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# Arctic National Wildlife Refuge (ANWR): An Overview

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## Arctic National Wildlife Refuge (ANWR): An Overview

In the ongoing energy debate in Congress, one recurring issue has been the possibility of oil and natural gas development in the Arctic National Wildlife Refuge (ANWR, or the Refuge) in northeastern Alaska. ANWR is rich in fauna and flora and also has significant oil and natural gas potential. Energy development in the Refuge has been debated for more than 50 years. In December 2017, President Trump signed into law P.L. 115-97, which provides for an oil and gas program on ANWR's Coastal Plain, an area covering 1.57 million acres in the northern part of the 19-million-acre Refuge. P.L. 115-97 requires at least two oil and gas lease sales for the Coastal Plain, which are to be conducted by specified dates within a decade of the law's enactment. One sale was held in January 2021, but the leases awarded at the sale were canceled in September 2023. The Biden Administration has scheduled the second lease sale for January 10, 2025. This report discusses the oil and gas program in the context of the Refuge's history, its energy and biological resources, Alaska Native interests, and debates over protection and development.

ANWR is primarily managed by the U.S. Fish and Wildlife Service (FWS), an agency within the Department of the Interior (DOI). Under P.L. 115-97, DOI's Bureau of Land Management (BLM) administers the oil and gas program in ANWR's Coastal Plain. The Coastal Plain (sometimes also called the *1002 Area*) is viewed as a promising onshore oil prospect, with a mean estimate by the U.S. Geological Survey of 7.7 billion barrels of technically recoverable oil on federal lands, or 10.4 billion barrels if Alaska Native lands and adjacent waters are included. It is also a center of activity for caribou and other wildlife, and it is designated as critical habitat for polar bears under the Endangered Species Act (16 U.S.C. §§1531-1544). The Alaska National Interest Lands Conservation Act of 1980 (ANILCA; 43 U.S.C. §§1601 et seq.) had prohibited oil and gas development in the Coastal Plain unless authorized by an act of Congress. Development was thus barred prior to the December 2017 enactment of P.L. 115-97. Previous legislative proposals have ranged from those to designate the Coastal Plain as wilderness or a national monument (with energy development prohibited) to those to allow partial or full development. Related questions have concerned the extent to which Congress should legislate special management to guide the manner of any development—for example, by limiting the footprint of energy activities. Under P.L. 115-97, surface development is limited to 2,000 acres, which need not be concentrated in a single area. Some contend that newer technologies will help to consolidate oil and gas operations and reduce the environmental impacts of development, whereas others maintain that facilities will likely spread out and significantly change the character of the Coastal Plain.

The history of ANWR is intertwined with congressional efforts to settle land claims of Alaska Natives. As part of those efforts, some property in the Refuge was transferred to Alaska Native Corporations, including some surface lands and subsurface rights within the Coastal Plain. The opening of federal lands in ANWR to development under P.L. 115-97 also opens adjacent Alaska Native lands, but BLM and FWS have not approved permits necessary to conduct exploration activities on the Native lands. The Native community, both between and within its villages and organizations, is divided on the question of energy development in the Refuge.

Further legislation related to ANWR's Coastal Plain has been introduced since enactment of P.L. 115-97. Some bills would repeal the oil and gas program and establish the Coastal Plain as wilderness, meaning there would be no commercial development. Other bills have sought to promote development by, for example, restricting future lease cancellations and declaring that previous permitting and environmental review documents are sufficient to govern exploration and development. Provisions from earlier bills related to managing the environmental impacts of development could also potentially be reconsidered in the future.

