



Hooper Bay Subsistence Trails

Community 4-Wheeler Trail Planning for Conservation



Photo courtesy of USFWS, by T. Bowman

As the use of modern all-terrain vehicles (ATVs) for subsistence hunting and gathering practices in the Y-K Delta has increased over time, so too has concern for the impact of these machines on tribal and federal lands. As many know, the reckless use

of Hondas (4-wheelers) can cause irreparable damage to both plants and wildlife in coastal, lowland tundra environments.

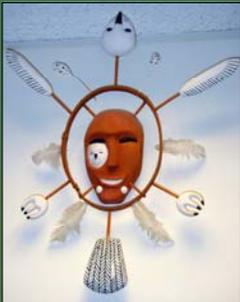
On April 11th 2006, tribal members in the Native Village of Hooper Bay gathered to participate in a 4-wheeler trail mapping and planning exercise to identify existing natural resource concerns related to 4-wheeler use on village corporation land. At this meeting organized by the Sea Lion Corporation, community members also began the process of planning for the future by documenting possible trail improvements or developments that would not only improve access, but ensure better trail management for the conservation of subsistence resources. Facilitation for the meeting was provided by William Naneng of the Sea Lion Corporation and Bethel-based, USDA Natural Resources Conservation Service employee Ryan Maroney.

The information in this flyer illustrates the results of the first planning session and documents the materials and associated costs of installing a relatively short 2300 ft section of improved trail near the lagoon. A second short trail option is also presented for consideration. These proposed improvements to high-use sections of existing trails connected to the Native Village of Hooper Bay would reduce some of the impacts of 4-wheelers and also provide opportunity for community members to evaluate the use of an alternative trail hardening surface not used in the area previously. Community feedback is important! If you have ideas you want to share about how trails should be improved or managed on Sea Lion Corporation Land please contact a Corporation Board member.

Quyana Tailucii to all those who participated in this planning event and special thanks to the Sea Lion Corporation, Native Village of Hooper Bay Tribe, and the City for donating a total of 60 gallons fuel oil for door prizes and pop for refreshments.



Tribal members in Hooper Bay met on April 11th to participate in a community 4-wheeler trail mapping and planning exercise to “*Qaunqelluku Nunavut, Umyuaqluku Ciunerkarput*” (Protect Our Land, Protect Our Future). In this photo Elders Paul Joe and Jane Green, along with Village Chief Eric Olsen, tribal member Jimmy Rivers and Sea Lion Corporation General Manager William Naneng take part in trail planning. Photo by R. Maroney.



Illustrations by George Smart, Photos by R. Maroney



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Photo courtesy of USFWS, by P. Mickelson



Photo courtesy of USFWS, by T. Bowman

Protect the nesting grounds by reducing your impact. Walk to hunt and gather.



Photo courtesy of USFWS, by G. Bob



Photo by G.K. Peck



Photo courtesy of USFWS



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Measured Success Protecting *Neqlernaq*

Source – USGS R. Anthony's: *Aerial Surveys of Brant Colonies on the Yukon Delta NWR in 2005.*

The US Fish and Wildlife Service has conducted photographic aerial surveys of *Neqlernaq* (black brant) colonies in Kokechik Bay, Tutakoke River, Kigigak Island, and Baird Inlet Island since 1998. In the last few years, new digital cameras have allowed biologists to collect high resolution images from these areas. They take these pictures of non-overlapping 0.19-hectare quadrants with a vertically mounted digital still camera through a hole in the floor of a Cessna-206 aircraft. In addition to collecting information on the number of *neqlernaq* (brants) and other waterfowl such as *Tuutangayak* (Canada goose), *nacaullek* (emperor goose), *neqleq* (white-fronted goose), *aangikvak* and *qaugeq* (spectacled and common eider), biologists can count tracks from All Terrain Vehicles (ATVs) and human boots visible in the photos. Monitoring these parameters over time provides insight on different types of use levels.

