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Protecting Alaska’s Coastal Ecosystems: The Story of the Cook Inlet Belugas

Rosemary D. Boelens[†]

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I. INTRODUCTION

“If you walked one thousand miles a year, it would take forty-four years to hike Alaska’s coastline.”¹ Along the way, you would experience pristine coastal habitat, ranging from massive looming cliffs to rivers winding lazily through lush green valleys to long stretches of barren mudflats. A traveler would also encounter a myriad of important species including: “Salmon, Dolly Varden, char, and whitefish; Sitka black-tail deer, and moose; clams, crabs, and shrimp; waterfowl, shorebirds, and seabirds; beluga whale, bowhead whale, seal species, and walrus; berries, herbs, grasses, and other plants....”² Finally, you would find yourself in the midst of many of Alaska’s most productive industries, including timber, mining, fishing, and oil and gas extraction.³ The coastal zone stretches far inland in some places,⁴ increasing the vastness of Alaska’s coastal zone even beyond the sheer length of the perimeter.

All of these features combine to make Alaska’s expansive coastal zone both locally and nationally significant.⁵ At a local level, the resource rich habitats are ideal foundations on which to build communities. In fact, three-fourths of Alaska’s population lives in coastal communities.⁶ The coastal lands and waters “are the sources of community, family, and individual sustenance.... Alaska Native peoples understand that they would not exist as peoples, communities, and cultures without them.”⁷ These local communities possess a vast knowledge of the coastal zone, which the State took into consideration during land management planning under the Alaska Coastal Management

1. *Explore Alaska’s Coast, Alaska Coastal Management Program*, DEP’T OF NATURAL RES., <http://www.alaskacoast.state.ak.us/Explore/Tourintro.html>, (last visited Mar. 30, 2012).

2. Julie Hammonds Penn, *How the Alaska Coastal Management Program Responds to the Subsistence Needs of Alaskans*, 17 INT’L CONF. COASTAL SOC’Y 298, <http://nsgl.gso.uri.edu/oresu/oresuc00002/pdf/papers/050.pdf>.

3. *Explore Alaska’s Coast*, *supra* note 1.

4. Alaska’s coastal zone is defined by many different things, not simply “proximity to marine coastal water.” Penn, *supra* note 2, at 297; *see also infra* notes 178-80 and accompanying text.

5. *Explore Alaska’s Coast*, *supra* note 1.

6. *Id.*

7. LIBBY RODERICK, ALASKA NATIVE CULTURES AND ISSUES: RESPONSES TO FREQUENTLY ASKED QUESTIONS 33 (2010).

Plan (ACMP), a state statute enacted on June 4, 1977, pursuant to the Federal Coastal Zone Management Act (CZMA).⁸

The CZMA was passed to provide comprehensive management of the nation's coastal resources and to balance "economic development with environmental conservation."⁹ It also created incentives for states to participate. This program calls for state and federal cooperation, integrated planning, and cooperative development for all projects affecting the coastal zone. Alaska opted into the program, and subsequently passed the Alaska Coastal Management Act (ACMA), which established the ACMP.¹⁰ The ACMP provided robust environmental protections for the coastal zone and ensured Alaska a voice in protecting the coastal zone's communities, natural resources, and uniquely pristine ecosystems, as will be discussed throughout this article.

One significant aspect of the ACMP was that it provided substantial protections for Alaska's unique and vulnerable coastal habitats through robust environmental protection provisions. These protected habitats included the critical habitat of the endangered Cook Inlet beluga whales. The Cook Inlet beluga whales were listed as endangered in 2008 after a long history of population decline.¹¹ The State, however, opposed the listing, believing that the environmental protections afforded by the ACMP were sufficient to arrest the population decline of the species. In fact, when the State of Alaska formally challenged the listing of the Cook Inlet belugas one reason it cited was the robust regulatory protections of the ACMP.¹²

Unfortunately, not only were these regulatory protections inadequate to protect the Cook Inlet beluga population, but the protections that did exist disappeared when the ACMP expired on July 1, 2011.¹³ The Alaska House of Representatives voted down the bill that

8. DIV. OF COASTAL & OCEAN MGMT., ACMP HANDBOOK OF STATUTES AND REGULATIONS A5 (2005), available at <http://alaskacoast.state.ak.us/Clawhome/handbook/panels/A.htm> [hereinafter ACMP HANDBOOK].

9. *About the Coastal Zone Management Act*, OCEAN & COASTAL RES. MGMT., http://coastalmanagement.noaa.gov/czm/czm_act.html (last visited Mar. 4, 2012).

10. ACMP HANDBOOK, *supra* note 8, at A5.

11. *See infra* part II. C.

12. Plaintiff State of Alaska's Memorandum of Points and Authorities Supporting its Motion for Summary Judgment at 10, *Alaska v. Lubchenko*, 825 F. Supp. 2d 209 (D.D.C. 2011) (No. 1:10-cv-00927-BAH).

13. The ACMP included an automatic sunset provision that required affirmative action on the part of the legislature to renew the State's participation in the program. The legislature failed to pass the requisite legislation to extend the program by the close of a special legislative session on May 14, 2011. *Alaska Coastal Management Program*, ALASKA DEP'T OF NATURAL RES., <http://www.alaskacoast.state.ak.us/> (last visited Apr. 8, 2012).

would have renewed the Coastal Management Program at the close of the special session in May of 2011. The loss of the ACMP represents a loss of one of the State's most powerful tools used to ensure a local voice in development projects located in the coastal zone. It also represents a loss of powerful state habitat protection and oil spill prevention standards that were enforceable for both state and federal projects. Even if the regulations promulgated pursuant to the ACMP were robust enough to protect the state's precious resources in the face of coastal development, the regulations disappeared in the midst of a political battle when the program sunset.¹⁴

While Alaska has a legitimate interest in protecting and regulating its own coastline and its own coastal resources, the environmental protections that were lost with the sunset of the ACMP were not sufficient. Something as important as protecting coastal habitat needs to be managed under a more robust system that is not subject to sunset in the event that the ACMP comes back and disappears again. Protections for Alaska's coastal ecosystems should be strengthened through legislative action or alternatively a citizen's initiative. Stronger protections should be promulgated as regulations under the ACMP—in the event that the legislature reinstates the program—to ensure federal compliance with the state's ecosystem protection provisions and to ensure the survival of species such as the Cook Inlet belugas.

The story of the Cook Inlet beluga's listing under the Endangered Species Act illustrates the need for enhanced coastal protection. This article first discusses that listing process, focusing on the State's argument that adequate protection has already been implemented, partially through the habitat protections under the ACMP. Then, the history of the ACMP will be outlined and analyzed, and the regulations that were in place at the time of the beluga listing will be discussed in detail. This discussion will highlight the inadequacies of the program and the need for more protection. This article concludes with an example of what this robust protection might look like.

II. COOK INLET BELUGA LISTING: AN EXAMPLE OF WHY ALASKA NEEDS SUBSTANTIVE LEGISLATION TO PROTECT COASTAL ECOSYSTEMS

Belugas are an important part of the coastal ecosystem and of the Alaska Native subsistence lifestyle. The belugas also illustrate the necessity of having strong coastal habitat protections. All five of the

14. Rep. Les Gara, *State Gave Away a Bit of its Sovereignty*, ANCHORAGE DAILY NEWS, July 2, 2011, <http://www.adn.com/2011/07/02/1948677/state-gave-away-a-bit-of-its-sovereignty.html#storylink=misearch>.

distinct stocks of beluga whales are found in Alaska,¹⁵ including the most isolated stock—the Cook Inlet beluga.¹⁶ The Cook Inlet is a large glacial fjord in South Central Alaska that spans 180 miles of some of Alaska's most populated and industrial coastline.¹⁷ The Cook Inlet beluga is currently listed as endangered under the Endangered Species Act (ESA) and depleted under the Marine Mammal Protection Act (MMPA).¹⁸

A. Beluga Background

Beluga whales, known for their characteristic white coloring, are one of the most unique species of whales. Belugas are small, white-toothed whales that can range in size from twelve- to sixteen-feet long. One way that Belugas are unique among whale species is that they are exceptionally adapted to life in shallow coastal areas; they can move their heads up, down, and side to side, which is likely an “adaptation to maneuvering and catching prey in muddy or ice-covered areas.”¹⁹ Belugas are also unique in the fact that they shed their outer layer of skin once a year, normally around July.²⁰ Belugas are extremely social mammals; they typically travel and hunt in large groups that can range from ten to several hundred.²¹ These social mammals are “known as the canaries of the sea, because they produce a vast repertoire of sounds including whistles, squeals, moos, chirps, and clicks.”²² While belugas eat a variety of fish species, they generally will eat whatever is most

15. *Beluga Whale*, NOAA FISHERIES OFFICE OF PROTECTED RES., <http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/belugawhale.htm> (last visited Apr. 7, 2013) (the five stocks are: Cook Inlet, Bristol Bay, Eastern Bering Sea, Eastern Chuckchi Sea, Beaufort Sea).

16. *Id.*

17. Cities located along the Cook Inlet include: Seldovia, Homer, Ninilchik, Soldotna, Kenai, Hope, Portage, Girdwood, Anchorage, Tyonek, and Beluga. See *Cook Inlet and Kenai Peninsula, Alaska, Environmentally Sensitive Areas: Winter (December-March)*, NOAA FISHERIES, <http://www.asgdc.state.ak.us/maps/cplans/cook/PDFS/WINTER.PDF> (last visited Apr. 5, 2013). Additionally, the Cook Inlet is home to several oil and gas extraction operations, shipping routes, the State's largest port, and two of the State's military bases. See *Development Projects in Cook Inlet Beluga Habitat, Cook Inlet Beluga Whales*, NAT'L MARINE FISHERIES SERV., ALASKA REG'L OFFICE, <http://alaskafisheries.noaa.gov/protectedresources/whales/beluga/development.htm> (last visited Apr. 5, 2013).

18. *Beluga Whale*, supra note 15.

19. *Id.*

20. *Id.*

21. *Id.*

22. *Id.*

common.²³ For the Cook Inlet belugas, this means salmon, octopuses, crabs, squid, and snails.²⁴

Belugas can adapt to a variety of environments, but generally prefer shallow coastal waters.²⁵ In the Cook Inlet, Belugas tend to concentrate near river mouths throughout the upper portion of the Cook Inlet for much of the year, which exposes them to the most industrialized and populated coastal areas in Alaska.²⁶ As a result, those areas that are most important for their survival and well-being are located within the coastal zone and within the former reach of the expired ACMP.²⁷

Although historically Cook Inlet beluga populations have fluctuated between 500 and 2,000 animals, the population experienced a sharp and alarming decline between 1994 and 1998.²⁸ According to surveys conducted by the National Marine Fisheries Service (NMFS), the estimated population of Cook Inlet belugas dropped nearly 50 percent in just four short years—from 653 animals in 1994 to only 347 in 1998.²⁹ Alaska Native subsistence harvest was identified as the main cause of this dramatic population decline.³⁰ Alaska Native hunters estimated that during the four years of population decline, the average number of whales harvested annually was sixty-seven animals.³¹ NMFS expressed concern that this level of subsistence harvest exceeded the sustainable removal level for the beluga population.³²

While subsistence harvest was the main factor identified by NMFS as the cause of the beluga's initial sharp population decrease,³³ the lack

23. *Beluga Whale*, DEFENDERS OF WILDLIFE, http://www.defenders.org/wildlife_and_habitat/wildlife/beluga_whale.php (last visited Mar. 4, 2012).

