

THE “MIDDLE PLACE”: THE NPR-A IMPACT MITIGATION PROGRAM AND ALASKA’S NORTH SLOPE

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ABSTRACT

The communities of Alaska’s North Slope increasingly find themselves in a “middle place,” stuck between a past to which they cannot return and a future that is fraught with uncertainty. Oil and gas development on Alaska’s North Slope has resulted in environmental, cultural, and social changes that have adversely affected the communities in the area. At the same time, oil and gas leasing in the National Petroleum Reserve in Alaska, located on the North Slope, has created an important revenue source for helping those communities mitigate the impacts of development and augment their capacities for addressing future changes. In particular, the Impact Mitigation Grant Program channels money from oil and gas leasing to the communities of the North Slope to address impacts caused by development. This situation has placed North Slope communities in an increasingly grave predicament: the very activities that most endanger their ongoing existence are also the source of the funds upon which they increasingly depend. When the region’s finite oil and gas resources no longer generate the current levels of revenue, North Slope communities will potentially be deprived of an economic life-line that enables them to sustain themselves in a situation that has been irrevocably changed. This Note proposes a research agenda for better understanding the challenges faced by North Slope communities and proposes how funding sources might be reorganized to address future needs. In particular, it highlights the importance of identifying stable sources of funding for local governments. It frames this discussion by examining the history of the Impact Mitigation Program and the documented changes wrought by oil and gas development on North Slope communities.

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INTRODUCTION

There is no turning back. We were introduced to the cash economy and now we can't do without it. How do we balance these? I don't know. We are learning it as we go. I don't know where is the middle place and I don't know what the future holds.¹

In the early 1980s, the U.S. Congress began to permit development in the National Petroleum Reserve in Alaska ("the NPR-A"). Subsequent development brought rapid cultural, social, and technological changes to Alaska's North Slope, and serious and unalterable consequences for its residents.²

The State of Alaska responded to the creation of the NPR-A by establishing an Impact Mitigation Grant Program ("the Program") to alleviate these increasing problems. The Program, with guidance from the federal government and funding from entities leasing land for oil and gas development, serves a critical role in the eight communities of the North Slope, and its continuing vitality is crucial to their well-being.

Nuiqsut is one of the communities in the North Slope Borough affected by this development.³ Nuiqsut, translated from the native Inupiatun as "a beautiful place over the horizon,"⁴ sits on the Nigliq Channel of the Colville River, about thirty-five miles south of the Beaufort Sea Coast.⁵ Originally a tent city, Nuiqsut was incorporated in 1975.⁶ The community of Nuiqsut has worked with the Alaska Department of Commerce, Community and Economic Development ("the Department") since 1986, and in that time has been awarded \$6.2

1. NAT'L RESEARCH COUNCIL, CUMULATIVE ENVIRONMENTAL EFFECTS OF OIL AND GAS ACTIVITIES ON ALASKA'S NORTH SLOPE 132 (2003) [hereinafter NAT'L RESEARCH COUNCIL] (quoting Bernice Keigelak).

2. See CITY OF BARROW, CONTINUATION OF NEW BOAT RAMP IMPACT MITIGATION GRANT APPLICATION TO THE DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT 13-14 (2010) [hereinafter BARROW BOAT RAMP GRANT APPLICATION] (on file with the author) (discussing the social and cultural impact of society's change from a subsistence lifestyle to a cash-based economy in a limited timespan). This application was submitted for the 2011 fiscal year.

3. See CITY OF NUIQSUT, NUIQSUT YOUTH IMPACT MITIGATION GRANT APPLICATION TO THE DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT 22 (2011) [hereinafter NUIQSUT YOUTH CENTER GRANT APPLICATION] (on file with author) (discussing the impact on the community of the influx of migrant oil and gas workers due to NPR-A drilling). This application was submitted for the 2013 fiscal year.

4. *Id.* at 18.

5. *Id.* at 15.

6. *Id.* at 16.

million for projects that maintain public facilities and public services.⁷

In 2011, the Department approved Nuiqsut for two grants: (1) a grant to continue support for its youth center, and (2) a grant for local government operation and maintenance. Nuiqsut's Youth Center, according to the grant application, provides a safe, healthy, and controlled environment for the community's youth to gather, socialize, and participate in sports and recreation.⁸ Continuing to fund the Youth Center ensures local teenagers have an opportunity to develop positive lifestyle characteristics, leadership attributes, health and life skills, artistic appreciation, sports skills, and respect for physical fitness.⁹ The Nuiqsut Youth Center is designed to operate with an emphasis on the maintenance of local cultural tradition.¹⁰

In addition to receiving funding for its Youth Center, Nuiqsut received a grant to support local government operations and maintenance.¹¹ The local government operations and maintenance grant allows Nuiqsut to continue developing its administrative capacity. It aims to establish procedure, protocol, and policy for city operations and city staff-employment issues, and to provide continuing education and training for staff personnel.¹² The grant attempts to further develop an autonomous local government and to strengthen the newly created Nuiqsut Comprehensive and Strategic Plan,¹³ which ensures an inclusive community-planning process¹⁴ as funding from the Program diminishes.

These two projects in Nuiqsut are typical of those funded by the Program,¹⁵ which depends on the continued leasing of land for oil and gas development. The projects exemplify the stakes of this grant program: funds dispersed through Impact Mitigation Grants have a substantial and important role in the communities of the North Slope.

7. *Id.* at 4.

8. *Id.* at 30–31.

9. *Id.* at 31.

10. *Id.* at 31–32.

11. CITY OF NUIQSUT, NUIQSUT LOCAL GOVERNMENT OPERATIONS AND MAINTENANCE IMPACT MITIGATION GRANT APPLICATION TO THE DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT 30–33 (2011) [hereinafter NUIQSUT LOCAL GOVERNMENT GRANT APPLICATION] (on file with the author). This application was submitted for the 2013 fiscal year. This application was approved and granted funding. See SUSAN K. BELL, DEPARTMENT OF COMMERCE, COMMUNITY, AND ECONOMIC DEVELOPMENT, NATIONAL PETROLEUM RESERVE – ALASKA (NPR-A) IMPACT MITIGATION GRANT PROGRAM REPORT TO THE FIRST SESSION OF THE TWENTY-EIGHTH ALASKA LEGISLATURE 52 (2013).

12. NUIQSUT LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 11, at 31.

13. *Id.* at 33, 36–37.

14. *Id.* at 36–37.

15. See BELL, *supra* note 11, at 6–55 (detailing approved grants).

However, this reliance on nonrenewable resources for funding presents an important question regarding the future viability of the Program: What happens when leasing (and thus, funding) ceases?

This Note examines this question and offers suggestions for developing a workable solution. While scholars have independently discussed the economics, environmental impacts, and sociological effects of development, this Note will contribute to the existing literature by uniting all three discussions. It will address the history of the Impact Program, its current role in the North Slope, and its questionable future. This Note also offers government entities and scholars a framework for further research on the future of the Program.

Part I of this Note will discuss the history of the NPR-A and the Program. Part II will discuss the problems that have arisen in the North Slope and explore the connection with oil and gas development. Finally, Part III will argue for the importance of continued research into the problems of the North Slope, the necessity of establishing a procedure to maintain funding once leasing ends, and the value of providing the local government with a more powerful voice in determining the future of the region.

I. FORMATION & HISTORY OF THE NPR-A & THE IMPACT MITIGATION GRANT PROGRAM

The North Slope Borough's eight communities—Anaktuvuk Pass, Atkasuk, Barrow, Kaktovik, Nuiqsut, Point Hope, Point Lay, and Wainwright—are largely comprised of Inupiat Alaska Natives.¹⁶ According to archaeological and anthropological evidence, the North Slope Inupiat have resided in the area since approximately 1250 to 1300 A.D.¹⁷ Oil was discovered on the North Slope in the late nineteenth century by non-native explorers.¹⁸ From that point forward, the future of the communities of the North Slope was intertwined with the potential

16. NAT'L RESEARCH COUNCIL, *supra* note 1, at 19. According to a 1999 North Slope Borough study, "[a]pproximately 70% of NSB residents are Inupiaq Alaska Natives. The remainder of the population is made up of whites (16.8%), Asians (7.2%), other Alaska Natives (2.3%), African Americans and Hispanic people (0.8%), and a sprinkling of other ethnic groups." *Id.* (internal citations omitted). The study also found that "the proportion of Inupiaq people is higher in the smaller communities (Anaktuvuk Pass, 92%, Atkasuk, 95%, Kaktovik, 85%, Nuiqsut, 90%, Point Hope, 91%, Point Lay, 92%, and Wainwright, 93%) than in Barrow (53%)." *Id.* (internal citations omitted).

17. *Id.* at 20.

18. Ivan L. Ascott, *The Alaska Statehood Act Does Not Guarantee Alaska Ninety Percent of the Revenue from Mineral Leases on Federal Lands in Alaska*, 27 SEATTLE U. L. REV. 999, 1016 (2004) (citations omitted).

for oil development.

In 1923, scarcely more than forty years after the discovery of oil in the region, President Warren G. Harding established the Naval Petroleum Reserve Number Four on Alaska's North Slope.¹⁹ Naval Petroleum Reserve Number Four, now known as the NPR-A, is approximately the size of Maine.²⁰ The NPR-A encompasses more than twenty-three million acres and "stretches from the Colville River delta in the east to the Chukchi Sea in the west and from the Arctic Ocean in the north to the Brooks Range in the south,"²¹ making it the largest contiguous public landholding in the United States.²² Estimates suggest that the land may hold 9.3 billion barrels of technically recoverable oil and 59.7 trillion cubic feet of recoverable natural gas.²³

The physical environment in the NPR-A is unique. Even today the land is relatively untouched "with few roads or significant human impacts."²⁴ Ice and snow cover the ground for around eight months a year and temperatures reach as low as -57°F.²⁵ Average temperatures are so low that it is impossible to sustain agriculture or lumber.²⁶ Despite these temperatures, the land and surrounding waters are notable for their wide variety of animal and plant life.²⁷ The NPR-A is home to whales, seals, fish, polar bears, foxes, birds, white sheep, wolverines, muskoxen, and caribou.²⁸

19. N. Alaska Env'tl. Ctr. v. Kempthorne, 457 F.3d 969, 973 (9th Cir. 2006).

20. Debbie S. Miller, *Draft Plan for NPR-A Offers Alternate Way to Find Balance*, ANCHORAGE DAILY NEWS (May 13, 2012), <http://www.adn.com/2012/05/13/2463830/draft-plan-for-npr-a-offers-alternate.html>.