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## Introduction

The prospect of oil and natural gas development in the biologically rich ecosystem of the Arctic National Wildlife Refuge (ANWR, or the Refuge) on Alaska’s North Slope has been a focus of the American energy debate ever since oil was discovered on nearby state lands. At the heart of the debate is a part of the Refuge—the *Coastal Plain*<sup>1</sup>—that has potentially significant oil and natural gas resources and also serves as habitat for numerous species, such as polar bears, caribou, waterfowl, and others. The U.S. Fish and Wildlife Service (FWS), within the Department of the Interior (DOI), primarily manages the Refuge and has periodically updated plans to guide its management.<sup>2</sup> On December 22, 2017, President Trump signed into law P.L. 115-97, which established an oil and gas program for ANWR’s Coastal Plain and directed that this program be administered by DOI’s Bureau of Land Management (BLM).<sup>3</sup> The ANWR provisions were included in tax reform legislation enacted under the budget reconciliation process.<sup>4</sup> The law requires at least two lease sales (of no fewer than 400,000 acres each) for the Coastal Plain within 10 years,<sup>5</sup> and it contains provisions for the distribution of revenues and royalties. Surface development is limited to 2,000 acres, which need not be concentrated in a single area.

BLM held the first oil and gas lease sale for the ANWR Coastal Plain on January 6, 2021, under the Trump Administration. Subsequently, under the Biden Administration, DOI paused oil and gas activities in the Coastal Plain, pending a new analysis of the program’s potential environmental impacts.<sup>6</sup> In September 2023, DOI canceled the ANWR leases issued in the first sale, citing “fundamental legal deficiencies” in the environmental analysis underlying that sale.<sup>7</sup> In December 2024, BLM announced plans for the second Coastal Plain lease sale required under P.L. 115-97, which is scheduled to be conducted on January 10, 2025.<sup>8</sup> For updates on the status of the oil and

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<sup>1</sup> In discussions of the Arctic National Wildlife Refuge (ANWR), the term *coastal plain* can have two meanings. First, it can be used in a geographic sense, to refer to the broad area extending from the northern foothills of the Brooks Range and north to the ocean, and from the Canadian border in the east to the Chukchi Sea in the west. Second, it is used by many (including authors of P.L. 115-97 as well as other bills) to refer to a specific area in ANWR defined in statute, legislative maps, or regulation. When used in the latter sense, the term is generally capitalized: in effect, the *Coastal Plain* is a small, eastern portion of the larger coastal plain. This report also sometimes uses the term *1002 Area* when referring to this area (see “Alaska National Interest Lands Conservation Act,” below, for the origin of this term).

<sup>2</sup> Plans are required under the Alaska National Interest Lands Conservation Act (ANILCA; P.L. 96-487, §304(g)).

<sup>3</sup> Although the Refuge as a whole is administered by the U.S. Fish and Wildlife Service (FWS), under the Mineral Leasing Act of 1920 (MLA; 30 U.S.C. §§181 et seq.), the Bureau of Land Management (BLM) manages onshore federal energy and mineral resources, not only on its own lands but also on those of other federal agencies.

<sup>4</sup> For more information on the ANWR provisions, see CRS In Focus IF10782, *Arctic National Wildlife Refuge (ANWR) Oil and Gas Program: Provisions in P.L. 115-97, Tax Cuts and Jobs Act*, by Laura B. Comay. For more information on the budget reconciliation process, see CRS Report R44058, *The Budget Reconciliation Process: Stages of Consideration*, by Megan S. Lynch and James V. Saturno.

<sup>5</sup> P.L. 115-97 states, in Section 20001(c)(1)(A), that the Secretary of the Interior must conduct no fewer than two lease sales within 10 years of the law’s enactment. More specifically, Section 20001(c)(1)(B)(ii) states that the initial sale must take place within 4 years of the law’s enactment and a second sale within 7 years of enactment.

<sup>6</sup> BLM published a supplemental environmental impact statement (SEIS) for the Coastal Plain oil and gas program in November 2024 (BLM, “Final Environmental Analysis of Coastal Plain Leasing Program Released for Sale Mandated by Congress in 2017 Tax Act,” press release, November 6, 2024, <https://www.blm.gov/press-release/final-environmental-analysis-coastal-plain-leasing-program-released-sale-mandated>).

<sup>7</sup> U.S. Department of the Interior (DOI), “Biden-Harris Administration Takes Major Steps to Protect Arctic Lands and Wildlife in Alaska,” press release, September 6, 2023, <https://www.doi.gov/pressreleases/biden-harris-administration-takes-major-steps-protect-arctic-lands-and-wildlife-alaska> (hereinafter DOI, September 6, 2023, press release).

