

COMPATIBILITY DETERMINATION

Use: Commercial Film, Video, and Audio Production by Tandem Stills Motion, Inc in Wilderness and Non-Wilderness

Refuge Name: Alaska Maritime National Wildlife Refuge

Establishing and Acquisition Authorities: The Alaska Maritime National Wildlife Refuge (Refuge) was established by the Alaska National Interest Lands Conservation Act (ANILCA) (Public Law 96-487 Stat.2371, Sec. 303 (1) dated 2 December 1980).

“The Alaska Maritime National Wildlife Refuge shall consist of eleven existing refuges, including all lands (including submerged lands), waters and interests therein which were a part of such refuges and are hereby designated subunits of the Alaska Maritime National Wildlife Refuge; approximately four hundred thousand and sixty acres of additional public lands on islands islets, rocks, reefs, spires and designated capes and headlands in the coastal areas and adjacent seas of Alaska, and an undetermined quantity of submerged lands, if any, retained in Federal ownership at the time of statehood around Kodiak and Afognak Islands as generally depicted on the map entitled “Alaska Maritime National Wildlife Refuge”, dated October 1979, including the –

- (i) **Chukchi Sea Unit**—including Cape Lisburne, Cape Thompson, the existing Chamisso National Wildlife Refuge and all other public lands on islands, islets, rocks reefs spires, and designated capes and headlands in the Chukchi Sea, but excluding such other offshore public lands within the Bering Land Bridge National Preserve. That portion of the public lands on Cape Lisburne shall be named and appropriately identified as the "Ann Stevens-Cape Lisburne" subunit of the Chukchi Sea Unit;*
- (ii) **Bering Sea Unit**—including the existing Bering Sea and Pribilof (Walrus and Otter Islands) National Wildlife Refuges, Hagemeister Island, Fairway Rock, Sledge Island, Bluff Unit, Besboro Island, Penuk Islands, Egg Island, King Island, and all other public lands on islands, islets, rocks, reefs, spires and designated capes and headlands in the Bering Sea;*
- (iii) **Aleutian Islands Unit**—including the existing Aleutian Islands and Bogoslof National Wildlife Refuges, and all other public lands in the Aleutian Islands;*
- (iv) **Alaska Peninsula Unit**—including the existing Simeonof and Semidi National Wildlife Refuges, the Shumagin Islands, Sutwik Island, the islands and headlands of Puale Bay, and all other public lands on islands, islets, rocks, reefs, spires and designated capes and headlands south of the Alaska Peninsula from Katmai National Park to False Pass including such offshore lands incorporated in this unit under section 1427: and*
- (v) **Gulf of Alaska Unit**—including the existing Forrester Island, Hazy Islands, Saint Lazaria and Tuxedni National Wildlife Refuges, the Barren Islands, Latax Rocks, Harbor Island, Pye and Chiswell Islands, Ragged, Notoa, Chat, Chevel, Granite and Middleton Islands, the Trinity Islands, all named and unnamed islands, islets, rocks, reefs, spires, and whatever submerged lands, if any, were retained in Federal ownership at the time of statehood surrounding Kodiak and Afognak Islands and all other such public lands on islands, islets, rocks, reefs, spires and designated capes and headlands within the Gulf of Alaska, but excluding such lands within existing units of the National Park System Nuka Island and lands within the National Forest System except as provided in section 1427 of this Act.”*

ANILCA section 1417 (b) created the Pribilof Subunit (comprised of St. Paul, St. George, Walrus, and Otter islands) and authorized later land purchase.

Legal authorities for the pre-ANILCA refuges include (See Public Law 96-487 Stat.2371, Sec. 305 dated 2 December 1980):

- Bering Sea Reservation (St. Matthew, Hall and Pinnacle islands)
Executive Order 1037 dated 27 February 1909.
- Tuxedni Reservation (Chisik and Duck (Egg) Island)
Executive Order 1039 dated 27 February 1909.
- St. Lazaria Reservation
Executive Order 1040 dated 27 February 1909.
- Pribilof Reservation (Walrus and Otter Islands)
Executive Order 1044 dated 27 February 1909, and later
Pribilof Subunit (St. Paul, St. George, Walrus, Otter islands)
Public Law 96-487 Section 1417 (b) 2 December 1980.
- Bogoslof Reservation
Executive Order 1049 dated 2 March 1909.
- Forrester Island Reservation (Forrester and Lowrie islands and Wolf Rock)
Executive Order 1458 dated 11 January 1912.
- Hazy Islands Reservation
Executive Order 1459 dated 11 January 1912.
- Chamisso Island Reservation
Executive Order 1658 dated 7 December 1912.
- Aleutian Islands Reservation
Executive Order 1733 dated 3 March 1913, later including Amak Island
Executive Order 5318 dated 7 April 1930.
- Semidi Islands Wildlife Refuge (including lands and submerged lands)
Executive Order 5858 dated 17 June 1932.
- Simeonof National Wildlife Refuge (including lands, tidelands, and adjacent waters)
Public Land Order 1749 dated 30 October 1958.

Legal authority for other pre-ANILCA land include:

- Yukon Island
Public Land Order 3275 dated 26 November 1963.

Legal authorities for 3 submerged lands and waters include:

- Afognak Forest and Fish Culture Reservation
Proclamation 39 dated 24 December 1892.
Public law 96-487, 2 Dec 1980 Sec. 1427(m)
- Karluk Submerged Lands
Public Land Order 128 dated 19 June 1943.
- Womens Bay Submerged Lands
Public Land Order 1182 dated 7 July 1955.

Legal authority for small portions of Attu, Kiska and Atka islands to be managed as a National Monument by the Refuge under authority of the Antiquities Act of 8 June 1906 (34 Stat. 225, 16 U.S.C. 431 section 2):

“...Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.”