21. Appellants' Brief at 4, N. Alaska Env'tl. Ctr. v. Norton, 457 F.3d 969 (9th Cir. 2005) (No. 05-35085) (citations omitted).

22. Scott Streater, *Alaskan Oil Reserve Could See New Protections under Pending Interior Plan*, N.Y. TIMES (Jul. 30, 2010), <http://www.nytimes.com/gwire/2010/07/30/30greenwire-alaskan-oil-reserve-could-see-new-protections-68414.html?pagewanted=all>.

23. CITY OF BARROW, LOCAL GOVERNMENT OPERATIONS AND MAINTENANCE IMPACT MITIGATION GRANT APPLICATION TO THE DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT 7 (2009) [hereinafter BARROW LOCAL GOVERNMENT GRANT APPLICATION] (on file with the author). This application was submitted for the 2011 fiscal year.

24. Miller, *supra* note 20.

25. ATMOSPHERIC RADIATION MEASUREMENT CLIMATE RESEARCH FACILITY, COLD WEATHER HAZARDS 1 (JUNE 2010), available at http://www.arm.gov/sites/nsa/docs/nsa_cwh.pdf; NAT'L RESEARCH COUNCIL, *supra* note 1, at 24.

26. NAT'L RESEARCH COUNCIL, *supra* note 1, at 19.

27. *See id.* at 28-31 (describing regional plants and vegetation, tundra ecosystems, and aquatic ecosystems).

28. *See id.* at 140-41 (internal citations omitted) ("Nowhere else is all of this possible, a sea full of great whales and seals and fish and polar bears and foxes and birds of every kind, from nearly every land, with mountains just nearby full

There are no roads that connect the communities of the North Slope Borough to each other or the rest of the State.²⁹ Because these communities are so remote, prices of goods are much higher than in urban areas.³⁰ Consequently, North Slope residents are faced with limited options: they can rely solely on a cash-based income, which may require accepting a lower standard of living, or they can supplement their income with subsistence harvesting. Most residents of the North Slope participate in at least some subsistence activities.³¹ Oil and gas development disrupts many of these activities.³² Throughout the history of the NPR-A, local communities have consistently considered the preservation of a subsistence lifestyle a high priority.³³ Subsistence is “more than tradition or a great adventure, for many families it is close to a question of existence.”³⁴

A. Creation of the NPR-A

In establishing the NPR-A in 1923, President Harding reserved the area for the development of oil and gas only,³⁵ noting that “the future

of white sheep and wolves and wolverine and with great plains in between the mountains and the sea with muskoxen and caribou and river and lake fish and many more birds and a thousand other things, all intermingled with the spirits and memories and stories and legends and graves and old houses of our people. This is the perfect place, the perfect place for us, which is why God probably put us here, these few of us, and made us tough enough to stay.”).

29. NAT'L RESEARCH COUNCIL, *supra* note 1, at 19.

30. *Id.* at 20. See also SCOTT GOLDSMITH, INST. OF SOC. AND ECON. RESEARCH, UNIV. ALASKA ANCHORAGE, UNDERSTANDING ALASKA'S REMOTE ECONOMY 4 (2008), available at http://www.iser.uaa.alaska.edu/Publications/researchsumm/UA_RS10.pdf (discussing prices and the cost of living in remote parts of Alaska).

31. See NAT'L RESEARCH COUNCIL, *supra* note 1, at 21 (“For people in most North Alaskan villages, individual participation in the contemporary annual subsistence cycle is both voluntary and variable. Few individuals participate in all activities in every season, but most participate in some.”).

32. See *id.* at 156 (discussing the interference with subsistence activities resulting from petroleum development).

33. Relevant case law demonstrates that this is consistently a priority. See, e.g., *Alaska v. Babbitt*, 72 F.3d 698, 703–04 (9th Cir. 1995) (finding navigable waters fall under the umbrella of “public lands” and thus the government could exclude subsistence fishing); *Bobby v. Alaska*, 718 F. Supp. 764, 781–82 (Alaska 1989) (finding invalid certain regulations limiting the ability of subsistence hunters to take caribou and moose); *Ninilchik Traditional Council v. Fleagle*, No. 3:06 CV 213 JWS, 2006 WL 2711522, at *9 (Alaska Sept. 20, 2006) (denying plaintiff's motion for a preliminary injunction that would allow traditional rainbow trout fishing).

34. BARROW BOAT RAMP GRANT APPLICATION, *supra* note 2, at 13.

35. Exec. Order No. 3797-A (Feb. 27, 1923).

supply of oil for the Navy is at all times a matter of national concern.”³⁶ However, despite the wars that followed, development of the area did not begin for several decades, likely due to the area’s remoteness.³⁷

Oil and natural gas were not found at Prudhoe Bay in the North Slope until early 1968.³⁸ Following the oil embargo initiated by the Organization of Petroleum Exporting Countries (“OPEC”) in the late 1970s, the United States realized it could no longer rely on foreign countries to fulfill domestic demand for oil.³⁹ Meanwhile, the need for oil development in the United States continued to grow. In 1976 Congress redesignated the Naval Petroleum Reserve Number Four as the NPR-A when it passed the Naval Petroleum Reserves Production Act of 1976 (the “Act”).⁴⁰ Control of the land was transferred from the Navy to the Secretary of the Interior (the “Secretary”),⁴¹ in part due to the belief that the Secretary was better equipped to evaluate and manage the “protection of the unique natural, fish and wildlife, scenic, and historical values of the Reserve.”⁴² Though oil and gas development was generally barred in the North Slope under the Act,⁴³ President Gerald Ford indicated that the NPR-A, as well as three other former Naval Petroleum Reserves, should nonetheless be developed “in a manner consistent with the total energy needs of the Nation”⁴⁴

In passing the Act, President Ford acknowledged the importance of maintaining protections for wildlife in the North Slope.⁴⁵ The Act

36. N. Alaska Env’tl. Ctr. v. Norton, 361 F. Supp. 2d 1069, 1072 (Alaska 2005) (citations omitted).

37. See N. Alaska Env’tl. Ctr. v. Kempthorne, 457 F.3d 969, 972–73 (9th Cir. 2006) (“Since the administration of President Warren G. Harding, the United States has looked to the petroleum and natural gas resources underlying the wilderness of Northern Alaska, but development has come slowly. The frigid region is far reaching and so is the range of wildlife that inhabits it.”).

38. NAT’L RESEARCH COUNCIL, *supra* note 1, at 133.

39. See Wendy Koch, *U.S. Oil Supply Looks Vulnerable Forty Years After Embargo*, U.S.A. TODAY (Oct. 19, 2013), <http://www.usatoday.com/story/news/nation/2013/10/19/us-oil-imports-opece-embargo/2997499> (discussing how the oil embargo impacted American dependence on foreign oil).

40. Naval Petroleum Reserves Production Act of 1976, Pub. L. 94-258, 90 Stat. 303 (1976) (codified as amended in scattered sections of 10 and 42 U.S.C.).

41. 42 U.S.C. § 6502 (2012).

42. Brief of Petitioner-Appellant at 5, N. Alaska Env’tl. Ctr. v. Norton, 457 F.3d 969 (9th Cir. 2005) (No. 05-35085) (citing H.R. Rep. No. 94-81, reprinted in 1976 U.S.C.C.A.N. 492, 498–99).

43. Kunaknana v. Clark, 742 F.2d 1145, 1147 (9th Cir. 1984) (citing 42 U.S.C. §§ 6501–07 (1976)).

44. Naval Petroleum Reserves Production Act of 1976, Pub. L. No. 94-258, 90 Stat. 303, 303 (1976).

45. See Karin McDougal, Note, *Nat’l Audubon Soc’y et. al. v. Kempthorne: A Win for the Environment, or an Example of NEPA’s Shortcomings?*, 13 DRAKE J. AGRIC. L. 437, 439 (2008) (citations omitted) (“[Ford] acknowledged that

mandated that the Secretary conduct an extensive study examining “the best overall procedures to be used in the development, production, transportation, and distribution of petroleum resources in the reserve.”⁴⁶ The study was to consider the impact on Alaska Natives and their usage of the land, on the region’s wilderness and wildlife, and, of course, on oil and gas quantities in the reserve.⁴⁷ Based on the study, the Secretary was to design a plan to manage the NPR-A.⁴⁸ The Act also empowered the Secretary to prohibit development in areas where the land was considered to have significant subsistence, recreational, environmental, historical, or scenic value.⁴⁹ From 1976 onward, the importance of environmental preservation has remained a consideration in decisions regarding development of the North Slope.

During the House of Representatives and Senate debates on opening the NPR-A for development, it became clear that the State of Alaska would have little influence over what might happen to the NPR-A. In his comments introducing the bill to the House,⁵⁰ the bill’s sponsor, Representative John Melcher of Montana, referenced the wishes of the State of Alaska only twice.⁵¹ First, he told the House that “[a]reas of land or water having significant Native subsistence uses, and historical, recreational, archaeological, scenic, or fish and wildlife habitat and use values, are to be identified” and protected.⁵² For example, the Utukok area and Teshekpuk Lake were to be protected because they had been “identified by the State of Alaska as being essential to Native subsistence utilization of fish and wildlife.”⁵³

Second, Representative Melcher discussed the taskforce required by the Act. The Secretary would form a taskforce comprised of Alaska

regulations should include protection of this unique area and its wildlife.”).