<sup>8</sup> BLM, “Congressionally Mandated Lease Sale Announced for Alaska’s Coastal Plain,” press release, December 9, 2024, <https://www.blm.gov/press-release/congressionally-mandated-lease-sale-announced-alaskas-coastal-plain> (continued...)

gas leasing program, see CRS In Focus IF12006, *Arctic National Wildlife Refuge: Status of Oil and Gas Program*.

The Alaska Native community has unique historical ties to the Refuge that influence their views on potential energy development there. Alaska Natives are divided on the question of energy development in the Refuge, but some patterns can be discerned. Generally, the Alaska Natives along the North Slope (Iñupiat) have supported ANWR energy development, whereas the Alaska Natives of interior Alaska (Gwich'in) have opposed it, although neither group is unanimous on the question.<sup>9</sup>

This report discusses the Refuge's legislative history, energy resources, biological resources, and Alaska Native interests, as well as issues for Congress related to development under P.L. 115-97. Both before and after enactment of P.L. 115-97, Members of Congress proposed other management provisions for the program that were not included in the statute.<sup>10</sup> In addition to conducting oversight of the oil and gas program's implementation, Congress could choose to address some of these other issues—such as issues related to environmental compliance, judicial review, and special management areas within the Coastal Plain—in future legislation, or it could decide that the provisions of P.L. 115-97 provide sufficient guidance for the program. Some legislation in previous Congresses would have repealed the ANWR oil and gas program and established the Coastal Plain as wilderness, meaning there would be no commercial development except that which is needed to meet the minimum requirements for managing the area as wilderness.<sup>11</sup>

## Background and Legislative History

ANWR, established by the Alaska National Interest Lands Conservation Act of 1980 (ANILCA; P.L. 96-487, 43 U.S.C. §§1601 et seq.), consists of 19 million acres in northeast Alaska, primarily administered by FWS within DOI.<sup>12</sup> ANWR's 1.57-million-acre Coastal Plain—sometimes called the *1002 Area*—is viewed as a promising onshore oil prospect (**Figure 1**). According to a 2005 study by the U.S. Geological Survey (USGS), the mean estimate of *technically* recoverable oil from multiple prospects on the federally owned land in the Coastal Plain is 7.7 billion barrels (although not all these resources may be *economically* recoverable).<sup>13</sup> There is a low probability

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(hereinafter BLM, December 9, 2024, press release); and BLM, “Coastal Plain Oil and Gas Lease Sale Bid Opening Rescheduled to January 10,” press release, December 31, 2024, <https://www.blm.gov/press-release/coastal-plain-oil-and-gas-lease-sale-bid-opening-rescheduled-january-10> (hereinafter BLM, December 31, 2024, press release).

<sup>9</sup> For historical background on the Iñupiat peoples, see North Slope Borough, “Inuit Cultural Orientation,” [https://www.north-slope.org/wp-content/uploads/2022/02/Inuit\\_Cultural\\_Orientationpg.pdf](https://www.north-slope.org/wp-content/uploads/2022/02/Inuit_Cultural_Orientationpg.pdf). For historical background on the Gwich'in, see Gwich'in Tribal Council, “Gwich'in History,” <https://www.gwichintribal.ca/history.html>.

<sup>10</sup> One factor shaping congressional negotiations on P.L. 115-97 was the set of limitations imposed by the budget reconciliation process on matters that can be considered in reconciliation legislation. In particular, the Senate's “Byrd rule” limits inclusion of provisions extraneous to the goals of the reconciliation instructions. For more information, see CRS Report RL30862, *The Budget Reconciliation Process: The Senate's “Byrd Rule”*, by Bill Heniff Jr.

