BEARING THE BURDEN: ENVIRONMENTAL INJUSTICE
IN THE PROTECTION OF THE POLAR BEAR
ALASKA OIL & GAS ASS’N V. JEWELL (9TH CIR. 2016)

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INTRODUCTION

The Arctic is melting. Fast. The Intergovernmental Panel on Climate Change has found that the Arctic is warming at almost twice the rate of the rest of the planet, with potentially devastating environmental consequences.1 In northernmost Alaska, on the United States’ Arctic coastline, live two substantial, but declining, populations of polar bears. Surviving primarily on seal meat, the polar bears spend most of their lives hunting, mating, travelling and sleeping on and around the sea ice, which makes up much of the Arctic Ocean. As a result of climate change, however, it is predicted that there will be a significant reduction in the extent of Arctic sea ice, and so, in 2008, the U.S. Fish and Wildlife Service (“FWS”) designated the polar bear as a threatened species2 under the Endangered Species Act (“the Act”).3 As required by the Act, a year later, FWS designated an area of habitat as critical to the protection of the polar bear.4 The designated critical habitat covered 187,157 square miles of sea ice, land, and coastal islands in Alaska and the adjacent waters, an area larger than California.5

In the United States District Court for the District of Alaska, the designation was successfully challenged by the oil and gas industry, a number of native

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3. 16 U.S.C. §§ 1531–44 (2012); see also Alaska Oil & Gas Ass’n v. Jewell, 815 F.3d 544, 551 (9th Cir. 2016).
5. Designation of Critical Habitat, supra note 4, at 76,086.
corporations, the local municipality, and the State of Alaska. On appeal, the Ninth Circuit reversed the decision.

The decision of the Ninth Circuit is a positive one for those concerned about the environment. Both the agency and the court acknowledged the reality of climate change and the effect that it will have on the Arctic ecosystem and the species that rely on it. However, while the outcome is environmentally sound, it is a prime example of a decision which benefits the environment but which imposes an unfair burden on a number of indigenous communities, thereby causing environmental injustice. FWS failed to consider the environmental justice issues raised by the case, despite its authority to consider any “relevant impact” under section 4(b)(2) of the Act. By missing the environmental justice issues, the agency placed an undue, and unjust, burden on the local community. This comment argues that FWS should have done more to address the environmental justice issues affecting the indigenous communities of Arctic Alaska when designating the critical habitat of the polar bear.

Part I of this comment provides background information about the Endangered Species Act. Part II gives a detailed overview of the agency’s decision and the court cases which followed. Part III considers the environmental justice matters raised by this case and discusses the application of environmental justice to the Endangered Species Act, using Alaska Oil & Gas Ass’n v. Jewell as an example. Finally, Part IV argues that FWS failed to adequately prevent environmental injustice in this case and provides some suggestions regarding how similar injustices could be avoided in the future.

I. The Endangered Species Act

In the closing days of 1973, Congress passed the Endangered Species Act with the declared purpose of providing “a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.” The Act allows the Secretary of the Interior (who subsequently delegated the power to FWS) to designate species as endangered or threatened. An endan-

7. Alaska Oil & Gas Ass’n, 815 F.3d at 550.
10. The Act authorizes the Secretary of the Interior and the Secretary of Commerce to take action pursuant to the Act. 16 U.S.C. §§ 1532(15), 1533. Their respective areas of authority are established under the Reorganization Plan No. 4 of 1970. Id. § 1532(15). The Secretaries have delegated their authority to the FWS and the National Marine Fisheries Service under the National Oceanic and Atmospheric Administration, respectively. The latter deals with marine species and FWS is responsible for species found on land or in freshwater.
gered species is any species “in danger of extinction throughout all or a significant portion of its range.” 12 A species can be designated as “threatened” when it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” 13 The decision to list a species is made on the basis of scientific data, and FWS cannot take economic or social factors into account when making its determination. 14 The cost of the listing is irrelevant; the Supreme Court has confirmed that “[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.” 15

Once FWS lists a species, the statute requires that the agency also designate any habitat necessary to the preservation of the species as “critical habitat.” 16 Unlike for the listing decision, the critical habitat determination requires FWS to consider “the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat.” 17 FWS may choose not to include an area as part of the critical habitat if the benefits of exclusion outweigh the benefits of designation. 18

Once a species is listed as endangered or threatened and a critical habitat is designated, the protections of section 7 of the Act apply. 19 Section 7 prevents any federal agency from “authoriz[ing], fund[ing], or carry[ing] out” any activity which is “likely to jeopardize the continued existence of any endangered

Despite its being a marine mammal, responsibility for the polar bear lies with FWS. 50 C.F.R. § 402.01(b) (2018).

11. 16 U.S.C. § 1533(a). FWS determines whether a species should be designated as either endangered or threatened on the basis of the five “listing factors.” The factors are: (A) the present or threatened destruction, modification, or curtailment of [the species’] habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence.” Id. § 1533(a)(1).

