We will stay together and we will move together.

Not that long ago the water was far from our village and could not be easily seen from our homes. Today the weather is changing and is slowly taking away our village. Our boardwalks are warped, some of our buildings tilt, the land is sinking and falling away, and the water is close to our homes. Our infrastructure that supports our village is compromised and affecting the health and well-being of our community members, especially our children. Our children should not know the governmental term “disaster declaration.”

We saw the changes coming, we consulted our elders, and we have taken steps to move to safer land. By a vote of the people we selected Mertarvik as the place for our new village and we worked for many years to secure the land. Mertarvik is a place that we know well as we frequently stop there for fresh water before hunting and fishing trips. It is on higher ground and it will provide us with a safe site on which to build our new village.

Over five and a half years ago we joined with the State of Alaska and federal and regional agencies to create the Newtok Planning Group. This joint effort was new and has been led by Maligtaquyarat, our guiding principles, as it is our desire that our relocation be defined by our Yup'ik way of life. We have had the great benefit of working with dedicated, thoughtful partners. We believe these years have seen significant progress and this Plan is an indicator of that progress.

As we look to the future we are dedicated to the hard work of moving our community. We are strong people and are used to hard work. It has taken years of partnership to get to this point, but we also know that the water is getting closer and time is running out. With this Plan, we look to both renew the commitments with our current partners and to develop relationships with new partners to help us turn this document into action and to make our move to safer land a reality.

We have taken instruction from our elders, who are our advisors and our greatest resource. We owe it to our elders to provide them with a life where they can focus on community and our culture and not worry about the water coming into the village. We owe it to our children to provide them with a life where they do not worry about illness or the coming of the next storm. We will all sleep better when we know that our elders and children are safe.

With the guidance of our elders, we look forward to working with current and future partners who share our collective vision of creating our new village in accordance to our guiding principles. Thank you for helping us move our village.

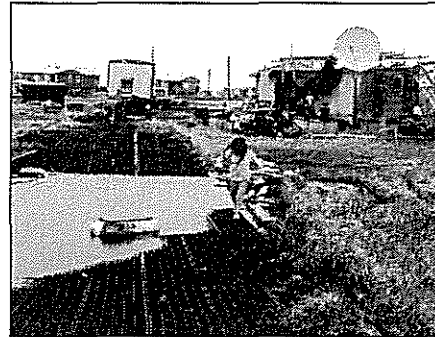
Moses Carl
Newtok Traditional Council

George Tom
Newtok Native Corporation

This page is intentionally left blank

Introduction

Newtok is a growing Yup'ik Eskimo village located on the Yukon-Kuskokwim Delta along the western coast of Alaska, near the confluence of the Newtok and Ninglick Rivers. As detailed in the accompanying *Relocation Report::Newtok to Mertarvik (August 2011)*,¹ the community's health and safety are currently threatened by severe coastal erosion and flooding. The Ninglick River, which is tidally influenced and connects Baird Inlet to the Bering Sea, is eroding toward the village at an average pace of 72 feet per year (with an observed rate of up to 300 feet in one year) and has been moving toward the village for decades. Erosion projections (last updated in 2007) indicate that the river could reach the school by 2017.¹



The community's health and safety are currently threatened by severe coastal erosion and flooding.

Although the fast pace of erosion is alarming, it was the capture of the Newtok River by the Ninglick River in 1996 that has had the most dramatic impact on livability of the current village. Nearly overnight, the village became more susceptible to storm surges on the Ninglick River due to the direct hydrologic connection. The Newtok River, which runs alongside the village, turned from a free flowing river into a slough. When the slough silted in, commercial vessels could no longer navigate to the village and honey bucket waste no longer flowed out. These changes, which are likely exacerbated by climate change and thawing permafrost, have increased the frequency and severity of flooding in Newtok during the last decade.

A powerful storm surge can raise tide levels 10 to 15 feet above normal. Severe flood events, such as the 20-year flood of 2005 and the lesser flood of 2006, permeate the village water supply, spread contaminated waters through the community, displace residents from homes, destroy subsistence food storage, and shut down essential utilities. The U.S. Army Corps of Engineers (USACE) predicts that a 50-year flood would flood almost the entire community. Staying in place is not an option for Newtok. On November 8th of this year, the National Oceanic and Atmospheric Administration (NOAA) issued a severe storm warning for the western coast of Alaska. The posting concluded with “[t]his will be an extremely dangerous and life threatening storm of epic magnitude rarely experienced” – a powerful reminder of Newtok's vulnerability.



Erosion projections (last updated in 2007) indicate that the river could reach the school by 2017.

In early 2006, the Newtok Traditional Council requested assistance from the DCCED Division of Community and Regional Affairs (DCRA). Despite the community's acquisition

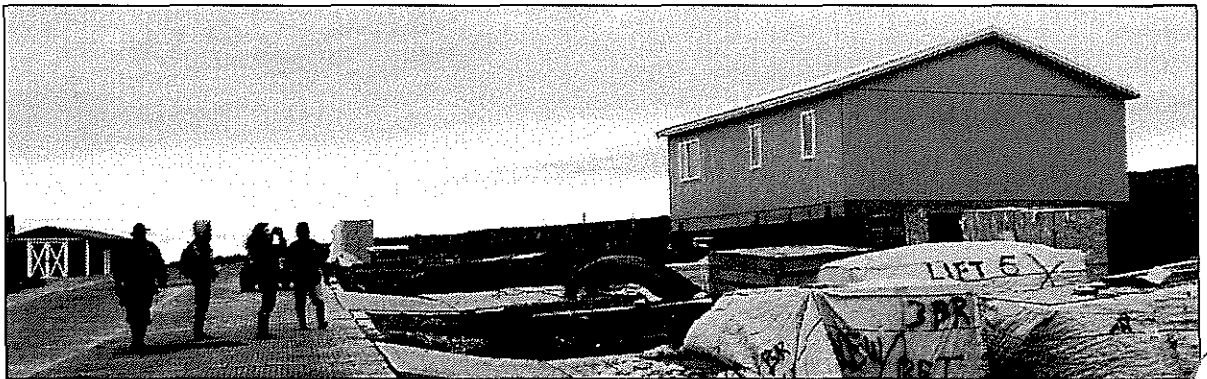
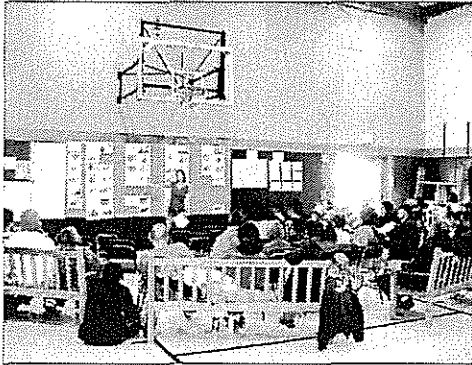
¹ The Relocation Report includes citations for the background information summarized within this section.

of a suitable new village site, Newtok was facing resistance with its relocation effort, the threat of erosion was ever present, and no state or federal agency was authorized to relocate an Alaskan community. DCCED is directed through two State of Alaska Administrative

Orders² to *“to act as the state coordinating agency to coordinate with other state and federal agencies to propose long-term solutions to the ongoing erosion issues in ... affected coastal communities in this state.”* In order to carry out this coordination for Newtok, the Newtok Planning Group (NPG) was formed.