Presidential Proclamation 8327 dated 5 December 2008 (73 Fed. Reg. 75293; 10 December 2008) Establishment of World War II Valor in the Pacific National Monument later redesignated Aleutian Islands World War II National Monument (Public Law 116-9 Sec 2206 (c)(3))

Purposes

Section 303(1)(B) of ANILCA states the purposes for which Alaska Maritime National Wildlife Refuge was established and shall be managed:

- (i) to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to marine mammals, marine birds and other migratory birds, the marine resources upon which they rely, bears, caribou and other mammals;*
- (ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;*
- (iii) to provide, in a manner consistent with the purpose set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents;*
- (iv) to provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), a program of national and international scientific research on marine resources; and*
- (v) to ensure, to the maximum extent practicable and in a manner consistent with the purpose set forth in paragraph (i), water quality and necessary water quantity within the refuge.*

In addition, Section 1417 (b) of ANILCA authorized the Pribilof Subunit which:

“...shall be incorporated within, and made a subunit of, the Alaska Maritime National Wildlife Refuge and administered accordingly.”

Alaska refuges established before the passage of ANILCA have additional purposes which remain in force and effect, except to the extent that they may be inconsistent with ANILCA or the Alaska Native Claims Settlement Act, in which case the provisions of those Acts control (ANILCA Section 305, 603 FW 2.8). However, the purposes of pre-ANILCA refuges apply only to those portions of the Refuge established by the prior executive order or public land order, and not to those portions of the Refuge added by ANILCA. Additional purposes for pre-ANILCA refuges include:

“...as a preserve and breeding ground for native birds.” (8 refuges/reservations):

- Bering Sea Reservation (St. Matthew, Hall and Pinnacle islands)
Executive Order 1037 dated 27 Feb 1909.
- Tuxedni Reservation (Chisik Island)
Executive Order 1039 dated 27 February 1909.
- St. Lazaria Reservation
Executive Order 1040 dated 27 February 1909.
- Bogoslof Reservation
Executive Order 1049 dated 2 March 1909.
- Forrester Island Reservation (Forrester and Lowrie islands and Wolf Rock)
Executive Order 1458 dated 11 January 1912.
- Hazy Islands Reservation

Executive Order 1459 dated 11 January 1912.
Chamisso Island Reservation
Executive Order 1658 dated 7 December 1912.
Pribilof Reservation (Walrus and Otter Islands)
Executive Order 1044 dated 27 February 1909, and

“...as a preserve and breeding ground for native birds, for the propagation of reindeer and furbearing animals, and for the encouragement and development of the fisheries. The establishment of this reservation shall not interfere with the use of the islands for lighthouse, military, or naval purposes, or with the extension of the work of the Bureau of Education on Unalaska and Atka Islands.”

Aleutian Islands Reservation

Executive Order 1733 dated 3 March 1913, and later including Amak Island,

“...as a preserve and breeding ground for birds and wild animals, subject to valid existing rights. These islands and rocks are hereby added to and made part of the Aleutian Islands Reservation, Alaska subject to all provisions of law, regulations, and orders governing said reservation.”

Aleutian Islands Reservation Enlarged (Amak)

Executive Order 5318 dated 7 April 1930.

“It is hereby ordered that Aghiyuk Island, Chowiet Island, Kateekuk Island, Anowik Island, , Kiliktagik Island, Suklik Island, Aghik Island, Aliksemit Island and South Island together with all unnamed islands, rocks, and reefs, and all lands under water appurtenant thereto, lying between parallels 55° 57’ and 56° 15’ north latitude and meridians 156° 30’ and 157° 00’ longitude west of Greenwich, in the North Pacific Ocean southeast of the Alaska Peninsula, Alaska, and shown on United States Coast and Geodetic Survey Chart No. 8881, published in Washington, D.C., April, 1919, as within the Semidi Island Group, be, and the same are hereby, reserved from all forms of appropriation under the public land laws and set apart for the use of the Department of Agriculture as a refuge and breeding ground for wild birds and game and fur animals.”

Semidi Islands Wildlife Refuge, Alaska Peninsula Unit

Executive Order 5858 dated 17 June 1932.

“Subject to valid existing rights, the following-described public lands, tidelands, and adjacent waters in Alaska are hereby withdrawn from all forms of appropriation under the public land laws, including the mining and mineral lease laws, but not the act of July 31, 1947 (61 Stat. 631; 30 U.S.C. 601-604), nor the act of March 4, 1927 (22 Stat. 1452; 48 U.S.C. 471a-471o), and reserved and set apart for the use of the United States Fish and Wildlife Service, Department of the Interior, as a refuge for the preservation and propagation of the sea otter and other wildlife thereon... The lands shall be administered for grazing purposes by the Bureau of Land Management, but such grazing will be limited to one lease at any one time. Violations of game regulations or undue interference with the sea otter herd by the grazing lessee, his agents or employees, will constitute valid reason for cancellation of such lease.”

Simeonof National Wildlife Refuge, Alaska Peninsula Unit

Public Land Order 1749 dated 30 October 1958.

“And whereas, the public lands of the Territory of Alaska, known as Afognak Island, are in part covered with timber, and are required for public purposes, in order that salmon fisheries in the waters of the Island, and salmon and other fish and sea animals, and other animals and birds, and the timber, undergrowth, grass, moss and other growth in, on, and about said Island may be protected and unimpaired and it appears the public good would be promoted by setting apart and reserving said lands as a public reservation.”

Afognak Forest and Fish Culture Reservation, Gulf of Alaska Unit

Presidential Proclamation 39 dated 24 December 1892.

“...hereby designated as an Indian reservation for the use and benefit of the native inhabitants of the village of Karluk, Alaska and vicinity...”

Karluk Submerged Lands, Gulf of Alaska Unit
Public Land Order 128 dated 19 June 1943.