24. *Cook Inlet Beluga Whale*, CTR. FOR BIOLOGICAL DIVERSITY, http://www.biologicaldiversity.org/species/mammals/Cook_Inlet_beluga_whale/natural_history.html (last visited Apr. 8, 2012).

25. *Beluga Whale*, *supra* note 15.

26. Regulations Governing the Taking and Importing of Marine Mammals; Threatened Fish and Wildlife; Cook Inlet Belugas, 63 Fed. Reg. 64228, 64229 (Nov. 19, 1998).

27. See *Cook Inlet Beluga Critical Habitat*, NOAA FISHERIES OFFICE OF PROTECTED RES., http://www.nmfs.noaa.gov/pr/pdfs/criticalhabitat/belugawhale_cookinlet.pdf (last visited Apr. 5, 2013).

28. Regulations Governing the Taking and Importing of Marine Mammals; Endangered and Threatened Fish and Wildlife; Cook Inlet Beluga Whales, 65 Fed. Reg. 38,778, 38,779 (June 22, 2000).

29. *Id.*

30. NAT'L OCEANIC & ATMOSPHERIC ADMIN., NAT'L MARINE FISHERIES SERV., ALASKA REGION, SUBSISTENCE HARVEST MANAGEMENT OF COOK INLET BELUGA WHALES, FINAL ENVIRONMENTAL IMPACT STATEMENT, ii-iii (2003), <http://www.fakr.noaa.gov/protectedresources/whales/beluga/eis2003/final.pdf>.

31. Additionally, between 1995 and 1996, the estimated annual harvest was ninety-seven whales per year. *Id.* at 1.

32. Regulations Governing the Taking and Importing of Marine Mammals; Threatened Fish and Wildlife; Cook Inlet Belugas, 63 Fed. Reg. 64,228, 64,229 (Nov. 19, 1998).

33. "[T]he subsistence harvest can account for the decline of the stock during that interval. Therefore, NMFS agrees that a failure to restrict the subsistence harvest would likely cause [Cook

of recovery that motivated NFMS's decision to list the whales under the ESA can be attributed to many things, including increasing human activity and development in the Cook Inlet.³⁴ These anthropogenic threats include "shipping, oil and gas production and transport, indirect and direct adverse effects from commercial fishing gear (e.g., gillnets) and operations, pollution, habitat destruction and alteration, harassment due to increasing commerce and recreation in Cook Inlet, and noise."³⁵

Many of these growing threats could have been managed under the ACMP. State and federal projects alike would have had to conform to any habitat protection regulations that were promulgated pursuant to the ACMP. The regulations under the recently lost ACMP would have required project proponents to avoid and minimize impacts to important beluga habitat, protect subsistence uses of the belugas, and choose project sites that would minimize probability of petrochemical spills.³⁶ Although these regulations would have provided some protections to belugas and their habitat, they were lost when the State chose to no longer participate in the federal CZMA program. These lost protections, even in combination with other state conservation programs, however, were still not enough to protect the Cook Inlet belugas from an endangered listing under the ESA.

B. Cultural Significance and Local Knowledge of Cook Inlet Belugas

One provision of the now expired ACMP would have protected the continued use of the Cook Inlet beluga for subsistence purposes.³⁷ "Subsistence" encompasses sustenance, social and religious values, and ties to custom and tradition.³⁸ "For Alaska Natives, subsistence lies at the heart of culture, the truths that give meaning to human life of every kind. Subsistence enables the Native peoples to feel at one with their ancestors, at home in the present, [and] confident of the future."³⁹ Typical subsistence activities include hunting, fishing, and gathering; sharing the fruits of their labor with the community; and celebrations that accompany various activities and rituals.⁴⁰

Inlet] beluga whales to become in danger of extinction in the foreseeable future." 65 Fed. Reg. at 38,783.

34. *Beluga Whale*, *supra* note 15; Endangered and Threatened Species; Endangered Status for the Cook Inlet Beluga Whale, 73 Fed. Reg. 62,919, 62,927 (Oct. 22, 2008).

35. *Beluga Whale*, *supra* note 15.

36. *See infra* part III.C.

37. ALASKA ADMIN. CODE tit. 11 § 112.270 (2011).

38. DAVID S. CASE & DAVID A. VOLUCK, ALASKA NATIVES AND AMERICAN LAWS 258-59 (2d ed. 2002).

39. *Id.* at 257 (quoting T.R. BERGER, VILLAGE JOURNEY: REPORT OF THE ALASKA NATIVE REVIEW COMMISSION 55 (1995)).

40. *Id.* at 258.

The subsistence provisions under the ACMP would have protected subsistence uses of the Cook Inlet Belugas, which are culturally important to many Alaska Natives who make up the surrounding coastal communities. The native village of Tyonek, for example, has a close cultural tie to beluga whales.⁴¹ Tyonek is located in the upper Cook Inlet, and is accessible only by boat or plane.⁴² The Dena'ina Athabascans of Tyonek have occupied the Cook Inlet area for several hundred years, and the village is home to approximately 200 residents, who "participate in traditional subsistence fishing, gathering, and hunting activities, including the hunting of beluga."⁴³ Without beluga hunting, the community faces added economic stress because they can no longer rely on the beluga oil, blubber, and meat.⁴⁴

In addition to providing a nutritional food source, beluga whales are socially and culturally important to the people of Tyonek.⁴⁵ Beluga hunting provides the community with a way to pass on skills to younger generations, a way to strengthen cultural identity through participation in a traditional activity, and a way to unite the community.⁴⁶

Because of these close ties with the whales, coastal communities like Tyonek have a wealth of traditional knowledge about the species and their environment. For example, the people of Tyonek are highly knowledgeable about the belugas' environment, abundance, distribution, migration, health, and habitat,⁴⁷ as well as the factors that have contributed to the population decline.⁴⁸ Residents noted how belugas responded to boats, predators, and human hunters,⁴⁹ as well as "increased shark populations, expanded northern pike distribution, more frequent killer whale sightings, and increased siltation leading to mudflat expansion."⁵⁰ This traditional and observational knowledge "is a valuable tool for scientists attempting to understand changes in the Cook Inlet environment . . . especially...in the context of declining Cook Inlet beluga whale populations."⁵¹

41. STEPHEN R. BRAUND & ASSOCIATES, RELATIONSHIP BETWEEN THE NATIVE VILLAGE OF TYONEK, ALASKA AND BELUGA WHALES IN COOK INLET, ALASKA, SUBMITTED TO NOAA FISHERIES iii (2011), available at <http://www.fakr.noaa.gov/protectedresources/whales/beluga/report/s/tyonekbelugarpt0611.pdf> [hereinafter Tyonek Report].

42. *Id.* at 9.

43. *Id.* at 6.

44. *Id.* at 52.

45. *Id.* at 51 ("when residents do not have beluga, they are 'starving for it.'").

46. *Id.* at 51.

47. *Id.* at 63.

48. *Id.* at 64.

49. *Id.* at 63.

50. *Id.* at 64.

51. *Id.*

C. Cook Inlet Beluga Listing Process

Both the state and federal governments have tried different strategies to protect the belugas, but ultimately the federal government listed them as an endangered species under the ESA. The listing process for the Cook Inlet belugas has been a long ordeal, spanning thirteen years.⁵²

After the whales experienced a sharp population decline between 1994 and 1998, NMFS initiated a status review to determine what conservation action was appropriate.⁵³ NMFS determined that the sole factor leading to the decline was the subsistence harvest and decided that the most appropriate action was to list the whales as “depleted” under the Marine Mammal Protection Act (MMPA).⁵⁴ This decision was challenged by conservation groups and upheld in federal district court.⁵⁵ Five years later, NMFS initiated yet another status review to address the still declining population of the Cook Inlet belugas.⁵⁶ This time, however, NMFS found that an ESA listing was warranted, and listed the whales as “endangered” in 2008.⁵⁷ This decision was challenged by the State of Alaska and upheld in federal district court.⁵⁸

In order for NMFS to list the Cook Inlet belugas as endangered or threatened under the ESA,⁵⁹ it has to satisfy at least one of the five statutory factors listed in Section 4.⁶⁰ If any one of the statutory factors is present, NMFS must list the whales as endangered or threatened.⁶¹

52. The thirteen year ordeal began with a status review in 1998, Regulations Governing the Taking and Importing of Marine Mammals; Threatened Fish and Wildlife; Cook Inlet Beluga Whales, 63 Fed. Reg. 64,228 (Nov. 19, 1998), and concluded with a federal district court upholding NMFS's decision to list the whales as endangered in 2011, *Alaska v. Lubchenko*, 825 F. Supp. 2d (D.D.C. 2011).

53. 63 Fed. Reg. at 64,228.

54. Designating the Cook Inlet, Alaska, Stock of Beluga Whale as Depleted Under the Marine Mammal Protection Act (MMPA), 65 Fed. Reg. 34,590, 34,690 (May 31, 2000).

55. *Cook Inlet Beluga Whale v. Daley*, 156 F. Supp. 2d 16 (D.D.C. 2001).

56. Endangered and Threatened Wildlife and Plants: Announcement of Initiation of a Status Review of the Cook Inlet Beluga Whale under the Endangered Species Act (ESA), 71 Fed. Reg. 14,836 (Mar. 24, 2006).

57. Endangered and Threatened Species; Endangered Status for the Cook Inlet Beluga Whale, 73 Fed. Reg. 62,919 (Oct. 22, 2008).

58. *Alaska v. Lubchenko*, 825 F. Supp. 2d 209 (D.D.C. 2011).

59. A species is “endangered” when it is in “danger of extinction throughout all or a significant part of its range,” and it is “threatened,” when it is “likely to become an endangered species within the foreseeable future.” 16 U.S.C. §§ 1532(6), (20) (2012); 16 U.S.C. § 1533(c) (2012).

60. 16 U.S.C. § 1533(a)(1). Additionally, NMFS must show that the Cook Inlet belugas are a distinct population segment. 16 U.S.C. § 1532(16). NMFS concluded that the Cook Inlet belugas are a distinct population segment during the first status review and decision not to list. Regulations Governing the Taking and Importing of Marine Mammals; Endangered and Threatened Fish and Wildlife; Cook Inlet Beluga Whales, 65 Fed. Reg. 38,778, 38,780 (June 22, 2000).

61. 16 U.S.C. § 1533(a)(1).

The statutory factors listed under Section 4 are: “(1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting its continued existence.”⁶² Additionally, NMFS’s decision whether or not to list the Cook Inlet belugas must be made “solely on the basis of the best scientific and commercial data available...after taking into account those efforts, if any, being made by any State...whether by predator control, protection of habitat and food supply, or other conservation practices....”⁶³

In 1998, NMFS initiated a status review to determine whether the Cook Inlet beluga whale should be listed under the ESA.⁶⁴ The status review was prompted by the sharp decline in population of the Cook Inlet belugas.⁶⁵ Upon conclusion of this review, NMFS made the decision to list the whales as depleted under the MMPA.⁶⁶ Under the MMPA, the Secretary can designate a species as depleted if the species’ population is below its “optimum sustainable population.”⁶⁷ The MMPA defines optimum sustainable population as “the number of animals which will result in the maximum productivity of the population or the species.”⁶⁸ Once NMFS designates a species as depleted under the MMPA the Secretary is authorized to promulgate regulations governing Native subsistence harvest, thus addressing the reason for the sharp population decline.⁶⁹ This designation, however, does not come with the same regulatory protections as a listing under the ESA.⁷⁰

The NMFS status review showed that because the Cook Inlet beluga whale population was far below its optimal sustainable population, a depletion listing under the MMPA was appropriate.⁷¹ NMFS relied on abundance estimates indicating both the steady decline in population, as

62. *Id.*

63. 16 U.S.C. § 1533(b)(1)(A).