Under this backdrop, the community and their NPG partners have made significant progress laying the groundwork for the future townsite, Mertarvik. Amongst the progress, the NPG saw the need to develop a strategic management plan for the relocation and, in doing so, set clear direction and priorities for relocating Newtok to Mertarvik. DCCED secured a grant for the SMP through the federal Coastal Impact Assistance Program and in January 2011, awarded a contract for the project. This document represents the culmination of a year-long effort that included two community-wide meetings in Newtok, two Newtok Traditional Council meetings in Newtok, a site visit to Mertarvik, three Newtok Planning Group meetings, more than forty-five stakeholder and potential funder interviews, and numerous planning sessions.

Residents discuss the phases of relocation and what life might be like in Mertarvik and Newtok as the community moves.



² State of Alaska Administrative Orders 231 and 239

Why Develop a Strategic Management Plan?

The goal of the Mertarvik Strategic Management Plan is to set a common vision for relocating the village of Newtok through a plan that provides guidance to all activities at Mertarvik, with a focus on priority actions during the next three years. The reasons for producing a strategic management plan are many:

Develop a Collective Vision

With growing concerns and urgency to relocate before Newtok is destroyed by erosion, it is important to focus the resources of the community and supporting partnerships behind a common vision and common set of priorities.

Establishing a Framework for Other Plans

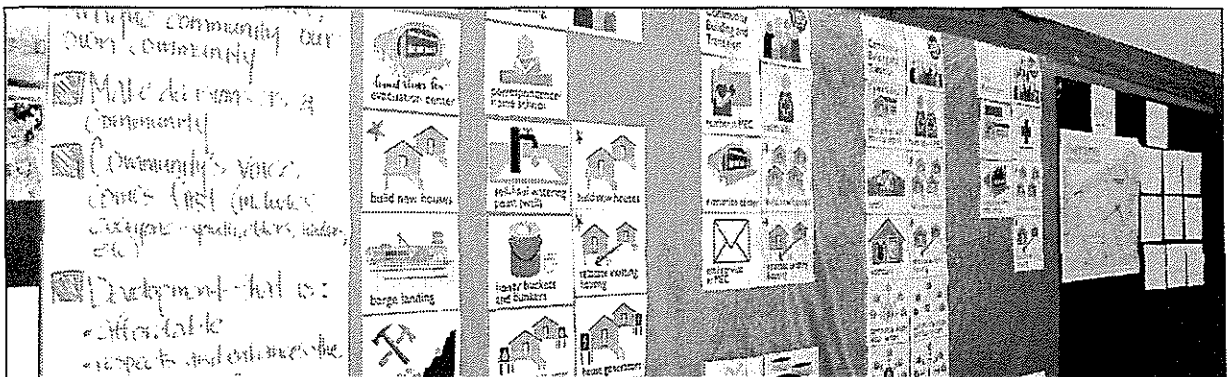
The strategic management plan acts like an “umbrella document” for relocation activities. All other plans, policies and strategies will support the strategic management plan and take direction from it.

Communicating the Strategic Plan

Strategic planning establishes and communicates the community vision, guiding principles and strategic actions in a positive and practical way to everyone in the community, government agencies, and other organizations.

Entering Into Effective Partnerships

A strategic management plan provides the basis for strengthening existing and building new partnerships with different levels of government, as well as other partners and funders. These partnerships are essential to achieving the strategic actions of the plan.



Mission Statement + *Maligtaquyarat* (Guiding Principles) for Mertarvik

Mission

The mission of the Mertarvik Relocation is to create a safe and self-sustainable village for this and future generations that is built by and governed by our own people working together as a tribe and people unified by our history, cultural traditions and language.

Maligtaquyarat (Guiding Principles)

On March 27, 2012, the Newtok Traditional Council unanimously passed and approved a set of guiding principles for the community's relocation to Mertarvik (*Newtok Traditional Council Resolution 12-12*, page 26). It is the hope and intent of the Newtok Traditional Council that all community residents and partners working toward the relocation will respect and promote these guiding principles.

The relocation of Newtok will be defined by our Yup'ik way of life. Our Guiding Principles are:

- Remain a distinct, unique community – our own community.
- Stay focused on our vision by taking small steps forward each day.
- Make decisions openly and as a community and look to elders for guidance.
- Build a healthy future for our youth.
- Our voice comes first – we have first and final say in making decisions and defining priorities, by implementing nation-building principles and working with our partners.¹
- Share with and learn from our partners.
- No matter how long it takes, we will work together to provide support to our people in both Mertarvik and Newtok.
- Development should:
 - Reflect our cultural traditions.
 - Nurture our spiritual and physical well-being.
 - Respect and enhance the environment.
 - Be designed with local input from start to finish.
 - Be affordable for our people.
 - Hire community members first.
 - Use what we have first and use available funds wisely.
- Look for projects that build on our talents and strengthen our economy.

¹ Two Approaches to Economic Development on American Indian Reservations: One Works, the Other Doesn't by Stephen Correll, and Joseph P. Kalt, 2006. The Harvard Project on American Indian Economic Development.

Vision: Relocation Plan to Mertarvik

“One thing that we gain from pioneering is continuing and honoring our values. If we rely on the western society’s way of life, that’s forgetting who I am. We need to go back to our way of life. We have to start somewhere.”

– Newtok Traditional Council Member

The Mertarvik Relocation Plan (Figure A, page 7) defines the long-term vision and goals for relocating Newtok. The Plan delineates four phases: the Getting Ready Phase, the Pioneering Phase, the Transition Phase (which includes early and late stages) and the Final Move Phase. These phases are driven by population levels at Mertarvik. The Relocation Plan also organizes work into nine strategic focus areas – site preparation; transportation; housing; drinking water, sewer, and solid waste; health and safety; communications; education; energy; and community resources – and sets clear goals by phase for each area. Priority strategic focus areas are discussed in detail in the next section while a description of each of the relocation phases is included below.

Phase 1: Uplluteng (Getting Ready)

Population 0

The getting ready phase refers to the current phase of development. The groundwork is being laid for future phases. This phase includes activities and infrastructure such as selecting the site, developing the quarry, drilling two drinking water wells, completing a Community Layout Plan and a Strategic Management Plan, conducting a harbor feasibility study, creating a topographic map to facilitate surveying, and building a barge landing, initial houses, pioneer roads, airport planning, and the foundation of the Mertarvik Evacuation Center (MEC). Efforts in this phase are now well established.

Phase 2: Upagluteng (Pioneering)

Population ~25 to 100 People

Upagluteng refers to the traditional practice of moving with the seasons. The icons in this phase of the Relocation Plan depict what life might be like for the first residents living at Mertarvik. Self-haul water, honey buckets, wood stoves, and individual house generators, correspondence and home schooling, and VHF radio are some of the likely characteristics defining early life in Mertarvik. New technologies for waste water treatment and alternative energies might be piloted during this phase. For safety, residents will likely move back to Newtok during the spring and fall when movement back and forth to Mertarvik via water would be challenging and potentially dangerous because of annual thaw and freeze cycles.

Phase 3: Nass'paluteng (Transition)

Population ~100 People or More

In Yup'ik, Nass'paluteng refers to periods of transition. During the transition phase, more and more community members will make the move to Mertarvik. Early in this phase, a health aide and teacher(s) might be in place to provide health care and education. The MEC will be completed and serve as a multi-functional community facility. A pioneer runway may be completed and larger-scale demonstration projects might test promising technologies as agencies explore sustainable solutions for basic services. As the population grows, reaching 200 or more, community systems that can later be scaled to meet the entire community's needs should be agreed upon and established for water, wastewater, energy, and communications. An airport, a landfill, a small school, a store, and community greenhouse might be set in place during this phase as well.