“...for use of the Department of the Navy for naval purposes”

Womens Bay Submerged Lands, Gulf of Alaska Unit
Public Land Order 1182 dated 7 July 1955.

“...for protection and preservation of their archaeological and historical values.”

Yukon Island, Gulf of Alaska Unit
Public Land Order 3275 dated 26 November 1963.

Additional purposes for specific Refuge lands include:

“...purpose of protecting the objects [Attu battlefield objects, Kiska occupation site, Atka B-24]...purposes of preserving, interpreting, and enhancing public understanding and appreciation of the national monument and the broader story of WWII in the Pacific.”

Select portions of Attu, Kiska and Atka islands, Aleutian Islands Unit
Presidential Proclamation 8327 dated 5 December 2008
Establishment of World War II Valor in the Pacific National Monument later redesignated Aleutian Islands World War II National Monument (Public Law 116-9 Sec 2206 (c)(3)) dated 12 March 2019

“...the Joint venture provided for in subsection (c) of this section shall be entitled to and there shall be conveyed to the joint venture in the conveyance provided for in subsection (c) hereof, the right to timber resources on such islands: Provided, That management and harvest of such timber resources shall be only in accordance with management plans jointly developed by the joint venture and the Secretary of the Interior.”

Delphin and Discover islands, Gulf of Alaska Unit
Public Law 96-487 dated 2 Dec 1980, Sec 1427 (m)

“National Historic Trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment.

Portions of the Iditarod National Historic trail designated under 16 U.S.C. 1244 (a) (7)
running through Safety Sound and Topkok Head, Bering Sea Unit
Public Law 95-625 Section 3 (3)

ANILCA Sec. 305 incorporated many existing public lands from earlier proclamations, Executive orders, public land orders and administrative actions for other federal agencies within the Refuge boundary. Under Sec. 304 these lands are to be administered in accordance with laws governing refuge administration subject to valid existing rights, but under Sec. 1310 the other federal agency retains the authority to continue its use for the primary purpose the land was withdrawn. The Refuge retains secondary jurisdiction for all other public purposes that do not infringe on or impact the other federal agency’s use of its facility. If the proposed public use or administrative action would preclude or unreasonably interfere with the other agency’s access, operation, and maintenance the use or action cannot be undertaken without the other agency’s consent. The original withdrawal purposes for these lands hold a special status which can influence Refuge authority to administer uses.

“...for lighthouse purposes.”

- Ugamak Is., and 2 tracts on Unimak Is., U.S. Coast Guard
Executive Order 19010104 dated 1 January 1901
- Unimak Is, U.S. Coast Guard
Executive Order 19010827 dated 27 August 1901
- Seal Rocks, Rugged Is., Chisik Is., E. Amatuli Is., Elizabeth Is., Nagai Is., Goloi Is., C. Pankof, Barwell Is., Sutwik Is., Castle Rock, Seal Cape, U.S. Coast Guard
Executive Order 3406 dated 13 February 1921
- Rugged Island, U.S. Coast Guard
Executive Order 4223 dated 11 May 1925
- Sledge Is., Puffin Is – Chiniak Bay, U.S. Coast Guard
Executive Order 4257 dated 27 June 1925
- Point Petrof off Sanak Is.
Executive Order 7032 dated 1 May 1935

“...for use of the Department of the Navy for military purposes...The reservation made by this order shall be the dominant reservation except for purposes of wildlife conservation and management as to which Executive Order No. 1733 of March 3, 1931 [sic] shall be the dominant one.” PLO 1949 later modified by PLO 5464 ... *“as an aid to navigation facility for the U.S. Coast Guard.”*

- Attu Island, Massacre Bay, U.S. Coast Guard
- Adak Island, Lake Andy, U.S. Navy
Public Land Order 1949 dated 19 August 1959 later partially revoked by
Public Land Order 4564 dated 16 January 1969

“...for use of the U.S. Coast Guard for a radio aid to navigation facility. The jurisdiction and use granted by this order shall be limited to those activities which are related directly to the construction, operation, and maintenance of radio aids to navigation facilities. (PLO 2887)” and *“...in aid of contemplated legislation” (PLO 664)*

- Sitkinak Island, Two parcels, U.S. Coast Guard
Public Land Order 2887 dated 18 January 1963
Public Land Order 664 dated 28 August 1950

“...for military purposes.”

- Point Lay, U.S. Air Force
Public Land Order 1851 dated 14 May 1951
- Cape Lisburne, U.S. Air Force
Public Land Order 2034 dated 16 December 1959
- Unalaska, Driftwood Bay, U.S. Air Force
Public Land Order 2374 dated 17 May 1961, and
44 L.D. 513 road corridor between 2 parcels

“In exercising such primary jurisdiction, custody, and control, the Secretary of the Air Force may utilize and apply such authorities as are generally applicable to a military installation, base, camp, post, or station. Shemya Island and its appurtenant waters (including submerged lands) shall continue to be included within the Alaska Maritime National Wildlife Refuge and the National Wildlife Refuge System and the Secretary of the Interior shall have jurisdiction secondary to that of the Department of the Air Force.”

- Shemya Island, U.S. Air Force
Public Law 106-554 Section 302 dated 21 December 2000

“...for use of the Alaska National Guard.”