64. Regulations Governing the Taking and Importing of Marine Mammals; Threatened Fish and Wildlife; Cook Inlet Beluga Whales, 63 Fed. Reg. 64,228 (Nov. 19, 1998); 65 Fed. Reg. at 38,778.

65. *See supra* text accompanying notes 28-32.

66. Designating the Cook Inlet, Alaska, Stock of Beluga Whale as Depleted Under the Marine Mammal Protection Act (MMPA), 65 Fed. Reg. 34,590 (May 31, 2000).

67. 16 U.S.C. § 1362(1) (2012).

68. 16 U.S.C. § 1362(9).

69. 65 Fed. Reg. at 34,592.

70. For example, no critical habitat would be designated under 16 U.S.C. § 1533(a)(3), nor would the whales be the recipients of the consultation, 16 U.S.C. § 1536, or take, 16 U.S.C. § 1538, provisions of the ESA.

71. 65 Fed. Reg. at 34,596.

well as the historical decline that occurred prior to the first estimate in 1994.⁷² Following the designation as depleted, NMFS began the process to regulate the subsistence harvest,⁷³ “which was the only factor found to be directly linked to the decline.”⁷⁴

Despite two petitions to list the whales under the ESA, NMFS found that because of the “significant legislative and management actions” to control subsistence harvest, a listing was not warranted.⁷⁵ In June of 2000, NMFS determined—based on the best available scientific information—that although the “population had declined to a level that is considered depleted under the MMPA,” the Cook Inlet belugas were not in danger of extinction and it was unlikely they would be in danger of extinction in the foreseeable future.⁷⁶ Therefore, neither an endangered, nor threatened, listing was warranted at the time.⁷⁷ This decision was based on a thorough analysis of the ESA Section 4 factors.⁷⁸

First, with regard to “the present or threatened destruction, modification, or curtailment of its habitat or range,”⁷⁹ NMFS found that while a significant portion of the Cook Inlet beluga habitat “has been modified by municipal, industrial, and recreational activities,”⁸⁰ this modification has not been shown to “diminish the value of the habitat for both survival and recovery of the species.”⁸¹ Second, NMFS concluded that because there is no commercial or recreational market for harvesting the whales, and because the only scientific uses currently are non-fatal, “overutilization for commercial, recreational, scientific, or educational purposes”⁸² does not place the whales in danger of extinction.⁸³ Third, NMFS found that predation by killer whales and occurrences of parasites and disease have not been shown to have a significant or measurable

72. The first abundance estimate in 1994 was only 653 whales. According to local Alaska Native hunters, the population exceeded 1,000 whales in previous decades. *Id.* at 34,596-97. One estimate put the beluga population at about 1,300 in August of 1979. *Id.* at 34,596.

73. Additionally, a moratorium on the taking of Cook Inlet belugas unless authorized by an agreement with NMFS was signed in to law, in cooperation with the management process under the MMPA. Regulations Governing the Taking and Importing of Marine Mammals; Endangered and Threatened Fish and Wildlife; Cook Inlet Beluga Whales, 65 Fed. Reg. 38,778, 38,779 (June 22, 2000).

74. *Id.*

75. *Id.*

76. *Id.* at 38,789.

77. *See id.*

78. 16 U.S.C. § 1533(a)(1) (2012).

79. 16 U.S.C. § 1533(a)(1)(A).

80. 65 Fed. Reg. at 38,780.

81. *Id.* at 38,781.

82. 16 U.S.C. § 1533(a)(1)(B).

83. Subsistence is discussed under regulatory mechanisms and other manmade factors. 65 Fed. Reg. at 38,781.

impact on the whales' survival or recovery.⁸⁴ Therefore, "disease or predation"⁸⁵ of the species did not warrant listing.⁸⁶ Fourth, NMFS found that the "inadequacy of existing regulatory mechanisms"⁸⁷ similarly did not warrant a listing decision because the subsistence harvest—the only factor identified as having a significant impact on the belugas' survival—was being adequately managed by existing regulations.⁸⁸ Finally, NMFS concluded that in spite of encroaching threats to the beluga's habitat such as increased oil and gas development, other pollutants and contaminants in the watershed, noise, and commercial boat traffic, there were simply no indicators that any of these factors "caused the stock to be in danger of extinction and are not likely to do so in the foreseeable future."⁸⁹

NMFS continued to rely on the conclusion that the subsistence harvest was the only factor that contributed to the population decline, and that uncontrolled harvest had been reined in through a combination of regulatory schemes.⁹⁰

NMFS's decision to withhold listing the belugas as endangered was challenged by conservation organizations in federal district court in 2001.⁹¹ In *Cook Inlet Beluga Whale v. Daley*, the court found that it was undisputed that "the single most significant factor in the population decline has been Native American hunting...."⁹² The court then held that NMFS's decision to not list the belugas as endangered, relying on the premise that federal efforts to curtail subsistence harvest would effectively control the population decline, was neither arbitrary nor capricious.⁹³

The decision not to list the Cook Inlet belugas stood until further monitoring could show that the current protections were no longer controlling the population decline.⁹⁴ Despite its decision not to list the belugas, "NMFS remain[ed] concerned about the status of the [Cook Inlet] beluga population and...continu[ed] to monitor the abundance and population trend of the stock."⁹⁵ In 2006, NMFS initiated a second status

84. *Id.* at 38,781-82.

85. 16 U.S.C. § 1533(a)(1)(C).

86. 65 Fed. Reg. at 38,781-82.

87. 16 U.S.C. § 1533(a)(1)(D).

88. 65 Fed. Reg. at 38,782; *see also supra* note 75 and accompanying text.

89. 65 Fed. Reg. at 38,783.

90. *Id.* at 38,789.

91. *Cook Inlet Beluga Whale v. Daley*, 156 F. Supp. 2d 16, 18 (D.D.C. 2001).

92. *Id.* at 18.

93. *Id.* at 22.

94. "If a moratorium fails to control the Native American harvesting in the future, ESA listing will be warranted. That much is agreed." *Id.* at 20.

95. 65 Fed. Reg. at 38,789-90.

review to once again determine the status of the dwindling population of whales.⁹⁶

NMFS initiated this review because “the 2000 determination that ESA listing was not warranted was premised on at least two findings that justif[ied] further review.”⁹⁷ First, at the time of the 2000 decision, the only known factor responsible for the sharp population decline was an overutilization by native subsistence users.⁹⁸ Second, the studies that led to the 2000 decision suggested that if the subsistence harvest was controlled, the population would cease its decline.⁹⁹ However, estimates following the moratorium on subsistence harvest have proven these original findings false.¹⁰⁰ In fact, the population of Cook Inlet belugas continued to decline steadily from 1999 to 2007, when the proposed rule to list the population as endangered was issued.¹⁰¹

NMFS officially listed the Cook Inlet belugas as endangered in its 2008 final rule.¹⁰² NMFS again considered the five factors under Section 4 of the ESA, satisfaction of any one of which would require NMFS to list the whales under the ESA.¹⁰³ NMFS found that the cumulative effects of ongoing activities in the Cook Inlet were, and continue to be, a significant threat to Cook Inlet beluga habitat.¹⁰⁴ NMFS found that the cumulative effects on whale habitat from “(1) continued oil and gas exploration, development, and production; and (2) industrial activities that discharge or accidentally spill pollutants”¹⁰⁵ may significantly modify and destroy important habitat and cause mortalities within the population.¹⁰⁶ Additionally, NMFS found that past subsistence uses over-utilized the species, predation by killer whales could impede recovery,¹⁰⁷ and excessive stranding has contributed to the whale

96. Endangered and Threatened Wildlife and Plants: Announcement of Initiation of a Status Review of the Cook Inlet Beluga Whale under the Endangered Species Act (ESA), 71 Fed. Reg. 14,836 (Mar. 24, 2006).

97. Endangered and Threatened Species; Proposed Endangered Status for the Cook Inlet Beluga Whale, 72 Fed. Reg. 19,854, 19,855 (proposed Apr. 20, 2007) (to be codified at 50 C.F.R. Pt. 224). NMFS also cited the International Union for the Conservation of Nature and Natural Resources (IUCN) finding that the whales met its criteria for critically endangered status as an additional factor that led to the status review. *Id.*

98. *Id.*

99. *Id.*

100. *Id.*

101. The population is estimated to have declined at an average rate of 4.1 percent per year. *Id.*

102. Endangered and Threatened Species; Endangered Status for the Cook Inlet Beluga Whale, 73 Fed. Reg. 62,919 (Oct. 22, 2008).

103. *Id.* at 62,927; *see also supra* notes 60-65 and accompanying text.

104. 73 Fed. Reg. at 62,927.

105. *Id.* (“e.g., petroleum, seafood processing waste, ship ballast discharge, effluent from municipal wastewater treatment systems, and runoff from urban, mining, and agriculture areas”).

106. *Id.*

107. *Id.*

mortality rates.¹⁰⁸ Finally, NMFS found that while the regulations enacted following the 2000 determination of depleted under the MMPA did adequately control the subsistence harvest, “they are not comprehensive in addressing the many other issues now confronting Cook Inlet beluga whales.”¹⁰⁹

The grave truth is that the threats to the belugas and their habitat have increased. Since the 2000 decision not to list, increased commercial activity and resource extraction has exacerbated the dangers the belugas face. The newly identified threats, coupled with the already dangerously low population, indicate the imminent need for a comprehensive statutory and regulatory scheme to ensure the belugas’ continued existence and future recovery. Regulations promulgated as part of the ACMP could have been an integral part in this much needed comprehensive regulatory scheme, as will be discussed below.¹¹⁰

Despite the lack of population recovery, the State of Alaska challenged the listing of the Cook Inlet beluga; the challenge was struck down in federal court, partially due to the untimely loss of the ACMP.¹¹¹ The State challenged NMFS’s findings and argued that the identified threats were not significant because protections offered under the AMCP “effectively conserve[d] belugas and beluga habitat by preventing adverse environmental impacts.”¹¹² Although the coastal management program included some very important protection for the belugas,¹¹³ even before the program expired, it failed to bring the species back from the cliff of extinction.¹¹⁴ The Cook Inlet beluga population never recovered from the initial sharp decline, despite protections in place at the time.¹¹⁵ With the loss of the protections that were available under the

108. *Id.* at 62,928.

109. *Id.* at 62,928.

110. *See infra* part III.C.

111. *Alaska v. Lubchenco*, 825 F.Supp.2d 209, 212, 222-23 (D.D.C. 2011); Richard Mauer, *Federal Judge Backs Listing of Inlet Belugas as Endangered*, ANCHORAGE DAILY NEWS, Nov. 22, 2011, <http://www.adn.com/2011/11/21/2182364/federal-judge-backs-listing-of.html#storylink=misearch>.

112. Plaintiff State of Alaska’s Memorandum of Points and Authorities Supporting its Motion for Summary Judgment at 10, *Alaska v. Lubchenco*, 825 F. Supp. 2d 209 (D.D.C. 2011) (No. 1:10-cv-00927-BAH).

