THE LEGAL PROTECTION OF SUBSISTENCE: A PREREQUISITE OF FOOD SECURITY FOR THE INUIT OF ALASKA*

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For the last twenty-five years, the legal protection of subsistence in Alaska has given rise to legal and political controversies. Subsistence is closely related to the concept of "food security," as defined by the World Food Summit. The purpose of this Article is to highlight the need to recognize and critically examine the link between food security and the efficient legal protection of the traditional hunting, fishing, and gathering activities of the Inuit people of Alaska. The Article first describes the genesis and evolu-

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^{*} The authors are grateful to David S. Case, Taylor Brelsford, and Robert Anderson for their very helpful comments on this Article.

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tion of the subsistence debate in Alaska. It then attempts to demonstrate that the legal protection of subsistence is a prerequisite to Inuit food security for nutritional, cultural, and economic reasons. Finally, the Article identifies specific features of the Alaskan legal regime that threaten Inuit subsistence and food security.

I. Introduction

The concept of food security was put forth by the United Nations' Food and Agriculture Organization ("FAO") in 1974 in the aftermath of the food crisis that devastated a number of third world countries. This concept was initially given a very narrow meaning, as it referred solely to the global availability of adequate food supplies necessary to meet the needs of a growing world population. It has since evolved considerably, thanks to a more sophisticated understanding of the many factors and conditions that affect the capacity of individuals to obtain adequate and sufficient food. Food security is now defined as the capacity of individuals to "have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." The purpose of this Article is to highlight the need to recognize and critically examine the link between the challenge of food security and the efficient legal protection

^{1.} See Universal Declaration on the Eradication of Hunger and Malnutrition, adopted by the World Food Conference on Nov. 16, 1974, available at http://www.ohchr.org/english/law/malnutrition.htm (last visited Mar. 10, 2005) [herinafter Universal Declaration]; Report of the World Food Conference, U.N. Food and Agriculture Org., at 1, U.N. Doc. E/CONF.65/20 (1975).

^{2.} See Universal Declaration, supra note 1 (calling for "a world food security system which would ensure adequate availability of, and reasonable prices for, food at all times").

^{3.} E.g., Gérard Duhaime & Anne Godmaire, The Conditions of Sustainable Food Security: An Integrated Conceptual Framework, in Sustainable Food Security in the Arctic: State of Knowledge 15, 15–16 (Gérard Duhaime ed., 2002); Johan Pottier, Anthropology of Food: The Social Dynamics of Food Security 11–12 (1999); Simon Maxwell, Food Security: A Post-Modern Perspective, 21(2) Food Policy 155, 156 (1996); Sophie Thériault & Ghislain Otis, Le Droit et la Sécurité Alimentaire, 44(4) Les Cahiers de Droit 573, 578–79 (2003).

^{4.} WORLD FOOD SUMMIT, ROME DECLARATION ON WORLD FOOD SECURITY AND WORLD FOOD SUMMIT PLAN OF ACTION 7 (1996), *available at* http://www.fao.org/wfs/index_en.htm (last visited Jan. 30, 2005).

of the traditional hunting, fishing, and gathering activities of the Inuit people of Alaska.⁵

The Alaskan Inuit have been using their environment and its natural resources for nutritional, material, social, and ritual purposes since time immemorial.⁶ Activities that revolve around the harvesting, transforming, sharing, and consuming of renewable resources of the land are frequently designated by the generic term "subsistence." Subsistence still constitutes a central component of Alaskan Inuit culture, identity, and economy. Indeed, for those Alaska Natives who engage in subsistence uses, "the very acts of hunting, fishing, and gathering, coupled with the seasonal cycle of these activities and the sharing and celebrations which accompany them are intricately woven into the fabric of their social, psychological, and religious life."

In Alaska, the legal protection of subsistence has given rise to a controversy that occupies an increasingly important place in the state's political and judicial landscape. The controversy pertains to the allocation of fish and game among different users and, in particular, the recognition of a priority for rural residents and Natives. Alaska Natives demand better legal protection for their customary and traditional subsistence activities in the face of increasing competition for access to fish and game, intensifying exploitation of non-renewable resources, growing environmental pollution, and continuing animal rights activism. On the other hand, recreational and commercial users of natural resources oppose any preferential access to fish and game and

^{5.} This Article is part of an interdisciplinary research project on sustainable food security in the Arctic. Although a substantial part of our research is relevant to other Alaska Native communities, this Article focuses on the Inupiat and the Yup'ik peoples. We will use the generic term "Inuit" to refer to these two groups.

^{6.} THOMAS R. BERGER, VILLAGE JOURNEY 51 (1985).

^{7.} Alaska Natives Comm'n, 3 Final Report 2 (1994).

^{8.} See, e.g., id. at 6; BERGER, supra note 6, at 51; DAVID S. CASE & DAVID A. VOLUCK, ALASKA NATIVES AND AMERICAN LAWS 257–59 (rev. ed., Univ. of Alaska Press 1984) (1978); Mary Kancewick & Eric Smith, Subsistence in Alaska: Towards a Native Priority, 59 UMKC L. Rev. 645, 649–51 (1991); Thomas F. Thornton, Alaska Native Subsistence: A Matter of Cultural Survival, 22(3) CULTURAL SURVIVAL Q. 29 (1998).

^{9.} CASE & VOLUCK, supra note 8, at 258.

^{10.} See generally id. at 283–309 (providing a description of the impact of ANCSA and ANILCA on the state's political scene); STEPHEN HAYCOX, FRIGID EMBRACE: POLITICS, ECONOMICS AND ENVIRONMENT IN ALASKA 149–74 (2002) (describing conflict between Alaska Natives and others arising out of ANCSA and ANILCA).

^{11.} CASE & VOLUCK, *supra* note 8, at 285.

^{12.} Richard A. Caulfield, *Food Security in Arctic Alaska: A Preliminary Assessment, in* Sustainable Food Security in the Arctic: State of Knowledge 75, 87–90 (Gérard Duhaime ed., 2002).

claim their right to equality. This conflict has resulted in heated political debates and numerous lawsuits over the last three decades. 14

A substantial body of literature on the political and symbolic dimensions of the Alaska subsistence debate exists; however, other implications of the debate have not yet been explored, such as the relationship between subsistence and food security. This Article demonstrates that the ability of Alaskan Inuit to pursue their subsistence activities is closely linked to their food security. In other words, even if it is essential to ensure that the Inuit have access to healthy marketed foods, such as fruits, vegetables, whole grain cereals, and dairy products, protecting their subsistence harvesting of renewable natural resources is a fundamental requirement for their food security as well. The Article analyzes some of the effects of the subsistence debate and federal and state resource management regimes regarding Alaskan Inuit food security.

Part II describes briefly the genesis and the evolution of the subsistence debate in Alaska, and Part III attempts to demonstrate that the legal protection of subsistence is a prerequisite to Inuit food security for nutritional, cultural, and economic reasons. Part IV identifies specific features of the Alaska legal regime that threaten Inuit subsistence and food security.

II. THE ENDURING CONFLICTS OVER SUBSISTENCE IN ALASKA

Alaska Natives have been struggling for the recognition of their rights, including land, hunting, fishing, and gathering rights, since at least 1867 when the United States purchased Russian interests in the territory that later became the State of Alaska. No treaty protecting Alaska Native rights has been reached with the United States. In fact, until 1971, when the Alaska Native Claims Settlement Act ("ANCSA") was passed, the very existence of Alaska Native rights remained uncertain. Subsistence hunting and fishing rights were not comprehensively defined until the adoption of the 1980 Alaska National Interest Lands Conservation Act ("ANILCA").

^{13.} Id. at 88.

^{14.} See CASE & VOLUCK, supra note 8, at 285–87; HAYCOX, supra note 10, at 152; Richard A. Caulfield, Alaska's Subsistence Management Regimes, 28(164) POLAR REC. 23 (1992); Caulfield, supra note 12, at 87–90.

^{15.} See generally CASE & VOLUCK, supra note 8, at 6–22.

^{16.} See id. at 16–17.

^{17.} See id. at 290–91.

A. Native Subsistence Rights from Statehood to ANILCA

When Alaska was admitted as a state in 1959, ¹⁸ the Alaska Statehood Act authorized the new-born state to select for development 103.35 million acres of "vacant, unappropriated, and unreserved" public lands of the United States, ¹⁹ representing about 28% of Alaska's total land base. ²⁰ The Act also recognized the rights of Native peoples in the following terms:

As a compact with the United States said State and its people do agree and declare that they forever disclaim all right and title . . . to any lands or other property (including fishing rights), the right or title to which may be held by any Indians, Eskimos, or Aleuts (hereinafter called natives) or is held by the United States in trust for said natives. ²¹

However the Act did not define the title or rights that Natives might have, leaving this question unresolved.²²

The State of Alaska and its Native peoples clashed when the state began to select lands and plan development projects that could interfere with subsistence activities.²³ Native peoples claimed that the lands selected by the state were subject to aboriginal title and thus were not "vacant, unappropriated and unreserved."²⁴ They also challenged the state's land selections before the federal Bureau of Land Management.²⁵ In 1966, in response to Native protests, U.S. Secretary of the Interior, Stewart Udall, halted state land selections until Native claims were settled.²⁶ The "land freeze" was made permanent in 1968.²⁷ However, the discovery of vast oil reserves at Prudhoe Bay in 1967 and 1968 prompted the settlement of Native land claims.²⁸

^{18.} Alaska was formally admitted to the Union on January 3, 1959, after President Eisenhower signed the official proclamation pursuant to sections 1 and 8(c) of the Alaska Statehood Act. Pub. L. No. 85-508, 72 Stat. 339 (1958).

^{19.} Alaska Statehood Act, Pub. L. No. 85-508, § 6, 72 Stat. 339 (1958).

^{20.} ALASKA DEP'T OF NATURAL RESOURCES, DIV. OF MINING, LAND & WATER, LAND OWNERSHIP IN ALASKA 1 (2000), *available at* http://www.dnr.state.ak.us/mlw/factsht (last visited Mar. 28, 2005).

^{21.} Alaska Statehood Act § 4.

^{22.} Id.

^{23.} See BERGER, supra note 6, at 91.

^{24.} Alaska v. Udall, 420 F.2d 938, 939 (9th Cir. 1969).

^{25.} See id.

^{26.} CASE & VOLUCK, supra note 8, at 156.

^{27.} Claus-M. Naske & Herman E. Slotnick, Alaska: A History of the 49th State 202 (2d. ed., Univ. of Okla. Press 1987).

^{28.} See CASE & VOLUCK, supra note 8, at 157; HAYCOX, supra note 10, at 83; NASKE & SLOTNICK, supra note 27, at 208. On April 1, 1970, the United States District Court for the District of Columbia granted a preliminary injunction restraining the issuance of right-of-way permits for gravel haul roads and pipelines running across the lands

To this end, Congress enacted ANCSA in 1971.²⁹ The Act extinguished "[a]ll aboriginal titles, if any, and claims of aboriginal title in Alaska based on use and occupancy, including submerged land underneath all water areas, both inland and offshore, and including any aboriginal hunting or fishing rights that may exist" and all claims based on aboriginal rights and title. In exchange, the Act provided that Native regional and village for-profit corporations would receive \$962.5 million in compensation and about forty-five million acres of land. In extinguishing aboriginal rights, ANCSA did not provide for specific Native hunting, fishing, and gathering rights; however, the Conference Committee declared that it expected the State of Alaska and the Secretary of the Interior to take any measures necessary to further the protection of subsistence. Unfortunately, both the Secretary and the

claimed by Stevens Village after the Secretary of the Interior purported to modify the land freeze to make the issuance of such permits possible. Hearing on Mot. for Preliminary Injunction at 74, Native Vill. of Allakaket v. Hickel, No. 706-70 (D.D.C. Apr. 1, 1970). Initially, five Alaska Native villages claiming lands in the path of the pipeline and roadway projects sued to prevent the Secretary of the Interior from issuing permits without first obtaining the consent of their tribal officials. *Id.* at 7. The villages alleged that the Secretary of the Interior had statutory and regulatory obligations to secure their consent before issuing the permits. Id. They also argued that this obligation flowed from the trusteeship relationship between the United States government and American Indians that obliged the United States to protect lands held by virtue of an Aboriginal title. Id. at 24. The court granted a preliminary injunction only to Stevens Village, organized under the Indian Reorganization Act of 1934 ("IRA"), after applying 25 U.S.C. § 324, which states that "[n]o grant of a right-of-way over and across any lands belonging to a tribe organized under the [IRA] . . . shall be made without the consent of the proper tribal officials." Id. at 74. It did not grant a preliminary injunction to Minto Village, the only other IRA village among the plaintiffs, as the road and pipeline were not to pass across its lands. Id. The court also refused to grant a preliminary injunction to Bettles, Rampart, and Allakaket, villages not organized under the IRA and therefore not entitled to the guarantee provided in 25 U.S.C. § 324. See id. at 75.

- 29. Alaska Native Claims Settlement Act, Pub. L. No. 92-203, 85 Stat. 688 (1971) (codified as amended at 43 U.S.C. §§ 1601–1629h (2000)).
 - 30. 43 U.S.C. § 1603(b) (2000).
 - 31. Id. § 1603(c).
 - 32. Id. § 1605.
 - 33. Id. § 1611.
- 34. H.R. REP. No. 92–746, at 4 (1971), reprinted in 1971 U.S.C.C.A.N. 2247, 2250. Congress was well aware that subsistence would need further protection. See id. The Senate final version of the claims settlement bill included a provision directing the Secretary of the Interior to protect subsistence uses on public lands. See id. The provision was not retained by the conference committee. Id. The committee's awareness of the need to provide further protection for subsistence, however, is confirmed by the following excerpt from its report:

state failed to meet congressional expectations, and neither adopted comprehensive policies aimed at the protection of Natives' subsistence.³⁵ Hence, after ANCSA, subsistence remained virtually unprotected.³⁶ Native peoples could only rely on specific exemptions provided in certain fish and game laws, such as the Migratory Bird Treaty Act ("MBTA"),³⁷ the Marine Mammal Protection Act of 1972 ("MMPA"),³⁸ and the Endangered Species Act of 1973 ("ESA").³⁹

The Senate amendment to the House bill provided for the protection of the Native peoples' interest in and use of subsistence resources on the public lands. The conference committee, after careful consideration, believes that all Native interests in subsistence resource lands can and will be protected by the Secretary through the exercise of his existing withdrawal authority. The Secretary could, for example, withdraw appropriate lands and classify them in a manner which would protect Native subsistence needs and requirements by closing appropriate lands to entry by non-residents when the subsistence resources of these lands are in short supply or otherwise threatened. The Conference Committee expects both the Secretary and the State to take any action necessary to protect the subsistence needs of the Natives.

Id.

- 35. CASE & VOLUCK, supra note 8, at 283.
- 36. *Id*.

37. 16 U.S.C. § 703 (2000), amended by Migratory Bird Treaty Reform Act of 2004, Pub. L. No. 108-447, 118 Stat. 2809, 3071 (2004). This statute, as amended, implements the provisions of four international conventions regarding migratory birds and makes it illegal to take, possess, or sell migratory birds, their parts, or their eggs. *Id.* Originally, treaties between the United States and Canada and the United States and Mexico prohibited migratory bird harvests from March 10 through September 1. Convention between the United States and Great Britain for the Protection of Migratory Birds, Aug. 16, 1916, U.S.-Gr.Brit. art. II, 39 Stat. 1702, 1703; Convention between the United States of America and Mexico for the Protection of Migratory Birds and Game Mammals, Feb. 7, 1936, U.S.-Mex. art. II, 50 Stat. 1311, 1313. These treaties ignored the fact that Alaska Natives traditionally harvest migratory birds during these months as an important part of their diet. See id. Treaties with Japan and Russia, however, created exceptions to the closed season for Native peoples of Alaska. Protection of Birds and Their Environment, Mar. 4, 1972-Sept. 19, 1974, U.S.-Japan, art. III, 25 U.S.T. 3329; Conservation of Migratory Birds and Their Environment, Nov. 19, 1976, U.S.-U.S.S.R., art. II, 29 U.S.T. 4647. In Alaska Fish and Wildlife Federation and Outdoor Council, Inc. v. Dunkle, 829 F.2d 933 (9th Cir. 1987), the Ninth Circuit Court of Appeals held that "[t]he Unites States-Canada Convention is the most restrictive of the four treaties, and all of the Secretary's regulations must be in accord with that treaty." Id. at 941. Thus, it was not possible for Congress to implement the more liberal provisions of the Russian treaty until the Canadian and Mexican conventions were amended to permit spring and summer subsistence hunting of migratory birds. See id. at 941-42. The treaties with Canada and Mexico were later amended to provide such an exception for the "indigenous inhabiB. The Enactment of the Alaska National Interest Lands Conservation Act and the Ensuing Subsistence Debate

Congress passed ANILCA in 1980,⁴⁰ recognizing, among other things, that the congressional expectations of 1971 had not been realized.⁴¹ ANILCA first aimed at the creation of more than 140 million acres of conservation system units, principally national parks and preserves, national forests, and wildlife refuges.⁴² ANILCA also purported to protect the subsistence lifestyle of rural residents, who are predominantly Native, at least in certain regions.⁴³ This goal was affirmed in Congress's declaration of findings, which recognized that "the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives, on the public lands and by Alaska Natives on Native lands is essential to Native

tants" of Alaska. Protocol Amending the 1916 Convention for the Protection of Migratory Birds, Dec.14, 1995, U.S.–Can., art. II, para. 4, S. TREATY DOC. No. 23–36. The exception has been integrated into the MBTA in the following terms:

In accordance with the various migratory bird treaties and conventions with Canada, Japan, Mexico, and the Union of Soviet Socialist Republics, the Secretary of the Interior is authorized to issue such regulations as may be necessary to assure that the taking of migratory birds and the collection of their eggs, by the indigenous inhabitants of the State of Alaska, shall be permitted for their own nutritional and other essential needs, as determined by the Secretary of the Interior, during seasons established so as to provide for the preservation and maintenance of stocks of migratory birds.