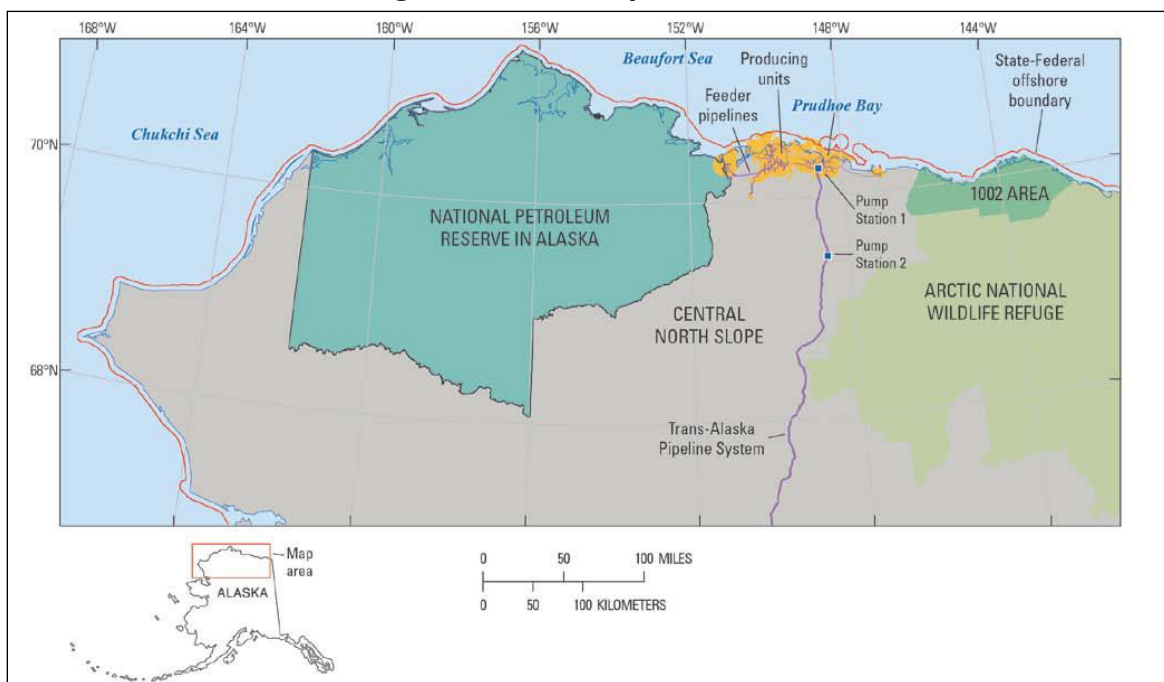
<sup>11</sup> Under the Wilderness Act (16 U.S.C. §§1131-1136), a “recommendation of the President for designation as wilderness shall become effective only if so provided by an Act of Congress” (16 U.S.C. §1132(c)). Prior to enactment of P.L. 115-97, the Coastal Plain had been managed under the Minimum Management Policy (MMP), which provides for minimal human intervention. A wilderness designation for the Refuge's Coastal Plain would be consistent with recommendations in the Obama Administration's *Revised Comprehensive Conservation Plan and Final Environmental Impact Statement (RCCP)* for ANWR, finalized with a record of decision in April 2015 (80 *Federal Register* 19678).

<sup>12</sup> However, BLM (also a DOI agency) administers the oil and gas program within ANWR.

<sup>13</sup> E. D. Attanasi, *Economics of 1998 U.S. Geological Survey's 1002 Area Regional Assessment: An Economic Update*, U.S. Geological Survey (USGS) Open-File Report 2005-1217, 2005, [http://pubs.usgs.gov/of/2005/1359/OF2005-\(continued...\)](http://pubs.usgs.gov/of/2005/1359/OF2005-(continued...))

of 11.8 billion barrels of technically recoverable oil on the federal lands over the life of the prospective fields.<sup>14</sup> As context for these figures, a 2020 USGS assessment for the Central North Slope of Alaska, abutting ANWR to the west (**Figure 1**), estimates that this region—which includes the large Prudhoe Bay oil field—contains 3.6 billion barrels of remaining undiscovered, technically recoverable oil.<sup>15</sup> For the ANWR Coastal Plain, the 2005 study is the most recent available, and its estimates are based on geological data gathered in the 1980s (see **text box** below, “Old Geological Data, Ongoing Interest”).

**Figure 1. North Slope of Alaska**



**Source:** Figure 1 in Emil D. Attanasi and Philip A. Freeman, *Economic Analysis of the 2010 U.S. Geological Survey Assessment of Undiscovered Oil and Gas in the National Petroleum Reserve of Alaska*, U.S. Geological Survey, May 2011, <http://pubs.usgs.gov/of/2011/1103/ofr2011-1103.pdf>.