12. Id. § 1532(6).
13. Id. § 1532(20).
17. Id. § 1533(b)(2).
18. Id. However, the Secretary may not find the costs outweigh the benefits if the failure to designate the area will lead to extinction.
19. Id. § 1536(a). In addition, section 9 of the Act creates various prohibitions on the importation, transportation and “tak[ing]” of an endangered species. Id. § 1538(a)(1)(B). The Act defines taking as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct . . . .” Id. § 1532(19). Threatened species are similarly protected by regulations promulgated by the Secretary under Section 4(d) of the Act. Id. §§ 1533(d), 1538(a)(1)(G). There is an exemption allowing Alaska Natives living in Alaska and non-native residents of “an Alaskan native village” to take an endangered and threatened species for the purposes of subsistence and to sell any non-edible by-products which have been “made into authentic native articles of handicrafts and clothing” unless the Secretary directs otherwise. Id. § 1539(e).
species or threatened species” or which could destroy or adversely modify the habitat of that species (unless an exemption is granted).20 In order to decide whether a federal activity will pose a threat to a listed species, section 7 requires FWS to consult with the relevant federal agency.21 Section 7 also applies if a private landowner—such as a federal tribe, tribal members, or private individual—seeks to perform an action that requires a federal permit or relies on federal funding.22

II. The Case

A. The Listing and Critical Habitat Decisions

The polar bear (Ursus maritimus) can be found throughout the Arctic; current population estimates suggest that there are around 20,000 to 25,000 polar bears dispersed across the region.23 In Alaska, there are two “relatively distinct polar bear populations,” one in the southern Beaufort Sea and the other in the Chukchi and Bering Seas.24 As marine mammals, polar bears rely predominantly on sea ice, using the ice as a platform from which to hunt, migrate, swim, mate, and rest.25 While the majority of a polar bear’s life is spent on the sea ice, female polar bears will come off the ice in order to give birth in dens on land.26 Any reduction in the extent or quality of sea ice makes it harder for polar bears to hunt, thereby reducing their ability to obtain adequate nutrition and causing competition for food.27 This results in polar bears swimming longer distances to obtain food or to reach adequate rest areas, which leads to higher levels of drowning and an increased risk of interactions with humans.28

There is substantial evidence that the sea ice in the Arctic is melting rapidly.29 Recorded surface air temperatures in the Arctic are rising, with the years 2005 to 2010 being the warmest five-year period recorded since records began

20. Id. § 1536(a)(2).
21. Id. § 1536(a)(3).
22. Id. § 1536 (a)(2).
26. See, e.g., id. at 595.
27. Designation of Critical Habitat, supra note 4, at 76,111.
28. Id.
around 1880. As a result of these temperature increases, the multi-year sea ice, which normally remains frozen during the summer, is melting at an unprecedented rate, even faster than the projected rate in past Intergovernmental Panel on Climate Change models. By 2011, summer sea ice was at or near its lowest levels every year for the previous decade and was almost one third smaller than the average between 1979 and 2000. Even where the ice remained intact, research showed that thinner, newer ice had taken the place of thick, multi-year ice; this newer ice is less able to support polar bears.

FWS concluded that the loss of sea ice would cause a substantial decline in the population levels of the polar bear, and in 2008, decided to list the polar bear as a threatened species. In 2010, following extensive public comment, FWS designated a critical habitat in northern Alaska for the polar bear.

**Figure 1: The Location of the Critical Habitat of the Polar Bear**

31. See id. at vi.
32. Id.
33. Id.
35. Designation of Critical Habitat, supra note 4.
The designation was broken down into three units. Unit 1, which made up 95.9 percent of the total habitat, covered the offshore sea ice which the polar bears use for hunting, mating, swimming and travelling. Unit 2 covered the terrestrial denning habitat which female polar bears use for giving birth and raising their young. The area designated in Unit 2, approximately 5,657 square miles, included 95 percent of the known denning areas of the polar bears in the southern Beaufort Sea population. Unit 3 encompassed the offshore barrier islands on the coast of Alaska, the accompanying spits of land and all of the water, ice and land within one mile of the islands. This area is partly used for denning and partly provides protection for the bears from interactions with humans.

The native village of Barrow (Utqiaġvik) and part of the native village of Kaktovik, both situated in Unit 2, were excluded from the area designated as critical habitat on the basis that these populated areas do not provide the necessary habitat for polar bears and that polar bears are discouraged from entering the villages (and even killed if necessary) to protect the local population. The

37. *Id.* at 76,120–22.
38. See *id.* at 76,121.
39. *Id.* at 76,121–22.
40. *Id.* at 76,121. The unit is split into two zones, the first running along the coast and inland for five miles between the town of Barrow (Utqiaġvik) and the Kavik River and the second from the Kavik River to the Canadian border but covering an inshore area of 20 miles from the coastline. *Id.* at 76,134. The denning area does not extend west of Barrow (Utqiaġvik) because historically there have been few bears who have built dens in this area. *Id.* at 76,094. This case was argued before the village of Barrow changed its name to the native name, Utqiaġvik. Throughout this Comment, the name Barrow is used, with Utqiaġvik in parentheses to avoid confusion while acknowledging the decision of the native community to use their traditional name.
41. *Id.* at 76,122.
42. *Id.*
43. *Id.* at 76,125, 76,128–29, 76,134–36.
Final Rule suggested that these are the only two communities that fall within the critical habitat designation. However, there are thirteen smaller villages which appeared on the maps as being included in the barrier island habitat or in the surrounding “no disturbance zone” but which had not been excluded from the critical habitat designation except under the general exception for manmade structures. It is not clear why the two bigger towns were excluded and the smaller communities included.

B. The Litigation

The final FWS designation was challenged in the Alaska District Court by the oil and gas industry, the State of Alaska, and a number of the Alaska native organizations including the Alaska Native Corporations and tribal and