16 U.S.C. § 712(1) (2000).

38. 16 U.S.C. §§ 1361–1421h (2000). Section 1371(b) provides that the moratorium on the taking of marine mammals shall not apply to

any Indian, Aleut, or Eskimo who resides in Alaska and who dwells on the coast of the North Pacific Ocean or the Arctic Ocean if such taking (1) is for subsistence purposes; or (2) is done for purposes of creating and selling authentic native articles of handicrafts and clothing . . . and (3) in each case, is not accomplished in a wasteful manner.

- 39. 16 U.S.C. §§ 1531–1544 (2000). This Act exempts Alaska Natives and non-Native permanent residents of an Alaska Native village from the prohibition on taking endangered species when such taking is done for subsistence purposes. *See id.* § 1539(e). Further, non-edible byproducts of the endangered species "may be sold in interstate commerce when made into authentic native articles of handicrafts and clothing." *Id*
- 40. Alaska National Interest Lands Conservation Act, Pub. L. No. 96-487, 94 Stat. 2371 (1980) (codified as amended at 16 U.S.C. §§ 3101 *et seq.* (2000)).
 - 41. CASE & VOLUCK, supra note 8, at 283.
 - 42. See 16 U.S.C. § 3101 (2002).
 - 43. Id. § 3101(c).

physical, economic, traditional, and cultural existence and to non-Native physical, economic, traditional and social existence."⁴⁴ Recognizing the link between subsistence and food security, Congress also stated that "in most cases, no practical alternative means are available to replace the food supplies and other items gathered from fish and wildlife which supply rural residents dependent on subsistence uses."⁴⁵

In response to those findings, Congress enacted a priority for the taking of fish and wildlife on public lands for nonwasteful subsistence uses over other uses, such as the taking of fish and game for recreational and commercial purposes.⁴⁶ "Subsistence uses" are defined in ANILCA as:

the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade.⁴⁷

Whenever the resources are so scarce that restrictions among subsistence users are required, Congress directed that limitations should be based on the following criteria: "(1) customary and direct dependence upon the populations as the mainstay of livelihood; (2) local residency; and (3) the availability of alternative resources."

The priority applies to subsistence activities only when exercised on public lands, waters, or interests therein owned by the federal government, representing about 59% of the state's total area. To avoid duplicating management systems and to allow the state to exercise management authority over its entire territory, ANILCA provides that Alaska may obtain subsistence jurisdiction of federal lands upon passage of a law providing for a similar subsistence priority for rural residents. Alaska adopted such a law in 1978 and was therefore granted jurisdiction over fishing and hunting activities throughout the state.

^{44.} *Id*. § 3111(1).

^{45.} Id. § 3111(2).

^{46.} *Id.* § 3114.

^{47.} *Id.* § 3113.

^{48.} Id. § 3114.

^{49.} CASE & VOLUCK, *supra* note 8, at 292; Teresa Hull & Linda Leask, *Dividing Alaska, 1867–2000: Changing Land Ownership and Management*, 32(1) ALASKA REV. OF SOCIAL AND ECONOMIC CONDITIONS 1, 6 (2000).

^{50. 16} U.S.C. § 3115(d) (2000).

^{51.} During the discussions on ANILCA and in anticipation of the bill, the state enacted in 1978 a subsistence law providing for a subsistence priority over all other uses. ALASKA STAT. § 16.05.940 (1978) (current version at ALASKA STAT. § 16.05.930(e) (Michie 2004)). The state law did not identify who was a subsistence user. *See* ALASKA

In 1989, after ten years of state control, the Supreme Court of Alaska held in *McDowell v. State* that the state law granting the rural priority was unconstitutional because of its inconsistency with the strict equal-access clauses of the Alaska Constitution.⁵² Following this ruling, the supreme court held that all Alaskans were eligible for the subsistence priority.⁵³ At that point, the state was no longer in compliance with ANILCA⁵⁴ and could not comply without either amending its constitution to allow for the recognition of a rural residence priority or securing an amendment to ANILCA that would eliminate the rural residence requirement. Neither Alaska nor Congress took either of these actions, so the federal government regained control of subsistence on federal lands in 1990⁵⁵ and in some waters in 1999.⁵⁶ Since then,

STAT. § 16.05.940(23) (1978). The priority benefited all residents, not just rural residents or Natives. *See id.* In order to conform to the rural priority requirement of ANILCA, the fish and game board adopted regulations in 1982 restricting the priority to rural residents; however, the Alaska Supreme Court quashed these regulations on the ground that the Alaska subsistence statute did not authorize the board to restrict the benefit of the subsistence priority to rural residents. Madison v. Alaska Dep't of Fish & Game, 696 P.2d 168, 176 (Alaska 1985). To comply with ANILCA and avoid a federal takeover of fish and game management on federal lands, the state amended the subsistence statute in 1986 to limit the subsistence priority to rural residents. ALASKA STAT. § 16.05.258(c) (1986) (amended 1992); § 16.05.940(30) (current version at § 16.05.940(33) (Michie 2004)).

- 52. 785 P.2d 1, 10–11 (Alaska 1989). Several sections of article VIII of the Alaska Constitution prevent the creation of special rights or privileges regarding access to natural resources. *See* ALASKA CONST. art. VIII, § 3 (reserving naturally occurring fish, wildlife, and waters to the people for common use); *id.* § 15 (prohibiting the creation of exclusive rights or access privileges to fisheries); *id.* § 17 (declaring that "[1]aws and regulations governing the use or disposal of natural resources shall apply equally to all persons similarly situated with reference to the subject matter and purpose to be served by the law or regulation").
 - 53. See State v. Morry, 836 P.2d 358, 368 (Alaska 1992).
 - 54. *Id.* at 364.
- 55. Temporary Subsistence Management Regulations for Public Lands in Alaska, 55 Fed. Reg. 27,114 (June 29, 1990). When the federal government took over subsistence management in July 1990, it initially refused to recognize its jurisdiction over navigable waters, stating that those waters were not "public lands" as defined in ANILCA. *Id.* at 27,115. The Secretary of the Interior's restrictive position on the extent of federal jurisdiction led to several lawsuits brought by Katie John, a Native from Copper River. *E.g.*, Alaska v. Babbitt, 72 F.3d 698 (9th Cir. 1995), *aff'd per curiam sub nom.*, John v. United States, 247 F.3d 1032 (9th Cir. 2001) (en banc). In *Alaska v. Babbitt*, federal jurisdiction was extended to all waters (navigable and non-navigable) in which the United States has an interest by virtue of the reserved water rights doctrine. *Id.* at 703–04. Under the reserved water rights doctrine, "when the United States withdraws its lands from the public domain and reserves them for a federal purpose, the United States implicitly reserves appurtenant waters then unappropriated to the extent needed to accomplish the purpose

subsistence hunting and fishing activities have been governed by two separate legal systems, depending on ownership of the land.⁵⁷ ANILCA governs subsistence for "rural residents" on federal lands;⁵⁸ state law governs subsistence for "all Alaskans" on state and private lands (including Native-owned ANCSA lands).⁵⁹

The state revised its subsistence law in 1992 in reaction to *McDowell* and to the political deadlock over potential constitutional amendments. The statute continues to grant subsistence users a priority over other users; however, unlike ANILCA, the statute does not define subsistence users in relation to rural residency. Thus, the priority applies to all Alaska residents, whether rural or urban. State law does distinguish among users in times of scarcity, when the harvestable portion of resources is not sufficient to satisfy all subsistence users. In such cases, limitations on access to fish and game can be imposed based on the customary and direct dependence of the subsistence user on the fish or game populations as well as the ability of the subsistence user to obtain food if subsistence use is regulated or eliminated. To alleviate the pressure on resources that would result

of the reservation." *Id.* at 703 (citing Cappaert v. United States, 426 U.S. 128, 138 (1976)). The reserved water rights doctrine applies when the United States intends to reserve unappropriated waters; intent can be inferred when the unappropriated waters are necessary for the purposes for which the land was reserved. *Id.* The federal agencies that administer the ANILCA subsistence priority are responsible for identifying those waters. *Id.* at 704; *see also* 36 C.F.R. § 242.3 (2004) (identifying public lands).

- 56. Subsistence Management Regulations for Public Lands in Alaska, Subparts A, B, C, and D, Redefinition to Include Waters Subject to Subsistence Priority: Final Rule, 64 Fed. Reg. 1276 (Jan. 8, 1999).
 - 57. CASE & VOLUCK, supra note 8, at 302.
 - 58. Id.
 - 59. Id. at 301.
 - 60. ALASKA STAT. § 16.05.258(c) (Michie 2004).
 - 61. Id. § 16.05.258.
 - 62. Id.
 - 63. State v. Morry, 836 P.2d 358, 368 (Alaska 1992).
 - 64. ALASKA STAT. § 16.05.258(b)(4) (Michie 2004).
- 65. *Id.* Before 1995, the State could also distinguish among subsistence users through limitations based on "the proximity of the domicile of the subsistence user to the stock or population" when determining whose access to fish and game would be prioritized. *See id.* § 16.05.258(b)(4)(B)(ii). In 1995, the Supreme Court of Alaska again ruled against the constitutionality of this portion of the Alaska statute. State v. Kenaitze Indian Tribe, 894 P.2d 632, 642 (Alaska 1995). Applying the reasoning of *McDowell*, the court held that linking eligibility for access to the "proximity of the domicile of the subsistence user" to the resource violated the equal access clause of the Alaska Constitution. *Id.* at 638–39. The court severed this criterion from the statute. *Id.* at 639. Therefore, limitations on subsistence use can be based only on the subsistence user's custom-

from a potential subsistence priority afforded to all Alaska residents, the statute also requires the fish and game board to identify "non-subsistence areas" where no priority applies. A non-subsistence area is defined as "an area or community where dependence upon subsistence is not a principal characteristic of the economy, culture, and way of life of the area or community." In those areas, subsistence users can fish and hunt under "personal use" or sport regulations. However, they will

ary and direct dependence on the resources and the ability of the subsistence user to obtain food if subsistence use is regulated or eliminated. *Id.* State regulations provide a system of indicators and points used to assess "the customary and direct dependence on the fish stock or game population by the subsistence user for human consumption as a mainstay of livelihood" and "the ability of the subsistence user to obtain food if subsistence . . . is restricted or eliminated." Alaska Admin. Code tit. 5, § 92.070 (2003). For example, in order to evaluate if this second prong is met, the board will consider "(1) the relative ability of alternative sources of game to the applicant's household; (2) the availability of food for purchase in the community . . . ; [and] (3) the cost of gasoline in the community." Alaska Admin. Code tit. 5, § 92.070(b)(1) (2003).

Recently, in Manning v. State, the Superior Court of the Third Judicial District ruled that the first prong of this test violates the equal access clauses of article VIII of the Alaska Constitution. No. 3AN-00-8814 Civ. (D. Alaska July 24, 2003), summary at http://www.law.state.ak.us/department/civil/nat_cases.html (last visited Apr. 7, 2005). Both parties have appealed the trial court's decision to the Alaska Supreme Court, and oral arguments were heard on February 10, 2005. Audiotape: Alaska Supreme Court Oral Arguments: State ν. Manning (Feb. 10, 2005), http://www.ktoo.org/gavel/audio.cfm (last visited Mar. 28, 2005). Manning challenged sections 92.070(b)(1), (2), and (3) of the Alaska Administrative Code and Alaska Statutes section 16.05.258, arguing that residency-based criteria for tier II subsistence eligibility violates the common-use clause of article VIII of the Alaska Constitution. Id. He proposed that fish and game resources be allocated through lottery. Id. The State argued that rather than striking down these regulations and statute, the court should instead overrule its prior decision in McDowell. Id. If the court does overrule McDowell, the State will be enabled to conform to ANILCA and to resume jurisdiction over its full territory.

- 66. ALASKA STAT. § 16.05.258(c) (Michie 2004).
- 67. *Id.* This definition is essentially the negative of the definition of rural area, which is defined as "a community or area of the state in which the noncommercial, customary, and traditional use of fish or game for personal or family consumption is a principal characteristic of the economy of the community or area." *Id.* § 16.05.940(28). *See also Kenaitze Indian Tribe*, 894 P.2d at 642 (confirming the validity of the provision creating non-subsistence areas). Subsistence uses are by no means strictly forbidden in nonsubsistence areas; rather, the statutory subsistence priority is forbidden. *Id.* at 640. The fact that residents of non-subsistence areas will have to travel to subsistence areas in order to use their subsistence permits and benefit from the subsistence priority does not preclude their admission into a subsistence user group. *Id.*
 - 68. Alaska Admin. Code tit. 5, § 99.016(a) (2003).

have to compete directly with all other users to fulfill their subsistence needs.⁶⁹

Over the last twelve years, several attempts have been made to amend the Alaska Constitution in order to grant rural residents a priority for the subsistence use of resources and to resume state jurisdiction over the entire state. However, all legislative efforts to advance ballot measures for a public vote to amend the state constitution have failed.

The political, practical, social, and symbolic implications of the subsistence debate have been discussed thoroughly in academic, political, and judicial forums.⁷² Little attention, however, has been paid to the specific relationship between this debate and the global challenge of food security.

III. SUBSISTENCE AS A CONDITION FOR INUIT FOOD SECURITY

The concept of food security, currently defined as the capacity of every individual to access sufficient, safe, and nutritious foods

^{69.} See id. § 99.016(5).

^{70.} E.g., H.J. Res. 41, 22d Leg., 2d. Sess. (Alaska 2002).

^{71.} ALASKA NATIVES COMM'N, *supra* note 7, at 19–34; Ryan T. Peel, *Katie John v. United States: Balancing Alaskan State Sovereignty with a Native Grandmother's Right to Fish*, 15 BYU J. Pub. L. 263, at 278 (2001). On February 15, 2002, Governor Knowles proposed a constitutional amendment to the Alaska Legislature that would have permitted the adoption of a rural priority. H.J. Res. 41, 22d Leg., 2d Sess. (Alaska 2002). This proposal was drafted by a working group established after the conclusion of the Subsistence Leadership Summit, held in August 2001. *Id.* In addition to permitting a rural subsistence priority, the amendment would have extended a subsistence priority to residents of urban areas who could show traditional and customary use of the resources. *Id.* Ultimately, however, the amendment failed. *See* Subsistence Management Information, Management History, *available at* http://www.subsistmgtinfo.org/history.htm (last visited Feb. 9, 2005).

^{72.} See, e.g., Ninilchick Traditional Council v. United States, 227 F.3d 1186 (9th Cir. 2000); Alaska v. Babbit, 72 F.3d 698 (9th Cir. 1995); Native Vill. of Quinhagak v. United States, 35 F.3d 388 (9th Cir. 1994); Kwethluk IRA Council v. Alaska, 740 F.Supp. 765 (D. Alaska 1990); State v. Kenaitze Indian Tribe, 83 P.3d 1060 (Alaska 2004); Kenaitze Indian Tribe, 894 P.2d at 632; State v. Morry, 836 P.2d 358 (Alaska 1992); State v. Kluti Kaah Native Vill. Of Copper Ctr., 831 P.2d 1270 (Alaska 1992); Alaska Native Subsistence and Fishing Rights: Hearing Before the Senate Comm. on Indian Affairs, 107th Cong. 107-456 (2002),available http://www.access.gpo.gov/congress/senate/senate13ch107.html (last visited Mar. 7, 2005); William M. Bryner, Note, Toward a Group Rights Theory for Remedying Harm to the Subsistence Culture of Alaska Natives, 12 ALASKA L. REV. 293 (1995); David G. Shapiro, Note, Jurisdiction and the Hunt: Subsistence Regulation, ANILCA, and Totemoff, 14 Alaska L. Rev. 115 (1997); Thomas A. Morehouse & Marybeth Holleman, When Values Conflict: Accomodating Alaska Native Subsistence, Occassional Paper No. 22, Institute of Social and Economic Research, Univ. of Alaska (1994).

corresponding to their preferences, 73 has an objective as well as a subjective component. It is not enough that sufficient, safe, and nutritious food supplies be *available*; they must also be *accessible* to every individual. Food security also requires that people have access to *adequate* foods, notably, foods "corresponding to the cultural traditions of the people to which the consumer belongs." The requirement of cultural acceptability "implies the need also to take into account, as far as possible, perceived non[-]nutrient-based values attached to food and food consumption." It recognizes that "food culture" is part of a group's wider cultural identity. As such, food security amounts to the practical objective of the "right to food" protected under international law, specifically, the right to adequate food affirmed in section 11 of the International Covenant on Economic, Social and Cultural Rights. The United Nations Special Rapporteur on the Right to Food interprets this right as follows:

- The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right...
- The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international cooperation,

^{73.} WORLD FOOD SUMMIT PLAN OF ACTION, *supra* note 4, \P 1.