Counts of ATV and boot tracks indicated a decrease in human activity in the brant colony at Kokechik Bay. In figure 1, a sharp decrease (94%) can be seen in the number of ATV tracks in the Kokechik Bay area between 2004 and 2005. In figure 2, the number of boot tracks decreased 28% between 2004 and 2005. In both cases, the decreased impact is attributable to on the ground public education efforts by the Sea Lion Corporation and USFWS.

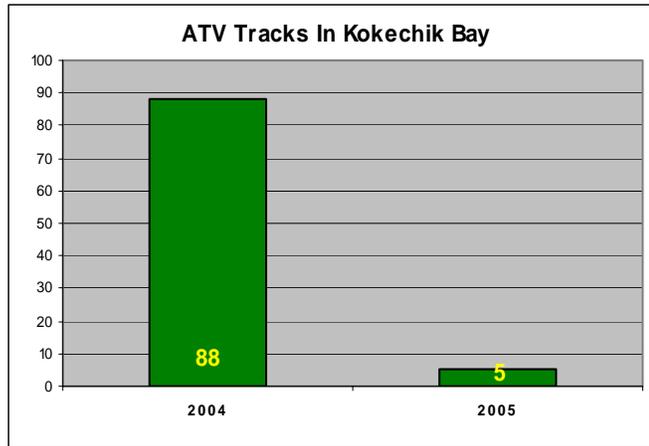


Figure 1 ATV tracks were observed in only 5 aerial survey images of Kokechik Bay in 2005, compared to 88 times in 2004. This marked decrease in mechanized disturbance is attributable to on the ground public education efforts by the Sea Lion Corporation and USFWS. Prepared from information presented in Anthony, 2005.

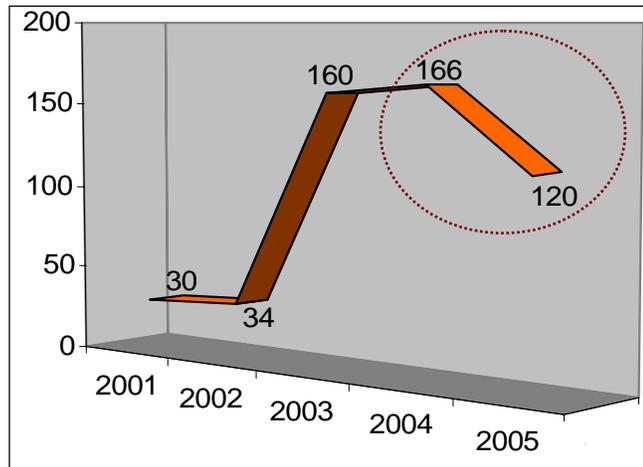


Figure 2 Boot tracks were observed in 166 aerial images in 2004, but only 120 images in 2005. Prepared from information presented in Anthony, 2005.



Photo courtesy of USFWS, by T. Bowman

Thanks to local efforts, counts of ATV and boot tracks indicated a decrease in human disturbance in the Kokechik Bay neqlernaq (black brant) colony between 2004 and 2005.



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Planning a Trail in Hooper Bay to Qaunqelluku Nunavut, Umyuaqluku Ciunerkarput

During the April 11th trail planning meeting in Hooper Bay, community members began the process of planning to Qaunqelluku Nunavut, Umyuaqluku Ciunerkarput by documenting possible trail improvements or developments that would not only improve access, but ensure better trail management for the conservation of subsistence resources. Workgroups first identified three top natural resource concerns related to 4-wheeler use and drew the trails used to get to those places on a map. Next, groups marked on another map the ideal trail that they would either create or improve for the community and identified the resources along the trail. Each group presented their ideas back to the audience and much conversation followed.

The community has a lot of work to do as it plans for better trail management. In addition to asking where new (or improved existing) trails should be located, and more importantly whether increased access to those areas is desirable, other practical issues must be addressed.

Figure 3 illustrates portions of the existing trails (red) and proposed ideal trails (green) near the village identified by each group.

Listening to the presentations, it was apparent that Sea Lion Corporation Land is rich in subsistence resources including: extensive bird nesting grounds, black, white and needle fishing areas, ponds for collecting greens, grasses for crafts, and Black, Blue and Salmon berry picking areas. Although many community members utilize 4-wheelers to access subsistence areas on village corporation land, it was also apparent that concern exists about the negative impacts of these vehicles. Everyone at the meeting knew firsthand of the damage 4-wheelers and snow machines can cause to wet tundra and its fish and game.