Phase 4: Piciurlluni (Final Move)

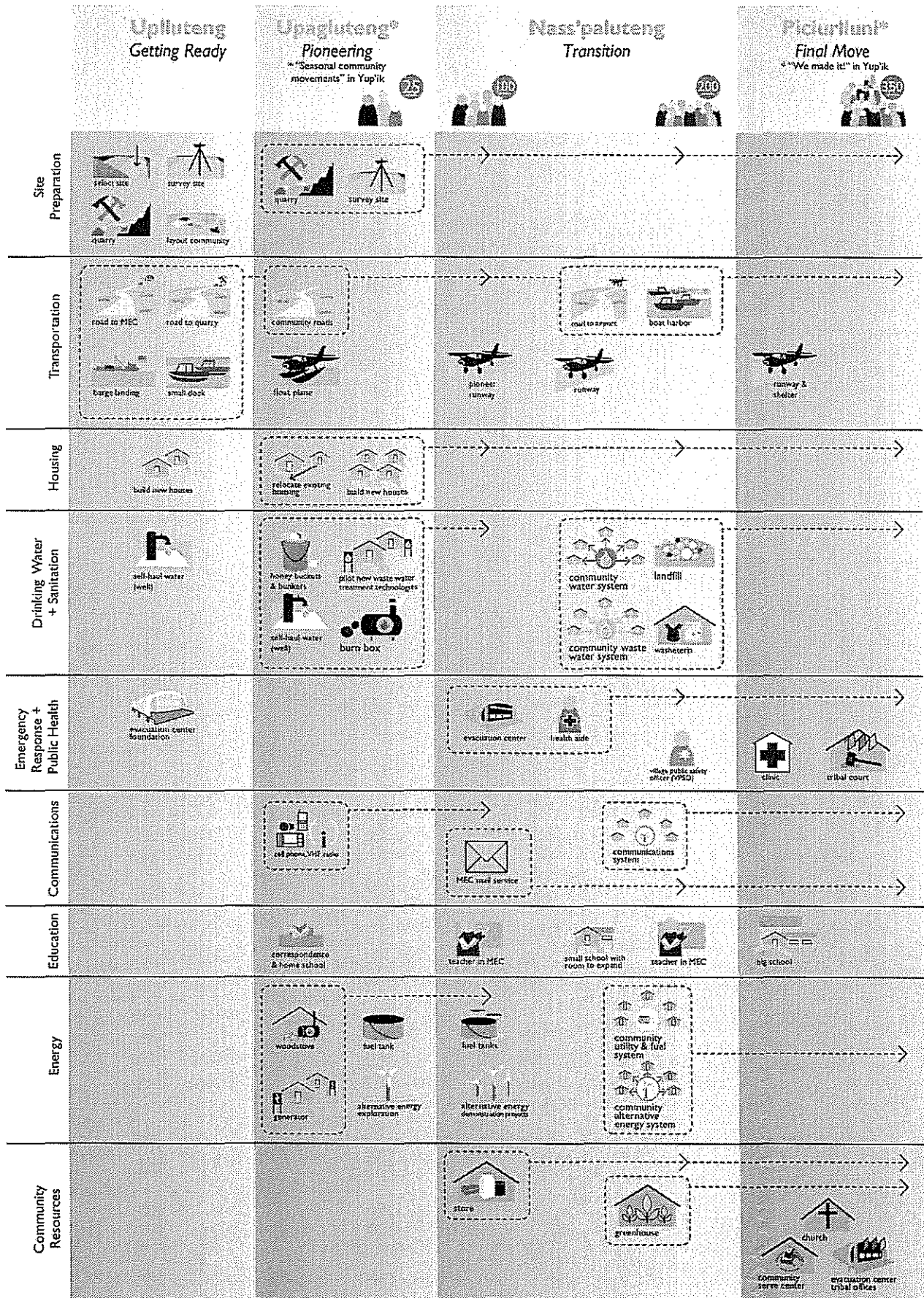
Population 350 People or More

Piciurlluni means "We made it!" in Yup'ik. This stage represents the final move of all Newtok residents to the new town site. The systems developed during the transition phase are scaled to accommodate more people and more houses. Additional community facility projects, such a large school, a clinic, and a tribal court, are completed.



Photos by Carolyn George.

Figure A. Mertarvik Relocation Plan (Vision + Long-Term Goals)



This page is intentionally left blank

Strategic Focus Areas: 2012-2015 Action Plan

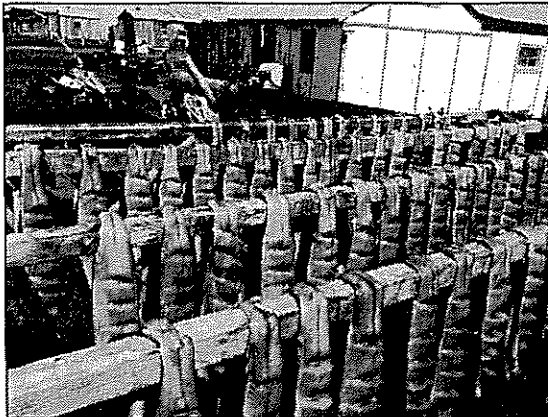
This section includes a discussion of **strategic focus areas** and lays out **priority actions** that should be undertaken by the community and their partners over the next three years, 2012-2015. The “priority” label indicates the importance of these actions to the relocation as a whole, but especially during the Pioneering phase. Completing these action items over the next three years is critical to the successful implementation of the overall Relocation Plan that will take place over the next ten to fifteen years. The intent of the priority actions is to jump-start progress in each strategic focus area, which in turn will trigger additional opportunities and investment for the relocation effort.

Strategic focus areas include:

- site preparation
- building capacity
- emergency response and public health
- housing
- drinking water and sanitation
- transportation
- education
- energy
- communications and community resources
- Newtok closure and restoration



As the community makes progress on current priorities, they will update the SMP to include new priority actions for each focus area. The result is a three-year action plan that draws from interviews and input from the community and a wide range of stakeholders.



Photos by Carolyn George.

Focus Area: Site Preparation 2012-2015 Action Plan

Surveying, Site Control, Planning, Quarry Development

OBJECTIVES

- Develop a village plan that sets a practical framework for guiding near-term locations of housing, community buildings and infrastructure, but is flexible enough to allow for incremental, organic growth.
 - Survey parcels to provide for clearly defined ownership and/or rights to use designated lots.
 - Secure material and equipment for essential pioneering site preparation.
-

1. Fund and prepare refined townsite plan.
2. Secure funding for and complete townsite survey.
3. Clarify land ownership issues and develop a site control process both between Newtok Native Corporation and the Newtok Traditional Council, and between these entities and other involved organizations and individual users.
4. Determine method for assigning housing lots to individuals.
5. Establish basic development rules for placing homes on lots.
6. Secure materials for and construct essential pioneering roads.
7. Continue developing the quarry resource.

PRIORITY ACTIONS

Focus Area: Building Capacity 2012-2015 Action Plan

Community-Agency Partnership Structure, Workforce Development, Quarry Development and MCDC

"I have confidence about this early move. When I was one or two years old, my family moved. I focus on the time when people decided to move. I believe our sovereign way of life will be stronger – we can start a new life, a new village. We shouldn't wait. We need to encourage ourselves to do it ourselves. The elders have said we need to change ourselves; we need to start a new beginning and new life. Leave hate and anger and put it away and start a new life."