Sarichef Is, village of Shishmaref, U.S. Army
Public Land Order 2020 dated 17 November 1959

“...as an administrative site for the maintenance of a Federal Aviation Administration air navigation facility. The withdrawal made by this order does not alter the applicability of the public land laws under lease, license, or permit, or governing the disposal of mineral or vegetative resources other than those under the mining law. However, leases, licenses, or permits will be issued only if the Federal Aviation Administration finds that the proposed use of the lands will not interfere with the proper use of its facilities on the land”

Middleton Island, Federal Aviation Administration
Public Land Order 4721 dated 24 October 1969

The Wilderness Act of 1964 (Public Law 88-577) created additional purposes for the Alaska Maritime National Wildlife Refuge. Designated wilderness areas are to be managed:

“(2a) In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.”

and *“(3b) Except as otherwise provided in this chapter, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this chapter, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.”*

Designated wilderness areas include:

Bering Sea Wilderness
Bogoslof Wilderness
Tuxedni Wilderness
St. Lazaria Wilderness
Hazy Island Wilderness
Forrester Island Wilderness
Public law 91-504, 23 Oct 1970

Chamisso Wilderness
Public law 93-632, 3 Jan 1975

Simeonof Wilderness
Public law 94-557, 19 Oct 1976

Aleutian Islands Wilderness
Amak Wilderness
Unimak Wilderness
Semidi Wilderness
Public law 96-487, 2 Dec 1980, Sec 702 (1), (11), (13); Sec 707

National Wildlife Refuge System Mission:

The mission of the National Wildlife Refuge System (NWRS) is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (National Wildlife Refuge System Administration Act, as amended [16 U.S.C. 668dd-668ee]).

Description of Use:

In 2000, Congress enacted Public Law 106-206 to allow the Secretary of the Interior and the Secretary of Agriculture to establish a fee system for commercial filming activities on Federal land, and for other purposes. This act describes commercial filming fees, recovery of costs, still photography, protection of resources, use of proceeds and processing of permit applications. To clarify the Department of Interior's commercial filming permit process, regulations were promulgated in 43 CFR 5. The National Wildlife Refuge System (NWRS) also promulgated regulations for this use in 50 CFR 27.71. The law and following regulations provide specific legal requirements when considering commercial filming activities on refuges.

This compatibility determination (CD) examines commercial filming activities by Tandem Stills Motion, Inc. to determine whether or not they may materially interfere with or detract from the purposes for which the Alaska Maritime National Wildlife Refuge was set aside or the NWRS mission as required by the National Wildlife Refuge System Improvement Act. In addition to meeting the requirements of the laws and regulations stated above, all considered commercial filming activities must meet the requirements of refuge regulation 50 CFR 29.1, which states “we may only authorize public or private economic use of the natural resources of any national wildlife refuge, in accordance with 16 U.S.C. 715s, where we determine that the use contributes to the achievement of the national wildlife refuge purposes or the National Wildlife Refuge System mission.”

These commercial filming activities would also be covered by the DOI Categorical Exclusion 43 CFR 46.210 (j) which includes “activities which are educational, informational, advisory, or consultative to other agencies, public, and private entities, visitors, individuals, or the general public” and found to not meet any extraordinary circumstances listed under 43 CFR 46.215. The Refuge and Tandem Stills Motion, Inc propose to develop a separate MOU that would provide mutual benefits to both parties. Products from the proposed filming and MOU would allow for broad exposure of the refuge, and wilderness values to the American public. We view this activity as a refuge management economic activity under 603 FW 2.6N and subject to a compatibility determination.

When filming in Wilderness, the intent of the producer is important. The primary purpose of media productions should be to capture wilderness values, character, and experiences that may be incidental to hunting, fishing, and ecotourism activities (i.e., non-consumptive uses) and other “public purposes” of wilderness (e.g., recreational, scenic, scientific, educational). The opposite may also be true: capturing fishing and hunting activities may be the primary purpose of a media production, with wilderness purposes and values of secondary importance, because documenting consumptive uses can provide popular media products. Service policy on filming in wilderness (610 FW 2.12 D) make a distinction between the two intentions described above. By policy, the Service generally prohibits commercial photography in wilderness areas unless it is necessary to provide educational information about wilderness uses and values, and it does not degrade the wilderness character of the area. The MOU in development recognizes this distinction and products will be centered on the values of wilderness character, wild places, refuge resources, and how they are managed.

The activities described in this CD are conducted only by Tandem Stills Motion, Inc and their employees. The intent is to produce a commercial film, video, or audio production for broadcast with additional short films for sharing through social media and other means of transmission. The Refuge proposes to assign a staff member to the unit to accompany the production crew to film sights and offer guidance on optimal timing and locations. Tandem Stills Motion, Inc. will primarily access the Refuge by motorized or non-motorized boats with transportation provided by the refuge aboard the R/V Tiglax. While not anticipated, there could be other opportunities for access through opportunistic use of other chartered vessels or possibly commercial aircraft to land at designated airports and travel via road onto the refuge. Equipment used may include hand-held cameras, video recorders, audio recording equipment, sets, props, or drones. Models may only be used when endorsing compatible uses on the Refuge. The use of helicopters, personal jet-powered watercraft, off-road vehicles, and airboats for access or use during filming activities are excluded from evaluation in this CD.

The commercial filming activity will take place May-Sept 2019. Associated activities such as camping, backpacking, hiking, boating (both motorized and non-motorized), and other incidental activities would be considered supporting uses. Filming would mostly take place from the Refuge vessel R/V Tiglax in the Alaska Peninsula and Aleutian Islands Units. Specific islands possibly include all refuge lands within the boundary of the Krenitzen, Islands of Four Mountains, Andreanof, Delarof, Rat and Near Island groups.

The Alaska Maritime National Wildlife Refuge extends from Forrester Island in Southeastern Alaska to Attu Island at the tip of the Aleutian Chain and almost to Utqiagvik on the Arctic Ocean. Within these nearly 5 million acres, the Refuge comprises over 3,000 headlands, islands, islets, rocks, tidelands, submerged lands, and waters. The numerous connections between the land and wildlife resources to the surrounding sea is the common theme linking all parts of the Refuge, but each of the five distinct geographic Refuge units has its own unique features:

Chukchi Sea Unit – This northernmost of Refuge units is comprised of treeless areas of permafrost and high coastal escarpments as well as low, sandy, barrier islands. The striking cliffs at Capes Lisburne and Thompson in the Chukchi Sea support an estimated 1,000,000 seabirds, the largest seabird colonies north of the Arctic Circle. Thick-billed murres account for over 90 percent of the breeding birds on these cliffs. Marine-dependent species such as harbor, ribbon, ringed, and bearded seals; walrus; and polar bears are common along the coast. But away from the coast, portions of the unit more resemble interior Alaska. Here are found populations of muskox, wolves, wolverine, grizzly bears, and caribou in contrast to the rest of the marine-dependent Refuge.