**Note:** The area labeled “1002 Area” is the ANWR Coastal Plain.

### Old Geological Data, Ongoing Interest

Because ANWR has been closed to oil and gas development activities since the 1980s, research that would require field studies or seismic exploration inside the Coastal Plain has not occurred for almost 40 years. The most recent geological data gathered on-site in the Coastal Plain date from the 1980s; these were background data for the study completed by DOI in 1987 that is known as the 1002 Report. Any studies of geological resources in the Coastal Plain published after the 1002 Report are based on new analyses of data from earlier field

1359.pdf (hereinafter USGS, *1002 Area Regional Assessment*, 2005). *Technically recoverable* refers to the quantity of oil or natural gas assessed as being in a formation that can be recovered using current technology without regard to cost and prices. *Economically recoverable* refers to the portion of technically recoverable resources that could be produced at a given price, accounting for costs, and including a return on capital.

<sup>14</sup> USGS, *1002 Area Regional Assessment*, 2005.

<sup>15</sup> USGS, “USGS Releases Estimate of Conventional Oil and Gas Alaska Central North Slope,” press release, January 23, 2020, <https://www.usgs.gov/news/national-news-release/usgs-releases-estimate-conventional-oil-and-gas-alaska-central-north>. The USGS estimate measures undiscovered, technically recoverable conventional resources that can be produced using traditional production techniques.

investigations, extrapolations from exploration of nearby areas, and/or improved modeling of older data. Various new industry techniques are also considered in reevaluating the area's potential.

The Coastal Plain is also home to a wide variety of plants and animals. The presence of caribou, polar bears, grizzly bears, wolves, migratory birds, and other species in this wild area has led some to call the area “America’s Serengeti.” Several species found in the area—including polar bears, caribou, migratory birds, and whales—are offered certain protections through U.S. laws or international treaties or agreements. In the past, there have been proposals that the Refuge and two neighboring parks in Canada join to form an international park, with prohibitions on oil exploration and development.

The balance between energy development and the preservation of biological resources of northern Alaska has been controversial since before Alaska became a state in 1959. In 1943, the federal government withdrew all lands on the North Slope (the land north of the crest of the Brooks Mountain Range and between Canada and the Chukchi Sea) by Public Land Order (PLO) 82 to prevent certain types of development.<sup>16</sup> In November 1957, then-Secretary of the Interior Fred Seaton filed a document protecting some of those lands (plus some additional lands south of the crest of the Brooks Range) for the benefit of wildlife and migratory birds.<sup>17</sup> In 1960, PLO 2214 reserved these lands as the Arctic National Wildlife Range.<sup>18</sup> The PLO withdrew the lands from “all forms of appropriation ... including mining but not the mineral leasing laws,” thus leaving development of some resources, including oil and natural gas, as a possibility.

Despite these withdrawals, not all of the Refuge is owned by the federal government. The history of the ANWR energy debate is intertwined with congressional efforts to settle land claims of Alaska Natives. As part of those efforts, some ANWR property was transferred to Alaska Native Corporations (ANCs). Congress’s decision in P.L. 115-97 to open the federal lands on ANWR’s Coastal Plain to energy development also opened lands held by Alaska Natives. In addition, development in the Coastal Plain may make nearby state lands and waters along the coast (already legally open to development) more economically attractive to industry for exploration and development. Together, the federal, state, and Native ownerships likely have multiple individual fields with oil potential. The 2005 USGS figures show that when Native lands and state waters are also considered, the mean estimate of technically recoverable oil rises from 7.7 billion barrels to 10.4 billion barrels, and there is a small chance that the three ownership areas might contain 16.0 billion barrels of technically recoverable oil.<sup>19</sup>

<sup>16</sup> DOI Public Land Order (PLO) 82 is available at 8 *Federal Register* 1599, February 4, 1943, <https://www.loc.gov/item/fr008024/>.