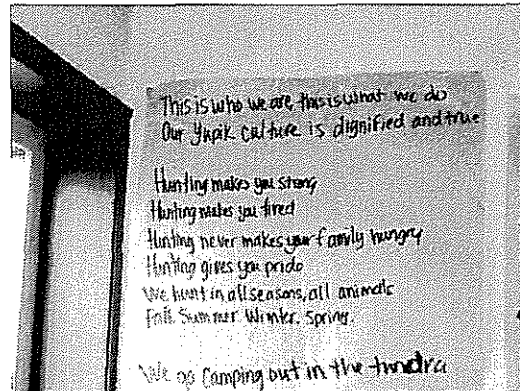
– Newtok Traditional Council Member

OBJECTIVES

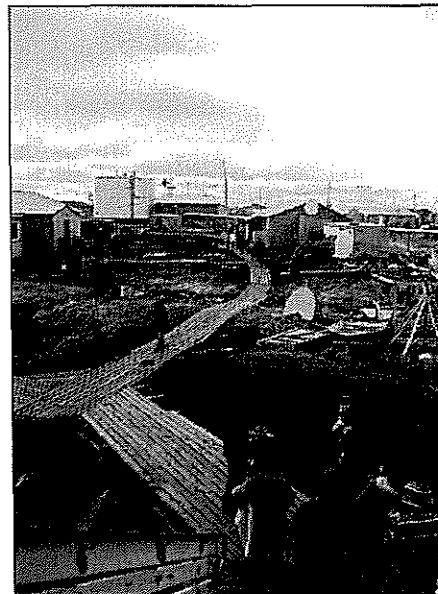
- Build partnership capacity to drive the relocation process (with and without external funding).
- Expand organizational capacity of the Mertarvik Community Development Corporation (MCDC).
- Develop a skilled workforce that can pursue, construct, and maintain infrastructure at Mertarvik and help close and restore Newtok.

PRIORITY ACTIONS

1. In the spirit of the Guiding Principles, Newtok will identify additional partners to work with the Newtok Planning Group to implement the SMP.
2. Determine role of MCDC and ramp up key functions required to support relocation efforts.
3. Assess existing local workforce skills and identify skills needed to complete upcoming projects; create a training plan to address labor needs and fill strategic skill sets.
4. Investigate feasibility of selling gravel and rock from quarry to region and invest profits in Mertarvik development.
5. Build relationships with foundations – establish connections and be able to tell the story.



The guiding principles for the relocation draw upon the community's heritage and values. This poster hangs in the Newtok school.



A top priority for the project team was working with the community to develop a shared vision and framework for the relocation. Residents leave the school after an evening meeting.

Focus Area: Emergency Response + Public Health 2012-2015 Action Plan

Completion of Mertarvik Evacuation Center; Pioneer and Long-term Health and Safety

OBJECTIVES

- Provide a safe place for Newtok residents during a storm or flooding event.
 - Create and implement a plan to protect health and safety of pioneers.
 - Begin to plan for long-term health care needs and facilities.
-

PRIORITY ACTIONS

1. Determine whether current design will be used for MEC and, if not, engage in a redesign process.
2. Hire a construction project manager for MEC; train and secure local labor for 2012 construction season.
3. Develop and implement funding strategy for remaining MEC construction needs.
4. Identify trained health professional as a pioneer; secure space to act as housing and a place to practice temporarily, until MEC is constructed.
5. Complete MEC vertical wall construction.
6. Identify funding for assessing the feasibility of moving the existing clinic and begin developing long-term plan based on findings.

Focus Area: Housing 2012-2015 Action Plan

Assessment and Relocation of Existing Housing; Design, Funding and Construction of New Housing

OBJECTIVES

- Develop a financing and construction strategy for meeting the community's housing need.
- Assemble materials, resources and knowledge – from construction training to outside funding – so residents can move to Mertarvik.

-
1. Complete tasks outlined in Site Preparation.
 2. Conduct housing survey to assess conditions in Newtok and determine specific needs in Mertarvik.
 3. Develop a housing strategy.
 4. Relocate Newtok houses.
 5. Implement housing programs / continue to build new homes.
 6. For new and relocated houses, research appropriate energy efficient technologies (space heating and electricity); identify funding needs to integrate those technologies; match need to funding opportunities.

PRIORITY
ACTIONS

Focus Area: Drinking Water + Sanitation 2012-2015 Action Plan

Feasibility Study - Analyze and Select Alternatives for Phases 2, 3, and 4 and Secure Funding for Design and Construction

OBJECTIVES

- Prepare a feasibility or preliminary engineering study to evaluate options for meeting the drinking water and sanitation (wastewater and solid waste) needs of Phases 2, 3, and 4 of the relocation plan.
 - Secure funding to design the recommended alternatives for Phases 2, 3, and 4.
 - Secure funding for the construction of the Phase 2 improvements.
 - Construct the water and sewer infrastructure for Phase 2.
-

PRIORITY ACTIONS

1. Develop practical and affordable solutions that will provide the drinking water and sanitation facilities for the Mertarvik pioneers (Phase 2).
2. Work closely with Village Safe Water to identify and evaluate alternatives for either a centralized or decentralize water and wastewater system, including moving any of the existing infrastructure to Mertarvik.
3. Ensure that the alternative or alternatives selected for Phases 3 and 4 are sustainable by developing a business plan.
4. Seek and obtain funding for design of Phase 2, 3, and 4 and for construction of Phase 3.

Focus Area: Transportation 2012-2015 Action Plan

OBJECTIVES

- Meet immediate needs for access to/from and within the community for pioneers including a pioneer road system and float plane access.
 - Build pioneering infrastructure needed to support future infrastructure and development projects.
-

1. Work together to complete the Waterfront Development Plan and continue to use the existing barge landing and beach to safely moor community boats.
2. Take advantage of the Newtok Long Range Transportation Plan.
3. Determine feasibility of quarry for gravel to develop pioneer road system and boat landing protection (more in "Site Preparation").
4. Clearly identify what roads are included in the "pioneer road system" and apply for funding.
5. Identify pioneer runway permitting, right of way, design and construction.

PRIORITY ACTIONS

Focus Area: Energy 2012-2015 Action Plan

OBJECTIVES

- Have an energy efficient community; maximizing renewables.
 - Have reliable and well maintained energy systems.
-

PRIORITY ACTIONS

1. Finalize strategy for pioneering energy needs.
2. As part of the site planning process, choose locations for fuel storage and a diesel generator that allow use of waste heat for commercial buildings.
3. Investigate renewable and low cost energy solutions.
4. Seek funding to leverage vendor and engineering resources to design, install and demonstrate new, sustainable approaches to energy generation and conservation.



Focus Area: Education 2012-2015 Action Plan

OBJECTIVES

- Sufficient educational opportunities for pioneering kids and youth.
-

1. Survey community to better understand short and long-term education delivery needs including the potential number of students at Mertarvik in different relocation phases.
2. Work with pioneering families to secure sufficient correspondence and home school materials.
3. Develop a solution for temporary teaching facility at MEC or different location if MEC completion is further out than anticipated.
4. Begin planning process with LKSD for new facility that includes plan for closing down existing school.

PRIORITY ACTIONS



Focus Area: Communications + Community Resources 2012-2015 Action Plan

OBJECTIVES

- Ensure reliable communication between pioneers and Newtok, nearby communities and beyond.
 - Ensure access to and protection of food sources.
-

PRIORITY ACTIONS

1. Ensure all pioneers have a cell phone and/or VHF radio.
2. Identify feasibility of mail service via float plane or drop service.
3. Develop cold storage facility for subsistence foods.
4. Research funding options for community garden/greenhouse.



Focus Area: Newtok Closure + Restoration 2012-2015 Action Plan

Health and Safety of Residents; Restoration of Land

"(The community) would like to say a graceful goodbye to Newtok; we won't be able to see the old village but we will return to some of the same areas for subsistence activities."

– Stanley Tom, Newtok Traditional Council, Tribal Administrator

OBJECTIVES

- Ensure health and safety of Newtok residents.
- Develop a clear plan for the eventual closure and restoration of Newtok.
- Develop support mechanisms for pioneer families.