44. Id. at 76,097, 76,109, 76,128.
45. The villages identified as being included in the critical habitat designation by the Alaska Native plaintiffs are Diomede, King Island, Kivalina, Nunam Iqua, Point Hope, Point Lay, Shaktoolik, Shishmaref, Solomon, St. Michael, Teller, Wainwright and Wales. Mem. Supp. Alaska Native Pls.’ & North Slope Borough’s Mot. Summ. J., Alaska Oil & Gas Ass’n v. Salazar, 916 F. Supp. 2d 974 (D. Alaska 2013) (No. 3:11-cv-00025-RRB), 2011 WL 6008558, at *12 [hereinafter Mem. Supp. Pls.’ Mot. Summ. J.]. Based on statements of FWS, the district court stated that the “thirteen villages were never included in the designation in the first place.” Alaska Oil & Gas Ass’n, 916 F. Supp. 2d at 994. It is not clear from the Final Rule whether or not the villages were included given that they were clearly marked on the maps as being situated within the designation and not excluded in the way that Kaktovik and Barrow (Utqiaġvik) were. The Final Rule excludes “manmade structures (e.g., houses, gravel roads, generator plants, sewage treatment plants, hotels, docks, seawalls, pipelines) and the land on which they are located existing within the boundaries of designated critical habitat” Designation of Critical Habitat, supra note 4, at 76,133, but there are spaces within all communities which would not fall under this definition and would therefore not be excluded. Even if the villages themselves were meant to be excluded, the immediate areas surrounding the villages, used for hunting, berry picking, travel and available for development by the villages were included. See North Slope Borough’s Resp./Opening Br., Alaska Oil & Gas Ass’n v. Jewell, 815 F.3d 544 (9th Cir. 2016) (No. 13–35619), 2015 WL 416857, at *7.
46. Unlike Native Americans in other parts of the United States, Native Alaskans are not organized into tribes but instead were allocated shares of Native Corporations created under the Alaska Native Claims Settlement Act of 1971 in order to acquire the benefit of title to the land selected as belonging to the local population. Alaska Native Claims Settlement Act of 1971, 43 U.S.C §§ 1601–1629h (2012). While the Native Corporations are corporate bodies, they also form “long-term communal institutions” with cultural, political, and economic power which “maintain and nurture Alaska Native communities,” and as such are able to represent the communities which they serve. Eric C. Chaffee, Business Organizations and Tribal Self-Determination: A Critical Reexamination of the Alaska Native Claims Settlement Act, 25 Alaska L. Rev. 107, 135 (2008). The Alaska Native Corporations “provide for the cultural and economic wellbeing of their shareholders in part through the responsible development of the region’s natural resources, operating as employers, landowners, lessors of subsurface rights, and business partners with oil and gas companies and others working in the
local governments.\textsuperscript{47} The coalition of plaintiffs argued that the designation of the critical habitat by FWS was arbitrary and capricious because it did not identify the specific areas that were necessary to the survival of the polar bear.\textsuperscript{48} They also argued that the designation was not supported by the administrative record.\textsuperscript{49} Finally, the plaintiffs made a number of procedural complaints alleging that FWS had not provided adequate justification to the State of Alaska for not changing the final ruling on the basis of the comments which the State had provided.\textsuperscript{50}

The District Court held that the designation of Unit 1, the sea ice, was not arbitrary and capricious and was fully supported by the record.\textsuperscript{51} However, in relation to Units 2 and 3, the court concluded that the record did not provide evidence that the units included all of the features required for the survival of the polar bear.\textsuperscript{52} The District Court found that FWS had identified the relevant primary constituent elements for the polar bear but had not demonstrated the location of these elements within Units 2 and 3.\textsuperscript{53} The District Court also ruled that FWS had inadequately consulted with the State of Alaska in designating the critical habitat.\textsuperscript{54} The District Court remanded the whole of the designation, despite having found that the bulk of the designation—Unit 1—was not arbitrary and capricious.\textsuperscript{55}

On appeal by FWS, the Court of Appeals for the Ninth Circuit reversed the decision of the District Court's remand of the designation.\textsuperscript{56} The Court held that the District Court had held FWS to a "standard of specificity that the [Act] does not require," and that there was no need for FWS to show where

\textsuperscript{47} See Alaska Oil & Gas Ass'n, 916 F. Supp. 2d at 982–83.

\textsuperscript{48} See id. at 983.

\textsuperscript{49} See id.

\textsuperscript{50} See id.

\textsuperscript{51} Id. at 990.

\textsuperscript{52} Id. at 1001–02.

\textsuperscript{53} See id. at 1001–03.

\textsuperscript{54} See id. at 1003–04.

\textsuperscript{55} See id. at 1004.

\textsuperscript{56} Alaska Oil & Gas Ass'n v. Jewell, 815 F.3d 544, 550 (9th Cir. 2016), cert denied, 137 S. Ct. 2110 (2017).
The court argued that the purpose of the Act was to protect the “future of the species” and to promote its recovery, not to preserve it at its current level. In order to do this, it was necessary to designate a habitat that went beyond the area being used by the depleted, threatened population but that still demonstrated the characteristics necessary for use by the species. The District Court had “contravene[d] the [Act]’s conservation purposes by excluding habitat necessary to species recovery.”

The plaintiffs argued that it was inappropriate to consider climate change under the Act on the basis that there was no evidence to establish that the critical habitat would change as a result of climate change. The Ninth Circuit refused to accept this position, noting that this argument had been made, and rejected, in the D.C. Circuit case challenging the initial listing of the polar bear. The Ninth Circuit followed the D.C. Circuit and held that it was proper for FWS to take into account climate change predictions relating to the polar bear’s sea ice environment.

The plaintiffs argued that FWS had not adequately explained its reasoning for including the villages, communities, and industry found on the North Slope in the critical habitat. Only the communities of Barrow (Utqiagvik) and part of Kaktovik were excluded from the designation, leaving the industrial areas of Deadhorse and Prudhoe Bay and thirteen smaller communities included in the critical habitat. The court found that this was not arbitrary and capricious on
the basis that there was evidence that, despite the human activity in and around Deadhorse (including a major airport), polar bears moved through and even built dens in the area and that polar bears had been “allowed to exist” in the area.66 No mention was made of the position of the smaller communities.