<sup>17</sup> Under the regulations in effect at that time, this document (called an *application*) was to “segregate” the lands in question (i.e., to remove them from disposal). The Supreme Court held that the segregation of lands before Alaska statehood prevented Alaska from owning certain submerged lands (such as river beds) in the Refuge upon statehood. *United States vs. Alaska*, 521 U.S. 1 (1997).

<sup>18</sup> DOI PLO 2214, December 6, 1960.

<sup>19</sup> USGS, *1002 Area Regional Assessment*; and USGS, “Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis,” Online Fact Sheet 028-01, <https://pubs.usgs.gov/fs/fs-0028-01/fs-0028-01.htm>.

## Alaska Native Claims Settlement Act (1971) and Chandler Lake Agreement (1983)

The Alaska Native Claims Settlement Act (ANCSA, P.L. 92-203; 43 U.S.C. §§1601 et seq.), enacted in 1971, sought to resolve Alaska Native land claims by providing compensation and land entitlements to Alaska Natives.<sup>20</sup> Among other things, ANCSA authorized the creation of state-chartered ANCs, including *Alaska Native regional corporations* (hereinafter referred to as regional corporations) and *Native village corporations*, to implement the act.<sup>21</sup>

ANCSA provided for approximately 45 million acres of land to be conveyed to Alaska Natives.<sup>22</sup> Under ANCSA, Native village corporations (for example, the Kaktovik Iñupiat Corporation, or KIC, based at the northern shore of the coastal plain of the Refuge) were collectively entitled to receive the surface estate of up to 22 million acres of land that had been held by the federal government.<sup>23</sup> Regional corporations—for example, the Arctic Slope Regional Corporation (ASRC), covering the area north of the Brooks Range from the Chukchi Sea to Canada—were generally entitled to select subsurface estate (mineral rights) beneath the land selected by Native village corporations.<sup>24</sup> Usually, regional corporations could receive the lands beneath Native village corporations in their area, but they were not allowed to select lands from wildlife refuges that existed before ANCSA (i.e., before 1971). In such situations, the regional corporations could select other lands. ANCSA Section 22(g) also provided that surface lands that were conveyed within a wildlife refuge created before 1971 were subject to that refuge’s regulations.<sup>25</sup> The split estate ownership, restriction on subsurface selections, and Section 22(g) limited Alaska Native claims regarding land and oil development.

As allowed by ANCSA, KIC, which lies within ASRC’s boundaries, selected the surface estate of certain lands near the northern boundary of the Refuge. These selections amounted to three townships.<sup>26</sup> Later, ANILCA also authorized KIC to select more lands (approximately 19,600 acres) within the Coastal Plain. Together with the three townships, the KIC surface estate in ANWR totaled more than 92,000 acres. In addition, there are at least eight individually owned Alaska Native allotments within the Coastal Plain that, together with the KIC lands, total nearly 100,000 acres.<sup>27</sup> Because the Refuge was created before ANCSA, ASRC was prohibited from taking title to the subsurface estate of the KIC lands.

In 1983, however, an agreement between the United States and ASRC—known as the Chandler Lake Agreement—gave ASRC title to the subsurface estate beneath those KIC surface lands, even

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<sup>20</sup> For general background on ANCSA, see CRS Report R46997, *Alaska Native Lands and the Alaska Native Claims Settlement Act (ANCSA): Overview and Selected Issues for Congress*.

<sup>21</sup> 43 U.S.C. §§1606-1607.

<sup>22</sup> 43 U.S.C. §1611 and 43 U.S.C. §1613. Alaska Native Corporations (ANCs) received approximately 38 million acres, and other groups received the remaining approximately 7 million acres.

<sup>23</sup> 43 U.S.C. §1611(b).

<sup>24</sup> In this way, ANCSA created *split estates*, or estates where one entity owns the surface estate and another owns all or part of the subsurface estate. ANCSA authorized some regional corporations to select from an additional 16 million acres, which the regional corporations would fully own (i.e., they would own both the surface and the subsurface estates). 43 U.S.C. §1611(c).

<sup>25</sup> 43 U.S.C. §1621(g).

<sup>26</sup> These three townships have not been included in some legislative definitions of the Coastal Plain. See note 33 for more information.