^{74.} Id.

^{75.} Report by the Special Rapporteur Jean Ziegler on the Right to Food, U.N. Comm'n on Human Rights, 58th Sess., Provisional Agenda Item 10, ¶ 26, U.N. Doc. E/CN.4/2002/58 (2002) (quoting Report by the Special Rapporteur Jean Ziegler on the Right to Food, U.N. Comm'n on Human Rights, 57th Sess., Provisional Agenda Item 10, ¶ 14, U.N. Doc. E/CN.4/2001/53 (2001)) [hereinafter Report by the Special Rapporteur]; see also General Comment 12, U.N. Comm. on Economic, Social and Cultural Rights, 20th Sess., Agenda Item 7, ¶ 11, U.N. Doc. E/C.12/1999/5 (1999) [hereinafter General Comment 12]; WORLD FOOD SUMMIT PLAN OF ACTION, supra note 4; Duhaime & Godmaire, supra note 3, at 26; Theriault & Otis, supra note 3, at 583.

^{76.} General Comment 12, supra note 75, ¶ 11.

^{77.} Arne Oshaug et al., Human Rights: A Normative Basis for Food and Nutrition-Relevant Policy, 19(6) Food Policy 491, 509 (1994); see generally Food And Culture: A Reader (Carole Counihan & Penny Van Esterick eds., 1997); Marcel Mauss, The Gift: The Form and Reasons for Exchange in Archaic Societies (W.D. Halls trans., Norton 2000) (1950); Gary Paul Nabhan, Food, Health, and Native American Farming and Gathering, in Eating Culture (Ron Scapp & Brian Seitz eds., 1998); Edmund Searles, Food and the Making of Modern Inuit Identities, 10 Food And Foodways 55 (2002).

^{78.} Section 11 of the International Covenant on Economic, Social and Cultural Rights provides:

the right to have regular, permanent and free access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free of fear.⁷⁹

As the following sections will explain, Inuit subsistence activities and foods⁸⁰ are not valuable merely from a nutritional and health perspective. They also correspond to the food preferences of a large number of Alaskan Inuit and promote both the cultural vitality and the food economy of Inuit communities.

the measures, including specific programmes, which are needed . . .

International Covenant on Economic, Social and Cultural Rights, opened for signature Dec. 16, 1966, G.A. Res. 2200, U.N. GAOR, 21st Sess., Supp. No. 16, at 49, U.N. Doc. A/6316 (1966) [hereinafter ICESCR]; see also Report by the Special Rapporteur, supra note 75, ¶ 15; Theriault & Otis, supra note 3, at 583; JEAN ZIEGLER, LE DROIT A L'ALIMENTATION 66 (2002). The Covenant entered into force on January 3, 1976. See Office of the United Nations High Comm'ner for Human Rights, Ratifications and Reservations ICESCR. available http://www.ohchr.org/english/countries/ratification/3.htm (last visited Jan. 27, 2005). The Covenant has been ratified by 151 states, a vast majority of the 191 members of the United Nations. Id. The United States signed the ICESCR on October 5, 1977, but has not yet ratified it. Id. Therefore, the Covenant is currently not binding on the United States. The United States' position with respect to the right to food is one of progressive recognition "that does not give rise to any international obligation or any domestic legal entitlement, and does not diminish the responsibilities of national governments toward their citizens. Additionally, the United States understands the right of access to food to mean the opportunity to secure food, and not guaranteed entitlement." Carolee Heileman, U.S. Mission to the United Nations Agencies for Food and Agriculture, Reservation of the United States to the Declaration of the World Food Summit: Five Years Later (2002), available at http://www.fao.org/ DOCREP/MEETING/005/Y7106E/y7106e03 .htm#P192_62571 (last visited Jan. 31, 2005); see also Philip Alston, U.S. Ratification of the Covenant on Economic, Social and Cultural Rights: The Need for an Entirely New Strategy, 84 Am. J. INT'L L. 365 (1990) (evaluating the United States' understanding of economic, social, and cultural rights as "rights" but not entitlements).

- 79. Report by the Special Rapporteur, supra note 75, \P 14.
- 80. These foods, commonly called "subsistence" or "Native" foods in Alaska, *see* Caulfield, *supra* note 12, at 83, will hereinafter also be called "country foods." We use this term to refer to fish, game and plants harvested locally by Inuit peoples. Country foods are the opposite of food products imported from the south and sold on Arctic markets, which will hereinafter be called "market foods."

A. The Significance of Country Food Gathered through Subsistence Activities in Alaskan Inuit Food Preferences and Diet

A gradual shift in the diet of Inuit populations and increasing dependence on a more "Western" diet has resulted from the progressive sedentarization of Inuit communities and the increasing availability of market foods. Nevertheless, foods surveys⁸¹ conducted among Alaska Native adults have revealed that "country foods" are still regularly consumed in Alaska. In 2000, 92% of Alaskan Arctic households, the majority of which are Inuit, reported consuming local game, such as caribou, harbor and ringed seal, bowhead whale, walrus, ptarmigan, duck, and geese. Ninety-six percent of households reported consuming fish, most frequently salmon, halibut, whitefish, and herring. The market foods reported as most frequently consumed were coffee, sugar, white bread, tea, soft drinks, butter, and margarine. Studies have suggested that country food intake increases with age and varies geographically and seasonally.

This preference for country foods may be explained in several ways. For example, in investigating the factors influencing individual motivation to eat country foods, one study reported that the Inuit of Barrow believe their country foods are, among other things, nutritious, tasty, filling, natural, and part of their identity. ⁸⁷ Many Inuit report craving country foods and state that it keeps them strong and warm. ⁸⁸

^{81.} Dietary surveys among Aboriginal people, especially among Inuit populations, are not regularly conducted.

^{82.} See Alaska Native Health Bd. & Alaska Native Epidemiology Ctr., Final Report on the Alaska Traditional Diet Survey (2004), available at http://www.anhb.org/epicenter/pdf/traditional_diet.pdf (last visited Mar. 31, 2005); Elizabeth D. Nobmann, Diet Among Siberian Yup'iks of Alaska and the Implications for Cardiovascular Disease, 57(1) Int'l J. Circumpolar Health 4 (1996) [hereinafter Diet Among Siberian Yup'iks]; Elizabeth D. Nobmann et al., The Diet of Alaska Native Adults: 1987–1988, 55 Am. J. Clinical Nutrition 1024–32 (1992).

^{83.} See Robert J. Wolfe, Alaska Div. Of Subsistence, Subsistence in Alaska: A Year 2000 Update 2 (2000); Carole Blanchet et al., Diet Profile of Circumpolar Inuit, in Sustainable Food Security in the Arctic 46, 50 (Gérard Duhaime ed., 2002).

^{84.} WOLFE, supra note 83, at 2; see also Blanchet et al., supra note 83, at 50.

^{85.} See Blanchet et. al, supra note 83, at 50.

^{86.} Id.

^{87.} See Christopher M. Furgal et al., Decision Making and Diet in the North: Balancing the Physical, Economic and Social Components, in Synopsis of Research Conducted Under the 2000–2001 Northern Contaminants Program 44–45 (Sarah Kalhok ed., 2001).

^{88.} Id. On Inuit preference for country foods, see Searles, supra note 77, at 64.

Current research tends to indicate that the consumption of country foods remains important for the health⁸⁹ of Alaskan Inuit. The food security of many Inuit is favored by the consumption of traditional foods supplemented with nutritious foods obtained from the external food market.⁹⁰ Country foods contain many key nutrients that contribute to individual health, and may lower the risk of heart disease, some cancers, diabetes, hyperinsulinemia, adverse birth outcomes, and atherosclerotic diseases.⁹¹ For example, numerous studies have reported that the Inuit traditional diet, rich in fish and marine mammals, protects against cardiovascular diseases.⁹² This benefit can be attributed to the n-3 fatty acids found primarily in many marine country foods.⁹³ Preliminary data suggests that a high dietary intake of these fatty acids may also reduce the occurrence of some cancers, diabetes, hyperinsulinemia, and birth defects.⁹⁴

Many Inuit regard a healthy lifestyle as closely linked to hunting, fishing, and gathering activities. In numerous aboriginal populations, however, a more sedentary lifestyle, the result of urbanization and acculturation, seems to be associated with the increasing prevalence of obesity, diabetes, and some cardiovascular diseases. Fishing, hunting, and gathering activities provide an opportunity for Inuit to increase physical activity, maintain normal weight, and prevent metabolic

^{89.} Health is referred to here in the holistic sense as defined by the *Constitution of the World Health Organization* of 1946: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." *See* WORLD HEALTH ORGANIZATION CONST. preamble, para. 2.

^{90.} Blanchet et. al, supra note 83, at 57.

^{91.} Id. at 47.

^{92.} *Id*.

^{93.} Id.; see also Donald A. Boudreau et al., Meeting Report of Arctic Native Atherosclerosis and Omega-3 Fatty Acids, 52 Arctic Med. Res. 73 (1993); Éric Dewailly et al., Relations Between N-3 Fatty Acid Status and Cardiovascular Disease Risk Factors Among Quebecers, 74(4) Am. J. CLINICAL NUTRITION 603 (2001); John P. Middaugh, Cardiovascular Deaths Among Alaskan Natives, 1980–1986, 80(3) Am. J. Pub. Health 282 (1990).

^{94.} See, e.g., Blanchet et al., supra note 83, at 57; Cylla E. Friedberg et al., Fish Oil and Glycemic Control in Diabetes, 21 DIABETES CARE 494 (1998); Daan Kromhout, The Importance of N6 and N3 Fatty Acids in Carcinogenesis, 7 Med. Oncol. Tumor Pharmacother 173, 173 (1990); Sjúrður F. Olsen et al., Does Fish Consumption During Pregnancy Increase Fetal Growth?, 9(4) Int. J. Epidemiology 971 (1990).

^{95.} Harriett V. Kuhnlein & Hing Man Chan, Environment and Contaminants in Traditional Food Systems of Northern Indigenous Peoples, 20 ANN. REV. NUTRITION 595, 617 (2000).

^{96.} See World Health Organization, Diet, Nutrition and the Prevention of Chronic Diseases, Technical Report Series 797, 1–2 (1990).

disorders, in addition to providing various significant social and cultural benefits.⁹⁷

The risks related to Inuit consumption of country foods are mainly attributable to the presence of contaminants in these foods, primarily heavy metals and organochlorines, from exposure to various zoonotic diseases, ⁹⁸ and food poisoning. The contamination of the arctic food chain has been identified and investigated in great depth over the past two decades. ⁹⁹ While the level of contaminants in some traditional foods in other circumpolar regions approaches or exceeds national safety standards, data available ¹⁰⁰ for Alaska suggests that exposure levels to methylmercury are, for the most part, below or near World Health Organization ("WHO") intake guidelines. ¹⁰¹ Despite knowledge of contaminant levels in country food species, no known adverse human health effects have been observed in the Alaskan Arctic. ¹⁰²

Recent dietary studies suggest that market foods are also important to the Inuit diet even though country foods provide many key nutrients. The adequate consumption of nutritious market foods, such as dairy products, fruits, vegetables, whole-grain cereals, fortified milk formulas, and iron-fortified cereals for infants, could help prevent nutritional deficiencies among some sub-groups of the Alaska Arctic population. Substituting market foods in place of country foods, however, is not always desirable, because of the high fat and sugar content of market

^{97.} See Nobmann, Diet Among Siberian Yup'iks, supra note 82, at 16; Cynthia D. Schraer et al., Low Fasting Insulin Levels in Eskimos Compared to American Indians: Are Eskimos Less Insulin Resistant?, 58(4) INT'L J. CIRCUMPOLAR HEALTH 272, 279 (1999).

^{98.} Zoonotic diseases are animal-borne infections transmitted from animals to humans. *Veterinary Medicine*, About.com, http://vetmedicine.about.com/od/zoonotic (last visited Mar. 3, 2005).

^{99.} See generally Kuhnlein & Chan, supra note 95; Publications, Northern Con-Program of Indian Northern and Affairs http://www.aincinac.gc.ca/ncp/index e.html (last visited Mar. 31, 2005); ALASKA NATIVE HEALTH BD. & ALASKA NATIVE EPIDEMIOLOGY CTR., FINAL REPORT ON THE ALASKA DIET SURVEY (2004),available http://www.anhb.org/epicenter/pdf/traditional_diet.pdf (last visited Feb. 24, 2004); Arctic Monitoring and Assessment Program, at http://www.amap.no/ (last visited Feb. 24, 2005).

^{100.} In Alaska, information about human exposure to PCBs is scarce, and little dietrelated and methylmercury intake data are currently available.

^{101.} ARCTIC MONITORING AND ASSESSMENT PROGRAM (AMAP), AMAP ASSESSMENT 2002: HUMAN HEALTH IN THE ARCTIC 37–38, 48, 107 (2003), *available at* http://www.amap.no/ (last visited Feb. 24, 2005).

^{102.} Id.

^{103.} See Blanchet et al., supra note 83, at 57.

foods.¹⁰⁴ The exercise of balancing or weighing the known risks and benefits of country food consumption is complex. While contaminants found in northern country foods may pose potential public health risks, these foods constitute a valuable source of several key nutrients. Significantly, reducing country food consumption would expose the Inuit to indirect risks caused by changes in diet, such as social and cultural disruption and chronic diseases such as diabetes, some cardiovascular diseases, and cancers seen at higher levels in other populations.¹⁰⁵

Considering all the factors involved and the uncertainty surrounding some relationships between contaminant exposures and health effects, the combined benefits of country food consumption and their related activities are greater than the known risk of exposure to contaminants and biological diseases that country foods may present. ¹⁰⁶

B. The Role of Country Food in the Promotion of Inuit Cultural Vitality

As previously stated, food security requires not only that individuals have access to foods that are good for their health, but also that those foods be culturally acceptable. Considering its cultural dimension, food security goes beyond the mere satisfaction of physical needs—it integrates the social and cultural symbolism of food, which determines *what* food is and *which* foods are appropriate for human consumption. Subsistence activities continue to shape the life of Alaskan Inuit communities, including their occupational structure and

104. See id.; Judith Lawn & Neima Langner, Dep't of Indian and Northern Affairs, Air Stage Subsidy Monitoring Program, Final Report, Food Consumption Survey (1994); Nobmann, Diet Among Siberian Yup'iks, supra note 82, at 16–17; Nobmann et. al, The Diet of Alaska Native Adults, supra note 82, at 1026–28.

^{105.} See Peter Bjerregaard & T. Kue Young, The Circumpolar Inuit: Health of a Population in Transition 202–06, 212–13 (1998); Blanchet et. al, supra note 83, at 57; H.V. Kuhnlein et al., Arctic Indigenous Women Consume Greater than Acceptable Levels of Organochlorines, J. Nutrition 2501, 2509 (1995); Nobmann, Diet Among Siberian Yup'iks, supra note 82, at 17–18.

^{106.} See Blanchet et. al, supra note 83, at 57; Kuhnlein, supra note 105, at 2509.

^{107.} See, e.g., Russel L. Barsh, Food Security, Food Hegemony, and Charismatic Animals, in Toward a Sustainable Whaling Regime 147, 154–55 (Robert L. Friedheim ed., 2001); Duhaime & Godmaire, supra note 3, at 26; Milton M.R. Freeman, Small-Scale Whaling in North America, in Understanding the Cultures of Fishing Communities: A Key to Fisheries Management and Food Security, FAO Fisheries Technical Paper #401 (2001), available at http://www.fao.org/documents (last visited Mar. 3, 2005); Searles, supra note 77, at 69.

their material and spiritual culture, language, and discourse. ¹⁰⁸ Inuit still partly derive their self-worth, individually and collectively, from traditions associated with hunting, fishing, and gathering. More than a mere means of obtaining the foodstuffs required for physical survival, these practices represent an important aspect of community integration. ¹⁰⁹

Activities related to subsistence represent an important foundation for the social and economic organization of Inuit communities. Moreover, traditions of sharing play an integral economic role in these communities, helping each individual, whether or not he practices subsistence activities, have access to the food he needs and the food that corresponds to his food preferences. 111

Subsistence activities create a space for learning and ensure the perpetuation of traditional knowledge. This knowledge contributes to the food security of populations dependent on the harvesting of natural resources. The practice of subsistence activities embodies a set of knowledge founded on experience and experimentation as well as on beliefs dealing with every dimension of the subsistence way of life, including the following: the management of the environment; the

108. See BERGER, supra note 6, at 48–72; NORMAN A. CHANCE, THE INUPIAT AND ARCTIC ALASKA 86–114 (1990); CHASE HENSEL, TELLING OUR SELVES: ETHNICITY AND DISCOURSE IN SOUTHWESTERN ALASKA 7–15, 103–13, 149–53 (1996); Caulfield, supra note 12, at 83–87 ("Country foods (commonly called 'subsistence' or 'Native' foods in Alaska) are a major part of the diets of people living in Alaska's Arctic. . . . Families consume bowhead whales, walrus, seals, fish, berries, waterfowl, caribou, moose, Arctic hares, and many other species. As noted above, these foods are important not only for their nutritional qualities but also for their connection to Inupiat identity and a treasured way of life."); Searles, supra note 77, at 57 ("The diverse forms of symbolic capital attributed to certain foods, their consumption, and their exchange in everyday life remain central to the ways in which Inuit relate to their colonial past and to a postcolonial present, an era in which caste-like relations and sentiments continue to deeply impact social experience.").