Figure 3 During the mapping session, 4 groups documented some of the existing 4-wheeler trails (red) and each proposed their “ideal” trails (green). The above map illustrates portions of existing and ideal trails near the village of Hooper Bay.

Figure 3 illustrates the large area and many ideas covered by the proposed green “ideal” trails. The community has a lot of work to do as it plans for better trail management. In addition to asking where new (or improved existing) trails should be located, and more importantly whether increased access to those areas is desirable, other practical issues must be addressed. Of great importance is the material and design selected for the trail. The costs and benefits of various trail materials should be weighed carefully. In an effort to determine if the GeoBlock panel is a suitable trail hardening surface for large scale application, the Sea Lion Corporation has proposed two options for improving relatively short sections of existing trail from the village. As can be seen in Figure 4, all proposed green “ideal” trails originate from the same general area located across Akulikutaq creek making these two options logical starting points for a trail improvement project.

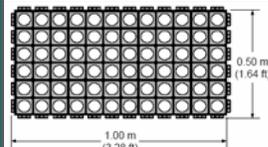
The materials and associated cost of installing Option 1 (2300 ft section of improved trail) near the lagoon can be found on the next page. The cost figures in this report are based on information collected by NRCS staff in Bethel and include cost of installation. Clients have the right to choose where to buy materials from, arrange their own freight and decide how labor will be compensated. Therefore, the total cost may be more or less than what is proposed. The cost estimates in this report are just a starting point to provide an idea of what the total cost would be for a project like this. In addition, there are other trail materials out there, so you are not required to use GeoBlock. Finally, when considering funding sources, NRCS cost-share assistance is an available option. NRCS Cost Share Programs could provide from 50-90% of the cost for this project with the remainder accounted for as in-kind funding. These federal cost-share programs, however, work on a reimbursement system and require the land owner, in this case the Sea Lion Corporation, to provide initial financing. For more information about these programs, please contact the Bethel Field Office at 543-7155.



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GeoBlock Panel Trail
 Option 1: 2300 ft Length
 4.8 ft Width

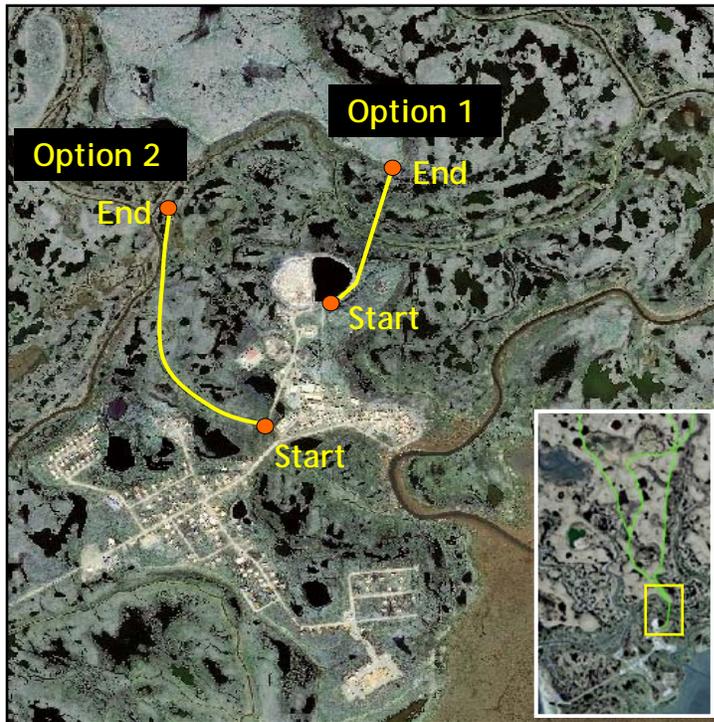


Figure 4 Two Akulikutaq creek trail options are under consideration. Which trail improvement do you think is best? Share your thoughts today! (Inset map in bottom right illustrates origin of all “ideal” trails).