<sup>27</sup> In 1906, the Alaska Native Allotment Act (Act of May 17, 1906, 34 Stat. 197) authorized the Secretary of the Interior to convey up to 160 acres of non-mineral land—or land that did not have the potential for mineral development—to individual Alaska Natives.



though the KIC lands fall in a refuge area created before ANCSA.<sup>28</sup> The Chandler Lake Agreement prohibited oil and gas development of the ASRC lands unless Congress allowed oil and gas development on the Coastal Plain generally or on the ASRC lands specifically, or both.<sup>29</sup> The agreement provided for FWS review of any future plans of operations for energy development, as well as stipulating certain operational requirements to protect the environment.<sup>30</sup> In 1986, a consortium of two oil and gas companies and ASRC and KIC drilled an exploratory well on the ANC lands; this remains the only well that has been drilled on the Coastal Plain.<sup>31</sup>

## Alaska National Interest Lands Conservation Act (1980)

In 1980, Congress enacted ANILCA,<sup>32</sup> which expanded the Arctic National Wildlife Range to the south and west by 9.2 million acres of public domain lands and renamed it the Arctic National Wildlife Refuge. ANILCA Section 702(3) designated 8 million acres of the original wildlife range as a wilderness area. The remainder of the original range, defined in Section 1002 of ANILCA as the *Coastal Plain* and constituting 1.57 million acres, was not included in the wilderness designation.<sup>33</sup> Debate over use of this area was intense, with one group favoring wilderness designation and another group (led by Alaska's two Senators at the time) favoring energy development. Instead, Congress postponed decisions on the development or further protection of the Coastal Plain. Section 1002 of ANILCA directed that all the resources of the Coastal Plain be studied. (This section is the reason this part of ANWR is also referred to as the *1002 Area*.) That study by DOI was completed in 1987 and is known as the 1002 Report or the Final Legislative Environmental Impact Statement (FLEIS).<sup>34</sup> The 1002 Report recommended full energy development.

ANILCA also recognized and protected subsistence uses on conservation system units in Alaska established prior to and after ANILCA's enactment. The law defines *subsistence* 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;
- the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption;

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<sup>28</sup> Agreement Between Arctic Slope Regional Corporation and the United States of America (August 9, 1983) (hereinafter 1983 Agreement). This agreement is also known as the Chandler Lake Agreement, referring to some of the property transferred as a result of the agreement. A copy is available to congressional staff from the authors of this report. Also see U.S. General Accounting Office (now U.S. Government Accountability Office), *Federal Land Management: Chandler Lake Land Exchange Not in the Government's Best Interest*, GAO/RCED-90-5, October 1989.

<sup>29</sup> 1983 Agreement, Appendix 2.

<sup>30</sup> *Ibid.* The agreement provided that future federal regulations could supersede the specific environmental protections required in the agreement.

<sup>31</sup> H.Rept. 116-133, p. 2, <https://www.congress.gov/116/crpt/hrpt133/CRPT-116hrpt133.pdf>.

<sup>32</sup> P.L. 96-487, variously codified; provisions relating directly to ANWR are found at 16 U.S.C. §§3141-3144.

<sup>33</sup> ANILCA Section 1002 excluded the three Kaktovik Iñupiat Corporation (KIC) townships selected under ANCSA (see discussion above) from its definition of the Coastal Plain, even though, in a geographic sense, they are within the coastal plain north of the Brooks Range. More recently, P.L. 115-97 defined the Coastal Plain with reference to the “1002 Area” identified on two USGS maps prepared in 2017, and there could be ambiguity about whether this definition includes the three townships as part of the Coastal Plain. The other Alaska Native lands (outside of the three townships) are included in the Coastal Plain as defined in both ANILCA and P.L. 115-97.

<sup>34</sup> U.S. Dept. of the Interior, Fish and Wildlife Service, Geological Survey, and Bureau of Land Management, *Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment*, Report and Recommendation to the Congress of the United States and Final Legislative Environmental Impact Statement, 1987 (hereinafter *1002 Report*).