113. *See infra* part III.C.

114. *See* 73 Fed. Reg. at 62,919 (indicating that NMFS had to list the Cook Inlet belugas as endangered due to encroaching threats).

115. The Cook Inlet beluga population continued to decline at a rate of 1.45 percent per year between 1999 and 2008, when NFMS made the final decision to list the belugas as endangered. 73 Fed. Reg. at 62,920. Abundance estimates showed populations of 278 in 2005, 302 in 2006, and 375 in both 2007 and 2008. *Id.* at 69,920, 69,924.

ACMP, and without other substantial coastal habitat protections, the belugas are left vulnerable to the new threats facing their population.¹¹⁶

On June 4, 2010, the State of Alaska filed a complaint for declaratory judgment and injunctive relief challenging the Cook Inlet beluga listing.¹¹⁷ One of the claims brought by the State was that NMFS failed to take into account the state's conservation efforts, especially those provided by the ACMP.¹¹⁸ The state asserted that the coastal management program ensures consistency with enforceable policies that prevent adverse environmental impacts, and sufficiently protect belugas.¹¹⁹ However, the loss of the ACMP in July of 2011 signaled the extinction of the most significant tool that the state had for ensuring state and federal coastal projects comply with the previously enforceable robust protections.¹²⁰

On November 21, 2011, the State's challenge was dismissed in Federal District Court.¹²¹ The court took note of the state environmental laws and regulations that supposedly protected the belugas, but ultimately agreed with the listing decision. The court stated that "it is not enough for the State to identify conservation efforts that *may* be beneficial to a species' preservation: those efforts must actually be in place and have achieved some measure of success in order to count"¹²² Here, those conservation laws failed the belugas: the recovery that NMFS expected in its 2000 decision never materialized.¹²³ Additionally, "the subsequent expiration of Alaska's Coastal Management Program certainly does not help plaintiffs' argument that the Service [NMFS] somehow overlooked an important state-sponsored conservation effort."¹²⁴ Therefore, the conservation efforts pointed to by the State were rejected by the court as inadequate to protect the belugas.¹²⁵

116. Populations of Cook Inlet belugas face a continued threat of development "within and along upper Cook Inlet," with particular threats from oil and gas operations and "industrial activities that discharge or accidentally spill pollutants (e.g., petroleum, seafood processing waste, ship ballast discharge, effluent from municipal wastewater treatment systems, and runoff from urban, mining, and agricultural areas.)" *Id.* at 62,927.

117. Plaintiff State of Alaska's Memorandum of Points and Authorities Supporting its Motion for Summary Judgment at 1, *Alaska v. Lubchenco*, 825 F. Supp. 2d 209 (D.D.C. 2011) (No. 1:10-cv-00927-BAH).

118. *Id.*; Richard Mauer, *Loss of Coast Zone Program Hurts State's Beluga Whale Case*, ANCHORAGE DAILY NEWS, Oct. 31, 2011, <http://www.adn.com/2011/10/30/2146856/coast-zone-loss-hurts-states-beluga.html>.

119. *Lubchenco*, 825 F. Supp. 2d at 219; Mauer, *supra* note 118.

120. Mauer, *supra* note 118; *see also infra* part III.D.

121. *Lubchenco*, 825 F. Supp. 2d at 219.

122. *Id.*

123. *Id.*

124. *Id.* at 220 n.4.

125. *Id.* at 219.

Furthermore, the court upheld NMFS's conclusion that all five ESA Section 4 factors now support listing the Cook Inlet belugas under the ESA.¹²⁶ NMFS first found that many "municipal, industrial, and recreational activities" have modified the belugas' habitat,¹²⁷ and that future projects threaten to destroy or modify their habitat further.¹²⁸ These future projects include coal mining and major port expansions, some of which could involve "filling more than 135 acres of intertidal and subtidal habitat."¹²⁹ NMFS pointed to a number of concerns discussed in the 2000 decision, and also concluded that ongoing activities such as oil and gas exploration and pollutant discharge from industrial activities now threaten to modify or destroy important habitat.¹³⁰ Ultimately, NMFS found that present or threatened destruction, modification, or curtailment of its habitat or range support the beluga's listing.¹³¹ Where the destruction and modification of the belugas' coastal habitat could result in mortalities within the already dwindling population, NMFS's findings supported the listing decision under the first Section 4 factor,¹³² threatened destruction, modification, or curtailment of habitat or range.¹³³

Second, NMFS concluded that the high rate of subsistence harvest that sparked the initial sharp decline should be considered as a factor in the listing decision.¹³⁴ It then concluded that the unsustainable levels of harvest during the largest population decline implied that the overutilization by subsistence hunters justified a listing under the second Section 4 factor.¹³⁵ The court upheld this decision as reasonable, despite NMFS's earlier conclusion not to analyze the subsistence harvest under this factor.¹³⁶

Third, NMFS concluded that any predation by killer whales could impede recovery, due to the already dangerously low population level.¹³⁷ Therefore, the third factor, dealing with disease and predation, also

126. *Id.* at 215, 219.

127. Endangered and Threatened Species; Proposed Endangered Status for the Cook Inlet Beluga Whale, 72 Fed. Reg. 19,854, 19,857 (proposed Apr. 20, 2007) (to be codified at 50 C.F.R. Pt. 224).

128. *Id.* at 19,858.

129. *Id.*

130. *Id.*

131. 16 U.S.C. § 1533(a)(1)(A) (2012).

132. 72 Fed. Reg. at 19,858.

133. *Id.*

134. Endangered and Threatened Species; Endangered Status for the Cook Inlet Beluga Whale, 73 Fed. Reg. 62,919, 62,927 (Oct. 22, 2008).

135. *Id.*; 16 U.S.C. § 1533(a)(1)(B).

136. *See Lubchenko*, 825 F. Supp 2d 209, 215 (D.D.C. 2011); *see also supra* note 83 and accompanying text.

137. 73 Fed. Reg. at 62,921.

weighs in favor of a listing decision.¹³⁸ Fourth, NMFS concluded that although the regulatory efforts to control the subsistence harvest were effective to manage that aspect of the belugas' population decline, "they are not comprehensive in addressing the many other issues now confronting Cook Inlet beluga whales."¹³⁹ Finally, NMFS concluded that the dangerously low population levels would leave the beluga whales vulnerable to "other natural or manmade factors,"¹⁴⁰ including "strandings, oil spills, noise, ship strikes, and the effects of pollutants and urban runoff."¹⁴¹

In its challenge, the State argued that many of NMFS's conclusions were the exact opposite of those conclusions made in the 2000 determination and that they were not justified by circumstantial changes.¹⁴² The court, however, stated that "it is precisely the lack of changed circumstances that led the Service to conclude in 2008 that listing was now appropriate. The key assumption underlying the agency's 2000 decision—that subsistence whaling was the only factor responsible for the decline in beluga abundance—has proven false."¹⁴³ Therefore, the court held that the Service's decision was neither arbitrary nor capricious under the circumstances.¹⁴⁴

At the end of the day, when it came to protecting the Cook Inlet belugas, Alaska's conservation laws were simply not enough.

III. HISTORY AND BACKGROUND OF THE ACMP: LESSONS LEARNED ABOUT EFFECTIVE AND INEFFECTIVE MANAGEMENT OF ALASKA'S COAST

The conservation laws and regulations in place during much of the beluga saga included the regulations promulgated pursuant to the ACMP. Although these regulations ultimately proved inadequate to protect the belugas, there were some valuable elements that should be retained in a future coastal protection scheme. In this section, these regulations will be discussed and examined as a foundation for what Alaska can do in the future to protect its coastal habitats.

138. 16 U.S.C. § 1533(a)(1)(C).

139. 73 Fed. Reg at 62,928; 16 U.S.C. § 1533(a)(1)(D).

140. 16 U.S.C. § 1533(a)(1)(E).

141. *Lubchencho*, 825 F. Supp 2d at 217.

142. *Id.*

143. *Id.* at 218.

144. *Id.* The court additionally held that the Service made its decision on the best available data, and that it complied fully with the Administrative Procedure Act requirements. *Id.* at 219, 221, 223.

After Alaska decided to participate in the CZMA, the Alaska legislature passed the ACMA in 1977.¹⁴⁵ The ACMA established the ACMP as the federally approved and enforceable Coastal Management Plan (CMP) under the CZMA.¹⁴⁶ Under the ACMP, the lead agency—the Division of Coastal Management (DCOM) within the Department of Natural Resources—promulgates regulations, approves local level coastal management plans, and ensures compliance with all promulgated rules and policies through consistency reviews.¹⁴⁷

Each state that participates in the CZMA must develop a CMP to address how projects will be managed in the context of ecological, historic, cultural, and esthetic values.¹⁴⁸ The federal government must then approve these CMPs before they become enforceable rules and regulations.¹⁴⁹ By requiring each state to develop its own CMP, the CZMA can better “preserve, protect, develop, and where possible, . . . restore or enhance, the resources of the Nation’s coastal zone”¹⁵⁰ Once the CMPs are developed and approved by the federal government, the participating states will receive federal grants, and all projects, including federal projects, will be subject to a state consistency review.¹⁵¹ Many of the regulations and policies that were promulgated under the ACMP were specific to protection of coastal habitat, and any state or federal activity¹⁵² located in the coastal zone would have been forced to comply with those rules and regulations.¹⁵³

Because both state and federal projects would be required to comply with the coastal habitat protections of an approved CMP, local Alaskan communities would be protected from the federal government’s ambitious plans for oil and gas leasing in Alaska’s coastal zone.¹⁵⁴ With

145. See *supra* notes 9-10 and accompanying text; ACMP HANDBOOK, *supra* note 8, at A5.

146. See ACMP HANDBOOK, *supra* note 8, at B-2.

147. See ALASKA STAT. § 46.40.010-210 (2011) (repealed July 1, 2011), available at http://alaskacoast.state.ak.us/Clawhome/handbook/pdf/AS_Chapter_46.40.pdf.

148. 16 U.S.C. § 1452 (2) (2012).

149. 16 U.S.C. 1455.

150. 16 U.S.C. § 1452(1).

151. 16 U.S.C. § 1456 (c)(1)(A) (stating that each federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs); 16 U.S.C. § 1456(c)(2) (stating that any federal agency which shall undertake any development project in the coastal zone of a state shall insure that the project is, to the maximum extent practicable, consistent with the enforceable policies of approved State management programs).

152. “‘Project’ means all activities that will be part of a proposed development.” ALASKA STAT. § 46.40.201(9) (repealed July 1, 2011), available at http://alaskacoast.state.ak.us/Clawhome/handbook/pdf/AS_Chapter_46.40.pdf.

153. ACMP Fact Sheet, DIV. OF COASTAL & OCEAN MGMT., http://alaskacoast.state.ak.us/ReferenceMaterial/ACMP_Fact_Sheet_2010.pdf (last visited Apr. 5, 2013).