- 109. See, e.g., Alaska Natives Comm'n, supra note 7, at 3; Case & Voluck, supra note 8, at 258; Chase Hensel, Yup'ik Identity and Subsistence Discourse: Social Resources in Interaction, 25(1–2) Etudes Inuit Studies 223–26 (2001).
- 110. See, e.g., Alaska Natives Comm'n, supra note 7, at 3; Carole Lévesque et al., Between Abundance and Scarcity: Food and the Institution of Sharing Among the Inuit of the Circumpolar Region During the Recent Historical Period, in Sustainable Food Security in the Arctic: State of Knowledge, supra note 3, at 106–07.
- 111. See Alaska Native Subsistence and Fishing Rights: Hearing before the Senate Committee on Indian Affairs, 107th Cong. 3–6 (2002) [hereinafter "Indian Affairs Hearing"] (statement of Rosita Worl, Chair, Subsistence Committee, Alaska Federation of Natives).
- 112. See Terry Cannon, Indigenous Peoples and Food Entitlement Losses under the Impact of Externally-Induced Change, 35(2) GEOJOURNAL 137, 147 (1995).

characteristics of plant, game, and fish species; hunting, fishing, and navigation techniques; and the preparation and conservation of food. 113

Ending or severely restricting traditional subsistence activities would deprive the Inuit of foods that are significant from a cultural standpoint, which in itself would be a source of food insecurity. Therefore, for cultural reasons, the legal protection of subsistence activities is a requirement for Inuit food security.

C. The Importance of Subsistence to the Food Economy of Alaska Inuit Communities

Many studies have underscored the high cost of living in the Arctic, including the cost of imported food. Due to the cost of market foods, customary institutions based on subsistence fishing, hunting, and gathering play an important part in the economics of food security in Alaska. Individuals count on networks of family and community members that make country foods available to those in the community who cannot hunt and fish themselves due to financial, employment, age, or illness reasons. These networks existed before the increased access and availability of imported food and have adapted to the new food supply. Today, they remain an important factor in social and family relations. Today, they remain an important factor in social and family relations.

The customary country food distribution networks provide healthy and culturally meaningful foods at a lower cost for most consumers than market food. Although efficient hunting and fishing requires sizeable

^{113.} See, e.g., MARK NUTTALL, PROTECTING THE ARCTIC: INDIGENOUS PEOPLES AND CULTURAL SURVIVAL 72 (1998); Fikret Berkes & Helen Fast, Aboriginal Peoples: The Basis for Policy-Making Toward Sustainable Development, in Achieving Sustainable Development 204, 214–17 (Ann Dale & John B. Robinson eds., 1996).

^{114.} See Duhaime & Godmaire, supra note 3, at 26.

^{115.} See Marian L. Campbell, Food Prices in the North: A Threat to Food Security, in Issues in the North 2, 107–09 (Jill Oakes & Rick Riewe eds., 1997); Peter Usher, Evaluating Country Food in the Northern Native Economy, 29 Arctic 105, 106 (1976).

^{116.} GERARD DUHAIME ET AL., LES RESEAUX D'APPROVISIONNEMENT ALIMENTAIRE DES MENAGES DE L'ARCTIQUE NORD-AMERICAIN 4–5 (GETIC, Université Laval 2003); Searles, *supra* note 77, at 60–64; Marcelle Chabot, De la Production Domestique au Marché: L'Économie Contemporaine des Familles Inuit du Nunavik 167–76, 204–15 (2001) (unpublished Ph.D. dissertation, Université Laval) (on file with the Laval University Library).

^{117.} See James S. Magdanz et al., Alaska Dep't of Fish and Game Div. of Subsistence, the Production and Distribution of Wild Food in Wales and Deering, Alaska 1, 3–5 (2002), available at http://www.subsistence.adfg.state.ak.us/techpap/tp259.pdf (last visited Mar. 29, 2005); Lévesque, supra note 110, at 106–07;.

^{118.} Chabot, *supra* note 116, at 256, 288; *see also* Gérard Duhaime et al., *The Impact of Dietary Changes Among the Inuit of Nunavik (Canada): A Socioeconomic Assessment*

investment on the part of the hunters themselves, the food obtained from these activities is redistributed among a larger number of individuals than is the case for imported food. 119 Inuit systems of food production and distribution are characterized by a small proportion of households handling a majority of the harvests (often referred to "superhouseholds") and by extensive cooperation among households in the production of subsistence foods. ¹²⁰ For example, while 63% of households in the Arctic region of Alaska harvest game, a much higher percentage (92%) are actually given access to the game through traditional food circulation channels. 121 The figures are similar with respect to fish, which is harvested by 78% of households and made available by family and community networks to 96% of households. 122 In a study on the production and distribution of wild food in the Inupiat villages of Wales and Deering, researchers found that about 30% of the households accounted for 70% or more of the harvest, by weight. 123 Country food therefore tends to be economically accessible to a greater number of people than imported food. Thus, at the household level, food security is fostered by traditional family and community networks whose continuing vitality is dependent on subsistence. 124

The viability of these traditional food circulation channels must be sustained. One way to accomplish this objective is to reinforce the mixed-economy bases of the Arctic by acknowledging the importance of hunting, fishing, and gathering activities in the context of global economic processes. The economic significance of subsistence in Alaskan Arctic communities is perhaps best appreciated in light of one study that suggested that replacing subsistence foods would have cost these communities between \$30 and \$50 million in 2000. In the context of a mixed-market subsistence economy, monetary income is also a condition for food security because income is essential both to purchase imported foodstuffs and to enable hunters to engage in hunting and fishing activities. Income is generated primarily from wage work

of Possible Public Health Recommendations Dealing with Food Contamination, 24(4) RISK ANALYSIS 1007, 1008, 1012–13 (2004).

^{119.} Chabot, *supra* note 116, at 146, 154.

^{120.} Dep't of Fish and Game, supra note 117, at 1–4; Magdanz, supra note 117, at 3.

^{121.} WOLFE, supra note 83, at 2.

^{122.} Id.

^{123.} MAGDANZ, *supra* note 117, at 58.

^{124.} Id. at 16.

^{125.} See Gérard Duhaime, Le Pluriel de l'Arctique, 23(2) SOCIOLOGIE ET SOCIETE 113 (1991); Chabot, supra note 116.

^{126.} WOLFE, supra note 83, at 2.

associated with government activities, transfer payments, private enterprises, and commercial fisheries. 127

When one considers the occupational structure and its relationship to securing food access and availability, the interconnection between the requirements of wage work (daily and weekly schedules, hourly pay, training and professional qualifications) and those of hunting, fishing, and gathering activities (financial needs for hunting/fishing gear, flexibility, climatic factors, seasonal migration of game) appears as the most relevant feature. The reconciliation of these spheres of economic activities reflects their interaction. Because the hunter needs cash for country food production, he will aim at getting part of this money from wage work and transfer payments. If one's available cash is not sufficient, family and community solidarity networks will then provide the hunter with extra money devoted to the hunting and fishing party. In order to ascertain the conditions for food security in Arctic Alaska, one must adopt an integrated view of subsistence activities and the wage economy and consider them as a single socio-economic reality.

We conclude that the consumption of subsistence foods is a precondition for Inuit food security. This security, and the capacity of Inuit people to pursue subsistence activities, is threatened by environmental pollution, reduced biodiversity, increased competition over access to fish and game, and disruptions caused by the exploitation of resources such as minerals and hydrocarbons. The legal framework may substantially hamper the ability of Alaska Natives to access their traditional foods in the following ways: by forbidding or restricting fishing, hunting, and gathering activities; by failing to protect these activities from the adverse impacts of economic development; or by prioritizing commercial and recreational uses of fish, game, and plants. Pevertheless, the law can also play a key role in protecting the sustainable access of Alaska Natives to their traditional foods by fostering availability, accessibility, and safe consumption. The legal

^{127.} Caulfield, *supra* note 12, at 78; *see also* Gérard Duhaime et al., *Food Consumption Patterns and Socioeconomic Factors Among the Inuit of Nunavik*, 41 ECOLOGY OF FOOD AND NUTRITION 91 (2002); Chabot, *supra* note 116, at 92–93, 100–03.

^{128.} See Sanjay Chaturvedi, The Polar Regions: A Political Geography 233–37 (2000); see also Oran R. Young, Arctic Politics: Conflict and Cooperation in the Circumpolar North 36–72, 104–125 (1992) (analyzing Arctic problems, including the mixed economy and resource conflicts); Lee Huskey & Thomas A. Morehouse, Development in Remote Regions: What Do We Know?, 45 Arctic 128, 129–30 (1992).

^{129.} Duhaime & Godmaire, *supra* note 3, at 24–26.

^{130.} *Id.* In recent years, social scientists have increasingly recognized the role of law in achieving food security. Thus, Duhaime and Godmaire's integrated conceptual framework of sustainable food security illustrates how law, along with other factors such as the environment, demography, technology, economics, and politics, influences the means

protection of subsistence must therefore be part of a comprehensive strategy for food security among the Inuit people of Alaska.

IV. PROTECTING SUBSISTENCE-BASED FOOD SECURITY: THE SHORTCOMINGS OF ALASKAN LAW

As defined by the 1996 World Food Summit, sustainable food security refers to the ability of every individual to access sufficient, safe, and nutritious food adapted to her or his preferences. Such ability must be "maintained and reproduced, thanks to a strong resistance to fluctuations in the components of the food system. This goal can be achieved only when every individual possesses the means to obtain sufficient food, including the materials, labor power, and legal entitlements necessary to access food. A complete assessment of the "subsistence security" provided by a given legal regime would require the evaluation of several institutions governed by various legal disciplines. This Article, however, only focuses on a few specific issues that are particularly pressing from a food security perspective.

In Alaska, the subsistence debate and related issues show that the ability of Inuit peoples to access subsistence foods is precarious. The various facets of the debate, and its effect on Inuit food security, cannot be understood fully without a concurrent understanding of the geographic and demographic characteristics of Alaska. Alaska is the

of production and circulation, as well as the availability, accessibility, and consumption, of food. *Id. See also Indian Affairs Hearing, supra* note 111, at 1 (statement of Rosita Worl); Ghislain Otis, *Inuit Subsistence Rights Under the James Bay and Northern Quebec Agreement: A Legal Perspective on Food Security in Nunavik, in Sustainable Food Security in The Arctic: State of Knowledge, <i>supra* note 3, at 189, 192–94.

- 131. See WORLD FOOD SUMMIT PLAN OF ACTION, supra note 4, at ¶ 1.
- 132. Duhaime & Godmaire, supra note 3, at 32.

133. The entitlement approach was developed by Amartya Sen: "The entitlement approach to starvation and famines concentrates on the ability of people to command food through the legal means available in the society, including the use of production possibilities, trade opportunities, entitlements *vis-à-vis* the state, and other methods of acquiring food." AMARTYA SEN, POVERTY AND FAMINES: AN ESSAY ON ENTITLEMENT AND DEPRIVATION 45 (1982). Hunting, fishing and gathering rights are entitlements under Sen's theory of famines. *Id.* at 51.

134. Milton M.R. Freeman, *Issues Affecting Subsistence Security in Arctic Societies*, 34(1) ARCTIC ANTHROPOLOGY 7 (1997).

135. For a short discussion of some of the legal conditions for the protection of subsistence, *see* Thériault & Otis, *supra* note 3.

136. See, e.g., Caulfield, supra note 12, at 87–88; Gérard Duhaime & Nick Bernard, Regional and Circumpolar Conditions for Food Security, in Sustainable Food Security in the Arctic: State of Knowledge, supra note 3, at 227. See generally Henry P. Huntington, Wildlife Management and Subsistence Hunting in Alaska (1992).

largest American state, comprising approximately 571,951 square miles. The is sparsely populated; roughly 648,818 people reside there, about 16% of which are Alaska Natives. About 80% of the total population live in urban areas. The remaining 20% of Alaskans live in rural areas, spread in about 225 communities of less than 500 inhabitants. Most of those communities are not connected by road; food supplies are shipped by air or by sea. About half of the rural population are Alaska Native peoples, and in some areas Native peoples constitute a great majority of the population. For example, the population of Arctic Alaska is 56.2% Inuit in the North Slope Borough Area, 80.7% Inuit in the Nome census area, and 87.1% Inuit in the Northwest Arctic Borough.

As demonstrated in the following sections, several aspects of Alaska law tend to make Inuit subsistence activities insecure or unsustainable, thus threatening Inuit food security.

A. Legal Confusion Generated by Dual Land Management

Since the *McDowell* ruling that declared the rural priority unconstitutional under state law, ¹⁴⁵ Alaska subsistence hunting and fishing activities are regulated by a highly complex and confusing jurisdictional system. In July 1990, because the state was no longer in compliance with ANILCA, the federal government took over the management of subsistence activities on federal lands. ¹⁴⁶ The United States has authority over subsistence activities exercised on federal lands, which comprise about 59% of Alaska's total land surface. ¹⁴⁷ The U.S. also has jurisdiction over "reserved waters" in which it has an interest by virtue of the reserved water rights doctrine. ¹⁴⁸ Reserved waters are waters adjacent to or running through federal lands "reserved"

^{137.} U.S. Census Bureau, Alaska Quick Facts, *at* http://quickfacts.census.gov/qfd/states/02000.html (last visited Apr. 7, 2005).

^{138.} Id.

^{139.} *Id*.

^{140.} Id.

^{141.} *Id*; see also Caulfield, supra note 12, at 77.

^{142.} Caulfield, *supra* note 12, at 75–87.

^{143.} Id. at 77; see also WOLFE, supra note 83, at 1.

^{144.} Caulfield, supra note 12, at 76.

^{145.} McDowell v. Alaska, 785 P.2d 1, 12 (Alaska 1989).

^{146.} See Temp. Subsistence Mgmt. Regulations for Public Lands in Alaska, 55 Fed. Reg. 27,114 (June 8, 1990) (to be codified at 36 C.F.R., pt. 242); CASE & VOLUCK, supra note 8, at 296–97; MOREHOUSE & HOLLEMAN, supra note 72, at 21.

^{147.} See 16 U.S.C. §§ 3102(1)–(3) (2000); CASE & VOLUCK, supra note 8, at 292; Caulfield, supra note 12, at 88; Hull & Leask, supra note 49, at 3.

^{148.} John v. United States, 247 F.3d 1032, 1034 (9th Cir. 2001) (en banc).

for uses related to the federal lands. ¹⁴⁹ As for the state, it has jurisdiction over its lands in addition to private lands, including the ones owned by the Native corporations. ¹⁵⁰ State laws and regulations that deal, for example, with hunting and fishing methods also apply to federal lands when not preempted by Congress. ¹⁵¹ State lands represent approximately 28% of the territory, while private parties, mainly Native corporations, own approximately 13% of the territory. ¹⁵² The ANILCA subsistence scheme does not apply on these lands selected by Native corporations; ¹⁵³ these lands are often the most important for subsistence hunting and fishing by Natives.

The current land management regime can be confusing, rendering hunting and fishing rights uncertain. First, the boundaries separating federal, state, and private lands are not clearly marked. ¹⁵⁴ Jurisdictional borders have become even more blurred since the Ninth Circuit Court of

Federal law can preempt state law in three ways. First, Congress may expressly declare that state law is preempted. Second, state law is preempted if Congress intends the federal government to occupy a field exclusively. Third, federal law preempts state law if the two actually conflict.

Id. at 958.

In *Totemoff*, the Alaska Supreme Court first noted that "no provision in ANILCA expressly preempts state enforcement of state hunting laws against subsistence hunters on federal land." *Id.* The court held that ANILCA does not disclose a "clear and manifest purpose" to exclusively occupy the field of regulation of subsistence hunting on federal land, a jurisdiction traditionally exercised by the states. *Id.* at 959. The state can regulate subsistence hunting on federal land as long as its regulations do not conflict with federal law. *Id.* Finally, the Court held that there is "no direct conflict between Alaska's anti-spotlighting regulations and any federal statute or regulation." *Id.* at 960. For a comment on this case, *see* Shapiro, *supra* note 72.