In addition to the main appeal by FWS, the plaintiffs had brought a cross-appeal in which they were unsuccessful.67 The Ninth Circuit found that the “no disturbance zone” included in the barrier islands habitat was necessary as it “provides refuge from human disturbance.”68 The court also found that the plaintiffs had misunderstood the statements in relation to special management.69 The existence of “alternative protections” did not prevent FWS from designating the critical habitat.70 Finally, the court held that there was no additional duty to consult with the State of Alaska beyond that found in section 4 of the Act.71 The Alaska Native plaintiffs argued that the assessment of FWS underestimated the economic impact of the critical habitat designation and failed to account for “administrative costs, delay costs, and uncertainty and risk likely to result.”72 The court was, however, not persuaded by their arguments and dismissed them.73

The Supreme Court denied certiorari on May 1, 2017.74

III. ENVIRONMENTAL JUSTICE

For environmentalists, the decision in this case was positive. FWS sought to protect the polar bear, an iconic Arctic species, through the designation of a critical habitat on land, ice and sea, and the Ninth Circuit upheld this decision. However, the case raises a number of issues of environmental justice because, while the benefits of the critical habitat designation are felt by everyone who cares about the survival of the polar bear, the burdens are placed on the indigenous communities of the north coast of Alaska. When such an unequal sharing of the benefits and burdens unfairly impacts an indigenous, minority, or low-income community then it is considered to be an environmental injustice.

The Act allows FWS to take matters of environmental justice into account when considering whether to designate a critical habitat, both in terms of the economic impacts of the designation and in relation to “other relevant impacts.”75 In this case, however, FWS failed to adequately take a number of is-

66. Alaska Oil & Gas Ass’n, 815 F.3d at 559.
67. See id. at 564.
68. Id. at 564–65.
69. See id.
70. See id.
71. See id.
72. Id. at 564.
73. Id. at 545.
sues relating to environmental justice and distributional equity into consideration, which resulted in an outcome which was environmentally positive but has led to environmental injustice for a number of communities in northern Alaska. This section explains theories of environmental justice and then demonstrates how these theories should be incorporated into critical habitat designation decisions under the Act.

A. Legal Theories of Environmental Justice

The traditional argument of the environmental justice movement is that poorer and minority communities are more likely to be exposed to environmental harm, to suffer more detrimental environmental impacts, and to face increased levels of risk from environmental pollution than wealthier or white communities. It is common for toxic waste disposal facilities or heavily polluting industrial plants to be sited in poor or minority communities, exposing those who are already disadvantaged to a disproportionate share of contaminated air or water. When the burden of pollution and the benefit of clean air and water are not shared equally, it is considered to be an environmental injustice.

In 1993, Professor Richard J. Lazarus was the first to argue that issues of environmental justice could also cover “distributional inequity” in relation to the burden of environmental protection laws as well as in relation to environmental risks. This environmental injustice occurs when there is a law passed or decision taken which, prima facie, appears to be one which is environmentally beneficial, as it will protect wildlife or habitats, but imposes an unfair burden on a particular community. As Professor Lazarus wrote, “the burdens of environmental protection range from the obvious to the more subtle.” He identified burdens of environmental protection laws such as increased costs for both producers and consumers, reduced employment opportunities, and additional public resources being directed towards environmental protection and away from other socially beneficial activities. There are other burdens which Professor Lazarus did not identify, such as an increased administrative burden on an eco-

77. See Robert D. Bullard, Grassroots Flowering, 16 AMICUS J. 32 (1994).
80. Id.
81. Id. at 793.
82. Id. at 794.
nomically vulnerable community, or the inability of a community to exercise its cultural rights because its traditional practices conflict with environmental protection. Where these distributional inequalities impact minority communities or communities that are economically vulnerable, environmental injustice will also occur.

B. The Importance of Environmental Justice in Federal Policy

While the Act makes no mention of environmental justice, there are a number of federal policies in place which demonstrate the importance of environmental justice in federal decision making, including when FWS reaches decisions on critical habitat designation.

The first is that President Clinton made environmental justice the responsibility of the federal agencies. In Executive Order 12,898, the President ordered that

[t]o the greatest extent practicable and permitted by law . . . each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations . . . .

This Executive Order therefore requires federal agencies to address matters of environmental justice as much as possible, within the confines of their legal authority.

The agencies themselves have also indicated the importance and relevance of environmental justice. A Secretarial Order issued by the Secretary of the Interior and the Secretary of Commerce in 1997 committed the agencies to “carry out their responsibilities under the Act in a manner . . . that strives to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species . . . .” The Order recognizes the “fundamental rights of tribes to set their own priorities and make decisions affecting their resources and distinctive ways of life” and requires the agencies to “be sensitive to the fact

that Indian cultures, religions, and spirituality often involve ceremonial and medicinal uses of plants, animals, and specific geographic places.  

This Order clearly acknowledges the environmental justice issues relevant to the Act and provides guidance to agencies to ensure that these matters are taken into account when dealing with indigenous peoples.

There are a number of other federal policies which commit the government to addressing matters of environmental justice. For example, in 2011, federal agencies reaffirmed their commitment to environmental justice by signing the Memorandum of Understanding on Environmental Justice and Executive Order 12,898.  

In the Memorandum, the agencies and departments declared “the continued importance of identifying and addressing environmental justice considerations in agency programs, policies, and activities as provided in Executive Order 12,898,” again demonstrating the relevance and importance of environmental justice in all matters dealt with by the agencies.  

In 2012, the U.S. Department of the Interior published an Environmental Justice Strategic Plan which commits the department and its agencies to “identify and address environmental impacts that may result in disproportionately high and adverse human health or environmental effects on minority, low-income, or tribal populations.”