154. *Id.*

the threat of unbridled development of Alaska's resources—timber, tourism, mining, fisheries, and oil and gas development—Alaska's people sought a forum where they could have a meaningful voice in the management of these projects while still protecting the land and their way of life.¹⁵⁵ While participation in the CZMA gave Alaska's people the voice that they were looking for, Alaska's coastal communities, such as Tyonek, continue to face changes to their way of life as a consequence of continued development.¹⁵⁶ Additionally, as demonstrated by the Cook Inlet belugas, habitat threats are continuing, real, and jeopardizing the survival of species that depend on the coastal zone.¹⁵⁷

When establishing the ACMP, the Alaska Legislature noted several critical issues to be addressed in order to effectively manage coastal development. These issues included “waterfront space scarcity, energy resource development impacts, impacts of mining, impacts of Western Culture on Native Cultures, providing for the Alaska subsistence lifestyle, geological hazards, changing land ownership patterns, bottomfish, and governmental regulation.”¹⁵⁸ The legislature also made the following findings. First, the coastal regions of the state are “distinct and valuable natural resource[s] of concern to all the people of the state.”¹⁵⁹ Second, the demands on these resources are both significant and ever increasing, and the “capacity of the coastal area to withstand” these demands are limited.¹⁶⁰ Third, the development of these resources up until now has “often been motivated by short-term considerations, unrelated to sound planning principles.”¹⁶¹ In order to correct this past lack of planning in the future, “there is a critical need to engage in comprehensive land and water use planning in coastal areas....”¹⁶²

The coastal management plan addressed these issues and legislative findings through comprehensive environmental regulation and a significant forum for local input that still allowed for responsible development.¹⁶³ The ACMP accomplished this objective by developing industrial and commercial enterprises in a manner that was consistent with the “social, cultural, historic, economic, and environmental interests

155. *Id.*

156. See *Who We Are, History & Culture*, TYONEK NATIVE CORP., <http://www.tyonek.com/wh-o-we-are/history-culture/> (last visited Apr. 8, 2013). The residents of the Native Village of Tyonek are “beach people,” who live off of the land and sea. *Id.*

157. See *supra* part II.C.

158. ACMP HANDBOOK, *supra* note 8, at A5.

159. *Id.*

160. ACMP HANDBOOK, *supra* note 8, at A6.

161. *Id.*

162. *Id.*

163. See *infra* part III.A.

of the people and the state;”¹⁶⁴ “sound conservation and sustained yield principles;”¹⁶⁵ and state and federal energy needs.¹⁶⁶

The opportunity for local input was valuable for local governments because they would now be able to incorporate their familiarity with local conditions into the project planning process, and because local governments in Alaska “have the traditional political right and responsibility to govern local land use on city owned land within their municipal boundaries.”¹⁶⁷ Through a cooperative management philosophy, “state, local, national, and private goals and aspirations which depend on the use of coastal resources can be met through an open planning and management process where interested parties can be brought together to resolve their differences and eliminate potential conflicts before more serious problems occur.”¹⁶⁸ This cooperative management strategy could have been used to comprehensively protect the belugas from the development threats that ultimately led to their endangered listing.

A. Form of the ACMP

In order to create a cooperative and comprehensive management strategy, the ACMP emphasized a coordinated effort between state, local, national, and private interests when managing coastal development.¹⁶⁹ This approach allowed the state to balance and “properly manage the competing demands upon, preservation of, and sustainable use of, its precious coastal resources.”¹⁷⁰ The ACMP established coastal management objectives, coastal zone boundaries, coastal resource districts, and coastal habitat protections. Once established by the ACMP, the DCOM could then enforce these regulations and objectives through state and federal consistency reviews.

In order for the ACMP to be federally approved, the state had to include a number of required elements.¹⁷¹ Most significantly, the ACMP had to “identif[y] the boundaries of the coastal zone subject to the management program,”¹⁷² define the “permissible land uses and water

164. ALASKA STAT. § 46.40.20(2) (repealed July 1, 2011), available at http://alaskacoast.state.ak.us/Clawhome/handbook/pdf/AS_Chapter_46.40.pdf.

165. *Id.* § 46.40.20(3).

166. *Id.* § 46.40.20(7).

167. ACMP HANDBOOK, *supra* note 8, at A8.

168. *Id.*

169. *Id.*

170. *Id.*

171. 16 U.S.C. § 1455 (d)(2) (2012).

172. 16 U.S.C. § 1455 (d)(2)(A).

uses within the coastal zone,”¹⁷³ and identify how the state intends to manage them.¹⁷⁴ Additionally, the State had to create a procedure to protect public access to coastal areas,¹⁷⁵ and create a planning process for energy facilities and their impacts.¹⁷⁶ The ACMP also needed to “establish[] an effective mechanism for continuing consultation and coordination between the [DCOM] and with local governments, interstate agencies, regional agencies, and areawide agencies within the coastal zone” to ensure full local participation in the program.¹⁷⁷

Alaska identified the inland and seaward boundaries of the coastal zone that would be subject to the program¹⁷⁸ by surveying the geophysical and biological relationships between the marine environment and the terrestrial environment.¹⁷⁹ These relationships were then used to determine in what areas development would have a direct and significant impact to coastal regions. The inland boundaries were required to include areas that have direct and significant impacts on coastal waters, beaches, transitional tidal and intertidal areas, and islands.¹⁸⁰

Once the relationships between the marine and terrestrial environment were established, if development on an inland area would impact one of these relationships, then that area will be included within the boundaries of the coastal zone.¹⁸¹ Alaska, however, defined impact on coastal waters more broadly, encompassing both the impacts on these relationships and impacts on animals using the coastal waters, including anadromous fish.¹⁸² After these relationships and possible impacts were established, the boundaries were determined through identification of “landward and seaward limits of coastal biological and physical

173. 16 U.S.C. § 1455 (d)(2)(B).

174. 16 U.S.C. § 1455 (d)(2)(F).

175. Public access includes access to public beaches and areas that have environmental, recreational, historic, esthetic, ecological, or cultural value. 16 U.S.C. § 1455 (d)(2)(G).

176. 16 U.S.C. § 1455 (d)(2)(I).

177. 16 U.S.C. § 1455 (d)(3)(B).

178. 15 C.F.R. §§ 923.31(a)(1)-(7) (2012) (Inland boundaries must include: (1) areas that are necessary to control uses which have direct and significant impacts on coastal waters, or are likely to be affected by or vulnerable to sea level rise, (2) special management areas, (3) waters under saline influence, (4) salt marshes and wetlands, (5) beaches, (6) transitional and intertidal areas, and (7) islands).

179. ACMP HANDBOOK, *supra* note 8, at A-9. (Geophysical relationships include: water flow, salt water intrusion, tidal actions, erosion, wave fetch, salt spray, flooding, storm and tsunami surges and run-up, ice movements, and glacial activity; biological relationships include: links between the habits and habitats of anadromous fish, polar bears, sea birds, marine mammals, and other animals with a unique connection to the land and water area).

180. 15 C.F.R. §§ 923.31(a)(1)-(7).

181. 15 C.F.R. §§ 923.31(a)(1).

182. ACMP HANDBOOK, *supra* note 8, at A9-A10.

processes which must be considered for effective long-term coastal management.”¹⁸³

In order to ensure that development in the coastal zone be consistent with long-term coastal management, the state divided the coastal zone into three sub-zones.¹⁸⁴ These zones included (1) the zone of direct interaction, “the portion of the coastal area where physical and biological processes are a function of direct contact between land and sea”; (2) the zone of direct influence, “the portion of the coastal zone extending seaward and landward from the zone of direct interaction . . . closely affected and influenced by the close proximity between land and sea”; and (3) the zone of indirect influence, the zone that “extends outward from the zone of direct influence to the limit of identifiable land/sea relationships.”¹⁸⁵ This third zone, the zone of indirect influence, was not included in the ACMP defined coastal zone,¹⁸⁶ even though there are conceivable inland projects that could have a direct and significant impact on coastal waters.¹⁸⁷

Because the federal CZMA requirements call for boundaries that include areas of direct and significant impacts, the State was free to include this third zone in its coastal zone boundary demarcation if it found that projects in this zone would have the requisite impact.¹⁸⁸ The zone of indirect influence should have been included in the ACMP designation of the coastal zone boundaries because it would have provided a more substantial and comprehensive area that would be subject to environmental protections.¹⁸⁹ By establishing a more comprehensive coastal zone, more projects would be subject to consistency reviews, and more species would benefit from the protections. The Cook Inlet belugas, for example, would benefit from a more comprehensive coastal zone definition because of their tendency to congregate in tidal areas and near river mouths. Therefore, because the belugas spend much of their time near to shore, inland projects could

183. *Id.* at A10.

184. *Id.*

185. *Id.*

186. When the boundary was selected in 1978, the official boundary was set at the line between the zone of direct influence and the zone of indirect influence. *Id.*

187. *See id.* (“As an example of how the boundary system works, in the Beaufort Sea region, the zone of direct interaction extends landward to the extent of storm surge intrusion, averaging two to three miles inland, and seaward to the limit of shore fast ice and the shear zone. The zone of direct influence extends from the zone of direct interaction landward to include optimum water fowl and shorebird nesting habitat, and seaward into the ice pack. The zone of indirect influence extends to the limit of the coastal wet tundra ecosystem, corresponding to the 200-foot land contour and seaward to include major circumpolar and circumpacific migration patterns.”).

188. *See* 15 C.F.R. §§ 923.31(a)(1) (2012).

189. *See infra* part III.C.

have a large impact on their continued survival. If inland projects are subjected to the comprehensive habitat protections in the ACMP, negative impacts to the belugas' habitat could be mitigated and controlled.¹⁹⁰

In addition to defining the coastal zone within the limits proscribed by federal law, in order to ensure compliance with the CZMA the ACMP had to incorporate local participation in to the program.¹⁹¹ The ACMP did this by establishing a process for coastal communities to form coastal resource districts, which could enforce state-approved district management plans.¹⁹² Coastal resource districts provided the means for local input and implementation of the ACMP. A coastal resource district could be any municipality, organized borough, or city in an unorganized borough that contains a portion of the coastal area of the state.¹⁹³ Coastal resource districts could develop a coastal district plan¹⁹⁴ that, once approved by the Department of Natural Resources, becomes "enforceable as a matter of state law."¹⁹⁵ A coastal district management plan is a comprehensive resource use plan that states the "policies, objectives, and standards governing the use of resources" within the district.¹⁹⁶ These standards, however, must be consistent with the statewide standards of the ACMP.¹⁹⁷ By having the opportunity to establish their own policies and standards, coastal communities had meaningful local input on how their coastal zone was utilized and developed.

Coastal resource districts use the coastal zone boundaries defined in the ACMP to define their district boundaries.¹⁹⁸ The remaining state-owned lands outside of coastal resource districts that are subject to the ACMP are also defined by the coastal zone boundaries.¹⁹⁹ Federal lands, however, are excluded from Alaska's coastal zone, as required by the CZMA.²⁰⁰ Even though federal lands are excluded from the definition of the coastal zone, federal activities occurring on federal lands which result

190. See *supra* part II.C.

191. See *supra* notes 171-77 and accompanying text.

192. There are thirty-five coastal resource districts and thirty-three of these districts had enforceable coastal management plans. ACMP HANDBOOK, *supra* note 8, at A17-18.

193. ACMP HANDBOOK, *supra* note 8, at A17.

194. *Id.*

195. *Id.* at A20.

196. *Id.* at A18-19; ALASKA STAT. § 46.40.030 (repealed July 1, 2011).

197. ACMP HANDBOOK, *supra* note 8, at A19.

198. *Id.* at A10.

199. *Id.* at A11.

200. 16 U.S.C. § 1453(1) (2012) ("Excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal Government, its officers or agents.").

in impact to the state's coastal area must be consistent with the ACMP.²⁰¹ In these situations, the ACMP rules, regulations, and policies are enforced during federal project development through a consistency review process.