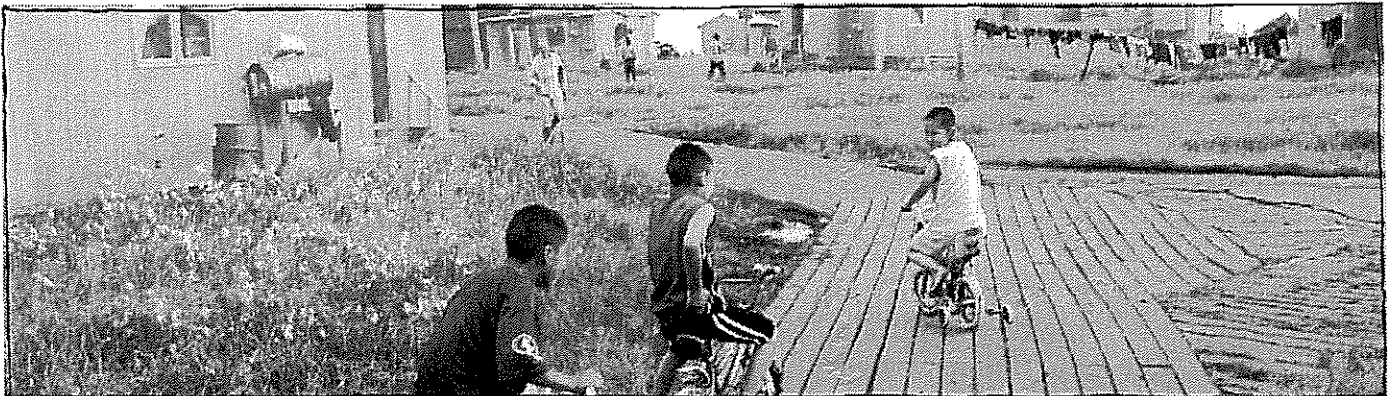
Cleanup and restoration of the current village site is an important priority.

"I use[d] to volunteer [to] cleanup our village and it made a big difference. I hope the whole community will help each other and make a big, big difference. I know when the whole community help[s] each other the time will go fast."






— Community Member in Letter
Shared with Agnew::Beck

PRIORITY ACTIONS

1. Practice emergency plan including the instant command system.
2. Inventory village resources that can be used at the new village site.
3. Develop preliminary, mid- and long-term plans for closing and restoring the village.
4. Identify immediate activities to support pioneering families and assign tasks that community members can conduct in Newtok.








Mertarvik 2012-2015 Action Plan + Proposed Schedule



Strategic Focus Areas	2012		2013		2014	
	winter/ spring	summer/ fall	winter/ spring	summer/ fall	winter/ spring	summer/ fall
Site Preparation  <ol style="list-style-type: none"> 1. Fund, develop townsite plan 2. Fund, carry out survey 3. Resolve land ownership questions 4. Determine lot allocation strategy 5. Construct pioneer roads 6. Establish basic housing development rules 7. Develop quarry resource 	█					
Building Capacity  <ol style="list-style-type: none"> 1. Identify partnership team 2. Define MCDC role, strengthen functions 3. Assess needed skills, create training plan 4. Assess regional demand for rock/gravel 5. Build relationships with foundations 	█					
Emergency Response + Public Health  <ol style="list-style-type: none"> 1. Redesign MEC if necessary 2. Hire MEC construction manager and crew 3. Develop, implement MEC funding strategy 4. Identify health professional pioneer 5. Complete MEC vertical construction 6. Develop long-term plan for clinic 	█					
Housing  <ol style="list-style-type: none"> 1. Complete site preparation tasks 2. Conduct housing survey 3. Develop a housing strategy 4. Relocate houses 5. Implement housing programs 6. Research housing energy technologies 	█					
Drinking Water+ Sanitation  <ol style="list-style-type: none"> 1. Identify practical system alternatives 2. Evaluate + select alternatives 3. Develop business plan 4. Pursue funding for design + construction 	█					

█ = project initiation █ = project maintenance

Mertarvik 2012-2015 Action Plan + Proposed Schedule

(cont'd)

Strategic Focus Areas	2012		2013		2014	
	winter/ spring	summer/ fall	winter/ spring	summer/ fall	winter/ spring	summer/ fall
Transportation						
						
1. Complete Waterfront Development Plan						
2. Newtok Long Range Transportation Plan						
3. Determine gravel development feasibility						
4. Identify pioneer roads + apply for funding						
5. Runway permitting, design + construction						
Energy						
						
1. Finalize pioneer energy provision strategy						
2. Locate fuel storage + generator						
3. Investigate renewable/low-cost energy						
4. Funding for energy demonstration projects						
Education						
						
1. Determine education needs (survey)						
2. Home school materials for pioneer families						
3. Temporary teaching facility						
4. Plan for new school + closing old facility						
Communications + Community Resources						
						
1. Cell phones/VHF radio for pioneers						
2. Feasibility of mail service						
3. Develop cold storage facility						
4. Research funding for garden/greenhouse						
Newtok Closure + Restoration						
						
1. Practice emergency plan						
2. Inventory resources useable at Mertarvik						
3. Develop preliminary plans for closing village						
4. Identify activities for supporting pioneers						

 = project initiation
  = project maintenance

Permitting + Why It's Important

During the development of the Strategic Management Plan, the following main messages regarding permitting of Mertarvik projects were as follows:

- It is possible that an Environmental Assessment (EA) will suffice for any projects requiring National Environmental Policy Act (NEPA) documentation. If the case can be made that the relocation is initiated by the community and not driven by or dependent upon federally-funded projects, it will be less likely that a federal agency will be required to address the impact of the full relocation in its permitting process.
- As the relocation progresses, opportunities may arise for agencies to pool EA efforts to help conserve limited project resources. For example, the United States Army Corps of Engineers (USACE) Planning Assistance to States Program allows USACE to accept and match non-federal funding from tribes, cities, states, etc. Partnering with USACE, one or more entities would lead the EA process, and individually or jointly take necessary next steps.
- NEPA compliance is only part of the permitting puzzle. The community and their partners must ensure appropriate permits are in place for all projects at Mertarvik. Table C (next page) highlights some, but not all, of the recommended consultations, required permits and clearances by agency and funding type (federal, state and federal, and private).