Bering Sea Unit – Treeless marine tundra characterizes the several islands and headlands on Norton Sound, extensive wilderness on St. Matthew Island, the Pribilof Islands' extensive and unequalled bird cliffs, Hagemester Island, and other smaller islands in the Bering Sea. Within this unit millions of thick-billed and common murres nest in immense colonies alongside red-legged and black-legged kittiwakes. The cliffs of St. George Island are home to over 70% of the world's population of red-legged kittiwakes. The Pribilof shrew, Insular or St. Matthew singing vole, and McKay's bunting are endemic species found only on Refuge lands in this unit.

Aleutian Islands Unit – Volcanic peaks rising up to 9,000 feet characterize this region where the North Pacific plate pushes against the North American plate at the deep Aleutian trench south of the island chain. These massive tectonic forces foment volcanoes and frequent earthquakes. Shallow passes between islands and currents advect rich sources of plankton between the North Pacific and Bering Sea. This plankton reliably nourishes tens of millions of seabird and hundreds of thousands of marine mammals found along 1,000 mile long archipelago. Burrow- and crevice-nesting tufted and horned puffins, along with several species of auklets, breed in huge colonies. Here visitors can enjoy immense

sweeping spectacles of aerial flight displays of wildlife. Formerly the stronghold of the sea otter and Steller sea lion, both species have seen declines of more than 90% throughout the unit since the early 1990s. Wind-raked treeless maritime tundra is composed of rank growths of grasses and sedges along the coast and by crowberry and other ericaceous shrubs at higher elevations.

Alaska Peninsula Unit – Several million seabirds breed on the more than 800 isolated, rugged, storm-lashed islands south of the Alaska Peninsula, especially in the Shumagin Islands and Sandman Reefs. The greatest diversity of marine bird species on the Refuge is found in this region. Murres, kittiwakes, puffins, crested auklets, storm-petrels, ancient murrelets, and other species abound. A majority of Alaska's nocturnal seabirds breed on fox-free islands in the Refuge. Sea otters, sea lions, and harbor seals are particularly abundant in the vicinity of small remote islands, rocks, and reefs scattered along the coast. In contrast to other units, some larger islands among the Shumagins are covered with dense alder and willow thickets inhabited by numerous ptarmigan.

Gulf of Alaska Unit – Lush rain forests dominate many of the precipitous small islands including Forrester, Hazy, and St. Lazaria subunits in southeastern Alaska; the Chiswell and Pye Islands off the coast of the Kenai Peninsula; islands and rocks in Cook Inlet; and islands and waters surrounding Kodiak and Afognak Islands. The Barren Islands at the entrance to Cook Inlet swarm with over 500,000 murres, kittiwakes, puffins, storm-petrels, cormorants, and other seabirds. Large numbers of storm-petrels and rhinoceros auklets are found breeding on the southeastern subunits of St. Lazaria and Forrester islands.

All units combined, the Refuge protects an estimated 40 million breeding seabirds or roughly 80% percent of Alaska's total. Shorebirds, sea ducks, raptors, and passerine birds are found throughout all units of the Refuge. Some of the reefs and islands teem with black brant, emperor geese, scoters, eiders, and large numbers of other waterfowl and shorebirds during winter and migration. Hundreds of pairs of bald eagles nest on islands and mainland cliffs, and peregrine falcons nest near some of the important small alcid colonies.

There are no native terrestrial mammals throughout most of the Alaska Peninsula and Aleutian Islands units. Many Refuge islands were misguidedly leased by the federal government for commercial fox fur farming activities in the late 1800s through 1940s. Foxes proliferated on the native seabird species that declined in abundance and distribution as a result of this predation. Most islands have now been eradicated of introduced foxes and seabird species have positively benefitted from their removal.

The extreme remoteness of most of the Refuge precludes visitation by many people, and typically bad weather further discourages use. With the exception of the Pye and Chiswell Islands, 35 miles southwest of Seward; St. Lazaria, 14 miles west of Sitka; and Sledge Island, 25 miles west of Nome, few individuals are able to reach the multitude of Refuge islands and mainland cliffs on their own. A small number of adventure cruise ships bring tourists to the Chiswells, Aleutians, Shumagins, and other islands to witness the wild, magnificent scenery and the awesome concentrations of marine birds and mammals. A few commercial fishermen occasionally go ashore on some of the more than 3,000 islands and mainland cliffs in the Refuge. Most of the Refuge is accessible by boat, but due to the rocky, rugged shorelines on some islands, access is difficult and many islands with formidable cliffs have never been explored.

Over half of the Refuge area is congressionally designated wilderness. The Refuge's Comprehensive Conservation Plan provides extensive details for all resources within each unit.

Availability of Resources:

Commercial filming permit requests vary greatly in scope, timing and duration. Per 43 CFR 5.8, the Refuge Manager is required to request cost recovery reimbursement for the actual direct and indirect

costs to evaluate, manage, and monitor the activity. The availability of cost recovery reimbursement is part of the availability of resources evaluation.

We view this as a normal commercial film application. Actions involve phone conversations, written correspondence, and time needed to evaluate the proposal under refuge policies and regulations. Currently this is completed by a GS-12 position so expected recovery costs would be \$1300 (22 hrs to process request, MOU, and write a MRA for any proposed wilderness activities).