B. Consistency Reviews

The ACMP consistency review process was the way that proposed state and federal projects and land uses were evaluated for compliance with the ACMP enforceable standards and regulations.²⁰² This consistency review was, by far, the most important step of the process regarding environmental protections, because it was this consistency determination that ensured that Alaska's high standards for coastal habitat protection and oil spill prevention were strictly followed. The consistency review process "brought all the relevant ACMP participants to the table," and established what the "authorities, responsibilities, and opportunities" were for each participant.²⁰³ For example, if a proposed project, like an oil lease in the Cook Inlet, would effectively destroy a crucial area of beluga habitat, it was at this consistency review stage that the project could be halted if not consistent with the high level of protection required by the ACMP.

The Department of Natural Resources was given the authority under the ACMP to conduct "all federal consistency determinations and certifications authorized by [the CZMA], and each conclusive state consistency determination when a project requires a permit, lease, or authorization from two or more state resource agencies."²⁰⁴ The state resource agencies are: the Department of Environmental Conservation, the Department of Fish and Game, and the Department of Natural Resources.²⁰⁵ During these consistency reviews, the lead agency—the DCOM, as part of the DNR—would ensure that all proposed projects are consistent with all enforceable statewide and coastal district standards.

There were many different land uses and activities that were subject to a consistency review. The consistency review provisions applied to (1) activities within the defined coastal zone and (2) activities on federal land, including the outer continental shelf (OCS), "that would affect any land or water use or natural resource of the state's coastal zone."²⁰⁶

201. ACMP HANDBOOK, *supra* note 8, at A11 (including activities conducted on the Outer Continental Shelf (OCS) that cause effects on any Alaskan coastal use or resource).

202. *Id.* at A84.

203. *Id.*

204. *Id.* at A35 (quoting ALASKA STAT. § 46.39.010 (repealed July 1, 2011)).

205. ALASKA STAT. § 46.39.010 (2) (repealed July 1, 2011).

206. ACMP HANDBOOK, *supra* note 8, at A81 (quoting ALASKA STAT. § 46.40.096(1) (repealed July 1, 2011)).

Under this definition, any state activity located in the coastal zone was subject to a consistency review. Additionally, any federal activity—which includes federal agency activities, licensing, or permitting—located either within the coastal zone or outside the coastal zone but impacting the uses or resources within the coastal zone, was subject to the state and district enforceable standards through the consistency review process.²⁰⁷

DCOM published a list of activities that may have a reasonably foreseeable direct or indirect effect on a coastal use or resource and, as such, would likely be subject to a consistency review; this list is referred to as the “C-List.”²⁰⁸ The C-List includes oil discharge contingency plans; hazardous waste transfer, storage, and disposal; solid waste disposal; operation of hatcheries and aquatic farms; timber sales; mining and prospecting; geothermal lease sales; oil shale leases; and oil and gas licenses and lease sales.²⁰⁹ These activities, if performed by the federal government, would likely be subject to a consistency review because they would impact a coastal use or resource. In the case of the Cook Inlet belugas, many of these activities—especially those relating to oil and gas extraction—have occurred in areas that are critical to their survival.²¹⁰ Under the ACMP, all activities of this type that occurred in beluga coastal habitat would have had to conform to the environmental protections promulgated as enforceable statewide standards and coastal district policies.²¹¹ Although these standards and policies were fairly strong, and likely benefitted the species, they were not enough to comprehensively protect them.²¹²

207. *Id.* at A82.

208. ALASKA ADMIN. CODE tit. 11, § 110.750(a) (2011).

209. DEP'T OF NATURAL RES., OFFICE OF PROJECT MGMT. & PERMITTING, LIST OF EXPEDITED CONSISTENCY REVIEWS AND STATE AUTHORIZATIONS SUBJECT TO THE ACMP (2004), *available at*, <http://alaskacoast.state.ak.us/Clawhome/abc/c.pdf>.

210. Endangered and Threatened Species; Endangered Status for the Cook Inlet Beluga Whale, 73 Fed. Reg. 62,919, 62,927 (Oct. 22, 2008).

211. In the case of the Cook Inlet belugas, a project affecting their habitat would have needed to be consistent with not only the statewide enforceable regulations, but also with the enforceable policies of the following coastal resource districts: the Kenai Peninsula Borough, the Municipality of Anchorage, and the Matanuska-Susitna Borough. *See* ACMP HANDBOOK, *supra* note 8, at A18; *see also* Cook Inlet Beluga Critical Habitat, NOAA, http://www.fakr.noaa.gov/newsreleases/images/cib_elugachmap.jpg (last visited Apr. 11, 2013).

212. *See infra* part III.C.

C. Enforceable Standards and Policies under the ACMP: Important Regulations that Protected the Coastal Zone, Including Cook Inlet Belugas and their Habitat

Although there were still gaps in the protection as it was prior to sunset, the ACMP's regulations would have protected several important aspects of the beluga's habitat and well-being. Those regulations are now extinct with the program. The three important regulations promulgated under the ACMP that would have directly protected the Cook Inlet belugas dealt with energy facilities,²¹³ subsistence uses,²¹⁴ and habitat protection.²¹⁵

First, the statewide enforceable regulations governing energy facilities covered the siting and approval of major energy facilities. A "major energy facility" was defined as any development that was required or used for energy operation support, production, processing, or transferring energy resources or marketable products.²¹⁶ This included pipelines, drilling rigs, platforms, petroleum and coal treatment or storage facilities, oil and gas terminals, plants, and refineries. Many of these facilities are located within the Cook Inlet, and were found by NFMS to threaten the Cook Inlet belugas continued existences.²¹⁷

Under the ACMP, the siting and approval decisions for these facilities were subject to a number of standards, including: (1) choosing a facility site that would minimize probability of spills or contamination that would affect fishing grounds, spawning grounds, marine mammal rookeries and hauling out grounds, and waterfowl nesting areas;²¹⁸ (2) choosing a facility site that would allow for free passage and movement of fish and wildlife with consideration for historic migratory patterns;²¹⁹ (3) choosing a facility site that protected areas of particular environmental value, as identified in the district plans;²²⁰ and (4) choosing a facility site in the least biologically productive, diverse, and vulnerable area, and where spills could be controlled or contained.²²¹ Project proponents were required to base their choices on these standards, but only "to the extent practicable."²²² For the Cook Inlet belugas, this standard meant that major energy facilities needed to be

213. ALASKA ADMIN. CODE tit. 11 § 112.230 (2011).

214. *Id.* § 112.270.

215. *Id.* § 112.300.

216. ACMP HANDBOOK, *supra* note 8, at A45; ALASKA ADMIN. CODE tit. 11 § 112.990(15).

217. *See supra* part II.C.

218. ALASKA ADMIN. CODE tit. 11 § 112.230(a)(11).

219. *Id.* § 112.230(a)(12).

220. *Id.* § 112.230(a)(13).

221. *Id.* § 112.230(a)(14).

222. *Id.* § 112.230(a).

sited with environmental protections in mind, but the standard also left considerable room for economic considerations to trump environmental concerns.

Second, the ACMP required project proponents to “avoid or minimize impacts to subsistence uses of coastal resources.”²²³ Areas of subsistence use could be designated by the department²²⁴ or defined by regulation.²²⁵ If the project was within a subsistence area defined by regulation, the applicant needed to “submit an analysis or evaluation of reasonably foreseeable adverse impacts of the project on subsistence use as part of” the consistency review process.²²⁶ This section was especially important to the beluga population because of the initial sharp decline in population due to subsistence overharvest,²²⁷ and because of the belugas’ cultural importance to many Native communities’ subsistence lifestyles.²²⁸

Third, the ACMP lists a number of habitats that are subject to the coastal program and the standards that apply to habitat management.²²⁹ Habitats that were covered under these standards included: offshore areas; estuaries; wetlands; tideflats; rocky islands and sea cliffs; barrier islands and lagoons; exposed high-energy coasts; rivers, streams, and lakes and the active floodplains and riparian management areas; and important habitat.²³⁰ The habitats on this list most critical to the belugas include offshore areas, tideflats, and rivers because of the belugas’ propensity to concentrate near shorelines and river mouths.²³¹

Different management standards applied to each different type of habitat. The language of all regulations mandated areas to be managed “to avoid, minimize, or mitigate significant adverse impacts”²³² to certain uses and habitat concerns, which differ among the different areas.

223. *Id.* § 112.270(a).

224. After consultation with the district, tribe, native corporation, and other appropriate persons or groups, the department may designate areas in which subsistence use is an important use of coastal resources as demonstrated by local usage. *Id.* § 112.270(d).

225. *Id.* § 112.270(a).

226. *Id.* § 112.270(b).

227. Regulations Governing the Taking and Importing of Marine Mammals; Endangered and Threatened Fish and Wildlife; Cook Inlet Beluga Whales, 65 Fed. Reg. 38,778, 38,783 (June 22, 2000).

228. *See supra* part II.B.

229. ACMP HANDBOOK, *supra* note 8, at A47-48.

230. ACMP HANDBOOK, *supra* note 8, at A48 (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(a)(1)-(9)). Important habitat is defined as other habitats in the coastal area that are identified by the department as having a direct and significant impact on coastal water and shown to be biologically and significantly productive, or habitats that are identified or designated by the department. *Id.* at A49 (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(c)(1)).

231. *See supra* part II.A.

232. *See e.g.*, ALASKA ADMIN. CODE tit. 11 § 112.300(b)(1).

Offshore management included consideration of impacts to “competing uses such as commercial, recreational, or subsistence fishing.”²³³ Tidelands management included consideration of “impacts to water flow and natural drainage patterns; and competing uses such as commercial, recreational, or subsistence fishing.”²³⁴ Rivers, streams, and lakes management included consideration of “impacts to natural water flow; active floodplains; and natural vegetation within riparian management areas.”²³⁵ Out of all three important habitats for the Cook Inlet belugas, none of the management standards even mentioned protection of coastal species utilizing the habitat.

As evidenced by the lack of consideration of coastal species, the habitat management standards that were promulgated under the ACMP did not adequately focus on coastal species’ protection and use of the habitats. Instead, the standards tended to focus on commercial, recreational, and subsistence uses of the areas. The only two management standards that required consideration of coastal species were rocky islands and sea cliffs, and barrier islands and lagoons.²³⁶ Standards for the management of rocky islands and sea cliffs included consideration of impacts to “habitat used by coastal species” and avoidance of “the introduction of competing or destructive species or predators.”²³⁷ Standards for the management of barrier islands and lagoons included consideration of impacts “from activities that would decrease the use of barrier islands by coastal species, including polar bears and nesting birds.”²³⁸

Requiring only two types of habitat to be managed with any consideration of coastal species was not adequate to create a comprehensive system of environmental protections. There are many species that inhabit the other seven types of habitat that needed to be protected and considered when addressing impacts from possible projects. The Cook Inlet belugas provide one such example. The Cook Inlet belugas inhabit types of coastal habitats that were not subject to a management standard that mandated consideration of coastal species, yet there were many projects occurring in the coastal zone that were subject to consistency reviews and would adversely impact their habitat use.²³⁹

233. ACMP HANDBOOK, *supra* note 8, at A48 (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(b)(1)).

234. *Id.* (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(b)(4)).

235. *Id.* at A49 (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(b)(8)).