46. 42 U.S.C. § 6505(b)(1).

47. *Id.*

48. § 6505(c)(3). Based on the study performed, the Secretary created several “options” for land management. *See* 1 NPR-A TASK FORCE, 105(c) FINAL STUDY, VOL. 1: SUMMARIES OF VALUES AND RESOURCE ANALYSIS AND LAND USE OPTIONS (EXCLUDING PETROLEUM VALUES AND USES) 169-249 (1979) [hereinafter 1 NPR-A STUDY: SUMMARIES OF VALUES AND RESOURCE ANALYSIS AND LAND USE OPTIONS].

49. § 6504(a).

50. In a comment that only serves to demonstrate how different the political environment is today than it was when the Act was passed, Representative Melcher informed the House of Representatives when he brought the bill to the House that he thought it was a bill everyone could “agree on.” H.R. REP. NO. 94-49, at 8887 (1976). The thought of a bill regulating oil and gas development today garnering any widespread consensus seems unlikely, particularly when such a bill affects the lives of so many.

51. *Id.*

52. *Id.*

53. *Id.*

Natives, members of the Fish and Wildlife Service, representatives from the State of Alaska, and members of the Office of National Petroleum Reserves.⁵⁴ The taskforce would conduct a joint study to identify ways to protect the environment and subsistence hunting areas;⁵⁵ however, Congress would retain final say in implementing any recommendations.⁵⁶ Alaska Representative Donald Young commented several times throughout the hearing, urging the House to be cautious in developing the North Slope without any meaningful input from Alaskans: "To take 23 million acres of land, which is opposed by the native groups affected, by the State of Alaska, and by every group of people that know this area To do this without proper hearings would be a travesty."⁵⁷

The two senators from Alaska also voiced concerns when the Senate debated the bill. Senator Mike Gravel asked that the study conducted by the Secretary also include a "study of the socioeconomic impact that would be experienced by this area of Alaska as a result of the exploration."⁵⁸ Senator Gravel then proposed an amendment establishing a socioeconomic impact study; the amendment was rejected.⁵⁹

Senator Ted Stevens similarly cautioned that the NPR-A "is not a panacea for the Nation's energy problems," and urged that it was "incumbent upon [the Senate] to request and get views of the great [Alaska Native] organization that does operate out of Barrow and is now acquiring substantial expertise in the area of oil and gas development."⁶⁰ Senator Stevens's request that Congress actively consult Barrow residents was promptly rejected.⁶¹ Ultimately, however, Senator Stevens did not oppose the amendment. Perhaps accepting the inevitability of development in that region, he acknowledged that "getting everybody involved to study the problem and give Congress some recommendations" was a step in the "right direction."⁶² In the end, Senator Stevens voted in favor of the bill, while Senator Gravel voted against it.⁶³

In 1980, after Congress amended the 1976 Act to establish an

54. *Id.*

55. H.R. REP. NO. 94-49, at 21,614.

56. *Id.* at 8887.

57. *Id.* at 21,629.

58. 121 CONG. REC. 25,663 (1975).

59. *Id.* at 25,674.

60. *Id.* at 25,666-67.

61. *Id.* at 25,667.

62. *Id.* at 25,666.

63. *Id.* at 25,675-76.

“expeditious program of competitive leasing of oil and gas,” development finally commenced.⁶⁴ This amendment provided for a maximum of five annual leases of two million acres each.⁶⁵ Through the Bureau of Land Management (the “Bureau”), the Department of the Interior enters what are typically ten-year leases for oil and gas exploration and development.⁶⁶ Leasing companies usually pay a decreasing annual amount to the federal government.⁶⁷ Lease payments are paid to the U.S. Treasury, which then pays back 50 percent of the revenues to the State of Alaska.⁶⁸ These funds paid to the State are earmarked for “(a) planning, (b) construction, maintenance, and operation of essential public facilities, and (c) other necessary provisions of public service,” provided that in the distribution of funds, “the State . . . give[s] priority to use by subdivisions of the State most directly or severely impacted by development of oil and gas leased under this Act.”⁶⁹

In addition to allocating funds back to Alaska communities, the revised Act also provides some protection for the land upon which the development is to occur. Any leasing activities undertaken must comply with all restrictions the Secretary believes will mitigate “reasonably foreseeable and significantly adverse effects.”⁷⁰ This provision was designed to protect environmental interests as well as the interests of Alaska Natives.⁷¹ The extent of this protection in practice, however, has proven unsatisfactory in preventing and mitigating past and present problems.

64. Department of Interior and Related Agencies Appropriations Act, Pub. L. No. 96-514, Title I, 94 Stat. 2957, 2964 (1980) (codified as amended at Competitive Leasing of Oil and Gas, 42 U.S.C. § 6506a (2012)).

65. *Kunaknana v. Clark*, 742 F.2d 1145, 1147 (9th Cir. 1984).

66. BELL, *supra* note 11, at 1.

67. *Id.*

68. ROBERT D. STORER, SUBJECT: DISTRIBUTION OF NATIONAL PETROLEUM RESERVE – ALASKA RECEIPTS 1 (Alaska A.G. Sept. 25, 2001), *available at* 2001 WL 34396430.

69. *Id.*

70. *See* Competitive Leasing of Oil and Gas, 42 U.S.C. § 6506a (2012) (“Activities undertaken pursuant to this Act shall include or provide for such conditions, restrictions, and prohibitions as the Secretary deems necessary or appropriate to mitigate reasonably foreseeable and significantly adverse effects on the surface resources of the National Petroleum Reserve in Alaska.”).

71. Department of Interior and Related Agencies Appropriations Act, Pub. L. No. 96-514, Title I, 94 Stat. 2957, 2964 (1980) (codified as amended at 42 U.S.C. § 6506a).

B. The Creation and Distribution of the National Petroleum Reserve Alaska Special Revenue Fund

Beginning in the State Fiscal Year (“FY”) 1983, Alaska began receiving payments from leases in the North Slope.⁷² In response, the Alaska Legislature created the National Petroleum Reserve Alaska Special Revenue Fund by passing sections 37.05.530(a) and 37.05.530(b) of the Alaska Statutes.⁷³ Initially, substantial debate and controversy arose over how to distribute this money.⁷⁴ Before 1984, 50 percent of the NPR-A funds received were placed in the Alaska Permanent Fund, 1.5 percent was placed in the Public School Trust Fund, and the remainder was deposited in the General Fund.⁷⁵ In 1986, the North Slope Borough, Wainwright, and Barrow sued in Alaska Superior Court, arguing this allocation of revenue was contrary to the Act, which intended the funds be used primarily in the communities heavily impacted by development.⁷⁶ The Alaska Superior Court agreed, holding that the State had been inappropriately distributing the funds by not prioritizing the communities impacted by development.⁷⁷ In response, the State restructured the distribution plan.⁷⁸

The NPR-A Special Revenue Fund was reconstituted in accordance with the court’s decision, and this structure remains today.⁷⁹ The funds are now distributed first via NPR-A Impact Mitigation Grants,⁸⁰ which fund “meritorious grant applications” to communities in the North Slope, giving priority to “municipalities that are experiencing or will

72. BELL, *supra* note 11, at 1.

73. 1984 Alaska Sess. Laws, ch. 94.

74. See 1986 Inf. Op. Att’y Gen. (May 28; 883-86-0126) [hereinafter ATT’Y GEN. OP.] (describing disagreement between the Attorney General’s office, the legislature, and the governor regarding permissibility of allocating money to the Alaska’s Permanent Fund).

75. See BELL, *supra* note 11, at 2 (describing the initial distribution of monies); see also ATT’Y GEN. OP., *supra* note 74 (recounting the legislature’s failed attempt to pass a law allocating the funds prior to 1984, and approximate amounts allocated to each fund by the Department of Revenue before this point).

76. ATT’Y GEN. OP., *supra* note 74, at *2.

77. See *id.* (explaining the superior court’s ruling in Barrow).

78. See *North Slope gets NPR-A Impact Funds*, TUNDRA TIMES, Dec. 1, 1986, available at <http://ttip.tuzzy.org/collect/ttimes/index/assoc/HASHf72b.dir/doc18.pdf> (“A March 1986 Superior Court ruling directed the state to give priority use of the funds to political subdivisions most directly or severely [sic] impacted by NPR-A development.”); see also BELL, *supra* note 11, at 2 (“As a result of the litigation, the NPR-A Fund was reconciled and reconstituted as of October 1987.”).

79. See BELL, *supra* note 11, at 2 (“The general procedure remains the same today as in 1987.”).

80. ALASKA STAT. § 37.05.530(c), (d), (g) (2013).

experience the most direct or severe impact from oil and gas development.”⁸¹ Twenty-five percent of the remaining funds are placed in the Alaska Permanent Fund, 1.5 percent is deposited in the Public School Trust Fund, and the remainder can be transferred by the Legislature to the Power Cost Equalization and Rural Electric Capitalization Fund and the State’s General Fund.⁸²

When the Department is notified by the Bureau that the federal government is offering leases, the Department then advertises in eligible communities that funding may potentially become available for NPR-A Impact Mitigation grants and asks communities to submit project proposals.⁸³ The Department then “establishes a review committee [and] makes award recommendations.”⁸⁴ The review committee typically “consists of professionals that work closely with land and development concerns around the state and have interaction with both local, federal, and other state agencies.”⁸⁵

Those applying for grants must meet both applicant and project eligibility.⁸⁶ An applicant “must be a municipality under state law and . . . must demonstrate present impact, regardless of date of initial occurrence, or foreseeable future impact, on the applicant or the applicant’s residents from oil or gas exploration, production, or transportation activities in the NPR-A.”⁸⁷ Projects must be “related to present, continuing, or reasonably foreseeable impact[s] on the applicant or the applicant’s residents from oil or gas exploration, production, or transportation activities in the NPR-A” and must be for planning, for the construction, maintenance, and operation of essential public facilities, or for other necessary public services.⁸⁸ Impact is defined as an effect “reasonably attributable to NPR-A oil and gas activities” on population, employment, finances, social and cultural values, air and water quality, fish and wildlife habitats, the ability to provide essential public services,

81. § 37.05.530(c).