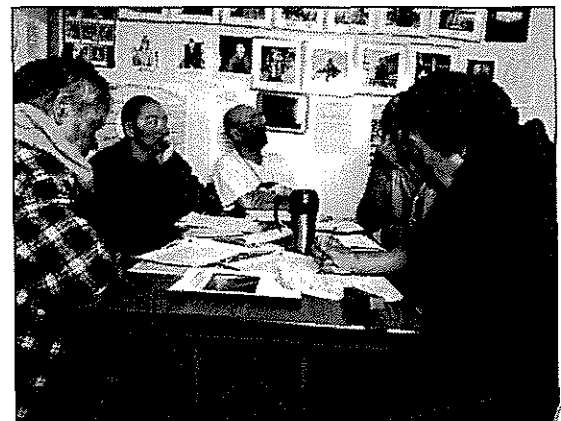
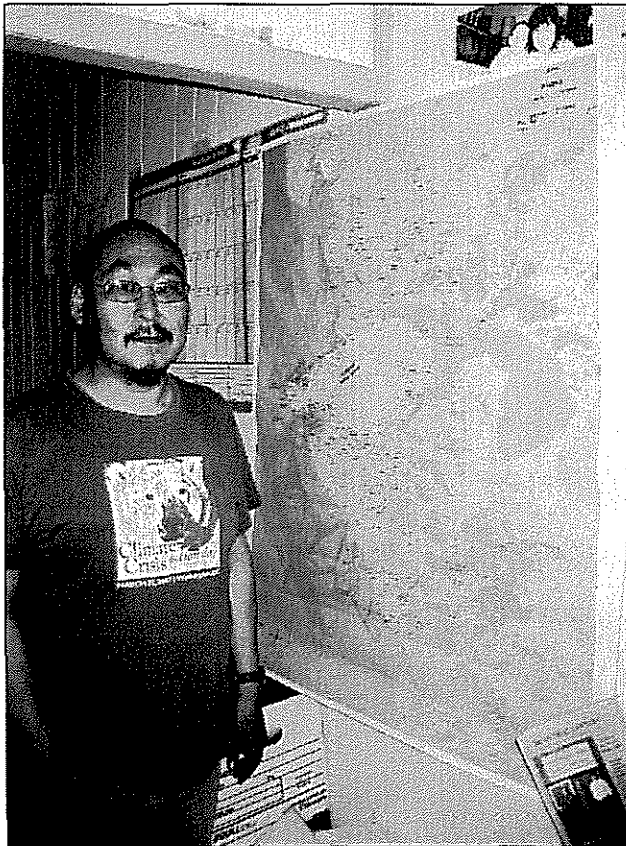


Photo by Carolyn George.

Table A. Permitting considerations for Newtok relocation projects.

Agency	Permit/Clearance/ Consultation	When to initiate	Approximate timeline to acquire permit/clearance
Federally Funded Projects			
NEPA Decision Document	Environmental Assessment (EA)	Upon receipt of funding*	1 year
	Environmental Impact Statement (EIS)	Upon finding of significance during EA process, unless funding agency decides to start with an EIS class of action.	3-5 years
State Historic Preservation Office (SHPO)/Tribes	Initiation of Consultation	Once a set of Alternatives are selected	30 days
	Finding of No Historic Properties Affected	After selection of a preferred alternative	30-120 days
State and Federally Funded Projects			
United States Fish and Wildlife Service (USFWS)	Under the Migratory Bird Treaty Act, there is no provision for consultation or for any allowance or take.	USFWS has established closure dates for different regions of the state to presumptively protect nesting birds. The dates are posted and can be used as a guide and as protection for prosecution from taking migratory birds.	
National Marine Fisheries Service (NMFS)	Consultation for Essential Fish Habitat	For any in-water work	14-30 days
Alaska Department of Fish and Game (ADF&G)	Title 16 Fish Habitat permit	For any work within Takikchak Creek	30-90 days
United States Army Corps of Engineers (USACE)	404 Wetlands permit	After a selection of a preferred alternative	120 days
Alaska Department of Environmental Conservation (ADEC)	Alaska Pollutant Discharge Elimination System (APDES) Construction General Permit	1 month prior to construction, once 100% construction documents are complete	30 days**
Privately Funded Projects			
ADF&G	Title 16 Fish Habitat permit	For any work within Takikchak Creek	30-90 days
USACE	404 Wetlands permit, Individual or Nationwide Permit	For any work placing fill within wetlands	120 days
USFWS	Under the Migratory Bird Treaty Act, there is no provision for consultation or for any allowance or take.	USFWS has established closure dates for different regions of the state to presumptively protect nesting birds. The dates are posted and can be used as a guide and as protection for prosecution from taking migratory birds.	
ADEC	APDES Construction General Permit	For any work that is part of a development plan with greater than 1 acre of disturbance. 1 month prior to construction, once 100% construction documents are complete	30 days**

*Initiation of NEPA document will begin with informal agency scoping and data gathering. The NEPA process will continue throughout the entire project until a decision document (Finding of No Significant Impact (FONSI) or Record of Decision (ROD)) is obtained.

+Length of consultation will depend on determination of affect by regulatory agency.

** Includes review and approval of SWPPP, pre construction site visit, and submittal of notice of intent.

Next Steps

The next steps for the community are steps that will implement the SMP and move the community forward behind a common vision, strategies, and priority actions over the next three years.

- Bring the SMP “to life” by using the document as a communication tool to gain the support and the funding assistance needed to implement the strategic initiatives in the SMP.
- Solicit formal support for the SMP from existing partnerships and develop additional support from potential partners.
- Establish protocol for ongoing monitoring of the SMP. The SMP is a living document and a process to guide the community with relocation. The community and their partners should assess progress and update the plan at least annually. The update should report the progress made and highlight new challenges and issues, including the remaining focus areas not addressed in this version of the SMP.
- Initiate the Three-Year Action Plan and embrace its direction and priorities.

Communicating the SMP is a key next step in gaining the commitment and financial support from existing partnerships and developing further support from other potential partners.



Photo by Carolyn George.

Newtok Traditional Council Resolution 12-12

MALIGTAQUYARAT (Guiding Principles for Mertarvik)

The relocation of Newtok will be defined by our Yup'ik way of life. Our Guiding Principles are:

- To remain a distinct, unique community – our own community
- To stay focused on our vision by taking small steps forward each day
- To make decisions openly and as a community and look to elders for guidance
- To build a healthy future for our youth
- Our voice comes first – we have first and final say in making decisions and defining priorities, by implementing nation-building principles and working with our partners¹
- To share with and learn from our partners
- No matter how long it takes, we will work together to provide support to our people in both Mertarvik and Newtok
- Development should:
 - Reflect our cultural traditions
 - Nurture our spiritual and physical well-being
 - Respect and enhance the environment
 - Be designed with local input from start to finish
 - Be affordable for our people
 - Hire community members first
 - Use what we have first and use available funds wisely
- To look for projects that build on our talents and strengthen our economy

¹ Two Approaches to Economic Development on American Indian Reservations: One Works, the Other Doesn't by Stephen Correll, and Joseph P. Kalt, 2006. The Harvard Project on American Indian Economic Development.



NEWTOK TRADITIONAL COUNCIL

P.O. Box 5545
Newtok, Alaska
99559-5545

Phone: 907-237-2314/2316
Fax: 907-237-2428

RESOLUTION 12 - 12

A Resolution of the Native Village of Newtok's Traditional Council adopting Guiding Principles for the relocation to and development of Mertarvik, the new village site.

WHEREAS: The Native Village of Newtok's Traditional Council, hereinafter called the Council, is the State and Federally recognized governing body of Newtok, Alaska; and,

WHEREAS: The Village of Newtok has been threatened for years by the advance of the Ninglick River due to high rates of erosion of the river bank adjacent to the village; and,

WHEREAS: This progressive erosion is recognized as a serious long-term threat to the existence of the village; and,

WHEREAS: Seasonal flooding from coastal storms has exacerbated this situation. Newtok was included in two federal disaster declarations, DR-1571-AK (2004 Bering Sea Storm) and DR-1618-AK (2005 Fall Sea Storm); and,

WHEREAS: Studies performed by the U.S. Army Corps of Engineers and others have concluded that the village must relocate as there is no permanent and cost-effective alternative to remain at the current village site; and,

WHEREAS: The Newtok Traditional Council, by a vote of the people of Newtok, selected Mertarvik, a site on the northern coast of Nelson Island, located within the Yukon Delta National Wildlife Refuge, as the preferred relocation site for the village of Newtok; and,

WHEREAS: The Newtok Native Corporation entered into negotiations with the U.S. Department of the Interior, Fish and Wildlife Service to exchange Newtok Native Corporation land for the Mertarvik site; and,

WHEREAS: In November 2003, the 108th Congress passed S. 924, allowing the Newtok Native Corporation to receive title to the Mertarvik land in a land exchange with the U.S. Fish and Wildlife Service; and,

WHEREAS: In May 2006, the Council and the Newtok Native Corporation joined with state, federal and regional agencies and organizations to form the Newtok Planning Group to assist with Newtok's relocation effort; and,

WHEREAS: In 2008, the Council and the State of Alaska negotiated a commitment with the U.S. Department of Defense, Innovative Readiness Training Program to provide labor on development projects at Mertarvik; and,

WHEREAS: In 2011, the Council, the Newtok Native Corporation and the agencies and organizations involved in the Newtok Planning Group began working with a contractor to develop a Strategic Management Plan for the relocation of Newtok to Mertarvik.