236. *Id.* at A48.

237. *Id.* (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(b)(5)).

238. *Id.* (quoting ALASKA ADMIN. CODE tit. 11 § 112.300(b)(6)).

239. See Endangered And Threatened Species; Endangered Status for the Cook Inlet Beluga Whale 73 Fed. Reg. 62,919, 62,927 (Oct. 22, 2008).

While two habitat management standards did strive to protect the coastal species' use of the habitat, the rest fall far short of protecting coastal habitat, and instead simply protect commercial, recreational, and subsistence uses of the areas.

D. Sunset of the ACMP

Although there were gaps in protection of coastal areas when the ACMP was in place, when the ACMP sunset, all of the protections that existed as described above went with it. Additionally, there is no longer a centralized point for consistency reviews and permitting, and perhaps more importantly, there will be no further state consistency reviews of federal projects.²⁴⁰ Some of the most significant environmental losses include the habitat protection regulations and the oil spill prevention standards.²⁴¹ According to Alaska State Representative Beth Kerttula, "[t]he coastal zone program is essential if Alaska is to have any say in planning federal projects off Alaska's coast."²⁴²

Without this program, the State has lost its "direct voice," and its "most powerful tool to influence federal activities and federally permitted activities,"²⁴³ not to mention all of the input from local coastal communities, who have had an intimate relationship with the coastline for hundreds of years. Additionally, permitting and comment processes for OCS activities could become seriously disjointed and "lead to less informed decisions that affect Alaska's coastal areas."²⁴⁴ Although these protections have been lost, there are still some protections afforded by what is left of Alaska's permitting system.²⁴⁵ However, these remaining protections are nowhere near as robust as the ACMP and its consistency

240. See *supra* part III.B.

241. See *supra* part III.C.

242. *No Special Session to Save Alaska's Coastal Zone Management Program*, STORIES IN THE NEWS (May 31, 2011), http://www.sitnews.us/0511News/053111/053111_special_session.html.

243. Letter from Randy Bates, Director, Dep't of Natural Res., Div. of Coastal & Ocean Mgmt., to Susan Haynes, Legislative Analyst, Legislative Research Servs. (Feb. 10, 2011) (*available at*, http://alaskacoast.state.ak.us/Current_News/2011_Leg_Session/110210_SHaymes_leg_inquiry_response.pdf).

244. Memorandum from Susan Haynes, Legislative Analyst, to Senator Bill Wielechowski (May 20, 2011) (*available at*, http://aksenate.org/27thpress/Nonpartisan_Report_on_Demise_of_ACMP.pdf).

245. *Resource Development Council Address, June 28, 2011*, OFFICE OF GOVERNOR SEAN PARNELL, <http://gov.alaska.gov/parnell/press-room/full-press-release.html?pr=5825> (last visited Mar. 5, 2012) ("The reality is that even without ACMP, the state has a very robust permitting process, one that will continue to assure that Alaska residents and local communities have a voice in the permitting process. Alaskans will continue to receive notice of proposed federal decisions and there will continue to be the opportunity for public comment and input before final decisions are made. Alaska and local communities still have multiple ways to impact federal decisions.").

review process, and they are not sufficient to protect the diverse and unique ecosystems of Alaska's coast.

IV. ALASKA'S SIGNIFICANT INTERESTS IN PROTECTING ITS COASTAL ECOSYSTEMS AND POSSIBLE WAYS TO ACCOMPLISH BETTER CONSERVATION

In order to protect Alaska's diverse and unique ecosystems, the State needs to recognize what its significant interests are in protecting coastal areas and then address those interests in a way that gives equal weight to environmental and commercial concerns.

Alaska's interest in self-regulating its coastal zones stems from its interest in managing the vast quantities of natural resources located along its coasts. Specifically, Alaska has an interest in implementing and enforcing its own laws. It also has economic interests in supporting commercial, sport, and subsistence fishing; oil and gas exploration and development; and shipping operations. Finally, it has an interest in protecting the unique and traditional way of life of coastal communities and including local knowledge in its coastal resource management.

This unique and traditional way of life is built on Alaska's enormous coastline, which is home to a diverse number of coastal habitats "ranging from steep, rocky coasts and fjords, to mudflats, coastal tundra, eelgrass lagoons, and large, sprawling river valleys."²⁴⁶ These diverse coastal areas are vital to healthy fish and wildlife populations, economic well-being of the state and the nation,²⁴⁷ and the cultural and spiritual well-being of Alaska's coastal communities.²⁴⁸ With three-fourths of the state's population residing along the coast,²⁴⁹ and 80 percent of the state's economic activity occurring on the coast,²⁵⁰ the coastal habitats are subject to an immense amount of stress. Additionally, Alaska has unique challenges involved with resource extraction and its associated infrastructure.²⁵¹ Because Alaska's resources contribute to the economic well-being of both the state and the nation, the coastal resources are constantly in high demand. Thus, Alaska has an interest in ensuring the safe and prudent use of its coastal habitats.

As evidenced by the State's failure to adequately protect the Cook Inlet belugas, the old form of the ACMP was not sufficient to accomplish

246. U.S. FISH AND WILDLIFE SERVICE, ALASKA COASTAL PROGRAM 1 (2012), *available at* http://alaska.fws.gov/fisheries/restoration/pdf/factsheet_coastal_program.pdf.

247. *Id.*

248. *See supra* part II.B.

249. *Explore Alaska's Coast*, *supra* note 1.

250. *Id.*

251. *Id.*

effective coastal protection. However, without this program, there is a serious gap in coastal ecosystem protection. The State's failure to renew its participation in the CZMA also represents the State's failure to protect its valuable and delicate ecosystems with high standards of habitat protection and oil spill prevention. The valuable ecosystem protections that were encapsulated in the program are too important to be subject to voluntary state compliance with a federal program.²⁵² One way to accomplish this level of protection is through a citizens' initiative or a bill that deals specifically and exclusively with the protection of coastal ecosystems as a whole.

This protection could be accomplished through a statutory provision that is similar to the State's protection of endangered species.²⁵³ A state statute that is independent of the federal CZMA would enable Alaska to fulfill its own interest in properly managing its coast. This provision could include factors for determining if a coastal ecosystem needs to be protected as endangered, which would parallel those factors used in the determination of an endangered species. If the ecosystem is determined to be endangered, then it would invoke similar protections under the statutory scheme. Additionally, if an ecosystem was listed, it would invoke more stringent protections under a subsequent iteration of the ACMP. Finally, a subsequent iteration of the ACMP needs to include a statutory directive to promulgate regulations that protect habitat based on ecological concerns, not simply recreational or commercial.

A. the Coastal Management Plan—Including Possible Future Reincarnations—Alone is Not Enough to Ensure Ecological Conservation

As shown through the story of the Cook Inlet belugas, the ACMP protection of coastal habitats is inadequate for two reasons. First, even though the program had some robust environmental protections, such as those that covered energy facilities²⁵⁴ and certain habitats,²⁵⁵ many of the habitat protections focused on commercial and recreational use, instead of conservation and environmental protection.²⁵⁶ This led to protection of the beluga habitat that was merely incidental to these other uses, and ultimately ineffective.²⁵⁷ Many of the threats to the beluga and their habitat fell under the control of the ACMP in effect at the time, such as

252. See *supra* part III.

253. ALASKA STAT. § 16.20.190 (2011).

254. See *supra* part III.C.

255. *Id.*

256. *Id.*

257. See *supra* part II.C.

oil and gas exploration and development and port expansion.²⁵⁸ If there were stronger directives to manage coastal resources by giving equal weight to conservation and commercial interests, perhaps some of those threats could have been mitigated or eliminated.

Second, the State's participation in the program is only voluntary, and the protections are subject to the political whims of the day.²⁵⁹ If the State enacts its own coastal management statute, then the State will be in control of what provisions and protections are included, as opposed to being required to include provisions mandated by the CZMA. This increased control would lend more legitimacy, and less politics, to the provisions, which would likely lead to a more permanent solution.

While there is a citizen's initiative to reinstate the ACMP in the works currently,²⁶⁰ it will be essentially the same program as before and will, therefore, be subject to these same two downfalls. The initiative would restore the ACMP and once again provide the State with a tool to influence federal decision making.²⁶¹ The new ACMP would provide for local participation through representation on a Coastal Policy Board and through reinstatement of coastal districts.²⁶² This initiative would, in effect, restore similar statutory authority that established the previously functioning ACMP.

Reinstating the State's participation in the CZMA is important to retain a state check on federal activities, but this alone will not adequately protect Alaska's coastal ecosystems, just as it did not adequately protect the Cook Inlet belugas.²⁶³

B. Statutory Coastal Ecosystem Protection in Combination with Participation in the CZMA Would Achieve Adequate Protection

If Alaska wants to protect species like the Cook Inlet belugas and maintain regulatory control over the coast, it needs a more substantial statutory and regulatory scheme that will ensure adequate protection of coastal ecosystems, even in the event of a possible revival and loss of the ACMP. Either through a bill or a citizen's initiative, the State should enact provisions that protect entire coastal ecosystems, ensuring conservation of Alaska's precious coastal resources and unique way of life. These statutes could model the State's endangered species listing

258. *Id.*

259. See Gara, *supra* note 14.

260. *Alaska Coastal Management*, ALASKA SEA PARTY, <http://www.alaskacoastalmanagement.org/> (last visited Apr. 7, 2013).

261. *Alaska Coastal Management Program Initiative, Overview*, ALASKA SEA PARTY, <http://www.alaskacoastalmanagement.org/ACMP%20Overview.pdf> (last visited Apr. 7, 2013).

262. *Id.*

263. See *supra* part II.C.

statutes, by providing criteria for the designation and protection of entire “at risk coastal ecosystems.” Once an area has been designated as an at risk ecosystem, it would be subject to conservation rules promulgated by the lead agency.²⁶⁴ Additionally, in the event that the State revives its participation in the CZMA, there should be specific rules promulgated under the new CMP to ensure maximum conservation of these areas, even in the face of a federal project. Through this scheme, an area could be protected by both state law and by regulations that would be enforceable policies during federal consistency reviews.

1. New Statutory Framework Needed to Protect Endangered Coastal Ecosystems

In the absence of the ACMP and its relevant coastal zone protections, the coastal habitats are left in jeopardy of being adversely impacted by development projects. Relying on what is left of the permitting system or relying on federal environmental law protections will not adequately meet the high standard needed to protect Alaska's coastal ecosystems.

The State's “extensive permitting program” was found to be inadequate to protect the Cook Inlet belugas when the State challenged the final endangered listing.²⁶⁵ In *Alaska v. Lubchenco*, the State argued that its fishery management and “extensive permitting program” are sufficient to protect and improve the habitat and food supply of the belugas.²⁶⁶ The State also argued that these programs are formal conservation efforts that should have factored in to the listing decision,²⁶⁷ based on Section 4(b)(1)(A) of the ESA, which states that listing determinations can only be made after “taking into account those efforts, if any, being made by any State or foreign nation...to protect the species.”²⁶⁸ The court, however, concluded that these conservation measures are meant to accomplish broad conservation goals, and only “may be beneficial” to the beluga whales through an “incidental impact on the beluga's chances for survival.”²⁶⁹ Based on this conclusion, combined with the fact that the population had shown no signs for

264. This lead agency could be ADF&G's Lands and Waters division. *Lands and Waters*, ALASKA DEP'T OF FISH & GAME, <http://www.adfg.alaska.gov/index.cfm?adfg=lands.main> (last visited Apr. 8, 2012).