82. § 37.05.530(g).

83. See BELL, *supra* note 11, at 2 (“The Department then provides public notice that funding may become available for NPR-A Impact Mitigation grants and requests that communities submit project proposals (grant applications).”).

84. *Id.*

85. E-mail from Janet E. Davis, Grants Administrator, Division of Community and Regional Affairs, Department of Commerce, Community, and Economic Development to Shauna Woods (Oct. 15, 2012, 12:48 EST) [hereinafter Oct. 15 Davis Email] (on file with author).

86. See ALASKA ADMIN. CODE tit. 3, § 150.030 (2012) (“Eligibility for NPR-A impact assistance has two main components: applicant eligibility and project eligibility.”).

87. § 150.040.

88. § 150.050(a), (b).

or other things “of demonstrable importance” to the applicant or the applicant’s residents.⁸⁹ The Department holds a training workshop on grant eligibility every two years for interested and eligible applicants.⁹⁰

After interested communities submit their applications, the Department evaluates applications and funds qualified grant requests.⁹¹ If the meritorious applications exceed the amount of money the Department has to distribute, then the Department ranks applications.⁹² In doing so, the Department examines “the severity of the impact caused by the development in the NPR-A . . . and . . . the degree to which the impact on the municipality is directly caused by development in the NPR-A.”⁹³ Applicants are scored on the following criteria: fifteen points possible for administrative capability, forty-five points possible for current and potential impacts, twenty points possible for project description, fifteen points possible for project budget, and five points possible for project sustainability.⁹⁴ If a community is denied, then it may request reconsideration.⁹⁵

In FY 1987, the first projects received funding under this new funding plan.⁹⁶ Twelve projects in five communities were given \$7,240,237 collectively.⁹⁷ No projects were funded in 1988; however, between 1987 and 1995, \$10,462,965 was awarded for forty-seven projects, representing a wide array of diverse projects throughout the North Slope.⁹⁸ By 1996, all previous leases of land in the NPR-A had expired, which cut off the flow of money into the NPR-A fund.⁹⁹ As a result, the Impact Mitigation Program did not again award funds until new leases were entered in 1999.¹⁰⁰ Between 1996 and 1999, the communities in the North Slope did not receive any funding for government services or programs from the Program.¹⁰¹

In 1997, the Bureau began to solicit comments from the public regarding whether or not it was economically prudent to conduct oil-

89. § 150.050(c).

90. Oct. 15 Davis Email, *supra* note 85.

91. § 150.020.

92. § 150.060.

93. § 150.060(c).

94. Oct. 15 Davis Email, *supra* note 85.

95. § 150.090.

96. *See* BELL, *supra* note 11, at 3 (tabulating aggregate grant information for the initial years of the NPR-A Impact Mitigation Program).

97. *Id.*

98. *Id.*

99. *Id.*

100. *Id.* at 5.

101. *See id.* at 4 (noting that zero funds were disbursed through the NPR-A Impact Mitigation Program between 1996 and 1999).

and gas-lease sales in the Northeast Planning Area of the NPR-A.¹⁰² In 1988, after reviewing these comments, the Bureau opened 4.6 million acres—87 percent of the Northeast Planning Area—for leases in oil and gas development.¹⁰³ Subsequently, in early 1999, the Bureau notified the Department that as a result of new leases additional funding would be available.¹⁰⁴ In 2004, 8.8 million acres in the Northwest Planning Area were also opened for leasing.¹⁰⁵ Funds from leases in the Northeast and Northwest Planning Areas were dispersed through Impact Mitigation Grants to local governments.¹⁰⁶

The relationship between NPR-A leases, U.S. oil production, tax revenue in Alaska, and the Impact Mitigation Program is complex. Since 1976, more than 300 leases encompassing three million acres of the NPR-A have been sold.¹⁰⁷ Oil and gas production is critical to Alaska's economy, providing around 80 percent of the State's tax revenue.¹⁰⁸ In addition, Alaska accounts for 15 percent of the country's domestic production of oil.¹⁰⁹ To many people, the country's reliance on oil requires continued exploration and development of the NPR-A.¹¹⁰

102. See BUREAU OF LAND MGMT., NORTHEAST NATIONAL PETROLEUM RESERVE-ALASKA: FINAL INTEGRATED ACTIVITY PLAN/ENVIRONMENTAL IMPACT STATEMENT I-9 (Aug. 1998) (discussing the procedures followed prior to issuance of the final decision to lease the land).

103. BUREAU OF LAND MGMT., NORTHEAST NATIONAL PETROLEUM RESERVE-ALASKA: INTEGRATED ACTIVITY PLAN/ENVIRONMENTAL IMPACT STATEMENT, RECORD OF DECISION v (Oct. 1998). A mere 589,000 of the 4.6 million acres were set aside for an important part of the "migratory bird and caribou habitat in a portion of the Teshekpuk Lake Special Area." Brief of Petitioner-Appellant at 6, *N. Alaska Env'tl. Ctr. v. Norton*, 457 F.3d 969 (9th Cir. 2005) (No. 05-35085) (citations omitted).

104. See BELL, *supra* note 11, at 3 ("The NPR-A Impact Mitigation Program remained inactive until the early part of calendar year 1999[, at which] time the Department was notified that BLM would be entering into new . . . leases.").

105. BUREAU OF LAND MGMT., NORTHWEST NATIONAL PETROLEUM RESERVE-ALASKA: INTEGRATED ACTIVITY PLAN/ENVIRONMENTAL IMPACT STATEMENT, RECORD OF DECISION 3 (Jan. 2004).

106. See BELL, *supra* note 11, at 11-55 (listing all grant projects between fiscal years 2000 and 2011, including grants to villages in both the Northeast and Northwest Planning Areas).

107. Streater, *supra* note 22.

108. See ALASKA TAX DIVISION, 2012 ANNUAL REPORT 4 (noting that the oil and gas production tax contributed 83.39 percent of the state's tax revenue in 2012).

109. Ascott, *supra* note 18, at 999.

110. See Press Release, White House, Weekly Address: President Obama Announces New Plans to Increase Responsible Domestic Oil Production (May 14, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/05/14/weekly-address-president-obama-announces-new-plans-increase-responsible-> ("[President Obama] is directing the Department of the Interior to conduct annual lease sales in Alaska's National Petroleum Reserve," as part of his plan "to continue to expand responsible and safe domestic oil

Additionally, the State of Alaska relies on this exploration and development to fund state services, and communities affected by the development rely on it to fund necessary programs to alleviate past and present impacts. This situation presents an interesting dilemma: local communities are harmed by development but simultaneously rely on it to fund crucial programs. The changes in the North Slope have already wrought considerable problems. Though the funds from development have helped to mitigate this damage, permitting further development and exploration could potentially worsen the impact of past development.

II. PAST & PRESENT IMPACTS OF DEVELOPMENT IN THE NORTH SLOPE

Alaska Natives in the North Slope have harvested plants, fished, and hunted wildlife for centuries.¹¹¹ The subsistence lifestyle requires activity year-round; Alaska Natives hunt migratory caribou, fish, and whale seasonally.¹¹² For Alaska Natives, subsistence not only refers to seasonal harvests, but also “implies a lifeway in which language, culture, societal structure, and social well-being are primarily derived from a close interrelationship with the land, its physical conditions, and biotic resources.”¹¹³

As a result of development and exploration that has already begun, “the degree of change occurring in northern Alaska is far greater than in any other part of the United States.”¹¹⁴ With eighty years of oil and gas exploration comes “eighty years of impacts to the region,” including increased populations and social problems, a decrease in adherence to cultural traditions, and a greater need for public services.¹¹⁵ The potential health, social, and cultural implications that could result from escalating changes pose a great concern to many residents.¹¹⁶ For example, increasing technology could cause changes in migratory patterns, increase the rate of asthma and other health risks, and

production.”).

111. 1 NPR-A STUDY: SUMMARIES OF VALUES AND RESOURCE ANALYSIS AND LAND USE OPTIONS, *supra* note 48, at 8.

112. *Id.*

113. *Id.* at 13.

114. *Id.* at 36.

115. BARROW LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 23, at 7.

116. See, e.g., Tamara Jones, *North Star: Anti-drilling Activist Caroline Cannon*, MORE MAGAZINE, Nov. 2012, <http://www.more.com/caroline-cannon-arctic-crusade> (discussing Caroline Cannon’s concern oil development and exploration may have on the environment of the North Slope).

contribute to global warming.¹¹⁷

Despite the serious environmental, social, health, and cultural concerns, oil and gas exploration and development will likely continue. The United States' need for oil and gas is cited by some as the impetus for the federal government opening larger portions of the NPR-A for oil and gas leasing.¹¹⁸ The laws enabling development also provide fewer protections, which are "vital to many endangered species, the native people, and even possibly the atmosphere."¹¹⁹ As a result of oil and gas development and exploration, changes in the North Slope have already resulted in serious health and cultural impacts.¹²⁰

A. Health Impacts

In recent years, unusual health risks faced by North Slope residents have been documented. The North Slope wildlife, including both fish and mammals which are integral to the diet of Alaska Natives in the area, has the greatest concentration of toxins—including DDT, PCB, and HCH—in the world,¹²¹ with ten times the amount of toxins as in other places.¹²² Though small levels of toxins exist in every environment, studies have shown that exposure to toxins can be dangerous and that higher concentrations of toxins increase the likelihood of harm.¹²³

117. McDougal, *supra* note 45, at 440. McDougal argues oil development scares away animals, that local communities have only seen their first instances of "asthma-related illnesses" since development began, and the development could contribute to global warming. *Id.*

118. *Id.* at 440-41 (citations omitted). See *Alaska North Slope Oil and Gas Transportation System*, NAT'L ENERGY TECH. LAB, U.S. DEP'T OF ENERGY (June 17, 2013), http://www.netl.doe.gov/technologies/oil-gas/Petroleum/projects/EP/ArcticResources/01240_NStransportation.html ("Oil and gas development on the North Slope is critical for maintaining U.S. energy supplies and is facing a period of new growth to meet the increasing energy needs of the nation.").