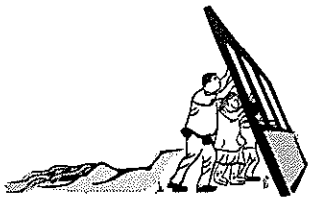
NOW, THEREFORE, LET IT BE RESOLVED; that the Council hereby adopts the following Maligtaquyarat (Guiding Principles, attached) for all agencies and organizations to follow in working with Newtok on the relocation to Mertarvik. The Maligtaquyarat form the basis of our Strategic Management Plan. It is the Newtok Traditional Council's desire that the relocation of Newtok be defined by our Yup'ik way of life. All proposals for and activities at the new village at Mertarvik must consider, respect, be assessed by, and be carried out according to Newtok's Guiding Principles.

I the undersigned, hereby certify that the Newtok Traditional Council is composed of 7 members, of whom 7 constituting a QUORUM were present and that the foregoing resolution was PASSED AND APPROVED on this 27 day of March, 2012.

Votes: X Yeas _____ Nays _____

Signed: Moses Carl
Honorable Moses Carl, President, Newtok Traditional Council

Attest: Andy Patrick
Andy Patrick, Secretary, Newtok Traditional Council



MERTARVIK

Nunaulimteggun ikayuqulluta tamanna,
assirluta ainiartitellierkamtenun,
nuggarilemtenuun ciunerkamteni

*a community that builds together
for the safe and healthy future of Newtok*

Strategic Management Plan :: Newtok to Mertarvik

FINAL DRAFT March 2012

by the Community of Newtok and the Newtok Planning Group,
Prepared for the Department of Commerce, Community, and Economic
Development, Division of Community and Regional Affairs by Agnew::Beck
Consulting with PDC Engineers and USKH Inc.



U.S. Department of Housing and Urban Development
Region X – Anchorage Field Office
Alaska Office of Native American Programs
3000 C Street, Suite 401
Anchorage, AK 99503-3914
www.hud.gov/local/anc

Memorandum to File

Coastal Barrier Resources Act

Environmental Record Determination

Alaska has no known or designated Coastal Barrier areas.

Source Documentation

- US Dept. of Fish and Wildlife Service Coastal Barrier Resources System

Coastal Barrier Resources System

Ecological Services

[ES Home](#)
[About Us](#)
[Species](#)
[Wildlife and Habitat Conservation](#)
[Development and Energy](#)
[FWS Regions](#)
[Library](#)
[Newsroom](#)

[ES Home](#) » Coastal Barrier Resources System

Overview

Overview

Legislation and Testimony

Historical Changes to CBRS

CBRA Prohibitions

Flood Insurance

Official Maps »

Mapping Projects »

Property Determinations

Project Consultations »

Glossary

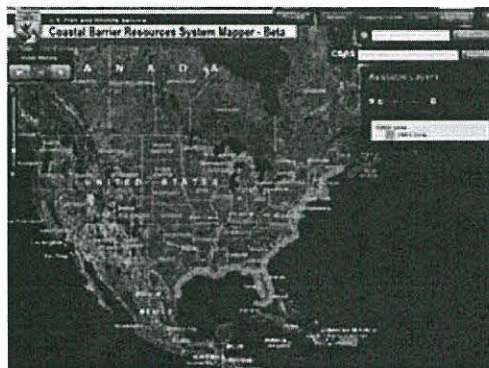
Contact Us

Documents

In the 1970s and 1980s, Congress recognized that certain actions and programs of the Federal Government have historically subsidized and encouraged development on coastal barriers, resulting in the loss of natural resources; threats to human life, health, and property; and the expenditure of millions of tax dollars each year. To remove the federal incentive to develop these areas, the [Coastal Barrier Resources Act \(CBRA\)](#) of 1982 designated relatively undeveloped coastal barriers along the Atlantic and Gulf coasts as part of the [John H. Chafee Coastal Barrier Resources System \(CBRS\)](#), and made these areas ineligible for most new federal expenditures and financial assistance. CBRA encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting federal expenditures that encourage development, such as federal flood insurance. Areas within the CBRS can be developed provided that private developers or other non-federal parties bear the full cost.

- [How do I know if my property is in the CBRS?](#)
- [How can I get information on changing the CBRS maps?](#)
- [How do I know if a federal project or activity is affected by CBRA?](#)
- [How can I see the official maps of the CBRS?](#)

[Click Here](#) for CBRA Mapper



Public Comment Period Closed for CBRS Maps in Gulf and Bay Counties, Florida and Monmouth and Middlesex Counties, New Jersey

The U.S. Fish and Wildlife Service (Service) held a 45-day comment period for six John H. Chafee Coastal Barrier Resources System (CBRS) draft revised maps. The draft maps, dated May 16, 2016, are for four CBRS units located in Gulf and Bay Counties, Florida, and for six CBRS units located in Monmouth and Middlesex Counties, New Jersey. We invited the public to review the draft maps and provide input to the Service. The Service will make any appropriate changes based on the comments received and will prepare final recommended maps for Congressional consideration. The final recommended maps will become effective only if they are adopted by Congress through legislation. [Learn more.](#)

Final Digital Conversion Maps Available for CBRS Units in 10 States

The U.S. Fish and Wildlife Service (Service) has conducted a [digital conversion and 5-year review](#) and prepared final revised maps for all of the John H. Chafee Coastal Barrier Resources System units in Alabama, Georgia, Michigan, Minnesota, Mississippi, Ohio, Wisconsin, the Great Lakes region of New York, 125 units in Florida, and 7 units in Louisiana. We held a 30-day comment period on the draft maps for Federal, State, and local stakeholders, from November 17, 2015 through December 17, 2015. Several comments were received from stakeholders during the comment period. The Service assessed the comments received during the comment period and officially adopted the final revised maps upon publication of a second notice in the *Federal Register* (81 FR 13407) on March 14, 2016. [Click here](#) to access the final revised maps and for more information.

CBRS Mapping Projects by State

Click on a state in the table below to see the CBRS mapping project(s) affecting each state.