- 152. Hull & Leask, supra note 49, at 3.
- 153. CASE & VOLUCK, *supra* note 8, at 301–02.

^{149.} See, e.g., Alaska v. Babbitt, 72 F.3d 698, 704 (9th Cir. 1995); John, 247 F.3d at 1033.

^{150.} CASE & VOLUCK, *supra* note 8, at 301–02; *see also* WOLFE, *supra* note 83, at 4; Kancewick & Smith, *supra* note 8, at 672.

^{151. 36} C.F.R. § 242.14 (2004); 50 C.F.R. § 100.14(a) (2004). These provisions read as follows: "State fish and game regulations apply to public lands and such laws are hereby adopted and made a part of the regulations in this part to the extent they are not inconsistent with, or superseded by, the regulations in this part." *Id.* As explained in *Totemoff v. State*, 905 P.2d 954 (Alaska 1995):

^{154.} ALASKA DEP'T OF FISH AND GAME, REPORT ON DUAL STATE AND FEDERAL MANAGEMENT OF FISH AND WILDLIFE HARVEST: EXAMPLES OF PROBLEMS AND RELATED ISSUES 8 (1993); see also Huntington, supra note 136, at 59; Caulfield, supra note 12, at 27.

Appeals held in *Alaska v. Babbitt*¹⁵⁵ that federal jurisdiction extends to reserved waters in which the United States has an interest by virtue of the reserved water rights doctrine. These waters can include those that are adjacent to federal conservation unit lands. Unclear boundaries combined with major differences in federal and state regimes generate confusion. Subsistence users, for instance, are not necessarily the same people under the federal and state schemes and do not have priority at the same time and place under state and federal law. Under state law, all Alaska residents can qualify as subsistence users; in contrast, under ANILCA, only people residing in rural communities and making traditional and customary uses of fish and game resources can benefit from the priority.

Moreover, management dualism sometimes results in conflicting federal and state regulations that apply to the same species. The effects of incompatible or contradictory regulations are particularly important when migratory species like caribou, moose, and salmon are concerned. Migratory animal populations will be subject to either federal or state

^{155.} Alaska v. Babbitt, 72 F.3d 698 (9th Cir. 1995), cert. denied 516 U.S. 1036 (1996), reaff'd in John v. United States, 247 F.3d 1032 (9th Cir. 2001).

^{156.} *Id.* at 703-04. A good example of the confusions resulting from management dualism can be found in the Proceedings of the Northwest Arctic Federal Subsistence Regional Advisory Council Meeting, Kotzebue, Alaska, Oct. 8, 2004, at 62-63, *at* http://alaska.fws.gov/asm/rac.cfm?ctr=08 (last visited Mar. 10, 2005).

^{157.} See 50 C.F.R. § 100.3(b) (2000).

^{158.} See, e.g., Totemoff v. State, 905 P.2d 954 (Alaska 1995).

^{159.} For example, moose hunting is subject to different state and federal regulations regarding seasons in management unit 23, located in the Northwest region of Alaska. Under the federal regulations, subsistence users are allowed to hunt from July 1 to March 31; in contrast, a state subsistence user can harvest moose only until December 31. Compare 50 C.F.R. § 100.26(23) (2004) with 5 Alaska Admin. Code tit. 5, § 85.045 (2005). On July 13, 2004, the State issued an emergency order under the statutory authority, ALASKA STAT § 16.05.060 (Michie 2000), restricting moose hunting seasons in a portion of game management unit 23 to August 1 through August 15 and December 1 through December 31, 2004, for residents who had registered to participate between June 1 and July 15. Emergency Order 05-04-04 issued at Kotzebue, Alaska, July 13, 2004, available at: http://www.wildlife.alaska.gov/regulations/eo/2004-2005/05-04-04.pdf (last visited Mar. 10, 2005). The State justified the emergency order by citing a decrease in the moose population. Id. Similar restrictions, however, were not enacted on federal lands in the same management unit. See 50 C.F.R. § 100.26(23) (2004). These conflicting regulations resulted in great confusion for local users and were discussed extensively during the Northwest Arctic Regional Advisory Council meeting held October 8, 2004 in Kotzebue. See Proceedings of the Northwest Arctic Federal Subsistence Regional Advisory Council Meeting, Kotzebue, Alaska, Oct. 8, 2004, at 28-29, available at http://alaska.fws.gov/asm/rac.cfm?ctr=08 (last visited Mar. 10, 2005).

^{160.} Compare Alaska Stat. § 16.05.258 (Michie 2000) with 16 U.S.C. §§ 3113–14 (2000); see also Case & Voluck, supra note 8, at 290–93, 300–02.

regulations in the course of their movements over the jurisdictional checkerboard. This situation hampers the enforcement of regulations and decreases user compliance, thus weakening the sound management of fish and game resources upon which the very availability of food depends. 162

The conflicts and confusion resulting from this management system are somewhat eased by the efforts made by federal and state agencies to coordinate their actions. Dual management between state and federal agencies is currently guided by an Interim Memorandum of Agreement ("MOA").¹⁶³ Specific protocols are developed under the MOA to provide guidelines for the management of various resources or areas.¹⁶⁴ Despite the fact that these protocols may help to minimize disruptions and duplication of efforts by federal and state managers, they do not provide for the certainty and stability required for the achievement of food security. While the protocol system provides a framework to foster coordinated subsistence management, it does not guarantee that the parties will systematically reach an agreement on the management of a particular resource. 165 In certain cases, concessions in federal subsistence regulations that adjust to state law might be overturned in federal court if the result does not provide subsistence users with meaningful preferences. 166

^{161.} ALASKA DEP'T OF FISH AND GAME, *supra* note 154, at 7-8; MAGDANZ, *supra* note 117, at 105–11; Caulfield, *supra* note 12, at 27.

^{162.} ALASKA DEP'T OF FISH AND GAME, *supra* note 154; HUNTINGTON, *supra* note 136, at 62, 94–98.

^{163.} This memorandum was adopted in April 2000. *Interim Memorandum of Agreement, available at* http://www.subsistmgtinfo.org/fvss.htm (last visited Feb. 26, 2005).

^{164.} See, e.g., Subsistence Management Information Sharing Protocol, available at http://www.subsistmgtinfo.org/doc/Info%20Sharing%20protocol%204-23-2002%20FINAL.doc (last visited Mar. 29, 2005); Yukon River Drainage Subsistence Salmon Fishery Management Protocol, http://www.subsistmgtinfo.org/doc/Yukon042302FINAL.doc (last visited Mar. 29, 2005).

^{165.} For example, the Yukon River Drainage Subsistence Salmon Fishery Management Protocol expressly states that "if federal and state managers cannot reach consensus on in season management decisions and these differences cannot be reconciled, the respective agencies may implement actions in accordance with their agency's mandates and applicable regulations for waters under their respective jurisdictions." Yukon River Drainage Subsistence Salmon Fishery Management Protocol, supra note 164.

^{166.} See, e.g., Ninilchick Traditional Council v. United States, 227 F.3d 1186 (9th Cir. 2000). One of the issues raised in the case was "whether the advance harvest season open only to subsistence hunters qualifies as a meaningful preference." *Id.* at 1195. In game management units ("GMU") 15B and 15C, the Subsistence Board authorized a harvest season running from August 10, 1995, through September 20, 1995, with the first ten days reserved for subsistence use hunts. *Id.* at 1190. For GMU 15A, however, the

B. Defective or Limited Subsistence Priority

The criteria used to determine the priority for subsistence uses of fish and game represent another feature of the Alaskan legal regime that limits the ability of Inuit peoples to access their traditional foods while increasing competition for fish and game. To a great extent, such competition is attributable to the inability of the state of Alaska to implement the rural priority provided in ANILCA. This federal statute recognizes a rural resident's priority for subsistence hunting and fishing activities on lands belonging to the federal government. The Federal Subsistence Board determines which areas are rural by applying regulatory guidelines. 168 A community or area of 2,500 residents or less is deemed rural unless it has significant non-rural characteristics, or is considered socially and economically part of an urbanized area.¹⁶⁹ Communities of 7,000 residents or more are presumed non-rural "unless such a community or area possesses significant characteristics of a rural nature."¹⁷⁰ The status of communities with a population between 2,500 and 7,000 is determined by evaluating community characteristics. ¹⁷¹ In its determination of whether an area will be considered rural or urban, the Federal Subsistence Board may consider specific characteristics, including, but not limited to, the intensity of the use of fish and game by its residents, the development and diversity of the economy, the development of community infrastructures, the means of transportation, and the existence of educational institutions. ¹⁷² Applying these criteria, the Board has determined that Fairbanks North Star Borough, the cities of Adak and Anchorage, and the areas of Homer, Juneau, Kenai,

Board adopted a harvest season running from August 18 to September 20, reserving only the first two days for subsistence hunters. *Id.* The federal government explained that the short length of the advance season in GMU 15A was motivated by its desire "to prevent conflict with a state-regulated nonsubsistence bow-and-arrow hunt which runs from August 10 through August 17." *Id.* at 1195. The court held that the government (1) restricted the harvesting of moose for subsistence uses in order to give preference to nonsubsistence hunting in violation of the plain language of 16 U.S.C. § 3114, and (2) failed to provide any evidence to support a finding that the two-day advance season provides subsistence hunters with meaningful preferences. *Id.* Therefore, the court rejected "as arbitrary and capricious the Board's determination that the advance hunting season in GMU 15A qualifies as a priority within the meaning of § 3114." *Id.* at 1195–96.

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167. 16 U.S.C. §§ 3113-14 (2000).
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^{168. 36} C.F.R. § 242.15 (2004).

^{169.} *Id.* § 242.15 (a)(1).

^{170.} *Id.* § 242.15 (a)(3).

^{171.} *Id.* § 242.15 (a)(2).

^{172.} *Id.* § 242.15(5)(i)–(v).

Ketchikan, Seward, and Wasilla are urban. Rural determinations are reviewed every ten years. Rural determinations are

State law relies upon similar criteria for determining the nature of an area in order to define the extent of priority for subsistence use of resources, although it does so in a different manner than ANCILA. In *McDowell v. State*, ¹⁷⁵ the Alaska Supreme Court held that recognition of a subsistence priority on the basis of residency is unlawful under the Alaska Constitution. ¹⁷⁶ In 1992, in order to reduce the pressure on resources that resulted from the *McDowell* ruling, the Board of Fish and Game designated "non-subsistence areas," or areas of state or private lands where subsistence activities are not permitted. ¹⁷⁷ A non-subsistence area is defined as "an area or community where dependence upon subsistence is not a principal characteristic of the economy, culture, and way of life of the area and community." To determine whether such dependence is characteristic of a specific area or community, the Board applies various criteria to assess the relative importance of subsistence. ¹⁷⁹ Thus, under state law, portions of the

179. More precisely the statute provides:

[i]n determining whether dependence upon subsistence is a principal characteristic of the economy, culture, and way of life of an area or community under this subsection, the boards shall jointly consider the relative importance of subsistence in the context of the totality of the following socio-economic characteristics of the area or community: (1) the social and economic structure; (2) the stability of the economy; (3) the extent and the kinds of employment for wages, including full-time, part-time, temporary, and seasonal employment; (4) the amount and distribution of cash income among those domiciled in the area or community; (5) the cost and availability of goods and services to those domiciled in the area or community; (6) the variety of fish and game species used by those domiciled in the area or community; (7) the seasonal cycle of economic activity; (8) the percentage of those domiciled in the area or community participating in hunting and fishing activities or using wild fish and game; (9) the harvest levels of fish and game by those domiciled in the area or community; (10) the cultural, social, and economic values associated with the taking and use of fish and game; (11) the geographic locations where those domiciled in the area or community hunt and fish; (12) the extent of sharing and exchange of fish and game by those domiciled in the area or community; (13) additional similar factors the boards establish by regulation to be relevant to their determinations under this subsection.

^{173.} Id. § 242.23.

^{174.} Id. § 242.15(7).

^{175. 785} P.2d 1 (Alaska 1989).

^{176.} Id. at 9.

^{177.} See Alaska Stat. § 16.05.258(c) (Michie 2004).

^{178.} Id.

following areas have been found to be non-subsistence areas: Ketchikan; Juneau; Anchorage-Matsu-Kenai; Fairbanks; and Valdez. 180

Under the state system, all Alaska residents benefit from the subsistence priority in designated subsistence areas regardless of urban or rural residency. ¹⁸¹ Granting such a general preference to subsistence uses rather than primarily benefiting only rural residents has given rise to major competition for access to resources between residents of subsistence areas and urban residents who travel to subsistence areas to hunt and fish for "subsistence." ¹⁸² Urban hunters from Anchorage, for instance, can get a state subsistence permit and travel to a subsistence area northeast of the city to hunt Nelchina caribou near a Native village whose residents rely upon this species for subsistence. 183 The Alaska Supreme Court ruled in State v. Kenaitze Indian Tribe¹⁸⁴ that the State may not give priority to residents of subsistence areas, even when the conservation of resources requires restricted access to fish and game. 185 Applying the McDowell ruling, the court held that when subsistence resources become scarce, the State will only be allowed to restrict the taking of such resources in accordance with the following criteria: (1) the customary and direct dependence on the fish stock or game population by the subsistence user for human consumption as a mainstay of livelihood and (2) the ability of the subsistence user to obtain food if subsistence use is restricted or eliminated. 186 Limited resources, allocated among a potentially large group of people, threaten the capacity of local people to obtain sufficient food from their traditional fishing and hunting grounds. 187

Id.

^{180.} ALASKA ADMIN. CODE tit. 5, § 99.015 (2003). The validity of this determination, including the inclusion of the Kenai Peninsula in the nonsubsistence areas, has been confirmed recently. State v. Kenaitze Indian Tribe, 83 P.3d 1060 (Alaska 2004).

^{181.} CASE & VOLUCK, *supra* note 8, at 300–02.

^{182.} Richard A. Caulfield, Sustainable Development in the Arctic, Conditions for Food Security, Summary of a Workshop in Alaska (Sept. 2001) (unpublished manuscript) (on file with Université Laval); *see also* Koyukuk River Basin Moose Co-Management Team v. State, 76 P.3d 383 (Alaska 2003); State v. Morry, 836 P.2d 358 (Alaska 1992); MOREHOUSE & HOLLEMAN, *supra* note 72, at 24–26.

^{183.} MOREHOUSE & HOLLEMAN, *supra* note 72, at 31–33.

^{184. 894} P.2d 632 (Alaska 1995).

^{185.} See id. at 637-39.

^{186.} See id. at 642; see also ALASKA STAT. § 16.05.258(b)(4)(B) (Michie 2004); note 65 and accompanying text.

^{187.} James S. Magdanz reports that between 1995 and 2000, non-local moose hunting efforts increased by an average of 21% per year in the upper Kobuck River region. Personal interview with James S. Magdanz, Subsistence Resources Specialist, Alaska Dep't of Fish and Game, Div. of Subsistence (Oct. 7, 2004). In 1995, forty non-local moose hunters reported using the area, compared with eighty-five in 2000. *Id.* The

The capacity to access country foods over time can also be undermined because the special status of subsistence over other uses of fish and game, including commercial and sport uses, is so closely linked to the rural status of a region as defined by demographic and socioeconomic criteria. For example, the economic development of a rural area resulting from the discovery and exploitation of non-renewable natural resources or tourism could have major consequences for local residents, who depend on the resources of the land to meet their food needs. Under federal law, a reclassification of an area or a community as non-rural would mean that its residents lose their subsistence priority and have to compete directly with all other users. Under state law, the reclassification of a subsistence area as a non-subsistence area would mean that residents must travel to a subsistence area in order to benefit from the subsistence priority.

The alternative of remaining in the non-subsistence area would mean that the subsistence user would be forced to compete directly with commercial, sport, and personal uses of the resources. To require Native people to travel in order to exercise their hunting and fishing rights could also break their ancestral ties to their lands, resulting in the loss of knowledge related to the lands' ancestral use.

complaints of local users are generally related to wasted meat, spatial conflicts with subsistence activities, and reduced wildlife populations. *Id. See also* Natasha Summit, State v. Kenaitze Indian Tribe: A "*Journey*" for Subsistance [sic] Rights, 13 T.M. COOLEY L. REV. 615, 640 n.196 (1996) (citing 12,000 Hunt for Caribou; Record Numbers Apply for Subsistence Permits, Anchorage Daily News, July 10, 1995, at B1); Susan Georgette & Hannah Loon, Subsistence and Sport Fishing of Sheefish on the Upper Kobuck River, Alaska, Technical Paper 175 (1990) (unpublished report) (on file with Alaska Dep't of Fish and Game, Division of Subsistence).