265. *Alaska v. Lubchenco*, 825 F. Supp. 2d 209, 219 (D.D.C. 2011).

266. *Id.*

267. *Id.*

268. *Id.* Section 4(b)(1)(A) of the ESA states that a listing determination will be made only “after taking into account those efforts, if any, being made by any State or foreign nation...to protect the species.” 16 U.S.C. § 1533(b)(1)(A) (2012).

269. *Lubchenco*, 825 F. Supp. 2d at 219.

recovery, the court found the conservation efforts by the State to be ineffective for protection and recovery of the species.²⁷⁰

Furthermore, the remaining permitting system does not give local coastal communities a significant voice in the management of coastal areas. Alaska's local coastal communities need to have a significant voice in the shape of the conservation program because despite Alaska's statewide and national coastal resource importance, the coastal resource is perhaps most valuable as a cultural resource to the local communities.²⁷¹ Additionally, Alaska Native coastal communities possess an immense amount of traditional and observational knowledge about the coastal environment that should form the foundation of any conservation program.²⁷²

For example, Tyonek Natives possess a great deal of traditional knowledge of the Cook Inlet belugas. Tyonek residents have important information about "beluga abundance, distribution, migration, health, and habitat," as well as critical information about the Cook Inlet environment in general.²⁷³ When interviewed about this knowledge, Tyonek residents were often found to be consistent with published reports on Cook Inlet belugas, and in some instances Tyonek residents provided information that was not available in published literature.²⁷⁴ This type of knowledge is a tremendous resource for any type of conservation program because it originates from coastal communities that interact with the coastal resource every day and intimately understand the threats facing the areas.

Using this traditional knowledge as a foundation, a conservation program should be developed that considers at risk coastal ecosystems as a whole, and protects them from the bottom of the food chain up. By including full ecosystems in the conservation goal, species and their habitats will likely be saved before reaching the eleventh-hour of their existence, necessitating a listing under the ESA.

Conservation of at risk coastal ecosystems could be accomplished through a system that is similar to the system used by the State to list species as endangered.²⁷⁵ Under this program, the Alaska Department of Fish and Game (ADF&G) determines and maintains a list of endangered

270. *Id.* at 219.

271. *See supra* part II B.

272. Tyonek Report, *supra* note 41, at 63.

273. *Id.*

274. *Id.*

275. Currently only five species are listed on the State Endangered Species list. *State of Alaska Special Status Species*, ALASKA DEP'T OF FISH & GAME, <http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akendangered> (last visited Mar. 5, 2012).

species.²⁷⁶ The ADF&G Commissioner makes these determinations according to a list of four factors²⁷⁷ and the “advice and recommendation of interested persons and organizations.”²⁷⁸ Once listed, the Commissioners of ADF&G and the Alaska Department of Natural Resources (ADNR) “shall take measures to preserve the natural habitat” of the species.²⁷⁹

A similar statutory framework should be enacted to protect at risk coastal ecosystems. The Commissioners of both ADF&G and DNR would determine whether an area should be designated as an at risk coastal ecosystem based on a number of factors and the advice and recommendation of local communities. The factors for determining whether an ecosystem’s “continued existence is threatened”²⁸⁰ could include similar considerations to the factors used to determine an endangered species.²⁸¹ For example, the “destruction, drastic modification, or severe curtailment of [the] habitat;”²⁸² overutilization of an area for commercial or recreational purposes; the effect on the area from resource extraction and development; overall cultural importance of the area; likelihood of widespread negative effects on plant and animal species; and “other natural or man-made factors affecting its continued existence.”²⁸³

Additionally, the statute should include a provision mandating that the Commissioners seek the advice and recommendation of any communities located in the area, in addition to “interested persons and organizations.”²⁸⁴ This provision would provide an effective and mandatory way to include traditional knowledge in to a conservation plan. This information has been shown to be at least as valuable as scientific studies, if not more so, and thus it will be an important step in the designation process.²⁸⁵

Once an ecosystem is designated as an at risk coastal ecosystem, the Commissioners “shall take measures to preserve” it.²⁸⁶ This open-ended

276. *Id.*; ALASKA STAT. § 16.20.190 (2011).

277. ALASKA STAT. § 16.20.190(a) (these factors include: “(1) the destruction, drastic modification, or severe curtailment of its habitat; (2) its overutilization for commercial or sporting purposes; (3) the effect on it of disease or predation; (4) other natural or man-made factors affecting its continued existence.”).

278. ALASKA STAT. § 16.20.190(c).

279. ALASKA STAT. § 16.20.185.

280. ALASKA STAT. § 16.20.190(a).

281. *Id.*

282. ALASKA STAT. § 16.20.190(a)(1).

283. ALASKA STAT. § 16.20.190(a)(4).

284. ALASKA STAT. § 16.20.190(c).

285. *See supra* part II.B.

286. ALASKA STAT. § 16.20.185.

mandate to “take measures to preserve” the coastal ecosystem would allow for flexible planning and management of the area because the Commissioners would essentially determine the most effective conservation techniques in light of development activities. Because of the comprehensive designation and flexible preservation mandate, this statutory framework would create protection for entire ecosystems from the bottom of the food chain up.²⁸⁷

The Cook Inlet can be used as an illustrative example of how this statutory framework would be applied and how it could have provided comprehensive protection to the belugas. The Cook Inlet, as a hot spot for oil and gas development, industrial activity, and population concentration,²⁸⁸ should be considered an at risk coastal ecosystem in light of the previously proposed factors.²⁸⁹ The area faces modification and destruction from projects such as port expansions, industrial discharges, and discharges of pollutants from sources like urban runoff.²⁹⁰ Additionally, the Cook Inlet is likely to be severely impacted by oil and gas development because of the numerous wells, leases, and pipelines located in the area.²⁹¹ Additionally, local coastal communities, such as Tyonek, could provide information on the historical changes that have occurred in the area that coincide with commercial and industrial development.

The at risk coastal ecosystem boundaries could be designated using a substantially similar process that was used to define the original coastal zone boundaries.²⁹² Once the Cook Inlet was designated as an at risk coastal ecosystem, the Commissioners ADF&G and the DNR could then take measures to preserve the ecosystem by promulgating regulations that protect the integrity of the entire ecosystem from encroaching development. By protecting the entire ecosystem, the belugas would be comprehensively protected because everything from their food source to their habitat would be covered. Additionally, because the protections would be promulgated strictly under a state program, the regulations and

287. This framework will necessarily apply to ecosystems that are not purely “coastal zone” areas. However, due to Alaska’s expansive coastline, population concentration, and natural resource location, the ecosystems that are most likely to be in danger are those located in the coastal zone.

288. See *Beluga Whale*, supra note 15; see also *Cook Inlet Watershed*, INLETKEEPER, <http://inletkeeper.org/about/watershed> (last visited Apr. 7, 2013).

289. See *supra* text accompanying notes 280-83.

290. Endangered and Threatened Species; Endangered Status for the Cook Inlet Beluga Whale 73 Fed. Reg. 62,919, 62,927 (Oct. 22, 2008).

291. More than twenty wells were drilled between 2010 and March 2012. See *Cook Inlet Oil and Gas Activity 2012*, ALASKA DEP’T OF NATURAL RES., DIVISION OF OIL & GAS (March 2012), http://dog.dnr.alaska.gov/GIS/Data/ActivityMaps/CookInlet/Cook_Inlet_Oil_and_Gas_Activity_Map_201202.pdf.

292. See *supra* part III.

standards can be crafted with Alaska's interests in mind, instead of adhering rigidly to a federal program.

Although this state statutory framework would be comprehensive and protective on state land, it would not protect coastal ecosystems located on federal land that face destruction by federal projects. Because the resources located on Alaska's coast carry great national significance, federal activity in the coastal zone is inevitable. Without Alaska's most powerful and influential tool—coastal management plan consistency reviews—the State has little control over the standards to which the projects are held. Coastal ecosystems do not distinguish between destruction by state projects and destruction by federal projects; therefore, it is extremely important to have a strong influence over federal projects.

2. ACMP Statutory Designation to Protect Ecological Value of Coastal Zone Habitat is Necessary to Fully Protect Cook Inlet Belugas

If the State does not participate in the CZMA, Alaskans will still receive notice of federal actions and the opportunity to comment through both the Administrative Procedures Act (APA) and the National Environmental Policy Act (NEPA).²⁹³ Additionally, state authority for water- and air-quality permitting was unaffected by the loss of the ACMP and the State continues to set air and water quality standards.²⁹⁴ While these are still valid avenues for the State to retain some control over federal projects, it is not anywhere near as substantial as the federal consistency requirement in the CZMA.²⁹⁵ Even if the State chose to only enact a statutory conservation scheme similar to what was suggested in the previous section, this important federal oversight piece will still be missing.

If the State chose to again participate in the CZMA, it would regain its consistency review procedure for federal projects.²⁹⁶ This would mean that federal projects would again have to comply with Alaska's promulgated regulations under the authority of a second ACMP. This strict compliance standard is more robust than the standard under the NEPA analysis, for example, which only requires "cooperation with state

293. Attorney General John J. Burns, *Even Without ACMP, Alaskans Will Have Voice in Coastal Issues*, ALASKA DISPATCH, June 22, 2011, <http://www.alaskadispatch.com/article/even-without-acmp-alaskans-will-have-voice-coastal-issues>.

294. *Id.*

295. *See supra* part III.B.

296. *Id.*

and local governments.”²⁹⁷ Additionally, depending on the structure of the new program, the State could regain a centralized permitting agency that would ensure an efficient and effective total permitting process. Because of the centralized permitting and the strict compliance under the consistency review requirements, participation in the CZMA is the most efficient way for the State to reclaim its influence over federal projects.

Once the State chooses to again enact a Coastal Management Act, it should include a provision to reflect the importance of ecological concerns. This could be in the form of a directive to the implementing agency that when drafting regulations, ecological concerns should be given equal weight with economic and recreational concerns. Additionally, there should be a statutory directive to ensure that an area with an endangered ecosystem designation receives extra protection. Including such a provision would allow for cohesive management and planning in sensitive areas regardless of whether it is a state or federal project because the State requirements would apply to both categories through the consistency review process.

By having these substantial environmental protections as both statutory authority and as enforceable policies under the ACMP, coastal ecosystems will be better protected from degradation due to development. Both pieces are necessary to ensure full protection because the State’s participation in the CZMA is voluntary and subject to become extinct in the wake of political shifts. Therefore, coastal protections under this program only are vulnerable to extinction. Statutory provisions for protection could be more robust, but do not apply to federal activities. Therefore, the combination of both pieces is the key to effective and efficient coastal ecosystem protection.

V. CONCLUSION

Alaska’s coasts are vast, unique, and diverse. Protecting this substantial resource should be one of the State’s highest and most pressing environmental concerns. Not only do a majority of Alaska’s citizens inhabit coastal communities, but it is also the location of a majority of Alaska’s wealth of natural resources. By establishing enforceable coastal ecosystem protections that are both statutory and enforceable policies under any subsequent reincarnation of Alaska’s coastal management program, coastal habitat and the species that depend on it will be protected regardless of the project.

297. 42 U.S.C. §§ 4331, 4332 (2012).

The Cook Inlet belugas are just one example of how Alaska's coastal habitat protections have fallen short, and unless something changes, they will not be the last.