C. Treatment of Environmental Justice under the Endangered Species Act

The Act does not direct the relevant agencies to take environmental justice into account when listing a species or designating critical habitat. Instead, when deciding whether or not to list a species as threatened or endangered, the Act requires the relevant agency to make a decision “solely on the basis of the best scientific . . . data available.” The agency is therefore statutorily prevented from taking environmental justice into account when deciding to list a species. The standard for the designation of critical habitat is, however, different. When designating a critical habitat, the agency is required to reach a conclusion only after taking into consideration the designation’s economic impact, its impact on national security, and “any other relevant impact.” Matters of environmental justice and distributional equity can fall under the heading of both “economic impact” and “any other relevant impact,” and FWS is therefore able to consider

87. Id. at § 1.
90. Id. § 1533(b)(2).
such matters under either heading. Matters of environmental justice can also be used in conducting a balancing act under section 4(b)(2) to decide whether the benefits of excluding an area in a critical habitat designation outweigh the benefits of including it.

1. Economic Impacts

The agency is required to consider the economic implications of its decision to designate a critical habitat. The obvious economic burdens include direct costs, such as the cost of applying for additional permits or the cost of delays caused by consultation processes, but there are also other, more subtle, economic burdens that may result from a critical habitat designation, such as the distributional burdens identified by Professor Lazarus in his analysis of environmental justice. As there are no limits under the Act as to the types of economic impacts that should be taken into account, there is no reason why distributional burdens should not be considered. Distributional burdens would include, for example, the costs passed on to low-income local consumers as a result of the direct economic costs imposed on local producers, the cost of delays caused by litigation, the impact of the designation on employment prospects for the local population—especially if industrial activities are prevented or delayed by the critical habitat designation—and the redirection of limited public resources in the area.

For indigenous communities, in particular, the economic impact of a critical habitat designation can be more burdensome than for other communities because the land on which indigenous communities live tends to be less well developed than the rest of the United States. The imposition of additional barriers to economic development, such as requirements for permits or delays due to consultations can limit the development of indigenous areas causing economic problems in communities already at risk of, or suffering from, the effects of poverty. While the nature of a critical habitat designation means that the burden will always be unevenly distributed, where distributional burdens will affect communities already at risk of environmental injustice as a result of poverty or minority status, it is likely that environmental injustice will occur.

91. Id.
92. Id.
94. See Lazarus, supra note 78, at 792–94. Professor Lazarus states that “[t]here has been virtually no accounting of how pollution controls redistribute environmental risks among groups of persons, thereby imposing a cost on some for the benefit of others.” Id. at 787–88.
95. See id. at 794.
96. Olive & Rabe, supra note 77, at 505.
97. See id.
The indigenous communities in northern Alaska affected by the decision in this case were communities at significant risk of poverty. The Inupiat population of the North Slope Borough has unemployment rates at five times that of the national average and over half of all households do not have permanent full-time employment. Any impact on employment rates caused by increased costs, delays, or uncertainty as a result of the need to conduct additional consultations under section 7 of the Act, any increase in the cost of food or other products passed on to consumers by producers suffering increased costs or delays, any barriers to hunting, and any redirection of public resources can push vulnerable families further into poverty. Locals argued that they may even be forced to “abandon their ancestral villages in search of work” if they became unable to support their families, with all the cultural implications of moving away from their communities, particularly if forced into a large city or another State with an entirely different culture, climate, language, and people.

Indigenous populations, such as the ones in this case, are also more likely to be impacted by the designation of critical habitat because of their reliance on federal funding and the administrative costs associated with the required section 7 consultations. While section 7 consultations are only required where action is “authorized, funded, or carried out” by a federal agency, the specific circumstances of the Alaska Natives on the North Slope mean that federal funding is more common than it would be for communities in other parts of the nation. Federal funding to Alaska is the highest per capita in the country, partly because of the costs of servicing remote communities such as those in the Arctic. Examples of projects which have received federal funding include the maintenance of “washteria” or community washing facilities, the construction of elder housing in Nuiqsut, the equipping of a dental surgery in Barrow.

(Utqiagvik) and the building of a new boat ramp and hockey facility in Barrow (Utqiagvik). Many other "public works projects" are either funded or authorized by the federal government. Any impairment or delay in authorizing or funding such projects would have an impact on communities which have very few choices in terms of public facilities and which are heavily reliant on federal assistance.

The federal government owns a large portion of the land affected by the critical habitat designation for the polar bear. Therefore, Alaska Native organizations predict that section 7 consultations would likely need to be carried out on hundreds of projects in the next thirty years. The communities are also likely to incur economic costs from delays to projects as a result of the need for (or uncertainty surrounding the need for) section 7 consultations. Potential investors may be wary of the public relations issues surrounding development projects within land designated as the critical habitat of the polar bear. The burden of the critical habitat designation is therefore likely to be greater in northern Alaska than it would be in other communities.

FWS received public comments about the distributional inequality resulting from the designation. Comments included concerns that the analysis had not adequately considered the distributional impact on the indigenous people of the North Slope, that the full economic impact on development projects had not been considered and that the effect of the critical habitat designation on cultural and lifestyle activities in the villages had been overlooked. Despite the comments identifying some of the environmental justice issues raised by this case, the concerns were dismissed by FWS because the agency believed that there would be no change in the conservation requirements for the polar bear as a result of the critical habitat designation.