- 188. Summit, *supra* note 187, at 637–42.
- 189. See, e.g., 16 U.S.C. § 3113 (2000); 36 C.F.R. § 242.15 (2004); Kenaitze Indian Tribe v. Alaska, 860 F.2d 312, 313–14 (9th Cir. 1988).
- 190. State v. Kenaitze Indian Tribe, 894 P.2d 632 (Alaska 1995); on subsequent appeal, 83 P.3d 1060 (Alaska 2004). For an example of such a situation, see generally Kenaitze Indian Tribe, 860 F.2d at 312. It should be noted that the challenge in Kenaitze Indian Tribe concerned an Alaska law where Alaska was complying with ANILCA and was exercising its jurisdiction on the entire territory of Alaska. Id. at 313–14. However, the reasoning in this decision could be applied to the federal law. See ALASKA NATIVES COMM'N, supra note 7, at 17.
 - 191. Summit summed up the implication of the *Kenaitze* decision this way:

 We would be well reminded to accord the sentiments of Justice Matthews in *McDowell* that simply moving is not a viable option to achieve the rights of equal access. Although the Kenaitze are eligible for Tier I and II subsistence status, to truly preserve and perpetuate their cultural heritage of subsistence activities, they will have to become highly mobile, traveling hundreds of miles to other hunting and

C. The Challenge of Accommodating Inuit Culture in the Subsistence Regime

The ability of the Alaska legal regime to foster food security for the Inuit will also be contingent upon the extent to which it can accommodate the Inuit understanding of and concerns related to subsistence activities. Closely related to this issue is the relative control of Inuit peoples over the decision-making processes that affect their ability to secure subsistence foods.

The Inuit peoples often complain that the rules governing subsistence fail to acknowledge their traditions, customs, and beliefs. Subsistence processes are characterized by their flexibility, dynamism, and resiliency. Hunting, fishing, and gathering patterns have always been determined by factors such as availability, opportunity, and needs. He are also defined by the knowledge transmitted from generation to generation in the form of traditions, customs, and beliefs. An overly strict and inflexible system that fails to take into account the practical and historical bases for subsistence patterns could jeopardize food security by dissolving the cultural cloth into which subsistence practices are woven and thus impede the ability of the Inuit to adapt to changing needs and environments.

fishing grounds and encroaching upon the subsistence heritage of others. *Kenaitze* essentially commands the Tribe to uproot from Kenai Peninsula if they wish to continue their traditional ways. It is not inconceivable that the tremendous pressures upon the resources of the Kenai will significantly curtail the personal fish and game uses. If the Kenaitze are forced to move to achieve equal access, they will ultimately lose their ancestral ties to their fishing and hunting grounds, and possibly as an inevitable consequence, their fundamental eligibility for any subsistence status.

Summit, supra note 187, at 641–42.

192. BERGER, *supra* note 6, at 48–72; HUNTINGTON, *supra* note 136, at 94–98; William E. Caldwell, "*Reasonable Opportunity*" v. "*Customary and Traditional*" in *Lime Village*, CULTURAL SURVIVAL Q. 64 (1998); Caulfield, *supra* note 12, at 6; Kancewick & Smith, *supra* note 8, at 661–62.

193. HUNTINGTON, *supra* note 136, at 5, 7–8, 11, 32–34; NUTTALL, *supra* note 113, at 79–80.

194. HUNTINGTON, *supra* note 136, at 5, 7–8, 11, 32–34; NUTTALL, *supra* note 113, at 79–80.

195. BERGER, *supra* note 6, at 51–52; HUNTINGTON, *supra* note 136, at 7; Caldwell, *supra* note 192, at 63.

196. NAVIGATING SOCIAL-ECOLOGICAL SYSTEMS: BUILDING RESILIENCE FOR COMPLEXITY AND CHANGE 1–16 (Fikret Berkes et al. eds., Cambridge Univ. Press 2003). The concept of resilience focuses on "adaptive capacity for sustainability." *Id.* According to this concept, "sustainability is viewed as a process, rather than an end-product, a dynamic process that requires adaptive capacity in resilient social-ecological systems to

The State's regime with respect to subsistence is often excessively rigid and does not adapt easily to the cultural, social, and nutritional needs of local users. The use of Euro-American wildlife management tools is not always compatible with customary and traditional patterns of subsistence. For example, the use of individual bag limits is inappropriate when meat is shared among every member in the community. In addition to threatening the capacity of individuals to obtain sufficient food, rules that are perceived either as culturally inappropriate or that prevent users from meeting their needs will often be ignored, ultimately thwarting conservation goals. Thus, from the

deal with change." *Id.* at 4. "Social-ecological resilience is determined in part by the livelihood security of an individual or group. Such security involves . . . the questions of entitlements and access to resources, the distribution of which is a key element of environmental justice." *Id.* at 14. The authors also point out that "[a] resilient social-ecological system, which can buffer a great deal of change or disturbance, is synonymous with ecological, economic, and social sustainability." *Id.* at 15.

197. HUNTINGTON, *supra* note 136, at 94–100; MAGDANZ ET AL., *supra* note 117, at 105–24; *see also* Kwethluk IRA Council v. Alaska, 740 F. Supp. 765 (D. Alaska 1990); Bobby v. Alaska, 718 F.Supp. 764 (D. Alaska 1989) (providing concrete examples).

198. HUNTINGTON, *supra* note 136, at 95; Kancewick & Smith, *supra* note 8, at 666; Alaska v. Kluti Kaah Native Village of Copper Center, 831 P.2d 1270, 1276–77 (D. Alaska 1990).

199. ALASKA DEP'T OF FISH AND GAME, *supra* note 154; HUNTINGTON, *supra* note 136, at 95; MAGDANZ ET AL., *supra* note 117, at 109; Kancewick & Smith, *supra* note 8, at 666. As explained by an Inupiat elder, Robert Newlin, testifying before the State Board of Game:

The [m]ajor and most fundamental difference of opinion we have with the proposed regulations is the proposed limit of one caribou per hunter. It does not make sense to an Iňupiaq community. . . . The Iňupiaq people's way of life has a heavy element of sharing. The best hunters have killed more than they and their immediate families need, and share what is left with relatives, older people, families with sick and injured hunters, and others who need the meat. We certainly do not want to lose the sense of community and helpfulness which our people share.

MAGDANZ ET AL., supra note 117, at 109.

200. MAGDANZ ET AL., *supra* note 117, at 120; HUNTINGTON, *supra* note 136, at 5, 98. As Huntington puts it:

Because the need is more than merely nutritional, it is not simply a question of ensuring that a certain number of seals and caribou can be taken. Requiring Inupiaq hunters to obtain a tag before hunting brown bear does not allow hunters to satisfy the spiritual need to show respect to the bear, which includes not discussing their intent prior to hunting. Individual bag limits may restrict the cultural need of a successful hunter to share his catch with members of his family and community. To achieve the goals of management, they must be viable in the field. The best-conceived regime cannot be effective if it is ignored by local hunters because they feel it is inappropriate. The attitude of local hunters to management regimes and their willingness to cooperate to achieve the goals of management are crucial parts of the regime-hunter interaction.

HUNTINGTON, supra note 136, at 5.

perspectives of food security and resource management, legal schemes governing the use of fish and wildlife must be responsive to local cultural, spiritual, and nutritional needs and conditions.²⁰¹ In other words, they must "become more situationally relevant in rural areas."²⁰² The responsiveness of a management regime to customary and traditional patterns of subsistence is measured by reference to such factors as the mandate of governmental agencies and the participation of Native users in the regulation-making process.²⁰³ The federal and state subsistence management regimes differ greatly in those regards.²⁰⁴

1. The Responsiveness of the Federal Regime to Inuit Cultural, Spiritual, and Nutritional Needs. In general, the federal management system is more responsive than the state system to the cultural, spiritual, and nutritional needs of subsistence users. This can be first explained by the specific mandate of federal agencies under ANILCA "to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so." Furthermore, in its declaration of findings Congress affirmed:

[I]n order to fulfill the policies and purposes of the Alaska Native Claims Settlement Act and as a matter of equity, it is necessary for the Congress to invoke its constitutional authority over Native affairs and it constitutional authority under the property clause and the commerce clause to protect and provide the opportunity for continued subsistence uses on the public lands by Native and non-Native rural residents. ²⁰⁶

Hence, after conservation, the federal resource management system's primary aim is to afford subsistence users a priority in the taking of fish and game.²⁰⁷ Unlike the state, the federal government is

201. ALASKA DEP'T OF FISH AND GAME, *supra* note 154; HUNTINGTON, *supra* note 136, at 99, 141–46. As argued by Magdanz, Utermohle, and Wolfe:

The freedom to organize wild food production in different ways is beneficial to both users and managers. Users benefit from being able to harvest, process, and distribute wild foods in ways that are efficient, socially and culturally acceptable, economically rewarding, and (perhaps most important) personally satisfying. Managers benefit because their efforts are more likely to be successful when they recognize and work within existing social and economic organizations.

MAGDANZ ET AL., *supra* note 117, at 120.

202. HUNTINGTON, *supra* note 136, at 1–2.

203. See id. at 79–81, 99–100, 144–55.

204. CASE & VOLUCK, supra note 8, at 288–302; Huntington, supra note 136, at 48–101.

205. 16 U.S.C. § 3101(c) (2000).

206. Id. § 3111(4) (internal citations omitted).

207. Id. § 3114 (providing that subsistence uses can only be restricted "[w]henever it is necessary to restrict the taking of populations of fish and wildlife on such lands for

not legally compelled to respond to the competing claims of different user groups. 208

The ability of federal managers to accommodate the concerns of Native users can also be linked to the role played by subsistence users within the Federal Subsistence Board's decision-making structure and processes. The Federal Subsistence Board has set up ten Regional Advisory Councils. 209 The members of these councils must reside in the region for which they are appointed and be "knowledgeable about the region and subsistence uses of the public lands therein."²¹⁰ Though no specific requirement exists for Native participation in the councils, Native people appear to be well-represented.²¹ The councils collect information and then develop, review, and present recommendations to the Subsistence Board. 212 The Subsistence Board must consider the councils' report and recommendations when enacting regulations related to subsistence uses of fish and wildlife.²¹³ discretion to refuse to implement such recommendations is statutorily limited to situations when the recommendation "is not supported by substantial evidence, violates recognized principles of fish and wildlife conservation, or would be detrimental to the satisfaction of subsistence

subsistence uses in order to protect the continued viability of such populations, or to continue such uses"); *see also* Ninilchik Traditional Council v. United States, 227 F.3d 1186, 1191–93 (9th Cir. 2000); United States v. Alexander, 938 F.2d 942, 945 (9th Cir. 1991); MOREHOUSE & HOLLEMAN, *supra* note 72, at 29.

208. The Alaska Constitution mandates the State "to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest." ALASKA CONST. art. VIII, § 1. It also "provide[s] for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people." *Id.* Art. VIII, § 2. Additionally, "wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use." *Id.* Art. VIII, § 3. *Compare* ALASKA STAT. §§ 16.05.251 (a)(12), (d)–(e), .255 (a)(10) (2000), with 16 U.S.C. § 3111 (2000); see also CASE & VOLUCK, supra note 8, at 286, 292–93, 301–02; HUNTINGTON, supra note 136, at 87; MOREHOUSE & HOLLEMAN, supra note 72, at 24–30.

- 209. CASE & VOLUCK, *supra* note 8, at 302; *see also* 16 U.S.C. § 3115 (2000).
- 210. 36 C.F.R. § 242.11(b)(1) (2004).
- 211. Taylor Brelsford, *A Meaningful Voice: Federal Regional Councils and Subsistence Management*, Cultural Survival Q. 72 (Sept. 30, 1998), *available at* http://www.culturalsurvival.org/publications/csq/index.cfm?id=22.3 (last visited Mar. 30, 2005); *see also* Morehouse & Holleman, *supra* note 72, at 27.
- 212. 16 U.S.C. § 3115 (2000); 36 C.F.R. § 242.11(c) (2004); see also CASE & VOLUCK, supra note 8, at 302.
 - 213. 16 U.S.C. § 3115(c); see also CASE & VOLUCK, supra note 8, at 302.

needs." ²¹⁴ If a recommendation is not accepted, the Board must disclose the factual basis and reasons for its decision. ²¹⁵

The Subsistence Board has generally proven receptive to the concerns of subsistence users and to the councils' recommendations. ²¹⁶ The Board has adopted some regulations demonstrating an improved understanding of Alaska Native subsistence patterns. For example, in many cases federal regulations allow a federally qualified subsistence user, or recipient, to designate another federally qualified subsistence user to take specific animal species on his behalf, ²¹⁷ unless the recipient is a member of a community operating under a community harvest system. ²¹⁸ This flexible measure fosters food security by recognizing traditional patterns of food sharing that have historically assured every member of the community access to subsistence foods. ²¹⁹

Moreover, federal courts have interpreted ANILCA's subsistence priority as requiring "meaningful priority" for "customary and traditional uses," so that subsistence uses must be "provided first and that nonsubsistence uses be regulated in such a manner as to have the least adverse impact on subsistence." Under the federal scheme, traditional means, methods, and patterns ought to be considered when formulating subsistence regulations. In *Bobby v. State*, 222 the residents from Lime Village, a small Athabascan Native community, challenged the state subsistence regulations adopted under ANILCA, arguing that seasons and bag limits restricted their customary and traditional practices and that those limitations could not be imposed if sport and commercial uses

^{214. 16} U.S.C. § 3115 (c).

^{215.} *Id.*; see also CASE & VOLUCK, supra note 8, at 302.

^{216.} Brelsford, *supra* note 211, at 72 ("During the five years in which the regional councils have advised the Board on regulatory changes needed to protect subsistence, their recommendations have been adopted into regulation in more than 90% of cases."); *see also* MOREHOUSE & HOLLEMAN, *supra* note 72, at 27.

^{217. 50} C.F.R. § 100.10(d)(5)(ii) (2004). "Designated hunter or fisherman means a Federally qualified hunter or fisherman who may take all or a portion of another Federally qualified hunter's or fisherman's harvest limit(s) only under situations approved by the Board." *Id.* § 100.25(a).

^{218.} Id. § 100.25(e).

^{219.} *See* Lévesque et al., *supra* note 110, at 106–07.

^{220.} CASE & VOLUCK, *supra* note 8, at 292; *see also* Ninilchik Traditional Council v. United States, 227 F.3d 1186 (9th Cir. 2000); Native Vill. of Quinhagak v. United States, 35 F.3d 388 (9th Cir. 1994); Kwethluk IRA Council v. Alaska, 740 F.Supp. 765 (D. Alaska 1990).

^{221.} CASE & VOLUCK, *supra* note 8, at 292–93.

^{222. 718} F. Supp. 764 (D. Alaska 1989).

had not been eliminated first.²²³ The federal court agreed with them.²²⁴ The following excerpt from the court's opinion is particularly interesting from a food security perspective and illustrates the spirit in which federal subsistence regulations ought to be developed:

However, the court feels constrained . . . to observe that the Board of Game must in the future proceed with scrupulous care and caution in imposing seasons and bag limits on subsistence hunting. Bag limits and seasons are game management tools which have seen extensive use in Alaska and nationally. These restrictions have typically, if not universally, been used to regulate sport hunting. In this case, bag limits and seasons are being applied to a very different type of game use. In its purest form, the subsistence lifestyle is quite literally the gaining of one's sustenance off the land. Typically, the sport hunter does not go hungry if the season ends without his taking any game or if he has taken and eaten his bag limit. The subsistence hunter who is without meat during a closed season or who has with his family consumed a fixed bag limit will go hungry unless some other game or fish are available and in season. Hunger knows nothing of seasons, nor is it satisfied for long after one's bag limit has been consumed.

The court further affirmed that any restrictions to subsistence uses, notably regarding bag limits, methods, and patterns of uses, must be justified:

If bag limits and seasons are imposed on subsistence hunting, there must be substantial evidence in the record that such restrictions are not inconsistent with customary and traditional uses of the game in question. It must be clear in the record that subsistence uses will be accommodated, as regards both the quantity or volume of use and the duration of the use. Need is not the standard. Again, it matters not that other food sources may be available at any given time or place. The standard is customary and traditional use of game. 226

Apart from these general principles of federal subsistence management, the bowhead whale regulatory system is the foremost example of a flexible regulatory system that favors the integration of Inuit cultural patterns into the law. Whale subsistence hunting has, for centuries, played an important part in satisfying some Alaskan Inuit villages' cultural, social, spiritual, and nutritional needs.²²⁷ Since 1946,

^{223.} *Id.* at 768–69. The challenged regulations were promulgated by the State of Alaska that was at that time still responsible for the management of subsistence on federal lands. *Id.* at 769.

^{224.} Id. at 781-82.

^{225.} Id. at 777.

^{226.} Id. at 778.

^{227.} Maggie Ahmaogak, ALASKA ESKIMO WHALING COMMISSION, AEWC and Whaling Information, *available at* http://www.uark.edu/misc/jcdixon/Historic_Whaling/AEWC/aewc_maggie%20presentation.htm (last visited Feb. 26, 2005); *see also* HUNTINGTON, *supra* note 136, at 110–15; Jean-Maurice Arbour, *La sécurité alimentaire*

that hunt has been governed by the International Whaling Convention ("IWC") and ancillary regulations adopted by the IWC pursuant to the Convention. In 1949, the IWC decided to forbid the taking of gray and white whales, including bowhead whales, "except when the meat and product of such whales are to be used exclusively for local consumption by the aborigines." The Marine Mammal Protection Act, passed by Congress in 1972, also exempted Alaska Natives dwelling on the coast of the North Pacific Ocean or the Arctic Ocean from its "moratorium on the taking and importation of marine mammals and marine mammals" products" when such taking is made "for subsistence purposes" or is "done for the purposes of creating and selling authentic native articles of handicrafts and clothing."