119. McDougal, *supra* note 45, at 440-41 (citations omitted).

120. See discussion *infra* Part II.A-B.

121. NUIQSUT LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 11, at 23; MARLA CONE, SILENT SNOW: THE SLOW POISONING OF THE ARCTIC 218 (Grove Press, 2006) (discussing scientists' conclusion at the Arctic Monitoring and Assessment Programme that animals in the Arctic have demonstrated "adverse effects" as a result of the high level of toxins).

122. NUIQSUT YOUTH CENTER GRANT APPLICATION, *supra* note 3, at 23.

123. See Kathryn H. Acosta, Comment, *The Status of Toxins in 2003: How Toxins Affect Human Health and the Environment During War*, 2003 COLOR. J. INT'L ENVTL. L. & POL'Y 75, 76 (2003) ("Toxins pose a significant and potential deadly threat to the environment and to the people of the world. Human exposure to toxins is known to cause a variety of health problems, such as damage to the nervous system, reproductive and developmental problems, cancer, and genetic disorders."); see also CONE, *supra* note 121, at 217 ("While [scientists] definitively found correlations between effects in animals and the chemicals in their bodies,

Additionally, residents of the North Slope “have experienced devastating epidemics of infectious disease and suicide, institutionalized discrimination and forced removal of children to boarding schools, and cycles of alcohol and drug-related familial violence and abuse.”¹²⁴ These problems likely result from historical and multigenerational trauma, in part caused by “the lack of control of one’s own destiny.”¹²⁵ These problems prompted the North Slope Borough to conduct a health study investigating effects of increasing oil and gas development on physical and mental health.¹²⁶

The study conducted was the first Health Impact Assessment for proposed oil development within the NPR-A following increased concern regarding the impact of oil and gas development on health.¹²⁷ The report concluded that oil development, due to the “influx of outside interests and money,” can “create conflict, alter social structure, and divide communities,” as well as build concerns over current and future environmental problems.¹²⁸ Additionally, it concluded that oil and gas development can cause health problems, including “increases in diabetes and related metabolic conditions as a result of dietary change; rising rates of substance abuse, domestic violence, and suicide; increased injury rates; more frequent asthma exacerbations; and increased exposure to organic pollutant, including carcinogens and endocrine disruptors.”¹²⁹ The report also identified possible benefits of oil and gas exploration and development, such as an increase in funding for infrastructure and health care, an increase to the average household

they cannot prove causality. Causality is the bogeyman of environmental science, a continual weak point.”); *see also* JANA McANINCH, NORTH SLOPE BOROUGH, DEPARTMENT OF HEALTH AND SOCIAL SERVICES, BASELINE COMMUNITY HEALTH ANALYSIS REPORT 100 (2012), *available at* http://www.north-slope.org/departments/health/report_content.php. Doctor Jana McAninch, in her study, emphasized the high levels of Polychlorinated biphenyls (a pollutant) and noted that the State of Alaska Department of Health and Social Services “summarized the evidence regarding the overall health risks of PCB’s and related compounds: ‘Overall, we conclude that there is some small, unproven but theoretical risk of subtle health effects related to low-level exposure to PCB-like chemicals.’” *Id.* at 100 (citations omitted).

124. McAninch, *supra* note 123, at 43.

125. *Id.*

126. Aaron Wernham, *Inupiat Health and Proposed Alaskan Oil Development: Results of the First Integrated Health Impact Assessment/Environmental Impact Statement for Proposed Oil Development on Alaska’s North Slope*, 500 *ECOHEALTH J.* 500 (2007).

127. *See id.* at 500 (describing the reasons why the Health Impact Assessment was undertaken).

128. McAninch, *supra* note 123, at 45.

129. *Id.* at 12.

income, and an increase in potential employment.¹³⁰

Residents in the North Slope region formed the North Slope Borough governmental entity in 1974 and established two primary purposes: (1) “the improvement of quality of life for the North Slope Inupiaq,” and (2) “development of the internal leadership necessary to deal with change through adaptation.”¹³¹ In 2012, the North Slope Borough completed its own health study in response to fears of potential health problems resulting from increased exploration and development.¹³² Like the Health Impact Assessment, the North Slope Borough’s study also noted high mental health problems. The resulting report found that “the communities of the [North Slope Borough] bear a disproportionately high burden of suicide, unintentional injury (accidents), and domestic and sexual violence.”¹³³ According to the report, these problems result mainly from alcohol and drug problems as well as multigenerational trauma.¹³⁴ The report also noted that oil and gas development and exploration has caused “an influx of outside interests and money [which could] create conflict, alter social structure, and divide communities, affecting community well-being.”¹³⁵ Further, both “real and potential impacts to the environment and subsistence are also ongoing sources of tension and concern.”¹³⁶ The study also noted that these Arctic communities are disproportionately affected by global climate change, in part because of oil and gas development and exploration.¹³⁷

Alcohol abuse has long been a problem in northern Alaska.¹³⁸ Although the rate of binge drinking is the same as the state average,

130. *Id.*

131. NUIQSUT YOUTH CENTER GRANT APPLICATION, *supra* note 3, at 18.

132. *See generally* McAninch, *supra* note 123.

133. *Id.* at 24.

134. *Id.*

135. *Id.* at 45.

136. *Id.*

137. *Id.* McAninch also noted that the Arctic is “warming twice as fast as the rest of the planet,” causing “temperature-related problems with the community drinking water source, thawing traditional permafrost food storage cellars resulting in food insecurity and food safety issues, [and] unstable shore ice increasing risk to hunters.” *Id.* at 97.

138. *See* 2 NPR-A TASK FORCE, 105(C) FINAL STUDY, FOR THE SECRETARY OF THE INTERIOR, NATIONAL PETROLEUM RESERVE IN ALASKA, UNDER AUTHORITY OF NAVAL PETROLEUM RESERVE PRODUCTION ACT 1976: VOL 2. SUMMARIES OF STUDIES 36 (1979) [hereinafter 2 NPR-A STUDY: SUMMARIES OF STUDIES] (noting introduction of alcohol to the North Slope); *see also* McAninch, *supra* note 123, at 221 (“Major efforts have been made in the NSB to combat the negative effects of alcohol in the community through local option laws banning local alcohol sales in Barrow and banning possession, sale, and importation of alcohol in the other North Slope villages.”).

rates of motor-vehicle accidents, suicide, and domestic and sexual violence are higher than the state average.¹³⁹ The suicide rate in the North Slope is twice the state average and four times the national average.¹⁴⁰ In 2005, while 8 percent of high school students in the United States reported attempting suicide within the previous year, 15 percent of Borough high school students reported attempting suicide.¹⁴¹ The rate of forcible rape in the North Slope is also twice as high as the state average and seven times the national average.¹⁴² The study also reviewed a 2003 report of domestic violence in the area, which found that rate of reports was “more than six times” the statewide rates.¹⁴³ This problem extends to high school students as well. In 2005, 13 percent of high school students reported “being hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend in the past twelve months,” while the national average was 9 percent.¹⁴⁴ Alaska Natives in the North Slope also “[experience] higher rates of lifetime intimate partner violence than white Alaskans.”¹⁴⁵ These cycles of abuse create and further the mental and emotional harm that already plagues the North Slope.

The North Slope Borough health study also identified positive health trends in its report. The majority of households still “rely on subsistence foods for at least half of their household diet.”¹⁴⁶ This continued adherence to a subsistence-based lifestyle may have health benefits.¹⁴⁷ Many people still “[engage] in such activities as whaling, hunting, and preparing food from subsistence sources.”¹⁴⁸ While the high concentration of toxins raises concerns about food contamination,

139. McAninch, *supra* note 123, at 29. McAninch also noted “the high rates of suicide, domestic violence, and child maltreatment in the [Borough] also point to underlying community mental and behavioral health issues and support the likelihood of underreporting of problems such as depression, post-traumatic stress disorder, addiction, and other related mental health conditions perhaps not captured in these statistics.”

140. *See id.* at 24 (“Between 1999 and 2008, the suicide hospitalization rate for [North Slope] residents overall was also higher than the Alaska rate [(seventeen versus ten per ten-thousand] respectively), but among [Alaska Native] residents, the [North Slope Borough] rate was lower than of [Alaska Native] residents statewide [(twenty-two versus twenty-seven per ten-thousand], respectively).”).

141. *See id.* at 25 (“The percentages of students who reported symptoms of depression or who *seriously considered* suicide were similar among the two groups, however.”).

142. *Id.* at 26.

143. *Id.* at 27 (citations omitted).

144. *Id.* (citations omitted).

145. *Id.* at 27 (citations omitted).

146. *Id.* at 41 (citations omitted).