While FWS addressed the indirect costs of the critical habitat designation, they chose to do so using a qualitative analysis as the figures were "too uncertain to include in the final calculation." As a result, these costs were not included in the overall cost of the critical habitat designation. At both the District Court and the Ninth Circuit Court of Appeals, the Alaska Native plaintiffs raised a

104. See Denali Commission Alaska, supra note 100; BDO USA, LLP, City of Barrow, Alaska Basic Financial Statements, Required Supplementary Information, Supplementary Information, and Single Audit Reports Year Ended June 30, 2015, at 53 (2016).
107. See id. at 65–68.
108. See id.
110. Id.
111. Id.
112. Alaska Oil & Gas Ass’n v. Jewell, 815 F.3d 544, 565 (9th Cir. 2016).
number of economic impacts relevant to distributional equity, including the impact on economic development, the risk of reduced levels of employment, the administrative and regulatory burden—particularly for communities not excluded from the designation—and the additional burden of section 7 consultations. The District Court examined the economic impacts of the critical habitat designation and concluded that FWS had “considered all of potential economic impacts of the designation” but acknowledged that it had been “arguably misleading for the Service to represent that the total potential incremental cost” included all of the potential costs which could be incurred. The additional costs that had been identified by the plaintiffs had been considered “at least generally, if not specifically” by FWS in its economic impact report and the court held that FWS had therefore not violated the Administrative Procedure Act. In the Ninth Circuit, the court found that FWS had conducted a “quantitative assessment of the likely direct costs” and a “qualitative assessment of the more uncertain and speculative potential indirect costs” and ruled that this was sufficient to comply with the Act.

FWS is required to consider the economic impact of making a critical habitat designation and is entitled to include in that consideration the distributional economic burdens on a community. In this case, FWS chose to assess the economic impacts most likely to have an effect on distributional inequity by way of a qualitative analysis. The Court accepted FWS’s right to assess the economic impacts in this way, but by undertaking the analysis in this manner, FWS was unable to adequately assess those impacts most likely to contribute to environmental injustice in the communities affected by the critical habitat designation.

2. Other Relevant Impacts

Under section 4(b)(2), the Act also allows for the agency to take into account “any other relevant impact” of the critical habitat designation. Such impacts will be ones which do not fall under the headings of economics or security but which are still pertinent to the decision. There are no clear guidelines as to what matters can be considered to be a “relevant impact,” and the Code of Federal Regulations provides no further definition, merely reiterating that “the Secretary will consider the probable economic, national security, and other relevant impacts of the designation upon proposed or ongoing activi-

115. Id. at 993–94.
116. Alaska Oil & Gas Ass’n, 815 F.3d at 564–65.
118. See id.
ties.”119 In an opinion written in 2008, the Solicitor of the Department of the Interior reasoned, “[t]he Secretary has broad discretion in determining what such impacts might be.”120 The memo cites the preamble to the implementing regulations issued in 1980 which stated:

Other types of impacts, which may take many forms, will depend upon the specific circumstances surrounding a critical habitat designation, and are to a considerable extent unpredictable at this time . . . . The Services intend to consider all identifiable relevant impacts on a case-by-case basis.121

As such, there is a broad range of factors which can be considered to be relevant for consideration under the heading of “any other relevant impact.”122 Where the agency identifies an “impact” as relevant in the case, then it can be, and should be, considered.123

While neither the Act nor the regulations state that the agency should consider matters of environmental justice in critical habitat designations, the federal policies identified earlier place environmental justice firmly within the category of “relevant impacts” for a critical habitat designation, particularly one having an impact on indigenous people.124 Executive Order 12,898, in particular, provides that environmental justice should be considered wherever it is possible to do so in accordance with the law. As the agency has broad discretion as to what factors can be considered under the heading of “other relevant impacts,” it would be lawful for them to consider the impact of environmental

121. Id.
122. Id.
123. As the only legal consequences of the critical habitat designation are on actions in which the federal government is somehow involved (by way of authorizing, funding or carrying out an activity), the relevant impacts of a designation will be those relating to such activities. Impacts, if any, on private parties, tribes or the State as a result of the critical habitat designation will only be relevant to the extent that the federal government is involved (for example, when granting a permit or providing funding). Id. at 11–12.
justice. The Executive Order therefore makes matters of environmental justice “relevant impact[s]” which should be taken into account in critical habitat designations.

The “relevant impacts” under section 4(b)(2) will differ depending on the specifics of each case. Good examples of “relevant impacts” in relation to a critical habitat designation affecting an indigenous community would be the impact of a designation on cultural practices or whether the designation will remove the power of a tribal government to make policy decisions regarding tribal land.

In this case, FWS identified a number of “relevant impacts” including other conservation plans, the need to cooperate with native communities, the fact that populated areas do not have the necessary features for polar bear survival and that, due to human activity, polar bears are deterred from built up areas. However, while FWS acknowledged that there were special circumstances surrounding cases where indigenous interests were at stake they failed to go any further and identify the relevant environmental justice impacts. Comments had been received by FWS highlighting the impact of the designation on village lifestyle and culture but these were dismissed because the agency believed that there would be no change in the conservation requirements for the polar bear as a result of the critical habitat designation. At court, the Alaska Native plaintiffs argued that the inclusion of native lands in the critical habitat designation would “disproportionately harm Alaska Natives and other North Slope Borough residents, the people who share habitat with polar bears” and that the designation would harm the working relationship between the Alaska Natives and the federal government. The District Court considered the arguments but dismissed them.

The parties did not argue that FWS had failed to take into account the environmental justice implications of the critical habitat designation in this case. As such, the courts could not engage in a discussion over whether or not FWS should have taken the matters into account under section 4(b)(2). It is likely that the courts would have shown deference to the agency and held that they were entitled to, but not required to, consider environmental justice. FWS’s policy should, however, be to consider environmental justice as a “relevant impact” under section 4(b)(2). Together, Executive Order 12898, the Order of the Secretaries of the Interior and of Commerce, the Memorandum of Understanding and the other formal and informal policies and commitments regarding environmental justice place the matter firmly in the category of “rele-

125. Designation of Critical Habitat, supra note 4, at 76,128.
126. Id. at 76,127.
127. Id. at 76,109.
vant impacts” and FWS should therefore be careful to consider environmental justice, particularly when dealing with communities at risk of environmental injustice, such as indigenous communities.  

