

July 30, 2009

Dr. Jane Lubchenco
Under Secretary for Oceans and Atmosphere
National Oceanic and Atmospheric Administration (NOAA)
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via fax/email

**RE: proposed designation of Unimak Pass and Bering Strait, Alaska as
National Marine Sanctuaries and Particularly Sensitive Sea Areas (PSSAs)**

Dear Dr. Lubchencho,

First, let me congratulate you on your appointment as NOAA Administrator. Many of us are hopeful that you will bring bold, new thinking to the many critical challenges facing our oceans, and in particular that you will advance a long-overdue national policy of ocean conservation and sustainability.

Toward that goal, I would like to respectfully suggest that you initiate a comprehensive assessment of all of our nation's seas for potential designation of new Marine Protected Areas. There are many special marine regions in U.S. waters that deserve additional protection, and I am hopeful that your administration can move this important effort forward.

In particular, I would like to recommend two particularly important marine ecological regions in Alaska for their inclusion in the National Marine Sanctuary network, as well as designation as Particularly Sensitive Sea Areas (PSSAs): Unimak Pass and Bering Strait. These two passes comprise much of the oceanographic and ecological connection - an umbilicus - between the Gulf of Alaska, the Bering Sea, and the Arctic Ocean.

Unimak Pass and Bering Strait host some of the most important migratory corridors for marine wildlife anywhere in the world ocean, and can be looked at as "marine ecological gateways." Most of the migration of whales, seals, walrus, birds, and fish between these three seas pass seasonally through these two restricted marine corridors, which also provide critical habitat for a number of marine species. Both regions also host important archaeological and cultural resources.

Just as these areas are important corridors for marine wildlife, they are also used extensively for maritime commerce. Much of the trans-Pacific shipping between North America and Asia travels the Great Circle Route through Unimak Pass (over 4,500 transits / year), and all of the ship traffic between the Pacific and Arctic Ocean transits the Bering Strait. With reduced sea ice in coming years, arctic shipping through Bering Strait is expected to increase dramatically. And these regions have some of the most severe weather in the world, adding to the risk of ship casualties.

To recognize and protect the extraordinary ecological importance of these two areas, I encourage you to assess both Unimak Pass and the Bering Strait for designation as National Marine Sanctuaries (or Marine National Monuments). Bering Strait should be considered for designation as an International Marine Sanctuary/Monument, to be co-managed with our neighbor Russia. The government of the Russian Federation and Chukotka should be invited to establish a similar sanctuary for marine waters on their side of the Strait, to be managed consistently with the U.S. designation.

And any such Marine Sanctuary/Monument designation in these waters must seek prior and informed consent by coastal indigenous peoples in the regions, and incorporate protections for their customary and traditional subsistence use of marine resources. As well, it would be good to work with the State of Alaska to include state waters in the protected areas.

In addition, to address the very real and immediate risk posed by international shipping through these straits, I encourage you to nominate these two critical passes as *Particularly Sensitive Sea Areas* (PSSAs) under the U.N. International Maritime Organization (IMO) regime. As you know, the Florida Keys were designated a PSSA in 2002, and the Papahānaumokuākea Marine National Monument was designated in 2007. PSSA designation would require close collaboration with the U.S. Coast Guard working with the IMO process. The Coast Guard is well aware of the risks from shipping through these two passes.

These critical waterways deserve designation as both National Marine Sanctuaries (or Monuments) and PSSAs, as each such designation provides somewhat different and complementary management tools. A PSSA alone will not afford sufficient authority to manage the full range of unique ecological resources in the regions, and the marine sanctuary designation alone will not afford adequate authority with which to manage international shipping. Thus, the tandem designation seems prudent.

Unimak Pass

Unimak Pass is about 18 km wide at its narrowest, and generally less than 100 m deep. Land on Unimak Island is protected as wilderness in the Alaska Maritime Wildlife Refuge, but the rich marine waters offshore remain unprotected. Most of the Alaska Coastal Current moves from the Gulf of Alaska through Unimak Pass into the Bering Sea, and areas of convergences, divergences, and upwelling are present in the region. The area is important for zooplankton (euphausiids and copepods), squid, and forage fish, particularly young-of-the-year Pollock and lanternfishes.

But clearly the greatest ecological importance of Unimak Pass is as a migratory corridor for marine mammals and seabirds. Tens of thousands of marine mammals transit Unimak Pass seasonally, including gray, fin, humpback, minke, sei, and sperm whales, the critically endangered North Pacific Right whale, killer whales, Baird's beaked whales, Steller sea lions, harbor seals, Dall's porpoise, northern fur seal, and sea otter.