147. *Id.*

148. *Id.* (citations omitted).

the majority of evidence suggests these food sources are safe to harvest and eat, and the health benefits from relying on a subsistence-based lifestyle “outweigh any potential health risks from contamination from pollutants or radioactivity.”¹⁴⁹ Consumption of “non-subsistence food” such as potato chips and soda “coupled with a reduced consumption of traditional foods, such as fish and marine mammal products, have increased the incidence of diabetes.”¹⁵⁰

The relationship between oil and gas development and these physical and mental health problems remains unclear.¹⁵¹ Though these two studies present reliable statistical information, there is a continued need for more research and better information on the potential effects of increasing development.¹⁵²

B. Cultural Impacts

The communities in the North Slope share four major cultural concerns: (1) diminished subsistence hunting opportunities, (2) loss of language and tradition, (3) problems in the local workforce, and (4) lack of communication between the federal and state governments and citizens. The increased development and exploration of the last eighty years, coupled with restrictions on access to land, have made sustaining a subsistence lifestyle more difficult.¹⁵³ In such a unique and sensitive environment, any significant change, including “over-harvesting, lack of forage, [and] altered migration routes” can greatly affect the ability to harvest through subsistence activities.¹⁵⁴ For example, caribou have

149. *Id.* (citations omitted).

150. BARROW LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 23, at 15.

151. In her study, McAninch notes several of the identified factors that influence health in the North Slope, including addiction, social isolation, environmental exposures, nutrition, global climate change, access to clean water, and access to health care. McAninch, *supra* note 123, at 74. These conditions, particularly environmental exposures, global climate change, and an increasing lack of access to traditional and healthy subsistence harvest, may be exacerbated by oil and gas development and exploration.

152. *Id.* at 58–59.

153. See Sophie Thériault, Ghislain Otis, Gérard Duhaime, & Christopher Furgal, *The Legal Protection of Subsistence: A Prerequisite of Food Security for the Inuit of Alaska*, 22 ALASKA L. REV. 35, 57 (“[T]he 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 . . . by forbidding or restricting fishing, hunting, and gathering activities . . .”).

154. 1 NPR-A STUDY: SUMMARIES OF VALUES AND RESOURCE ANALYSIS AND LAND USE OPTIONS, *supra* note 48, at 9.

diminished in number as a result of human traffic, noise, and seismic exploration.¹⁵⁵ Furthermore, due to hunting restrictions,¹⁵⁶ including restrictions based on geography and on where particular animals can be hunted, Alaska Natives have a limited ability to pursue these caribou.¹⁵⁷ Because some wildlife—such as caribou and muskoxen—are migratory, maintaining a subsistence lifestyle requires hunters to leave settled and populous communities to pursue the hunt.¹⁵⁸ It is not unusual for a hunter to follow game for over a hundred miles.¹⁵⁹ With hunting restrictions in place, this is becoming more difficult.

Although Alaska Natives have subsisted, at least in part, on the land for thousands of years, the land itself has been “left . . . in its natural form”¹⁶⁰ and has not been greatly affected by this subsistence-based lifestyle.¹⁶¹ For millennia, “the land, summer coastal waters, and winter shorefast ice” has belonged to Alaska Natives.¹⁶² As a consequence, Alaska Native linguistic and conceptual practices are deeply tied to the distinct physical environment in which they have lived.¹⁶³ The land’s importance is not limited only to the animals that inhabit it: this land is part of the *identity* of its inhabitants. Continuing changes as a result of oil and gas exploration and development greatly affect not only the wildlife, but also the subsistence lifestyle of Alaska Natives. Subsistence provides a critical link to tradition, and any impact

155. See Adam R.C. Jones, A. Kari Stuart-Smith, *Distribution of Wolves and Caribou in Relation to Linear Corridors*, 64(1) J. OF WILDLIFE MGMT. 154 (discussing the considerable evidence that roads, seismic lines, and other linear corridors affect “the distribution, movements, and population dynamics of many wildlife species”); Caribou, WILDLIFE CONSERVATION SOCIETY, <http://www.wcs.org/saving-wildlife/hoofed-mammals/caribou.aspx> (last visited Nov. 7, 2013) (“In spite of their ability to live in a wide variety of environments, caribou are vulnerable to a number of threats, including deforestation, natural resource extraction and accompanying road networks, and climate change. In North America, caribou have lost about one-third of their southern range, and have been officially classified as threatened or endangered by some jurisdictions in Canada and the U.S.”).

156. See *Totemoff v. State*, 905 P.2d 954, 954 (Alaska 1995) (holding the state could enforce a hunting restriction which disallowed a traditional hunting method on federal land).

157. See *Alaska Hunting Regulations*, ALASKA DEP’T OF FISH AND GAME, <http://www.adfg.alaska.gov/index.cfm?adfg=wildliferegulations.hunting> (last visited Nov. 1, 2013) (identifying where and when bear, caribou, rams, muskoxen, and moose can be hunted).

158. 1 NPR-A STUDY: SUMMARIES OF VALUES AND RESOURCE ANALYSIS AND LAND USE OPTIONS, *supra* note 48, at 6.

159. *Id.*

160. McDougal, *supra* note 45, at 440.

161. *Id.*

162. 2 NPR-A STUDY: SUMMARIES OF STUDIES, *supra* note 138, at 8.

163. *Id.* at 4.

to this lifestyle thus directly affects the preservation of tradition.

Changes in lifestyle prompt concerns that extend beyond the preservation of subsistence. Currently, some communities fear losing the Inupiatun language, the native language to the region.¹⁶⁴ In Nuiqsut, the majority of residents do not speak Inupiatun.¹⁶⁵ In Barrow, only 7.5 percent of residents speak mostly Inupiatun and only 22.3 percent speak both English and Inupiatun.¹⁶⁶ Many Alaska Natives in the North Slope fear that without a renewed emphasis on tradition, the language will be lost to the next generation.¹⁶⁷ In addition to language fears, leases of certain areas in the NPR-A have limited access to many traditional cultural sites.¹⁶⁸

The loss of language and tradition illustrates larger cultural problems. The “rapid cultural change” that the communities in the North Slope have experienced as a result of oil and gas development accounts for some of these problems, and has also resulted in culture shock.¹⁶⁹ Some locals report that the middle-aged population feels “‘stuck’ between two worlds”¹⁷⁰: they wish to adhere to the traditional subsistence lifestyle, but cannot rely on that alone because they must engage in a cash-based economy. Employed residents of the North Slope feel this cultural dissonance particularly strongly.

The problems facing the workforce in the North Slope illustrate the difficulty of balancing tradition with western culture. Although approximately 91% of the population in Nuiqsut is employed, many local employers are “intolerant of leave periods necessary to remain involved with the subsistence component.”¹⁷¹ Those in city administration acknowledge feeling like they must choose between the Western “work ethic” and the “desire to seize the moment” that is grounded in a subsistence lifestyle.¹⁷² Reconciling the daily obligations of jobs with the call of the traditional Inupiat lifestyle presents problems

164. *Id.* at 22.

165. *Id.*

166. BARROW LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 23, at 18.

167. *See* NUIQSUT YOUTH CENTER GRANT APPLICATION, *supra* note 3, at 22 (acknowledging the threat to Inupiatun culture associated with the decline of the language, and arguing how an “aggressive program” would be required to prevent its loss).

168. *See* 2 NPR-A STUDY: SUMMARIES OF STUDIES, *supra* note 138, at 64–65 (predicting, in 1976, how future development of the area could cause conflicts with Inupiat cultural ties).

169. NUIQSUT YOUTH CENTER GRANT APPLICATION, *supra* note 3, at 19.

170. *Id.* at 45 (clarifying that this is a generalization).

171. *Id.* at 25.

172. The desire to “seize the moment” references the opportunity to “seize” “whatever the environment is willing to ‘give up’ at that time.” *Id.*

to those in the North Slope. Because the subsistence-based lifestyle requires seasonal hunting, it often involves setting aside daily obligations for hunting purposes. To facilitate a 1979 study on the impacts of the NPR-A, the Secretary held meetings throughout the North Slope to solicit the input of Alaska Natives.¹⁷³ Residents informed the government that they wanted “protection of subsistence, traditional land use sites and the Native culture.”¹⁷⁴ Alaska Natives also expressed that they felt they were not getting “an equal share” of the profit made by oil companies.¹⁷⁵ One participant in these meetings commented that there is a “credibility problem” between the communities of the North Slope and the government, and that a “mutual distrust affects negatively the ability of the two groups to work together, or to view the other’s commentary and input as valid.”¹⁷⁶ The federal government has repeatedly expressed its interest in working *with* Alaska Natives.¹⁷⁷ However, this response has not fully met the concerns of those in the North Slope; their entire culture and tradition is at stake, and these efforts to appease North Slope residents are seen by some as merely symbolic, insufficient gestures.¹⁷⁸

In response to these increasing concerns, many groups in the North Slope have established organizations to represent their interests. These groups—including the North Slope Borough, the Inupiat Communities of the Arctic Slope, and the Arctic Slope Native Association—aim to give

173. 3 NPR-A TASK FORCE, 105(C) FINAL STUDY, FOR THE SECRETARY OF THE INTERIOR, NATIONAL PETROLEUM RESERVE IN ALASKA, UNDER AUTHORITY OF NAVAL PETROLEUM RESERVE PRODUCTION ACT: VOL 3: RECORD OF PUBLIC PARTICIPATION 1976 1 (1979) [hereinafter 3 NPR-A STUDY: RECORD OF PUBLIC PARTICIPATION].

174. *Id.* at 11.

175. *Id.* at 21. This was also prior to the implementation of the Impact Mitigation Grant Program.

176. *Id.* at 69.

177. The U.S. Forest Service is one such example. The U.S. Forest Service has regularly expressed interest in working with residents in order to determine when land should be set aside. See *Sacred Sites*, U.S. DEP’T OF FORESTRY, <http://www.fs.fed.us/spf/tribalrelations/sacredsites.shtml> (last visited Nov. 7, 2013) (“U.S. Department of Agriculture . . . directed the Forest Service to work with the USDA’s Office of Tribal Relations . . . to review existing laws, regulations, and policies and examine their effectiveness in ensuring a consistent level of protection for American Indian and Alaska Native sacred sites located on National Forest System lands.”).