3. Exclusion of Land from a Critical Habitat Designation

In order to be able to consider the economic, security and other impacts of the critical habitat designation, the agency will need to collect all of the necessary information and "document the costs that will be imposed on human activities by the designation." Once this has been done, the agency can conduct a balancing act to determine whether the benefits of inclusion outweigh the benefits of exclusion. The Secretary may “exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat” unless the exclusion would “result in the extinction of the species.” Where it would not lead to the extinction of a species, it would be appropriate for FWS to conclude that the benefit of ensuring environmental justice, particularly when an indigenous community is threatened, could outweigh the benefits of including certain lands within a critical habitat designation. It will not always be the case that the benefits of environmental justice, particularly when an indigenous community is threatened, could outweigh the benefits of including certain lands within a critical habitat designation. It will not always be the case that the benefits of environmental justice will outweigh the benefits of critical habitat designation, but in situations where there will be distributional injustice caused by the imposition of a critical habitat designation, especially on land used or owned by indigenous people in the exercise of economic or cultural rights, then the reasons for reaching such a decision should at least be clearly explained by the agency.

IV. Preventing Environmental Injustice in Future Cases

As has been argued, when an agency takes a decision under section 4(2)(b) of the Act they are able to include matters of environmental justice in their

130. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994) (as amended by Exec. Order No. 12,948, 60 Fed. Reg. 6381 (Jan. 30, 1995)); U.S. Dep’t of Interior, AD-3587, Secretarial Order 3206 (1997); U.S. Dep’t of Agric., DR1071-001, Memorandum of Understanding on Environmental Justice and Exec. Order 12,898 (2011); U.S. Dep’t of Interior, Environmental Justice Strategic Plan 2012-2017 (2012); 16 U.S.C. § 1533(b)(2) (2012). An additional policy was issued by the agencies in 2016, after the Agency’s decision in relation to the polar bear and the ensuing litigation had started. 50 C.F.R. § 424.12 (2018). The policy regarding the implementation of section 4(b)(2) of the Act came into force on March 14, 2016 and was therefore not relevant in this case but would be in the future. Id. It states that agencies will “always consider exclusions of Tribal lands under section 4(b)(2) of the Act prior to finalizing a designation of critical habitat, and will give great weight to Tribal concerns in analyzing the benefits of exclusion.” Id.

131. U.S. Dep’t of Interior, supra note 119, at 15.

132. Id.

considerations, especially when dealing with communities at risk of environmental injustice. Where they have failed to do so, particularly in relation to a minority, marginalised or impoverished community, it is likely that environmental injustice will result from that failure. It is clear from the many federal policies identified above that there is a desire within the federal government to avoid environmental injustice.\textsuperscript{134} In order to ensure that it is not guilty of causing environmental injustice, FWS should give much more priority to considerations of distributional equity and other matters of environmental justice in future critical habitat designations, particularly in relation to decisions made under section 4(2)(b) of the Act.

In this case, there were a number of failures by FWS which caused the communities in the north of Alaska to suffer from environmental injustice, including the use of a qualitative analysis for the economic impacts of the critical habitat designation and failing to discuss the impact on the more remote villages, thereby leaving the position of those communities unclear and using dismissive language when considering matters of environmental justice. Future cases must avoid making the same mistakes if vulnerable communities are to be protected. The case also demonstrated the need for FWS to take a holistic overview of matters of environmental justice in the same way as it does when considering the impact of a critical habitat designation on a tribal government. Such an overview would allow for other options with fewer environmental justice implications to be considered.

\textit{A. Qualitative Aanalysis of Economic Impacts}

FWS should not have used a qualitative analysis of the more uncertain economic impacts of the designation. The Ninth Circuit held that FWS was “only required to consider the potential economic impacts,” and that “FWS's decision not to include those costs deemed too uncertain or speculative in the total potential incremental cost of the designation was within its discretion.”\textsuperscript{135} While the court may have been right to exercise deference towards the agency in this matter, FWS should, as a matter of policy, conduct a full quantitative analysis of the costs of a critical habitat designation.

The environmental injustices in this case are primarily matters of distributional inequity, but FWS was not able to properly assess the distributional impact of the critical habitat designation because it did not have details of the impacts which would affect the distributional equity. By failing to conduct a quantitative analysis of the more uncertain impacts, such as the delays to development projects caused by potential section 7 consultations, or the impact on the community of lost jobs due to reduced investment as a result of the in-


\textsuperscript{135} Alaska Oil & Gas Ass'n v. Jewell, 815 F.3d 544, 564–65 (9th Cir. 2016).
creased administrative burden, the economic matters which most contribute to environmental injustice were allowed to go uncalculated. It is only when those costs are adequately identified and calculated, taking into account their uncertain nature, that their full impact can be assessed. The very costs about which the communities were most concerned, and the very costs most likely to cause environmental injustice, were not included in the final figure of how much the critical habitat designation would cost. It is clearly difficult to calculate the likely cost of uncertain impacts, but without these figures it is easy for an agency to dismiss the impacts without proper consideration. In order to ensure that these matters are given sufficient weight in future decision making, and in order that distributional inequity can be adequately assessed, FWS should conduct a full quantitative analysis of all costs, regardless of how uncertain those costs might be, whenever there is a risk of distributional inequity as a result of the indigenous or minority status of the community affected by a critical habitat designation.

B. The Position of the Smaller Villages

The position of the smaller villages and communities in relation to the critical habitat designation was unclear and, as a result, the needs of the smaller communities, particularly with regards to matters of environmental justice were not adequately considered. The Final Rule stated (in a number of places) that the only two communities affected by the critical habitat designation were Barrow (Utqiagvik) and Kaktovik. FWS argued that “there is no overlap with the critical habitat designation and the communities west of Barrow . . . . Only the North Slope communities of Barrow and Kaktovik overlap with the proposed critical habitat designation, and these communities have been excluded from the final designation.” This, however, is not what is shown on the detailed maps of the critical habitat designation. The plaintiffs identified thirteen communities which are clearly marked on the maps as being included in the designation. The Final Rule excluded all manmade structures and the land on which they stand. This means that some parts of a village would be automatically excluded but not the parts of a village which did not have a building or other structure on them. The villages in northern Alaska tend to have lots of undeveloped land within their boundaries so the exemption will not result in the entire community being excluded.