In 1977, however, the IWC decided to end the aboriginal exemption after the National Marine Fisheries Service ("NMFS") estimated that the bowhead whale stocks were critically depleted. The Inuit, challenging the accuracy of the NMFS estimate of bowhead whales, fought the ban by creating the Alaska Eskimo Whaling Commission ("AEWC"), an organization comprising whaling captains and their crews and representing the ten Alaska whaling villages. Following the intervention of the United States government, the IWC finally decided to lift the ban and approved a limited quota of eighteen strikes to be distributed among member villages of the AEWC for the 1978 bowhead whale hunt. A cooperative agreement was concluded in 1981 between the National Oceanic and Atmospheric Administration ("NOAA"), which was responsible for the management of whales, and the AEWC.

des peuples autochtones quant à la réglementation internationale de la chasse à la baleine: un avenir mal assuré, 94(4) LES CAHIERS DE DROIT 597 (2003); David S. Case, Subsistence and Self-Determination: Can Alaska Natives Have a More "Effective Voice?", 60 U. COLO. L. REV. 1009, 1026–27 (1989).

^{228.} HUNTINGTON, supra note 136, at 52.

^{229.} Id.

^{230. 16} U.S.C. § 1371(b) (2000).

^{231.} REX SNYDER, STATUS OF CO-MANAGEMENT ORGANIZATIONS IN NORTHERN ALASKA 2001/2002, RURAL DEVELOPMENT SENIOR PROJECT – RD 475, 11–15 (University of Alaska, Mar. 17, 2002); see also Huntington, supra note 136, at 110.

^{232.} Ahmaogak, *supra* note 227. The ten Alaska whaling communities are Gambell, Savoonga, Wales, Little Diomede, Kivalina, Point Hope, Wainwright, Barrow, Nuiqsut, and Kaktovik. *Id.* The members of the AEWC are the registered whaling captains and their crew in each community. *Id.* There are voting and non-voting members. *Id.* Only registered whaling captains have the right to vote in the AEWC decision-making process. *Id.*

^{233.} Id.

^{234.} *Id.* Section 1388 of the Marine Mammal Protection Act provides that "[t]he Secretary may enter into cooperative agreements with Alaska Native organizations to

Under this agreement, quotas are still set by the IWC, but the allocation of the quotas among whaling communities, the regulation and monitoring of the hunt, and the enforcement of the regulations are the province of the AEWC and the Whaling Captains' Associations. 235 Once the quotas have been distributed among the villages by the AEWC, each local Whaling Captain's Association adopts regulations concerning the hunt in its own community. 236 The management of the whale hunt is thus highly localized and receptive to user needs. After receiving reports from village whaling captains, the AEWC must report to the NOAA the results of each spring and fall whale hunt.²³⁷ Under the cooperative agreement, the "NOAA may assert its management and enforcement authority" only "[i]f the AEWC fails to carry out its enforcement responsibilities or meet the conditions" of the cooperative agreement or the management plan.²³⁸ This assertion of authority can be made only after the AEWC has been given an opportunity to present its views in a public forum. 239

This co-management regime strengthens food security as it provides the Inuit with the flexibility required to manage bowhead whale hunting in a culturally acceptable manner. One of the explicit purposes of the AEWC is "to protect and enhance Eskimo culture, traditions and activities associated with bowhead whales and bowhead whaling." For example, the AEWC has the authority to define the hunting methods and means that are presently limited to traditional harvesting methods. The federal government has no power to intervene in the regulation of whale hunting unless the species is determined, upon substantial evidence, to be depleted. In such a case, however, federal regulations shall be prescribed only after a hearing and shall be removed

conserve marine mammals and provide co-management of subsistence use by Alaska Natives." 16 U.S.C. § 1388(a) (2000).

^{235.} Ahmaogak, supra note 227.

^{236.} Id.

^{237.} Cooperative Agreement Between the National Oceanic and Atmospheric Administration and the Alaska Eskimo Whaling Commission (as amended 1998), 3–4, *available at* http://www.fakr.noaa.gov/protectedresources/whales/bowhead/cooperative_agrmt.pdf (last visited Feb. 26, 2005).

^{238.} *Id*. at 2.

^{239.} Id. at 2-3.

^{240.} Bylaws of the Alaska Eskimo Whaling Commission, § 1.2, *available at* http://www.uark.edu/misc/jcdixon/Historic_Whaling/AEWC/bylaws_final.pdf (last visited Feb. 26, 2005).

^{241.} *See* Alaska Eskimo Management Plan, § 100.21 (listing definitions), *available at* http://www.uark.edu/misc/jcdixon/Historic_Whaling/AEWC/manplan_final.pdf (last visited Feb. 26, 2005).

^{242.} *Id.* at § 100.24(a).

^{243. 16} U.S.C. § 1371(b) (2000).

as soon as the government determines that the need for their imposition has disappeared.²⁴⁴ Consequently, when the bowhead whale populations are healthy, local users benefit from a broad ability to define regulations respectful of their needs and culture. The power of the AEWC to distribute quotas among whaling villages and its obligation to consult each village to that effect also enhances food security in that the specific cultural and nutritional needs of every community will be taken into account.²⁴⁵

2. The Lack of Accommodation of Inuit Culture in the State Regime. The current state management scheme is much less flexible and receptive to the cultural patterns of subsistence and is therefore more problematic from a food security perspective. Alaska's objectives in resource management are unambiguously outlined in Article VIII of the state constitution, which affirms a strict conception of equal access to state natural resources. 246 The constitution states that "[t]he legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people"²⁴⁷ and that "[w]herever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use."248 Thus, "[t]he state's primary management goal is long-term conservation of resources to assure adequate levels of harvests for all qualified users—sport, commercial, and subsistence."²⁴⁹ In other words, to meet its goal of recognizing equal access to fish and game for all citizens while assuring the conservation of resources, the State tends to restrict all use (including subsistence) by general means, such as bag limits and seasons, without considering the special features and needs of each type of use.²⁵⁰

Under state law, the preference for subsistence uses is not translated into a "meaningful priority." State law instead provides a "reasonable opportunity for subsistence uses." "Reasonable opportunity" is defined as "an opportunity, as determined by the appropriate board, that

²⁴⁴ Id

^{245.} See Alaska Eskimo Management Plan, supra note 241, at § 100.21.

^{246.} See Alaska Const. art. VIII.

^{247.} Id. art. VIII, § 2.

^{248.} Id. art. VIII, § 3.

^{249.} MOREHOUSE & HOLLEMAN, supra note 72, at 28.

^{250.} *Id.* at 26; *see also* Kwethluk IRA Council v. Alaska, 740 F. Supp. 765 (D. Alaska 1990); State v. Palmer, 882 P.2d 386 (Alaska 1994); State v. Kluti Kaah Native Vill. of Copper Ctr., 831 P.2d 1270 (Alaska 1992); Huntington, *supra* note 136, at 94–100; Magdanz et al., *supra* note 117, at 105–11.

^{251.} ALASKA STAT. § 16.05.258(b)(1)(A) (Michie 2004); see also Caldwell, supra note 192, at 63.

allows a subsistence user to participate in a subsistence hunt or fishery that provides a normally diligent participant with a reasonable expectation of success in taking of fish and game." Moreover, state law provides that "[t]akings and uses of fish and game authorized under this section are subject to regulations regarding open and closed areas, seasons, methods and means, marking and identification requirements, quotas, bag limits, harvest levels, and sex, age, and size limitations." The Alaska Supreme Court ruled that ANILCA's "least adverse impact" or "least intrusive" standard is not applicable to the interpretation of state subsistence law. Additionally, the court found that state fisheries and game boards have the discretion, but are not mandated, to accommodate customs and traditions in regulating methods of hunting and fishing.

In practice, the state boards of fisheries and game tend to interpret the term "customary and traditional" in a restrictive manner. They are often criticized for not being responsive to the needs and concerns of local subsistence users, for example, in extending sport regulations to subsistence without evaluating the possible adverse affects on customary and traditional subsistence practices. Also, it is generally recognized that the state fish and game regulatory system is dominated by sport and commercial interests and that, at least outside the most remote regions, subsistence users are poorly represented. The Local Advisory

^{252.} Alaska Stat. § 16.05.258(f).

^{253.} Id. § 16.05.258(e).

^{254.} State v. Morry, 836 P.2d 358, 364–65 (Alaska 1992).

^{255.} *Id.* at 370–71. It is worth noting that Chief Justice Rabinowitz and Justice Compton reaffirmed their disagreement with this interpretation for reasons previously stated in *State v. Kluti Kaah Native Village of Copper Center*; 831 P.2d 1270 (Alaska 1992). *Morry*, 836 P.2d at 370 n.15. "Since 'subsistence hunting' incorporates 'subsistence uses,' and 'subsistence uses' contemplates 'customary and traditional uses,' reading the subsistence statute as a whole leads me to conclude that subsistence hunting encompasses customary and traditional use patterns, methods, and means." *Kluti Kaah Native Vill. of Copper Ctr.*, 831 P.2d at 1276. This position is a permissible interpretation and one that is more favorable to the food security of subsistence users.

^{256.} See Native Vill. of Quinhagak v. United States, 35 F.3d 388 (9th Cir. 1994); Kwethluk IRA Council v. Alaska, 740 F. Supp. 765 (D. Alaska 1990); Bobby v. Alaska, 718 F. Supp. 764 (D. Alaska 1989); State v. Kluti Kaah Native Vill. of Copper Ctr., 831 P.2d 1270 (Alaska 1992); State v. Morry, 836 P.2d 358 (Alaska 1992); CASE & VOLUCK, supra note 8, at 292–93; HUNTINGTON, supra note 136, at 95–98, 149.

^{257.} MAGDANZ ET AL., *supra* note 117, at 105–24.

^{258.} David Case, Will Federal or State Management Afford Alaska Natives a More Effective Voice?, Cultural Survival Q. (Sept. 30, 1998), available at http://www.culturalsurvival.org/publications/csq/index.cfm?id=22.3 (last visited Mar. 30, 2005); see also Case & Voluck, supra note 8, at 286; Huntington, supra note 136, at 88, 91–92; Morehouse & Holleman, supra note 72, at 16, 24–26.

Committees²⁵⁹ are criticized for not being capable of effectively defending the interests of subsistence users, at least outside the more remote rural communities where those users are in a majority. ²⁶⁰ The failures of the advisory committee system have been explained by factors such as a lack of staff and funding, the formal nature of the system in which many Native village subsistence users feel uncomfortable, and several other structural problems.²⁶¹ Numerous authors have noted that the state fish and game management structure is dominated by "non-Native urban, sport and commercial hunting and fishing interests" and that the Board members, who are mostly from urban areas, are making "wildlife management policies in splendid isolation from the rural (predominantly Native) populations, which are the most heavily affected by these policies."²⁶² There is no mandatory rural or Native representation on the boards and, unlike the ANILCA regime, no assurance that the recommendations of the Local Advisory Committees will be implemented by the boards. 263 Hence vague terms like "customary and traditional uses" are defined and interpreted by state managers who show little awareness of the reality of subsistence in rural regions.

The state subsistence regulations have been subject to several legal challenges over the last twenty years, indicating the discontent of subsistence users. Although the state assumed management responsibilities under ANILCA from 1982 through 1990, it failed to

^{259.} The Local Advisory Committees were established "to provide a local forum for the collection and expression of opinions and recommendations on matters relating to the management of fish and wildlife resources." Alaska Admin. Code tit. 5, § 96.010 (2003); see also Alaska Stat. § 16.05.260 (Michie 2000). The local committees are composed of persons that "have knowledge of and experience with the fish and wildlife resources and their uses in the area, and have a reputation within the community consistent with the responsibilities of committee membership." Alaska Admin. Code tit. 5, § 96.040; see also Alaska Stat. § 16.05.260. The members of each committee must be representative of fish and game user groups in their respective area and of each town and village located in the area that the committee represents. Alaska Admin. Code tit. 5, § 96.060(e)(1).

^{260.} HUNTINGTON, *supra* note 136, at 88, 91–92; MOREHOUSE & HOLLEMAN, *supra* note 72, at 24–25.

^{261.} *See e.g.*, Case, *supra* note 227, at 1033–35; Huntington, *supra* note 136, at 82–100; Morehouse & Holleman, *supra* note 72, at 24–30.

^{262.} Case & Voluck, *supra* note 8, at 286; *see also* Huntington, *supra* note 136, at 82–100; Magdanz et al., *supra* note 117, at 105; Morehouse & Holleman, *supra* note 72, at 24–26; Caldwell, *supra* note 192, at 63.

^{263.} ALASKA STAT. § 16.05.260 (Michie 2004) (holding that the Boards have wide discretion whether to follow the recommendations of the advisory committees and that their sole obligation is to inform the appropriate advisory committee of their reasons for not following the committee's recommendations).

provide for priority for subsistence users as guaranteed by ANILCA.²⁶⁴ As a result, state regulations were challenged repeatedly in federal courts.²⁶⁵ Since *McDowell*, the state regulations have also faced numerous challenges before the Alaska Supreme Court, often because they do not provide for the subsistence priority recognized by the state subsistence law.²⁶⁶

Some of the foregoing cases provide prime examples of state policies that fail to accommodate subsistence uses or that favor sport and commercial uses to the detriment of subsistence. In *Bobby v. Alaska*, ²⁶⁷ Athabascan subsistence users from Lime Village sought declaratory and injunctive relief, alleging the invalidity of "Alaska Board of Game regulations regarding subsistence hunting of moose and caribou."²⁶⁸ Lime Village is a small Athabascan community remote from urban centers and highly subsistence-dependent.²⁶⁹ The Board of Game recognized this situation when it found that the residents of Lime Village were extremely dependent on moose and caribou, that "the [forty] residents of Lime Village [were] probably the most geographically isolated and subsistence dependent people in the state," that moose and caribou "supply the highest proportion of the food eaten by residents of the area," that Lime Village residents have "customarily harvested moose and caribou on an opportunistic basis throughout the year," and

^{264. 16} U.S.C. § 3117(a) (2000).

^{265.} See, e.g., Native Vill. of Quinhagak v. United States, 35 F.3d 388 (9th Cir. 1994); United States v. Alexander, 938 F.2d 942 (9th Cir. 1991); Kenaitze Indian Tribe v. Alaska, 860 F.2d 312 (9th Cir. 1988); Kwethluk IRA Council v. Alaska, 740 F. Supp. 765 (D. Alaska 1990); Bobby v. Alaska, 718 F. Supp. 764 (D. Alaska 1989).

^{266.} E.g., Payton v. State, 938 P.2d 1036 (Alaska 1997); Totemoff v. State, 905 P.2d 954 (Alaska 1995); State v. Kenaitze Indian Tribe, 894 P.2d 632 (Alaska 1995); State v. Palmer, 882 P.2d 386 (Alaska 1994); State v. Morry, 836 P.2d 358 (Alaska 1992); State v. Kluti Kaah Native Vill. of Copper Ctr., 831 P.2d 1270 (Alaska 1992).

^{267. 718} F. Supp. 764 (D. Alaska 1989).

^{268.} Id. at 764, 768-69.

^{269.} Caldwell, *supra* note 192, at 64. For example, Caldwell describes the economic and subsistence circumstances of Lime Village in the following way:

Lime Village is a small, remote and isolated Dena'ina Athabascan Indian village located along the upper Stony River (a tributary of the middle Kuskokwim River) west of the Alaska Range. The village has roughly 40–50 residents at any given time, descendants of a semi-nomadic tribe who have inhabited that part of the world since time immemorial. . . . The village has no water and sewer systems; and since it continues to be without electricity, freezers are not available for food preservation. There is no village store, and thus the people must obtain food supplements and other supplies by mail, which arrives only once a week by air, weather permitting (which it often doesn't). . . . The people are cash-poor and vitally dependent upon the harvest of wild, renewable resources.

that "the moose populations were stable and that the caribou population in the area was at a high level and growing." ²⁷⁰

In 1987, despite these findings and without reassessing the subsistence needs of the Lime Village residents, the Board adopted regulations imposing individual bag limits for caribou and moose hunting and closing the hunts during certain periods of the year without analyzing their effects on subsistence practices.²⁷¹ The Lime Village plaintiffs challenged the validity of these regulations, alleging that they failed to provide for the subsistence priority as defined by ANILCA.²⁷² The federal court granted the remedies sought by the plaintiffs. ²⁷³ The court found that the regulations were arbitrarily adopted because they failed to accommodate what the Board had previously determined to be the customary and traditional use of moose and caribou for subsistence purposes.²⁷⁴ The Board imposed closed seasons despite its finding that "Lime Village residents customarily and traditionally take moose and caribou 'throughout the year.'"275 It also adopted bag limits without producing any evidence as to harvest levels.²⁷⁶ In a very interesting obiter dictum, the court also noted that individual bag limits were adopted despite substantial evidence that "moose and caribou are taken by a few hunters who then share their take with the whole community."²⁷⁷ The court advised that "the Board of Game must take care to accommodate the Lime Village tradition of sharing the moose and caribou they take." Since the ruling in McDowell v. State, 279 however, the reasoning of the federal court in the *Bobby* case no longer applies to the interpretation of state law, as was held by the Alaska Supreme Court in *State v. Morry*. ²⁸⁰

Morry demonstrates the propensity of the state of Alaska not to account for the specific requirements of subsistence practices and to extend its sport hunting and fishing management tools to subsistence uses. In Morry, the Board of Game extended its general big-game tag regulations to subsistence hunters without analyzing the effects of these regulations on subsistence uses.²⁸¹ The state regulations required a

^{270.} Bobby, 718 F. Supp. at 773.