	Non-Wilderness	Wilderness
Normal	6 hr	22 hr
Complex	12 hr	44 hr

Refuge personnel and resources are adequate at existing levels to administer this single use request. The Refuge is proposing to sign a MOU with Tandem Stills Motion Inc. which will assign a staff member to monitor the project. The MOU will specify that since the project is mutual in nature with the Refuge, no cost recovery will be requested. The Refuge will contribute this cost to administer the use as its contribution to the mutual project.

Anticipated Impacts of the Use:

Effects to fish, wildlife or other resources within the Refuge are generally anticipated to be minimal, transitory, and controlled by a Refuge monitor. Temporary displacement and disturbance to wildlife could occur, but effects would likely be short-term, minimal and controllable through by on-site Refuge staff. Access to the Refuge would be primarily by motorized boat onto remote beaches.

Filming within colonial seabird colonies could likely require special conditions necessary to avoid disturbance or abandonment. In particular, burrow-nesting seabird habitat is especially fragile and susceptible to burrow collapse by humans (Carney and Sydeman 1999, Byrd et al. 1983). Access points and entry into these sensitive habitats could possibly need to be controlled to avoid burrow collapse from commercial filming activities.

Burger (1981) found that “colonial birds are particularly vulnerable to human disturbance because of the large concentrations of birds nesting in close proximity. Vulnerability varies depending on species, nest location, and the type of disturbance. People affect nesting colonies of birds in diverse ways. They can destroy the nests, eggs, or chicks or force birds to abandon their nest sites and colonies. They can keep adults off their chicks and eggs, thus exposing them to temperature stress or predation. The above effects can be lethal to eggs or chicks, and result in immediate and obvious decreases in reproductive success. Many other effects of human disturbance are less obvious, but nonetheless contribute to lowered overall breeding success. Such effects include; decreased incubation and chick attendance, shifts in the mate incubating, earlier and distant movements of chicks, entanglement of chicks in vegetation, increased brood sizes (when several chicks enter the same nest), more frequent aggressive encounters, greater energy expenditures for territorial defense, and attraction of predators to nest sites.” Seabird species exhibit differential responses to human presence. Cormorants, murre, and some gulls are especially sensitive to human disturbance within nesting colonies (Carney and Sydeman 1999). Conditions to minimize disturbance in colonial seabird colonies might be necessary depending on the species and location.

Many seabird colonies are located on sheer cliffs which are easily and closely approachable from boats. This is a common method of filming seabirds in their nesting habitat and is off Refuge and in State of Alaska managed waters. However within the marine water areas of the Refuge, commercial filming activities would be subject to this compatibility determination and the same conditions as on Refuge lands

to avoid disturbance of wildlife.

Marine mammals can exhibit various responses to human disturbance when hauled out on Refuge lands. Harbor seals can react strongly to human and boat presence at great distances (average 310 m to 750 m, respectively; Andersen et al 2012). In contrast, Steller sea lions in Alaska failed to show any population level responses to substantial research disturbance on the rookery (Wilson et al 2012). All marine mammals are protected under the Marine Mammal Protection Act (MMPA, Public Law 92-522). The MMPA prohibits, with certain exceptions, the "take" of marine mammals. Jurisdiction for MMPA is shared by U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Any commercial filming within access-regulated sea lion rookeries or haulouts would require additional permitting from the National Marine Fisheries Service to ensure compliance with the MMPA.

The manager would exercise sound professional judgement and evaluate this proposed use and fully consider the biological integrity, diversity, and environmental health policy (601 FW 3). Currently there are no known effects of the proposed use which would be detrimental to the biological integrity, diversity or environmental health of the Refuge other than an increased risk of invasive species introduction. This risk is minimized by the proposed use occurring from the Refuge vessel with a staff member familiar with biosecurity protocols. Nevertheless, the introduction of non-native invasive species to Refuge lands or waters is a serious concern, prohibited by presidential Executive Orders 13112 and 13751, and could possibly have effects on Refuge biological integrity, diversity, and environmental health. In addition, it is illegal to introduce invasive species onto a National Wildlife Refuge (50 CFR 27.52) or to transport rodents within Alaska (5 AAC 92.141).

Commensal rodents, especially rats, are highly effective as invaders: They are secretive, intelligent, and reproduce at very high rates. They are also ravenous predators that eat the young, eggs and sometimes adults of birds and other small animals. Well known as carriers of serious diseases in humans, rats are also responsible for diseases that can adversely affect wildlife and, potentially, consumers of those wildlife species (Fritts 2007). Rats have caused 40-60% of all recorded seabird and reptile extinctions since 1600 (Island Conservation 2006). Rodents can be introduced to refuge lands by transport aboard ships which ground and in luggage and supplies of visitors. To confront this threat the Refuge assisted the State of Alaska in development of a plan for addressing the risk of rat invasions; *Wildlife and people at risk: a plan to keep rats out of Alaska* (Fritts 2007). Best management practices in this report can be incorporated into the proposed use.

Alaska has many natural and human vectors that could introduce aquatic invasive species, including: boats, floatplanes, tourism, marine shipping and transport, wind, ocean currents, and warming climate. As such, even field work in the most remote, pristine part of Alaska could have aquatic invasive species that have been introduced through anthropomorphic or natural vectors. Alaska is particularly vulnerable to the expansion of aquatic invasive species because of rapidly changing habitat suitability caused by shifting weather conditions, altered hydrologic regimes, and increasing development. Alaska's communities, cultures and economy rely on healthy aquatic resources (USFWS 2018). Compliance with best management practices in *Guidelines for preventing the spread of aquatic invasive species – management protocols* (USFWS 2018) would reduce the risk of introduction.