Cost Estimate for Option 1 (See Figure 4)
 For 2300 ft long & 4.8 ft wide GeoBlock trail

- \$143,520 for 2” GeoBlock Panels
- \$7300 for Geotextile (Panel Liner)
- \$3500 for Gravel
- \$5000 for 12 ft bridge and 4 ft ramps (if applicable)

Total project cost based on NRCS Bethel Field Office cost list = \$159,320. *This cost includes cost of installation and shipping.*

To learn more about GeoBlock Panels go online to: <http://www.geocheminc.com>

Community feedback is important! If you have ideas you want to share about how trails should be improved or managed on Sea Lion Corporation Land please contact a Corporation Board member.

Sea Lion Board Members: Myron Naneng Sr., Bosco Olson Sr., Anges T. Hoelscher, Bernard Murrin, Roberta Tinker, Patrick Lake, Nicholas Naneng.



Installation of GeoBlock trail hardening panels in Pinkey’s Park last summer in Bethel.



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Hooper Bay Community Begins Trail Planning Process

Hooper Bay, April 11th 2006



Hooper Bay community members Elder Blaise Tinker, IGAP Assistant Coordinator Franklin Napoleon and Tribal Training and Education Coordinator Leota Lake participate in a two part trail mapping exercise. Groups were first asked to identify three top natural resource concerns related to 4-wheeler use and draw the trails used to get to those places on a map. Next, groups were asked to mark on the map their ideal trail that they would either create or improve for the community and identify what resources along the trail would be effected. Photo by R. Maroney



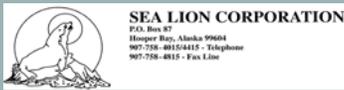
Along a proposed ideal trail, participants identified subsistence resources. In this photo, tribal council member Peter Gump and Victor Bell present their trail ideas back to the audience. During these presentations, much discussion about trails and subsistence resource conservation occurred and demonstrated the high level of respect the people of Hooper Bay have for their land. Photo by R. Maroney

Community Mapping Photographs

Hooper Bay, April 11th 2006



Photos Top Left—Sea Lion Board Member Myron Naneng and Ryan Maroney of NRCS in Bethel. **Top Right**—Elders Rueben Hill, Silas Tomaganuk and Marc Cowart. **Bottom**—Elder Blaise Tinker presents his group's trail ideas as other community members look on.



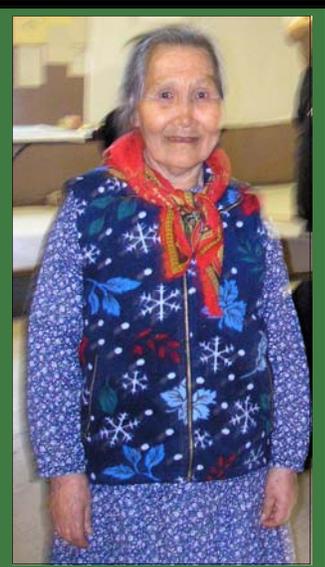
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From a USFWS Publication with
Illustrations by George Smart



Nunapigteggun
qanikcailngurteggun ikamralriani,
nauarraat ungunssit-llu
piunrilarait.



Elder Jane Green & young
Davida Murrin. Photos R.M.

Kencikluku Nuna:

- Tumellret wall'u nallunaikuciumalriit tumet aturaqluki.
- Yaqulget irniviit, ungunssit-llu uitaviit atunrilkurrluki.
- Qanikcartangqerraqan taugaam snuukuutgun ayagaqluci.
- Kencikluki merrilriit nunat kuiget-llu cenait.

Protect Our Subsistence Way of Life for the Future



Get the Word Out...



*Share your thoughts on
the future development
and management of
4-wheeler Trails on Sea
Lion Corporation Land*

Ways to Respect our Land and Heritage

- Youth stressed the importance of keeping 4-wheelers off sand dunes and berry picking areas.
- Leave ATVs on the trail and walk to your hunting and gathering site.
- Share your ideas with the community!

The USDA is an equal
opportunity provider
and employer.