136. See, e.g., Designation of Critical Habitat, supra note 4, at 76,097, 76,109, 76,128.

137. Id. at 76,097.

138. See supra Section I.D.


140. Designation of Critical Habitat, supra note 4, at 76,133.
FWS is not required to exclude from a critical habitat designation all communities or even those communities at risk of environmental injustice as a result of poverty or minority status. As has been argued, however, FWS should consider the impact of environmental injustice on such communities under section 4(b)(2) of the Act. In this case FWS failed even to identify that a number of villages and communities were included in the designation which demonstrated that matters of environmental justice were not adequately considered in relation to those communities. In the future, FWS should ensure that all communities, however small, have been properly identified and the environmental justice impacts on those communities considered. Merely excluding all man-made structures is not enough to ensure that communities are excluded from a critical habitat designation.

C. The Importance of Language

Matters of environmental justice and distributional equity had been raised with FWS during the consultation periods. Commentators, had, for example raised concerns that "the [analysis] does not include distributional effects of the designation on Inupiat Eskimos in the North Slope Borough" 141 or that "the effects on the lifestyle, cultures, and economic activities of the villages within the proposed critical habitat area are not separable from subsistence activities."142

Despite these serious concerns being raised by members of the community, the language used by FWS in the Final Rule is dismissive, seemingly giving no consideration to the issues. FWS simply stated that the designation "is not expected to result in additional conservation requirements for the polar bear."143 As a result, some members of the local community felt that their comments had been ignored by FWS.144 The Alaska Native Plaintiffs argued in the District Court that "[s]imply disregarding Alaska Natives’ legitimate concerns, or telling them that those concerns are unfounded despite compelling evidence to the contrary, undermines the relationship that the FWS claims it is trying to preserve."145 While this was not an argument on which the courts could legitimately act, it does demonstrate the importance of the use of language by federal agencies. Had the Alaska Native plaintiffs felt that their arguments about environmental justice had been heard and had been sufficiently taken into account then they may not have felt the need to take legal action. Where communities feel disenfranchised as a result of their concerns being dismissed, they are more likely to believe that the decision reached was not one which was just or equita-

141. Id. at 76,109.
142. Id.
143. Id.
145. Id. at *22.
ble. If FWS wants to reach decisions which are both environmentally just and seen to be so, then in future cases the agency must use language which is less dismissive of the concerns of indigenous and minority communities.

D. Conducting a Holistic Overview of Environmental Justice

In the Final Rule in this case, under the heading of “other relevant impacts” under section 4(b)(2) of the Act, FWS specifically considered the overall impact on the rights of the native communities as a result of its federal obligations to consider the impacts on tribal rights and on government-to-government relations with tribal governments. FWS conducted this overview because of the value given to tribal rights under the relevant Executive Order and federal policies. Given the importance that is also placed on environmental justice by various federal policies, in future critical habitat designations affecting poor, indigenous or minority communities, a holistic overview of environmental justice, similar to the overview of the impact on tribal rights, should be included. This overview would give FWS the opportunity to identify all areas where there might be an environmental justice impact, to address those issues, and to assess, as a whole, whether the critical habitat designation could impose environmental injustice on a community. Providing a clear analysis of the matter would also demonstrate to a community that any concerns regarding environmental justice had been taken into account. FWS considers issues affecting tribal governments to be sufficiently important to warrant an overview and should give the same attention to matters of environmental justice.

E. Considering Other Options

Matters of environmental justice could tip the balance in favor of excluding land from a critical habitat designation when it would lead to injustice for indigenous communities and it could be argued that this would leave species identified as endangered or threatened at risk. Where land is excluded from a critical habitat designation, however, it does not mean that the area will be entirely unprotected. There are other options for protecting species, beyond critical habitat designation. It may be possible, for example, for agencies to implement alternative conservation management arrangements in collaboration with indigenous peoples instead. The agencies should also seek to identify ways in which distributional inequity can be ameliorated rather than merely exclude-
ing land from designation. For example, it might be possible to provide additional public funding to cover the indirect economic costs, or to designate a specific team to deal with section 7 consultations in an expedited manner to avoid the economic impacts of delays and uncertainty. In addition, federal agencies dealing with indigenous and minority communities would be well advised to work with those communities to identify and resolve issues of environmental justice at an early stage to avoid lengthy conflict before the courts. Some attempts had been made in this case to work with the indigenous communities affected, but it was clear throughout the litigation that these attempts had not been sufficient to ensure that the voices of the local people had been heard and that their concerns had been addressed.

**CONCLUSION**

For many environmentalists, the outcome at the Ninth Circuit is a welcome victory at a time when there is little to celebrate in the arena of environmental law. The Ninth Circuit accepted that climate change poses a specific threat to the survival of the polar bear and upheld the decision of FWS to designate critical habitat in order to protect the polar bear. However, while the decision is environmentally positive, it is also problematic. This comment has noted that FWS failed to consider matters of environmental justice in designating critical habitat for the polar bear, as it was allowed to do and should have done. Distributional equity should be considered as an economic impact of a critical habitat designation when it will affect poor, indigenous, or minority communities at risk of environmental injustice. Furthermore, environmental justice should be considered under the heading of “other relevant factors” under the Act. It is important that environmental protection is balanced with the rights of indigenous people who live in the Arctic to exercise their traditional lifestyles and to ensure economic development for themselves and their communities.