^{271.} Id. at 775.

^{272.} *Id.* at 768–69.

^{273.} *Id.* at 781–82.

^{274.} *Id.* at 779–80.

^{275.} Id. at 779.

^{276.} Id. at 780.

^{277.} Id.

^{278.} Id. at 781.

^{279. 785} P.2d 1 (Alaska 1989).

^{280. 836} P.2d 358 (Alaska 1992).

^{281.} Id. at 360-62.

brown bear hunter to purchase a tag before hunting and to affix and keep it on the animal until the animal was "stored, consumed, or exported from the state." An Inupiat subsistence hunter challenged the validity of these regulations after he had been charged with compliance violations. The Inupiat regard the requirement of obtaining a tag before hunting as disrespectful to the animal; showing respect to the animal requires the hunter to refrain from discussing his intention before the hunt. The Supreme Court of Alaska decided that the Board unlawfully extended its big game regulations to subsistence users, stating that sport and subsistence uses are of a different nature and that state law requires the Board to adopt specific regulations for subsistence hunting. However, the court also ruled that the Board was "not mandated to take into consideration the traditional and customary methods of subsistence takings in their formulation of subsistence regulations."

In *Kwethluk IRA Council v. Alaska*, ²⁸⁷ the plaintiff, an Indian Reorganization Act Council for the Native Village of Kwethluk, applied for a temporary restraining order and preliminary injunction to allow an emergency hunt of 50 to 70 caribou from the Kilbuck herd. ²⁸⁸ The hunt of the Kilbuck caribou was suspended in 1985 due to a sudden decrease in the herd's number. ²⁸⁹ The herd had recovered, however, and it was argued before the Board that the taking of 100 animals would not cause irreversible damage. ²⁹⁰ Due to economic hardship in the village and the shortage of other food sources in the area, the plaintiff requested that the Board of Game authorize an emergency hunt. ²⁹¹ The Board agreed that

^{282.} *Id.* at 360 (citing Alaska Admin. Code tit. 5, § 92.165 (2005)).

^{283.} Id.

^{284.} HUNTINGTON, *supra* note 136, at 97; *see also* HANNAH LOON & SUSAN GEORGETTE, CONTEMPORARY BROWN BEAR USE IN NORTHWEST ALASKA, TECHNICAL PAPER No. 163 (Alaska Dep't of Fish and Game, Div. of Subsistence, Kotzebue, Alaska, 1989). As Loon and Georgette explained:

In summary, Inupiaq hunters in northwest Alaska believe bears have good hearing regardless of the distance, and hunters must therefore speak carefully about these animals. Knowledgeable hunters advise that the bear's hyoid bone be removed during butchering, and disposed of properly. The head is traditionally left in the field or in camps. Normally, when hunters follow these practices, they believe they will not have bad luck, their camp will not be bothered, and they will not feel threatened by bears in the future.

Id. at 35.

^{285.} Morry, 836 P.2d at 363-64.

^{286.} Id. at 370.

^{287. 740} F.Supp. 765 (D. Alaska 1990).

^{288.} Id. at 766.

^{289.} Id.

^{290.} Id.

^{291.} *Id*.

there was an emergency. Pevertheless, the Board refused to permit the emergency hunt, alleging that the "hunt was not in the long-term best interests of the Kilbuck herd" and that "any opening for a hunt of the Kilbuck herd would likely lead to excessive and uncontrolled harvest of that herd." The court criticized the Board for making its decision without establishing a management plan for the Kilbuck herd and for its lack of a proper working definition of the statutory term "sustained yield," on which it relied in refusing the emergency hunt. The court stated that "the game board appears to have acted not on the basis of a formulated policy, but rather in an *ad hoc* fashion, as though it had unfettered discretion to decide what meaning it would attribute to the sustained yield issue in any particular case." The court held that a hunt limited to fifty caribou would not adversely affect the herd and consequently authorized the emergency hunt.

In State v. Kluti Kaah Native Village of Copper Center, ²⁹⁷ the State of Alaska sought review of "a preliminary injunction, which, essentially, replaced the State Board of Game's seven-day general moose hunt with a twenty-six day subsistence hunt for residents of Kluti Kaah Native Village."²⁹⁸ In March 1991, the Board of Game established a seven-day season to hunt moose, which was open to both sport and subsistence hunters.²⁹⁹ The residents of Kluti Kaah applied to the superior court for a "preliminary injunction prohibiting the state's enforcement of the seven day hunt and requesting that the court establish a longer subsistence hunt for their benefit."300 They argued that they would suffer irreparable harm if the injunction were not issued, claiming that the seven-day season would not provide sufficient moose to meet their subsistence needs and that it would not afford them an opportunity to pass on to their children their traditional and customary methods of subsistence hunting.³⁰¹ Granting the preliminary injunction, the trial court prohibited the state from enforcing the seven-day moose hunt and also requested that the Board provide at least a twenty-six day hunt.³⁰² On August 21, the superior court entered a supplemental order that

^{292.} Id.

^{293.} Id.

^{294.} Id.

^{295.} Id. at 767.

^{296.} *Id*.

^{297. 831} P.2d 1270 (Alaska 1992).

^{298.} *Id.* at 1271.

^{299.} Id.

^{300.} Id. at 1272.

^{301.} *Id.* at 1272 n.3.

^{302.} Id. at 1272.

"limited the Kluti Kaah residents to a harvest of no more than forty moose and required that they obtain permits." 303

Vacating the injunction, the Alaska Supreme Court held that the trial court did not consider the interests of other subsistence users (under the state scheme, potentially all state residents) or guard against depletion of the moose population.³⁰⁴ As the court explained:

Although the forty moose limit imposed by the court may adequately protect the moose population if no other similarly situated groups seek an extended hunting season, the superior court can in no way ensure that others will not seek similar relief. If this distinct possibility, in fact, occurs, we question the Court's acumen, given the procedural and substantive limitations of a trial setting, to accurately determine when the moose population is taxed. ³⁰⁵

Further, the court added that "[i]n determining whether to issue a preliminary injunction, the trial court should have considered the threat that multiple injunctions would represent to the moose population and the problems it would create for orderly game allocation. Its failure to do so constitutes an abuse of discretion."

Finally, in *Native Village of Quinhagak v. United States*, ³⁰⁷ several native villages appealed a decision of the federal district court that denied their motion for a preliminary injunction. ³⁰⁸ Their motion was incidental to an action challenging state regulations that prohibited subsistence rainbow trout fishing. ³⁰⁹ The court noted that rainbow trout were an important food source for the residents of the plaintiff villages, "especially in the winter, because they retain their fat content and are easy to locate and catch unlike other less dependable food sources." ³¹⁰ Whereas the plaintiff villages were subject to an absolute ban on the taking of rainbow trout for subsistence uses, sport users had access to

^{303.} Id.

^{304.} Id. at 1274-75.

^{305.} Id. at 1274.

^{306.} *Id.* Justices Rabinowitz and Compton, dissenting, would have affirmed the superior court's preliminary injunction. *Id.* at 1275. They found that the village established irreparable injury, in that the "Kluti Kaah would be denied the opportunity to transmit knowledge of traditional and customary hunting patterns to their children, and that their 1991–92 winter subsistence needs for moose could possibly go unfulfilled." *Id.* The dissent also found that the Kluti Kaah had established "substantial questions going to the merits," and that "the harm to the state and the public [would] be insignificant" compared to the prejudice they would suffer if the preliminary injunction was not granted. *Id.* at 1278 (quoting Alaska v. Kluti Koah, No. 3AN-91-04554 CI (D. Alaska 1991)).

^{307. 35} F.3d 388 (9th Cir. 1994).

^{308.} Id. at 389.

^{309.} Id.

^{310.} Id.

this resource.³¹¹ In February 1993, after the villages filed their motion but before the district court's decision, the Alaska Board of Fisheries repealed the ban on subsistence rainbow trout fishing.³¹² In its place, the Board adopted regulations that allowed "incidental takings" of rainbow trout while fishing for other fish species, but continued to prohibit "directed rainbow trout fisheries for subsistence purposes." In April 1993, after deciding that "rainbow trout are customarily and traditionally taken for subsistence uses in the waters surrounding the Villages," the Federal Subsistence Board legalized subsistence rainbow trout fishing "in remote, non-navigable headwaters of the Villages' river systems." 314 However, the Federal Board did not extend its regulations to navigable waters, which remained subject to the incidental taking regulations imposed by the State Board.³¹⁵ The major question on appeal was "whether, for the purposes of ANILCA, public lands include navigable waters" and whether the federal regulations were thus applicable to the villages' subsistence trout fishing in these waters.³¹⁶

The district court refused to grant the preliminary injunction, holding "that the hardships attendant to the dispute do not tip in favor of the Villages because the actual harm involved is the collision of cultures, not the Villages' lack of access to a traditional food source." In reversing the decision of the district court on the preliminary injunction, the court of appeals discussed the importance of food security. The court decided that the plaintiffs had presented strong proof of injury, as they had established that "navigable waters are critical for subsistence rainbow trout fishing." The court noted that "rainbow trout is a critical source of fresh fat and protein, especially during the winter when equivalent substitute food sources are not available," and that "the federal and state regulations interfere with [the villagers'] way of life and cultural identity." The court strongly criticized the State for promoting sport and commercial fishing at the expense of subsistence users.

^{311.} Id. at 390.

^{312.} Id. at 391.

^{313.} *Id*.

^{314.} Id.

^{315.} Id.

^{316.} Id. at 392.

^{317.} Id. at 393.

^{318.} Id.

^{319.} Id.

^{320.} Id. at 394.

^{321.} *Id.* at 394–95. The court of appeals criticized the state with the following words: "If the Villages' interpretation of ANILCA is correct, the new state regulations reinforce the state of Alaska's denigration of the importance of subsistence fisheries." *Id.* at 394;

These cases and the relevant literature demonstrate state resource managers' lack of responsiveness to the cultural dimensions of subsistence and propensity to favor sport and commercial users at the expense of subsistence users. Thus, the state regime hinders the capacity of individuals to access the food they need because its management tools improperly respond to the culture and traditions of subsistence users and communities (the prime example being the individual bag limits, by which the resource is shared among members of the community). 322 The lack of effective Inuit participation in the state fish and game regulatory process is also detrimental to their food security. Such participation would ensure that Inuit concerns relating to food needs are known and taken into account by the appropriate regulatory authority. The failure of the state regime to accommodate subsistence in a culturally adequate way undermines its legitimacy among subsistence users which, in turn, results in limited compliance and potentially defective conservation of species that are critical food sources.³²³ This problem is compounded in areas where regulations are not effectively enforced due to a lack of resources.³²⁴ Any threat to the conservation of species resulting from non-compliance with fish and game regulations represents in itself a threat to food security because it impairs the very availability of food sources.

V. CONCLUSION

Subsistence remains a central component of Alaskan Inuit culture and identity and an important foundation of their social and economic organizations.³²⁵ Moreover, country foods contribute to the physical and

see also Kenaitze Indian Tribe v. Alaska, 860 F.2d 312 (9th Cir. 1988) (criticizing the state for "tak[ing] away what Congress has given" to rural Alaskans by interpreting ANILCA to "protect commercial and sport fishing interests"). Arguably, by its narrow interpretation of public lands, the United States has allowed Alaska to continue a "policy of promoting sport and commercial fishing at the expense of subsistence users, such as the Villages." *Id.* at 318.

322. See HUNTINGTON, supra note 136, at 94–98 (providing several examples of state management rules that are at odds with Inupiat culture and traditions).

323. Id. at 5, 98.

324. *Id.* at 149. Commenting on Alaska hunting regulation, Huntington writes: "The hunting regulations have a well-defined role, but they are poorly implemented because there is limited enforcement capability in northern Alaska. Without the cooperation of the hunters, there is little hope that the regulations will ever be implemented effectively." *Id*

325. See generally Alaska Dep't of Fish and Game, supra note 154; Alaska Natives Comm'n, supra note 7; Berger, supra note 6, at 48–72; Case & Voluck, supra note 8, at 258; Duhaime (ed.), supra note 3; Magdanz et al., supra note 117;

mental health of Alaskan Inuit, including both the nutritional benefits these foods provide and the health benefits derived from hunting, fishing, and gathering activities. Despite the fact that contaminants found in certain northern country foods may pose potential public health risks, it appears that the overall benefits of country food consumption and related activities are greater than the risks associated with the consumption of these foods. Therefore, the availability of subsistence foods is necessary for Inuit food security as it provides sufficient, safe, nutritious, and culturally appropriate foods. An inextricable link thus exists between the legal protection of the Alaskan Inuit hunting, fishing, and gathering activities and their food security.

In Alaska, however, the legal capacity of Inuit people to access country foods could be better secured. Certain aspects of the regimes governing subsistence activities in Alaska are detrimental to Inuit food security. One aspect is dual federal and state land management, which creates confusion for subsistence users and hampers the sound management of fish and game resources upon which the sustainable availability of foods depends. Another problem is the defective or limited subsistence priority afforded by both the state and federal Under the state regime, the subsistence priority that is accorded to all Alaskans and the designation of "subsistence" and "nonsubsistence" areas has resulted in increased competition for resources, which adversely affects the capacity of local residents to harvest the country foods they need. Under both the state and federal regimes, the subsistence priority is precarious because it hinges on the rural status of a region defined by demographic and economic criteria. The economic development of a region can thus lead to its reclassification as non-rural, causing the loss of the subsistence priority for its residents, whose dependency on subsistence does not end with the region's new status. Finally, Alaska has so far proven reluctant to accommodate Inuit culture in its subsistence regime. State managers tend to interpret the terms "customary and traditional" in a restrictive manner and to apply Euro-American management tools to Inuit subsistence users without taking into account the dynamics of Inuit subsistence needs and economies. The state authorities also tend to favor sport and commercial uses at the expense of subsistence uses. In addition, subsistence users are

WOLFE, *supra* note 83; CULTURAL SURVIVAL Q., *supra* note 8; Kancewick & Smith, *su-pra* note 8, at 649–53.

^{326.} *See generally* Kuhnlein et al., *supra* note 105; Blanchet et. al, *supra* note 83; Boudreau et al., *supra* note 93; Dewailly et al., *supra* note 93; Friedberg et al., *supra* note 94; Middaugh, *supra* note 93.

^{327.} BJERREGAARD & YOUNG, *supra* note 105, at 212–13; *see generally* Kuhnlein et al., *supra* note 105; Blanchet et. al, *supra* note 83.

underrepresented in the state resource management system and therefore have little influence on the regulatory process governing their subsistence activities.

Lasting and comprehensive solutions to these food security issues would require not only substantive changes in statutes and regulatory processes, but important constitutional and institutional reforms at the state level in order to better accommodate the unique dynamics of subsistence cultures and economies. Meanwhile, changes could be made within the existing constitutional framework to improve Inuit food security. First, the legal confusion generated by dual land management could be minimized by moving toward more institutionalized channels of cooperative management between state and federal agencies. Despite its shortcomings, the current MOA protocol system reduces the risk of management failures and alleviates the confusion engendered by land management dualism. Statutory codification of the process, comprising dispute resolution procedures, could be a means of fostering the certainty of the cooperative management system.

In addition, accommodation of Inuit cultural, spiritual, and nutritional needs in the state system would be improved by giving Native users a greater say in the state resource management system. Native participation could range from mere consultation to comanagement. Co-management institutions, such as the AEWC for bowhead whales, provide a substantial degree of Native control over the regulatory process and are sufficiently flexible to allow culturally acceptable arrangements. The further development of co-management regimes would therefore foster food security. The state system of Local Advisory Committees could also be improved to increase the influence of Native users in the decision-making process. For example, Native representation on local committees could be guaranteed by statute. The discretion of state boards of fisheries and game to reject recommendations made by the committees could also be limited so as to ensure the adaptability of the system to the needs and concerns of Native subsistence users.

Finally, Inuit food security would be enhanced by reinforcing the protection of subsistence from the detrimental effects of competition for country food resources. Even if the Alaska Constitution prohibits the preferential treatment of subsistence users based on residency, Inuit capacity to access country foods would be strengthened by redefining the subsistence priority to require that non-subsistence uses "be regulated in such a manner as to have the least adverse impact on subsistence." Likewise, Inuit food security would benefit if the state

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subsistence priority were defined as encompassing traditional hunting and fishing methods.