One study (Braham 1982, cited by LGL 1991) concluded the following:

“The diversity and seasonal abundance of marine mammals that occur in and adjacent to Unimak Pass and along the continental slope can be found in no other part of Alaska and perhaps the world.”

Thus, Unimak constitutes a globally significant habitat for marine mammals. Regarding vulnerability of the Unimak Pass marine ecosystem, LGL 1991 concluded that:

“An oil spill in Unimak Pass could potentially impact major portions of regional populations of some species. Major portions of populations of humpback, fin, and gray whales and northern fur seals move seasonally through the pass. Indeed, gray whale passage through the Aleutian Chain appears to be restricted to Unimak Pass itself, though humpback and fin whales also use other Aleutian passes. A spill large enough to significantly oil waters of the pass in spring or late fall could expose great numbers of fur seals and gray whales to hydrocarbon contaminants. Mortalities of fur seals during these periods would likely be high.”

Due to the water currents from the pass into the Bering Sea, a spill at Unimak could spread widely across the southeastern Bering Sea ecosystem. In December 2004, the Malaysian bulk freighter *Selendang Ayu* lost engine power and grounded on Unalaska Island after having transited Unimak Pass the previous day. The grounding cost the lives of six crew, and caused one of the worst oil spills in U.S. history. Had the ship lost power and grounded at Unimak and during spring or fall, the ecological injury could have been far worse.

Unimak is also important for seabirds, including auklets, shearwaters, fulmars, murre, kittiwakes, puffins, cormorants, gulls, sea ducks, albatross, and storm petrels. There are approximately 50 seabird colonies on islands in the pass, some with over 100,000 breeding birds. LGL, 1991 concluded the following with regard to seabirds of Unimak Pass:

“Unimak Pass is one of the major migration corridors for bird populations entering and leaving the Bering Sea (Strauch and Hunt, 1982, Thorsteinson, 1984).”...”The abundance of birds in the Unimak area is so large and regionally

important that potential impacts in this area (resulting from increased vessel traffic) area listed as being of concern even for developments spatially removed, such as the Navarin Basin. An estimate of 1.1 million shearwaters in the pass has been made in the fall (see Armstrong et.al. 1984). The mean density of all species using the pass in summer was estimated by Strauch and Hunt (1982) to be 224 birds/km² or 720,000 birds in the pass area. Hunt et.al. (1982) identified the Unimak Pass area as one of the regions in the southeastern Bering Sea with consistently high densities of seabirds and thus potentially of great sensitivity with respect to oil spills.”

Geographic boundaries for the Sanctuary will need to be carefully designed based on ecological parameters, but for discussion purposes, I would suggest that the Unimak Pass National Marine Sanctuary / PSSA extend from 54 N – 55 N, and 164 E – 167 E. This should include the area between Unimak Island and Unalaska Island, the pass itself, and the Krenetzin Islands.

Bering Strait

The Bering Strait is approximately 85 km across at its narrowest, and is very shallow, with average depth of only 30 - 50 m. The area is renowned as the Bering Land Bridge that connected North America to Asia during periods of ice age glaciations. For much of the year now, the area is covered by drifting sea ice offshore and shore fast ice along coastlines and in bays. As it moves north in spring and south in fall, the marginal ice edge is important habitat for a number of marine species, including primary producers, marine mammals and seabirds. While much of the land on both sides of Bering Strait is in protected status, the marine waters in between are not. The U.S. National Park Service manages a Shared Beringian Heritage Program to facilitate cultural and archeological commonalities over an extensive area between Chukotka and Alaska, and has been working (for over 20 years) to establish a Beringian Heritage International Park to jointly manage protected lands on both sides of the Bering and Chukchi Seas. The proposed international park however would not apply to the marine waters of the region, and thus would not accomplish the marine protections suggested herein.

All of the marine mammals that migrate seasonally between the Bering Sea and Arctic Ocean transit the Bering Strait, amounting to tens of thousands of individuals. Krupnik and Bogoslovskaya (1998) report that over 20 species of marine mammals use the region. This includes most of the entire population of Pacific walrus (currently proposed for listing under the ESA), and Bowhead whale. Other dominant marine mammal species in the region include bearded seal, ringed seal, spotted seal, ribbon seal, polar bear, gray whale, beluga whale, and to a lesser extent, humpback and fin whales. The strait is also an important migratory corridor for birds (including kittiwakes, murre, auklets, brant, snow geese, cranes, eiders, and sea ducks,) and forage fish.