178. See CITY OF BARROW, CONSTRUCTION OF PIURAAGVIK RECREATION CENTER FACILITY ADDITION IMPACT MITIGATION GRANT APPLICATION TO THE DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT 20 (2010) (on file with the author) (“Over the last 30 years, the City of Barrow residents have participated in public hearings for various industrial activities such as lease sales and project scoping. During these hearings, they have consistently stated that they are concerned about the cumulative effects of industrial activities in their traditional subsistence use areas.”).

residents “an active and powerful voice in decisions that affect their communities as well as the health of the local, as well as global, communities and ecosystems.”¹⁷⁹ These organizations have also created “cultural heritage centers, educational programs in traditional language and culture, talking circles, and other initiatives that support subsistence and traditional cultural values as avenues to improved community health and well-being.”¹⁸⁰ Cultural heritage centers and educational programs alleviate some of the cultural and social hardships communities are experiencing, and also demonstrate the critical importance these issues have to North Slope residents. These organizations and centers “have helped to rebuild partnerships and trust between communities and researchers” and answer questions about things like health concerns that exist within the communities.¹⁸¹ However, without oil development, these organizations would likely never have come into existence. This fact highlights the recurring dilemma North Slope communities face: balancing the positive outcomes of development with the negative.¹⁸²

Local governments have attempted to provide residents a voice on both the state and federal level. In Barrow, the council members, mayor, and administrative staff “coordinate, liaise, and take action on a host of topics important to the Inupiat people.”¹⁸³ However, local governments only have so much control over the future of the NPR-A and of the subsistence lifestyle: the state and federal governments set their own agendas without regard for local concerns. The future of subsistence, for example, relies on “a matrix of law, circumstance, economy, and cultural diversity.”¹⁸⁴ Local government and local organizations can seek to influence this matrix, but they ultimately depend on state and national governments to keep land open for hunting and to prevent future restrictions. Some North Slope residents believe preserving these

179. McAninch, *supra* note 123, at 42.

180. *Id.* at 18–19.

181. *Id.*

182. See NAT’L RESEARCH COUNCIL, *supra* note 1, at 148 (“Without the North Slope petroleum discoveries and development, the North Slope Borough, the Alaska Native Claims Settlement Act, and the Arctic Slope Regional Corporation would not exist. The emergence of those structures has caused major, significant, and probably unalterable changes to the way of life in North Slope communities.”).

183. See CITY OF BARROW, BARROW GOVERNMENT OPERATIONS AND MAINTENANCE 2012 IMPACT MITIGATION GRANT APPLICATION TO THE DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT 24 (2012) [hereinafter BARROW 2012 OPERATIONS AND MAINTENANCE GRANT] (on file with the author) (“These actions help to mitigate the stresses of threat and opportunity that the Inupiat population of Barrow feels on a daily basis.”).

184. NAT’L RESEARCH COUNCIL, *supra* note 1, at 26.

traditional ways of life will help alleviate some of the problems that have arisen.¹⁸⁵ Making work-schedule accommodations for subsistence hunting may be one way the federal government can aid in preserving these traditions.

As early as the 1979 meetings conducted by the Secretary, residents have asked that regional planners place emphasis “on the Inupiat, not a larger public” and “consider the future of the Native people after resource development ceases.”¹⁸⁶ These concerns have not yet been adequately addressed. The problems that rapid change has caused in the North Slope require more attention from the federal government, which itself is responsible for the change. While the Program attempts to resolve some of these issues, it is problematic for residents of the North Slope to rely on continued leasing (which will bring more change) in order to fund a program that mitigates problems resulting from the *same* leasing program. There remains a critical question concerning the future of the residents of the North Slope when development ceases, and thus, Impact Mitigation grants cease as well.

III. RECOMMENDATIONS FOR THE FUTURE OF THE NORTH SLOPE

The problems occurring in the North Slope are serious and substantial. It will take a committed effort on the part of the federal and state governments to lessen these problems. Inevitably, it will eventually become economically unviable for companies to continue oil and gas development and exploration in the North Slope.¹⁸⁷ When the businesses stop leasing and the federal government stops supplying money to the Program, what will happen to these necessary services and programs?

The Program is a competitive source of funding.¹⁸⁸ Because funding is limited and numerous project proposals are submitted annually, the communities of the North Slope are competing against each other to fund their projects. This competitiveness will only exacerbate existing

185. NUIQSUT YOUTH CENTER GRANT APPLICATION, *supra* note 3, at 19 (noting that many in Nuiqsut favor the maintenance of traditional cultural values).

186. 3 NPR-A STUDY: RECORD OF PUBLIC PARTICIPATION, *supra* note 173, at 18.

187. *Understanding Alaska: Non-Renewable Resource Economy*, INST. OF SOC. & ECON. RESEARCH, UNIV. ALASKA, <http://alaskanecology.uaa.alaska.edu/nonrenew/nonrenew.htm> (last visited Nov. 7, 2013) (sketching various challenges the Alaskan economy may face because it is “dominated” by oil development exploration, when oil gas is a “depleting natural resource”).

188. Interview with Joe Evans, City Attorney, City of Nuiqsut, David Arnold, Former City Administrator City of Nuiqsut, Cindy Arnold, Interim City Administrator City of Nuiqsut, and Jeff Congdon, Department of Commerce, Community and Economic Development, Local Government Specialist (Aug. 31, 2011).

problems as funding decreases or, eventually, ceases. Thus, the future of the grant program is uncertain in communities throughout the North Slope.¹⁸⁹

This is problematic: there is no backup plan to fund these projects, which means they could be forced to end if the grants are no longer available. The federal government should invest in determining how to adapt this program when funding from oil and gas development and exploration decreases and eventually stops. However, previous research methodologies examining problems of this nature are flawed. The last comprehensive study conducted by the Bureau was in 1979. Since then, many studies have examined particular areas of concern: health, cultural, or environmental. These concerns are interconnected and future research should study the nexus between these concerns.

The government should also approve continued subsidies for local government operations and maintenance in order to ensure residents continue to have a voice in the debates affecting their interests. Local governments face heightened administrative costs as a result of development, and these costs will persist in the coming years.

A. Research

Previous research on the North Slope that has “guided much [of the] social and economic impact assessment[s] are not entirely applicable to the North Slope experience.”¹⁹⁰ Some of this research has been conducted under the guidelines of the National Environmental Policy Act of 1969.¹⁹¹ Studies of this kind focus on determining the “social and economic effects *before* [potentially environmentally harmful] activities occur.”¹⁹² These studies find baseline conditions, analyze the possible and probable social effects, and then “project responses.”¹⁹³ Determining what baseline to use affects how projects are examined: Should studies use a baseline from the time before *any* development has occurred or from how conditions are presently? This

189. NUIQSUT LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 11, at 36–37.

190. NAT’L RESEARCH COUNCIL, *supra* note 1, at 132.

191. *See id.* (“[W]hich requires that federal or federally funded agencies assess and mitigate the environmental effects of their actions.”).

192. *Id.*

193. *See id.* (“It is necessary to describe baseline conditions (how the basic social and economic environment functions beforehand), identify the full range of probable social effects based on discussions with the affected parties, and project responses to the most likely effects. The approach identifies alternatives to the action proposed, and it establishes procedures for monitoring and mitigation.”).

type of research also only addresses the impacts of particular projects, and not the impacts of projects in the aggregate.¹⁹⁴ Moreover, the baseline method does not necessarily account for past development: it only examines future impacts, not impacts that have already occurred.¹⁹⁵

Similarly, the other research approach, which merely “assesses the effects of development activities *after* it happens,” is unable to fully capture the impacts of development in the North Slope.¹⁹⁶ Focusing on an individual project, this approach analyzes certain environmental and cultural variables immediately prior to development, and then those same factors after development.¹⁹⁷ This fails to adequately address the impacts of oil and gas development and exploration on a larger scale. Development is ongoing: assessing the effects of particular development projects after the fact will not take into account the probability of future development.¹⁹⁸ It also fails to acknowledge the role a single project may play in the larger development scheme. Thus, the previous research methods do not fully capture the developmental impacts in the North Slope. Any new research projects should be based on a methodology that is forward-looking and also encapsulates past development by involving the local communities.

Moreover, development can affect communities and environments in ways that may be difficult for research to pinpoint and analyze. For example, much of the research has not properly accounted for the effects that alterations of the physical environment may have had on the culture, society, politics, economics, and psychology of the North Slope.¹⁹⁹ For example, though studies may have accounted for a project resulting in a decreased caribou population in a particular region, they do not go on to assess what impact diminishing numbers of caribou may have on those who practice a subsistence lifestyle.

The effects of oil and gas development and exploration are not

194. *Id.*

195. *Id.*

196. *Id.*

197. *Id.* at 133.

198. See Press Release, Bureau of Land Mgmt., Dep’t of the Int., BLM-Alaska Announces NPR-A Oil & Gas Lease Sale in November (Sept. 30, 2013), available at http://www.blm.gov/ak/st/en/info/newsroom/2013/september/9-30-2013_BLM-Alaska_Announces_NPR-A_Oil_Gas_Lease_Sale_in_November.html (announcing a gas and oil lease sale, slated for November 2013, in accordance with President Barack Obama’s “direction to hold annual oil and gas lease sales” in the NPR-A).

199. NAT’L RESEARCH COUNCIL, *supra* note 1, at 136 (“Most research on effects on the human environment has focused on development effects—those associated with the actual development, construction, and operation of a project or with the onset of a particular activity or process.”).

confined to the areas in which these actions take place, but rather they are felt over a larger area of the North Slope.²⁰⁰ These studies lack an “integrated, North Slope-wide framework for wildland evaluation, mapping, ranking, planning, and analysis of effects.”²⁰¹ Because the environment is so interconnected, any effect on one part of the region inevitably has impacts beyond that locale.