Alaska's cool climate and remote location were long considered sufficient barriers to invasion by non-native species. However, recent inventories have revealed new, rapidly expanding populations of invasive plant species throughout the state. Direct impacts of invasive plants include competition for space, soil, light, or water with native plants, which can lead to reductions in populations of native species or even elimination of entire populations of rare or endangered species. Indirect effects are harder to quantify as they are based on the ways in which a plant interacts with other organisms, the greater plant community, and physical processes in the system. Often, these impacts are only discovered after the species is well

established and widespread or through careful experimental analysis. Competition by invasive plants can prevent the establishment of native trees and shrubs after a disturbance event like a fire or flood, disrupting the natural successional processes of grassland, shrubland, or forest development. Displacement of native plant communities can lead to loss of food sources and habitat for wildlife. Invasive plants can also induce drastic changes in ecosystem function by affecting critical elements like soil chemistry, groundwater tables, or the frequency and intensity of wildfires (AKEPIC 2005). Best practices contained in *Preventing the spread of invasive plants: best management practices for land managers* (Cal-IPC 2012) and incorporated into the project.

There are no known cumulative impacts of this proposed use.

Public Review and Comment:

This compatibility determination is posted online for public comment on the Alaska Maritime National Wildlife Refuge website for 1 week at https://www.fws.gov/refuge/Alaska_Maritime/. Hard copies of the draft CD are also available for comment at the Homer and Adak Refuge offices. Comments are also being sought from the Ounalashka Corporation, Akutan Village Corporation, Axtam IRA, the Aleut Corporation and the State of Alaska.

DRAFT Determination:

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

The refuge will assign a staff member to accompany and actively participate in the production of the commercial film while filming on the refuge. The development of a separate MOU means that action considered under this compatibility determination is considered a refuge management economic activity by policy. The Refuge staff member will control access of the film crew and provide expert advice to ensure that all laws, rules, policies and best management practices are followed including:

- Intentional product endorsement and placement within films is prohibited.
- The use of Unmanned Aerial Systems (UAS or drones) is authorized provided that:
 - The use is in direct support of the activity covered by this permit.
 - The Federal Aviation Administration (FAA) has granted permission for commercial UAS use through Section 333 Certificate of Authorization, UAS rule Part 107, or another FAA-approved commercial use mechanism.
 - At the discretion of the Refuge Manager an on-site observer may be necessary, with observer costs to be paid by the applicant.

Prior to using a UAS under this permit, the permittee must:

- Provide the Refuge Manager with a copy of the FAA authorization for commercial operation and conditions.
- Provide advance written notice to the Refuge Manager detailing explicit flight paths, timing, and operational details.
- No UAS use will be allowed in a manner which is likely to cause significant disturbance to wildlife or significant disturbance to other visitors to the Refuge. Airspace above

Refuge lands is under the jurisdiction of the FAA, but any UAS, helicopter, or fixed-wing activities must still comply with laws prohibiting disturbance of marine mammals and take of migratory birds.

- No UAS takeoffs, landings, or filming/recording will be allowed in wilderness unless authorized by the Refuge Manager.
- Your vessel (and any skiffs, boats or aircraft on water) shall not be operated within the three mile buffer zone around any Steller sea lion rookery site per Title 50 Code of Federal Regulations 223.202. No person shall approach on land closer than one-half (1/2) mile or within sight of a listed Steller sea lion rookery. Maps of these Restricted zones can be found at: <https://www.gpo.gov/fdsys/pkg/CFR-2002-title50-vol3/pdf/CFR-2002-title50-vol3-sec223-202.pdf>
- It is illegal to introduce invasive species onto a National Wildlife Refuge ([50 CFR 27.52](#)) and Alaska ([5 AAC 92.141](#)). Best management practices shall be taken so that no invasive plants, insects, or rodents are introduced to refuge islands. In particular, the introduction of rodents (rats or mice) onto islands would be devastating to island resources. The Refuge is developing an invasive species biosecurity plan which will have specific conditions to avoid invasive species introductions. In the interim, specific requirements with respect to invasive species prevention include:
 - Ships and airplanes used for transportation shall be rodent free, and vessels shall initiate rodent prevention measures for the trip.
 - All gear to be taken ashore shall be packed carefully in rodent-proof containers, or sealed such that no rodents can enter without causing visible sign. (e.g., hard sided totes or taped edges of cardboard boxes so rodents would have to chew through to enter).
 - Inspection of gear will be conducted during delivery to a staging area, vessel loading, and off-loading to the refuge island. Suspicious holes in food containers should not be brought to the island until the container is inspected to confirm no pests are inside. Items such as nets and tents shall be shaken out to insure no rodents are present. Rodent capture devices, such as glue boards and snap traps, could be placed around cargo on shore in case rodents have escaped detection.
 - It is especially important to inspect oncoming food especially fresh fruits, vegetables, and grain products for rodents and other signs of pests.
 - Construction materials such as straw wattles (which provide excellent habitat for rodents) require special handling procedures.
 - Revegetation seed mixes should be of Alaskan varieties, approved by the refuge before use.
 - All heavy equipment, vehicles and hand tools must be thoroughly pressure washed prior to loading to remove all mud, vegetation and seeds that might be transported between mainland work sites and islands or inter-island.
 - If plants, rodents or other non-native pests are detected on the island (some refuge islands have known, established populations of rats) you agree to contact the refuge headquarters immediately. If invasive plants or animals are discovered on a refuge island, then early detection and rapid response can increase the likelihood of eradicating the pest species at reduced expense and risk to non-target species. Once a species is already established on an island the refuge can determine its impact on native species and possibly form a plan for its control or eradication if feasible.