Alabama	Connecticut	Delaware
Florida	Georgia	Louisiana
Maine	Maryland	Massachusetts
Michigan	Minnesota	Mississippi
New Jersey	New York G.L.	New York L.I.
North Carolina	Ohio	Puerto Rico
Rhode Island	South Carolina	Texas
Virgin Islands	Virginia	Wisconsin

* Alaska not listed

Last updated: September 6, 2016

About

[Overview](#)
[Meet the Biologist](#)
[Contact Us](#)
[Glossary](#)

Species

[Endangered Species](#)
[Candidate Conservation](#)
[Foreign Species](#)
[Marine Mammals](#)

Wildlife and Habitat Conservation

[Wetlands](#)
[Coastal Barrier Resources System](#)
[Conservation Planning](#)
[Natural Resource Damage Assessment](#)
[Spill Response](#)
[Contaminants](#)

Development and Energy

[Transportation Planning](#)
[Water Resource Development](#)
[Energy](#)

FWS Regions

[Pacific \(Region 1\)](#)
[Southwest \(Region 2\)](#)
[Great Lakes \(Region 3\)](#)
[Southeast \(Region 4\)](#)
[Northeast \(Region 5\)](#)
[Mountain Prairie \(Region 6\)](#)
[Alaska \(Region 7\)](#)
[Pacific Southwest \(Region 8\)](#)
[Headquarters](#)

Library

[Ecological Services Documents](#)
[Federal Register Notices](#)

Newsroom

[News Stories](#)
[Publications](#)
[Stories from the Field](#)

Coastal Barrier Resources System

Ecological Services

- [ES Home](#)
- [About Us](#)
- [Species](#)
- [Wildlife and Habitat Conservation](#)
- [Development and Energy](#)
- [FWS Regions](#)
- [Library](#)
- [Newsroom](#)

[ES Home](#) » Coastal Barrier Resources System

[Overview](#)

Official CBRS Maps

[Legislation and Testimony](#)

[CBRA Prohibitions](#)

[Official Maps »](#)

[Mapping Projects »](#)

[Property Determinations](#)

[Project Consultations »](#)

[Glossary](#)

[Contact Us](#)

[Documents](#)

The John H. Chafee Coastal Barrier Resources System (CBRS) is a collection of specific units of land and associated aquatic habitats that serve as barriers protecting the Atlantic, Gulf, and Great Lakes coasts. The CBRS currently includes 585 System units, which comprise nearly 1.3 million acres of land and associated aquatic habitat. There are also 274 "otherwise protected areas," a category of coastal barriers already held for conservation purposes that include an additional 1.9 million acres of land and associated aquatic habitat.

Step 1: Use the [CBRA Online Mapper](#) or the [State Locator Maps \(PDF format\)](#) below to find a unit name (s).

State Locator Maps

Alabama	Georgia	Massachusetts	New Jersey	Ohio	Texas
Connecticut	Louisiana	Michigan	New York Great Lakes	Puerto Rico	Virgin Islands
Delaware	Maine	Minnesota	New York Long Island	Rhode Island	Virginia
Florida	Maryland	Mississippi	North Carolina	South Carolina	Wisconsin

Step 2: Download Official CBRS Maps (PDF format)

To download a map, click on a file name to save it, then open the file with a PDF viewer or editor.



[Click here to access Official CBRS Maps](#)

Last updated: May 12, 2016

About

- [Overview](#)
- [Meet the Biologist](#)
- [Contact Us](#)
- [Glossary](#)

Species

- [Endangered Species](#)
- [Candidate Conservation](#)
- [Foreign Species](#)
- [Marine Mammals](#)

Wildlife and Habitat Conservation

- [Wetlands](#)
- [Coastal Barrier Resources System](#)
- [Conservation Planning](#)
- [Natural Resource Damage Assessment](#)
- [Spill Response](#)
- [Contaminants](#)

Development and Energy

- [Transportation Planning](#)
- [Water Resource Development](#)
- [Energy](#)

FWS Regions

- [Pacific \(Region 1\)](#)
- [Southwest \(Region 2\)](#)
- [Great Lakes \(Region 3\)](#)
- [Southeast \(Region 4\)](#)
- [Northeast \(Region 5\)](#)
- [Mountain Prairies \(Region 6\)](#)
- [Alaska \(Region 7\)](#)
- [Pacific Southwest \(Region 8\)](#)
- [Headquarters](#)

Library

- [Ecological Services Documents](#)
- [Federal Register Notices](#)

Newsroom

- [News Stories](#)
- [Publications](#)
- [Stories from the Field](#)



U.S. Department of Housing and Urban Development
Region X – Anchorage Field Office
Alaska Office of Native American Programs
3000 C Street, Suite 401
Anchorage, AK 99503-3914
www.hud.gov/local/anc

Memorandum to File

Executive Order 11988 Floodplain Management

Environmental Record Determination

Area is not prone to flooding, see topo maps; not participating in the National Floodplain Insurance Program; new undeveloped site is not within a known 100/500 year floodplain, unmapped by FEMA

Source Documentation

FEMA Map
Topography Map of Metarvik
Who in Alaska participates in the NFIP
Floodplain Management Checklist



FEMA Flood Map Service Center : Search By Address

Navigation

Search

Languages

- MSC Home ([portal/](#))
- MSC Search by Address ([portal/search](#))
- MSC Search All Products ([portal/advanceSearch](#))
- ▼ MSC Products and Tools ([portal/resources/productsandtools](#))
 - Hazus ([portal/resources/hazus](#))
 - LOMC Batch Files ([portal/resources/lomc](#))
 - Product Availability ([portal/productAvailability](#))
- MSC Frequently Asked Questions (FAQs) ([portal/resources/faq](#))
- MSC Email Subscriptions ([portal/subscriptionHome](#))
- Contact MSC Help ([portal/resources/contact](#))

Enter an address, place, or coordinates:

newtok, alaska

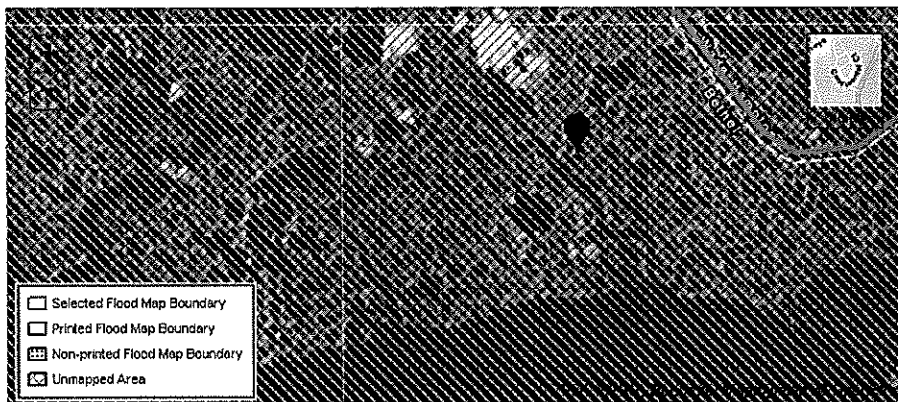
The buttons below let you view and print the selected flood map, download the flood map image, open an interactive flood map (if available), or expand the search to all products to view effective, preliminary, pending, or historic maps, and risk products for the community. The locator map shows flood map boundaries in your area of interest. You can choose a new flood map by clicking elsewhere on the locator map or entering a new location in the search box.

Search Results—Products for BETHEL

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.

Show all products this area
 (<https://msc.fema.gov/portal/availability?addcommunity=02050C&community>)

Locator Map



Share This Page.

- [Home \(//www.fema.gov/\)](#)
- [Download Plug-ins \(//www.fema.gov/download-plug-ins\)](#)
- [About Us \(//www.fema.gov/about-agency\)](#)
- [Privacy Policy \(//www.fema.gov/privacy-policy\)](#)
- [No Fear Act Data \(//www.fema.gov/no-fear-act-data\)](#)
- [Freedom of Information Act \(//www.fema.gov/freedom-information-act\)](#)
- [Office of the Inspector General \(//www.oig.dhs.gov/\)](#)
- [Strategic Plan \(//www.fema.gov/fema-strategic-plan\)](#)
- [Whitehouse.gov \(//www.whitehouse.gov\)](#)
- [DHS.gov \(//www.dhs.gov\)](#)
- [Ready.gov \(//www.ready.gov\)](#)
- [USA.gov \(//www.usa.gov\)](#)
- [DisasterAssistance.gov \(//www.disasterassistance.gov/\)](#)

Official website of the Department of Homeland Security