Research should also account for the social effects of oil and gas development and exploration. Although the effects on human health have been studied, there remains a need to study the interplay between oil and gas development and the “physical, psychological, cultural, spiritual, and social” conditions of communities.²⁰² This research should seek to determine to what extent the “oil and gas activities, as distinguished from other factors, are associated with rising levels of sociocultural change.”²⁰³ This would lead to a more precise understanding of the effects that development and exploration have had on the communities in the North Slope.

These studies should also acknowledge the role subsistence plays in Alaska Native lifestyles. The studies “should be integrated into broader socioeconomic research on contemporary rural life in Alaska, and subsistence activities should be studied in an integrated way that focuses on the everyday reality of life in Alaska Native communities.”²⁰⁴ By evaluating the role subsistence plays in the daily lives of communities in the North Slope, the research will more thoroughly capture the social and cultural costs of development. Ignoring the role subsistence plays in the social and cultural environment of the North Slope can only lead to inadequate research and findings.²⁰⁵ These social costs would be instrumental in “determining whether exploration and extraction in previously undeveloped public lands are economically warranted.”²⁰⁶

Extensive research could establish a “framework for wildland evaluation, mapping, ranking, impact analysis, and planning would help decision-makers identify conflicts, set priorities, and make better-informed decisions” with respect to community impacts.²⁰⁷ This research, in order to be thorough, “needs to occur as a cooperative

200. *Id.* at 132.

201. *Id.*

202. *Id.* at 149.

203. *Id.*

204. *Id.* at 22.

205. *See supra* Part II.B (discussing the critical and traditional role of subsistence in the lives of many residents of the North Slope).

206. NAT'L RESEARCH COUNCIL, *supra* note 1, at 148.

207. *Id.* at 149.

endeavor with local communities.”²⁰⁸ Traditional and local knowledge and language can furnish “rich, detailed information about the physical environment, the biota, and the human communities of the North Slope”; with this information, topic selection and study methods can be adapted.²⁰⁹ It is nearly impossible to analyze the social costs of development *without* the active involvement of the communities of the North Slope: these are the very communities and people that are affected.

The influx of money²¹⁰ into the Alaska North Slope has undoubtedly varied its makeup and landscape forever. The “human system [is] adaptable, even in extreme situations.”²¹¹ When new knowledge mixes with traditional knowledge, two potential problems can arise.²¹² The first problem, already a concern in the North Slope, arises when traditional knowledge of “behavior, economic activity, skills, and capital improvements” is lost because it has been supplanted with new knowledge.²¹³ The second problem arises when a new “activity is not sustainable.”²¹⁴ This is known as overadaptation: when the new activity declines, “communities or regions can be left less able to survive in their environment than they were before the new development came along.”²¹⁵

The possibility of overadaptation in the North Slope is substantial.²¹⁶ If the tax revenue collected from the federal leases declines, then the “current standard of living . . . could be impossible to maintain once petroleum activities cease.”²¹⁷ Further research should focus on the ability to sustain the standard of living in the North Slope. Additionally, any further research should focus on other possibilities of

208. *Id.*

209. *Id.*

210. See MATTHEW BERMAN, INST. OF SOC. & ECON. RESEARCH, UNIV. ALASKA ANCHORAGE, SUSTAINABLE DEVELOPMENT AND SUSTAINABLE INCOME FROM ALASKA’S RESOURCES abstract (2003), available at http://alaskaneconomy.uaa.alaska.edu/Publications/Berman_SNR.pdf

(“Estimates of sustainable income suggest that even after adjusting for depletion of non-renewable resources, the state’s economy was nearly three times larger at the end of the 1990s than it had been in 1971. Although oil assets declined, tourism, air cargo, and other sustainable industries grew, as did income from state savings accounts set aside from petroleum revenues. Despite the growth of Native corporations created under ANCSA, the locally controlled portion of Alaska’s economy continues to decline.”).

211. NAT’L RESEARCH COUNCIL, *supra* note 1, at 147 (citations omitted).

212. *Id.*

213. *Id.*

214. *Id.*

215. *Id.*

216. *Id.*

217. *Id.*

economic development.²¹⁸

The federal government should, in partnership with state and local governments, endeavor to begin an extensive new study into the past, present, and future effects of oil development. The need for a research framework that encapsulates these concerns is paralleled only by the need for studies to occur in conjunction with local municipalities. Without their participation and involvement, any research study would be merely perfunctory.

B. The Future of Funding

Future research should also consider the certainty of a terminable-funding source. Oil and gas development will inevitably cease, thus ending the primary funding source of the Program. The Act that transferred the NPR-A to the authority of the Secretary, codified at 42 U.S.C. § 6507, also provides a reliable funding source.²¹⁹ The Act authorizes the Secretary to provide federal financial assistance for “increased municipal services and facilities in communities located on or near reserve resulting from authorized exploration and study activities.”²²⁰ In addition, the Secretary is authorized to “assist such communities in meeting the costs of providing increased municipal services and facilities” when an “unfair and excessive financial burden will be incurred by such communities.”²²¹ Local governments in the North Slope are certainly in need of funding for increased municipal services and facilities as a result of increased development.²²² Indeed, an “unfair and excessive financial burden” is already faced each year by these communities.²²³

Many of the communities of the North Slope spend time and resources applying for grants to provide for needed local government infrastructure. For FY 2013, Atqasuk, Barrow, Nuiqsut, and Wainwright

218. See *Understanding Alaska*, *supra* note 187 (breaking down various economic areas relevant to the future of the Alaskan economy, including structure, public policy, and fiscal policy).

219. 42 U.S.C. § 6507 (1976).

220. *Id.*

221. *Id.*

222. See, e.g., BARROW LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 23, at 9 (explaining how increased oil and gas development has led to increased population in Barrow and a corresponding increase in demand for public services and infrastructure).

223. 42 U.S.C. § 6507. When an “immediate and substantial increase in the need for municipal services and facilities in communities located on or near the reserve” arises and “unfair and excessive financial burden will be incurred by such communities,” the Secretary is “authorized to assist such communities in meeting the costs of providing increased municipal services and facilities.” *Id.*

each applied for Impact Mitigation grants for government operations and maintenance.²²⁴ Representative of other North Slope communities, local governments in the North Slope face numerous challenges as a result of their relationship with oil and gas development and exploration.

Currently, the task of monitoring the effects of pro-development laws falls on communities themselves.²²⁵ The City of Barrow's facilities are used when other government agencies call for "input" from residents of the area, and Barrow must accommodate such requests to receive funding.²²⁶ The mayor of Barrow must act as "a voice for residents of Barrow regarding noted impacts, and effectively communicates those concerns to various oil and gas agencies to help mitigate current and future cultural impacts."²²⁷ Barrow itself must answer numerous inquiries from the government, including Environmental Impact Statements for Barrow subsistence-use areas, proposed oil-industry exploration and construction permits within Barrow subsistence-use areas, proposed changes to legislation that would affect NPR-A grant funds, and U.S. Army Corps of Engineer Hazard and Contamination Mitigation proposals.²²⁸

Between 2010 and 2012, Barrow applied three times for an Impact Mitigation grant to supplement the fiscal ability of the city to administer such a large number of tasks.²²⁹ Similarly, in its 2013 grant application, the City of Nuiqsut noted it was requesting funds to build "administrative capacity," so as to "[empower] the community to deal with local issues themselves, [and] build[] the capacity of government to mitigate the negative impacts of oil and gas development."²³⁰ Building the administrative capacity of local governments would greatly help the communities respond to the various challenges these communities face, and mitigate the impacts of development.

Invoking 42 U.S.C. §6507 and establishing a commitment to

224. BELL, *supra* note 11, at 56.

225. See BARROW 2012 OPERATIONS AND MAINTENANCE GRANT, *supra* note 190, at 23–24 ("[T]he City helps to monitor the increasingly complex web of regulations and legislation that have been and continues to be woven with regard to the Inupiat's aboriginal grounds.").

226. BARROW LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 23, at 19.

227. *Id.*

228. See BARROW 2012 OPERATIONS AND MAINTENANCE GRANT, *supra* note 185, at 23–24 ("City of Barrow helps to mitigate accelerated change and cultural disruption by responding administratively, by ordinance, or by proclamation to the constant stream of issues impacting Barrow . . .").

229. BELL, *supra* note 11, at 39, 43, and 50.

230. NUIQSUT LOCAL GOVERNMENT GRANT APPLICATION, *supra* note 11, at 30–35.

continued financing of needed programs and services in the North Slope has two benefits: it will increase trust between the local and the federal government, and it will provide needed administrative services for generations to come. While the United States's interest in oil and gas is important, the burden of development and exploration should not rest exclusively on the North Slope. Residents of the North Slope have been forced to alter their entire lifestyles to accommodate this interest. The federal government needs to acknowledge and commit itself to working with residents of the North Slope to create a plan for the future of the region, in particular for when proceeds from oil and gas development wane. Strengthening the capabilities of these local governments will allow them to continue advocating on behalf of their residents.

The first step in this process is more research. Research is needed to properly account for the problems caused by development, and determine what problems exist and what the federal government can do to help. As a second step, the federal government should empower local governments by ensuring administrative capability through continued subsidies. This would ensure residents of the North Slope continue to have strong advocates, even if funding to the NPR-A fund decreases.

CONCLUSION

The North Slope is in a "middle place" that is rife with uncertainty. The last eighty years of oil and gas development has created irreversible change in Alaska's North Slope. The Impact Mitigation Grant Program serves an essential role in alleviating some of the harms caused by these changes; however, the future of this program is uncertain. The future of the projects funded by the Program is similarly uncertain, and so is the future of the residents of the North Slope.

Research is gravely needed to figure out what is currently happening, what will happen when funding ceases, and what role the federal government should play when funding *does* cease. In addition, funding local governments separately from the Program will ensure the continued ability of local governments to represent their citizens and continue their work at full administrative capacity.

By implementing the recommendations detailed in this Note, the federal government may yet find a way to provide North Slope residents with a promising future, regardless of the future of oil and gas development in the NPR-A.