Justification:

I find commercial filming by Tandem Stills Motion, Inc. to be compatible with Refuge purposes and the NWRS mission. Effects of commercial filming for “*activities which are educational, informational, advisory, or consultative to other agencies, public, and private entities, visitors, individuals, or the general public,*” are thought to be generally positive under this CD, complimentary to Refuge purposes, and to foster increased public appreciation of Refuge lands and resources. Many Refuge locations are difficult for the public to visit due to expense, distances, costs and adverse field conditions. Commercial filming can often bring this remote region to the public, thus enhancing their appreciation and support for these areas and resources. Additionally, the proposed use does not adversely affect the Refuge’s ability to fulfill its role in the ecosystem or the mission of the National Wildlife Refuge System in any substantial manner. Educational, informational, and advisory filming projects are expected to benefit present and future generations of Americans by increasing their awareness of the many values of their public lands and Refuge resources which few will have the opportunity to see in person

To protect Wilderness areas, commercial filming in Wilderness is managed differently. Any commercial filming must meet the guidelines under Section 4(d)(6) of the Wilderness Act, which states that “*commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas*”. In addition the filming must comply with the provisions of Service policy 610 FW 2, and Alaska-specific Service policy 610 FW 5. A Minimum Requirements Analysis would be completed to determine if the proposed use is necessary for the administration of the Wilderness, and if so, to determine the best way to allow the use causing the least affect to Wilderness character.

The proposed use would not materially interfere with or detract from the Alaska Maritime NWR's purpose to conserve fish and wildlife populations and habitats in their natural diversity including but not limited to marine mammals, marine birds and other migratory birds, the resources upon which they rely, bears, caribou and other mammals. Although there could be minimal, short-term, localized disturbance or displacement of wildlife, the effects to fish and wildlife populations do not rise to the level of incompatibility and are manageable with an on-site Refuge monitor present during filming.

The proposed use does not materially interfere with or detract from the Alaska Maritime NWR's purpose to fulfill international treaty obligations of the United States with respect to fish and wildlife and their habitats. There would be no known loss of migratory bird, terrestrial or marine mammal habitat from this activity.

The proposed use does not materially interfere with or detract from the Alaska Maritime NWR’s purpose to provide the opportunity for continued subsistence uses by local residents. An ANILCA Section 810 analysis of the effects of the proposed use on subsistence opportunities would be completed.

The proposed use does not materially interfere with or detract from the Alaska Maritime NWR’s purpose to provide a program of national and international scientific research on marine resources. In this case, the intent of the proposed use is to highlight this scientific research and a positive justification to allow the use.

The proposed use does not materially interfere with or detract from the Alaska Maritime NWR's purpose to ensure water quality and necessary water quantity within the Refuge. Although some commercial filming activities may occur on and near Refuge waters, there are no anticipated effects to either the

quality of quantity of water on the Refuge.

In addition, the proposed use does not materially interfere with or detract from the Alaska Maritime NWR's additional purposes from the pre-ANILCA refuges or special lands and waters.

After fully considering the impacts of this activity, it is my determination that this use will not materially interfere with or detract from the purposes of the Refuge or the mission of the NWRS. These activities will remain compatible with the implementation of the listed stipulations.

Supporting Documents:

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- Andersen, S. M., J. Teilmann, R. Dietz, N.M. Schmidt, and L.A. Miller. 2012. Behavioral responses of harbor seals to human-induced disturbances. *Aquatic Conservation: Marine and Freshwater Ecosystems* 22:113-121.
- Burger, J. 1981. Effects of human disturbance on colonial species, particularly gulls. *Colonial Waterbirds* 4: 28-36.
- Byrd, G.V., D.I. Moriarty, and B.G. Brady. 1983. Breeding biology of Wedge-tailed shearwaters at Kilauea Point, Hawaii. *Condor* 85: 292-296.
- Cal-IPC. 2012. Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers (3rd ed.). Cal-IPC Publication 2012-03. California Invasive Plant Council, Berkeley, CA. Available at www.cal-ipc.org
- Carney, K.M. and W.J. Sydeman. 1999. A Review of Human Disturbance Effects on Nesting Colonial Waterbirds. *Waterbirds* 22(1): 68-79.
- Department of the Interior. 2013. Commercial filming and similar projects and still photography activities. 43 CFR 5. Federal Register Vol. 78, No. 163 Thursday, August 22, 2013. Pp 52087-52097.
- Fritts, E.I. 2007. Wildlife and People at Risk: A Plan to Keep Rats Out of Alaska. Alaska Department of Fish and Game. Juneau Alaska. 190 pp.
- Island Conservation. 2006. Evaluation of Primary and Secondary Exposure Risks to Land Bird Species for: Experimental Use Permit Application for Field Efficacy Trial of 0.0025% Brodifacoum Broadcast Bait to Eradicate Introduced Rats from Aleutian Islands in the Alaska Maritime National Wildlife Refuge, July 20, 2006. Island Conservation, Center for Ocean Health, 100 Shaffer Rd, Santa Cruz, CA 95060.17 pp)
- U.S. Fish and Wildlife Service. 1988. Alaska Maritime National Wildlife Refuge Final Comprehensive Conservation Plan, Wilderness Review and Environmental impact Statement. U.S. Fish and Wildlife Service, August 1988. Anchorage, Alaska, USA.
- U.S. Fish and Wildlife Service. 2018. Guidelines for preventing the spread of aquatic invasive species –

management protocols. Anchorage Alaska. 22pp.

U.S. Government. 1964. Public law 88-577. *The Wilderness Act*. 16 U.S.C. 1131-1136.

U.S. Government. 2000. Public Law 106-206. To allow the Secretary of the Interior and the Secretary of Agriculture to establish a fee system for commercial filming activities on federal land and for other purposes. 114 Stat 315. 26 May 2000.

Wilson, K., L. Fritz, E. Kunisch, K. Chumbley, D. Johnson. 2011. Effects of research disturbance on the behavior of Steller sea lions (*Eumetopias jubatus*) at two rookeries in Alaska.

Refuge Determination:

Refuge Manager: _____
(Signature & Date)

Concurrence:

Regional Chief: _____
(Signature & Date)