And, all of the shipping between the Arctic Ocean and Pacific Ocean transits Bering Strait. This includes barge traffic to Arctic oil fields and coastal communities, ore freighters to and from the port for the Red Dog mine near Kivalina, cruise ships, research vessels, and naval submarines. As the Arctic sea ice continues to recede due to climate change, it is projected that additional merchant shipping will use Bering Strait to access either the Northern Sea Route across Russia or the Northwest Passage across Canada. Proposed offshore oil and gas development in the Arctic would also increase ship traffic through the Strait (Arctic Marine Shipping Assessment, 2009).

Establishing the Bering Strait International Marine Sanctuary (or Monument) would provide the unique opportunity to partner with neighboring Russia to jointly manage a trans-boundary marine protected area, and would integrate well with the proposed Beringian Heritage International Park for land on each side. For discussion purposes, the Bering Strait International Marine Sanctuary (or Monument) should extend, given Russian participation, from about 64 N – 67 N (the Arctic Circle), and 167 E – 171 E, across the International Dateline to the Chukotka coast.

Managing Shipping Risks at Unimak Pass and Bering Strait

To date, there is little protection from ship casualties and oil spills in these two passes. These restricted waterways have limited vessel tracking, no established traffic lanes, no vessel traffic system, no speed limits, no mandatory pilotage, no weather and/or ice transit restrictions, inadequate or no tug rescue capability, and extremely limited spill response capability. Many in the ship safety community feel that Unimak and Bering Strait are ship disasters waiting to happen, and this risk needs to be addressed immediately. As a result of the Exxon Valdez oil spill, we seem to have learned our lesson in Prince William Sound, where there is now a state-of-the-art vessel traffic system, including 10 high-powered tugs on standby and in escort of tankers (for about 1 tanker transit / day). But we have yet to apply this hard-learned lesson at Unimak and Bering Strait, with considerably more traffic. And in addition to the immediate risk of oil and other hazardous cargos spills, there are risks from ship strikes of marine mammals, underwater noise from ships, and introduction of invasive species.

An Aleutian Vessel Traffic Risk Assessment will be conducted over the next few years, which will include an assessment of shipping risks at Unimak Pass. A similar Risk Assessment should be conducted for Bering Strait. Regardless, such detailed risk assessments will take years to complete, and years more to implement risk reduction recommendations that are identified. Until the recommendations from these assessments are fully implemented (likely not before 2015 at earliest), I encourage you to work with the U.S. Coast Guard to develop and implement an *Interim Protection Plan* for both waterways.

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This should include real-time vessel tracking of all traffic in the passes, upgraded spill response capability, and a chartered rescue tug to be on standby at both places – all reasonable and achievable objectives that will almost certainly be called for by the full risk assessments. Please note that most of the foreign flagged ships transiting these straits are not, as is often assumed, on “innocent passage,” as they usually call at U.S. ports along the west coast. Thus, the U.S. government does have authority and responsibility, under its Area Contingency Plan protocol, to regulate this foreign flagged transit traffic.

To fund the Interim Protection Plans for Unimak and Bering Strait, I would encourage the administration to work with Congress to clarify rules for use of the Oil Spill Liability Trust Fund (OSLTF) to enable its use for such reasonable prevention measures. This would mean that the plans could be funded at no cost to the federal budget, and create some jobs in the process. As well, it would be appropriate to encourage Congress to impose a reasonable assessment on cargo (non-tank) vessels to contribute to the OSLTF, as these ships are currently covered by the Fund but do not contribute to it.

In closing, I will reiterate that these two passes are globally significant marine ecological corridors, globally significant shipping routes, and are currently woefully unprotected from ship casualties, oil spills, and other risks. The land bordering these passes is largely in protected status, but the marine ecosystem is not. And as the terrestrial and marine systems are intimately connected, these areas lack comprehensive protection.

I urge you and your staff to methodically and thoroughly assess this proposal, in close collaboration with the U.S. Coast Guard, State of Alaska, the government of the Russian Federation, and coastal indigenous peoples in the respective regions. After your assessment, I trust that NOAA will move expeditiously to implement the designations as proposed. I would be glad to assist your staff in this process.

I look forward to hearing from you, and I wish you well on addressing the many important challenges in managing our oceans.

Sincerely,



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