- barter, or sharing for personal or family consumption; and
- customary trade.<sup>35</sup>

The law requires federal land management agencies to prioritize subsistence uses of fish and wildlife over other uses on federal lands in Alaska and to ensure that rural residents of Alaska (both Alaska Natives and non-Alaska Natives) have “reasonable access” to these resources.<sup>36</sup> When considering a land use decision, ANILCA requires federal agencies to consider potential adverse impacts upon subsistence uses and resources.<sup>37</sup> In addition, the agency must determine the necessity of the impending action and steps it would take to minimize any adverse impact upon subsistence uses.<sup>38</sup>

With respect to the future of the Coastal Plain, a significant aspect of ANILCA was Section 1003.<sup>39</sup> This section prohibited oil and natural gas production in the Refuge as a whole, as well as “leasing or other development leading to production of oil and natural gas from the range,” unless authorized by an act of Congress.

## Coastal Plain Oil and Gas Program Under P.L. 115-97 (2017)

Congress debated energy development in the Refuge for decades after ANILCA’s enactment.<sup>40</sup> A major turning point came in December 2017, when President Trump signed into law P.L. 115-97. The law directed the Secretary of the Interior, acting through BLM, to establish and administer a competitive program for the leasing, development, production, and transportation of oil and gas in and from ANWR’s Coastal Plain.<sup>41</sup> P.L. 115-97 provided that Section 1003 of ANILCA (which had prohibited oil and gas development in ANWR unless authorized by an act of Congress) shall not apply to the Coastal Plain.

P.L. 115-97 required at least two lease sales in the Coastal Plain. An initial lease sale was required within four years of the bill’s enactment and a second lease sale within seven years of enactment.<sup>42</sup> The act specified that each ANWR lease sale must offer at least 400,000 acres and must include those areas with the highest potential for discovery of hydrocarbons. P.L. 115-97 set the royalty rate for ANWR oil and gas leases at 16.67%. It directed that 50% of revenues derived from oil and gas leases on the Coastal Plain (including royalties, rents, and bonus bids) are to be

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<sup>35</sup> 16 U.S.C. §3113. For more information, see CRS Report R47511, *Subsistence Uses of Resources in Alaska: An Overview of Federal Management*, by Mark K. DeSantis and Erin H. Ward.

<sup>36</sup> 16 U.S.C. §3111; 16 U.S.C. §3114.

<sup>37</sup> 16 U.S.C. §3120.

<sup>38</sup> *Ibid.* For more background on subsistence uses in Alaska, see CRS Report R47511, *Subsistence Uses of Resources in Alaska: An Overview of Federal Management*, by Mark K. DeSantis and Erin H. Ward.

<sup>39</sup> 16 U.S.C. §3143. This section states that “production of oil and gas from the Arctic National Wildlife Refuge is prohibited and no leasing or other development leading to production of oil and gas from the range shall be undertaken until authorized by an Act of Congress.”

<sup>40</sup> For information on legislative debate in earlier years, see CRS Report RL32838, *Arctic National Wildlife Refuge (ANWR): Votes and Legislative Actions, 96th-114th Congresses*, by Laura B. Comay.

<sup>41</sup> P.L. 115-97, Section 20001. For more information on P.L. 115-97, see CRS In Focus IF10782, *Arctic National Wildlife Refuge (ANWR) Oil and Gas Program: Provisions in P.L. 115-97, Tax Cuts and Jobs Act*, by Laura B. Comay. The law also amended ANILCA to add, as a Refuge purpose, “to provide for an oil and gas program on the Coastal Plain.”

<sup>42</sup> Separately, other provisions of the act require that these two lease sales be conducted within 10 years of the bill’s enactment.

distributed to the State of Alaska, with the remaining 50% deposited into the U.S. Treasury as miscellaneous receipts.<sup>43</sup>

P.L. 115-97 also directed BLM to manage the oil and gas program in a manner similar to the administration of lease sales in the National Petroleum Reserve in Alaska (NPR-A) under the Naval Petroleum Reserves Production Act of 1976 (NPRPA; 42 U.S.C. §§6501 et seq.) and associated regulations, except as otherwise provided. The regulatory framework for the NPR-A includes requirements for leasing terms, bonding, environmental obligations, and many other activities associated with oil and gas development.<sup>44</sup> Separately, P.L. 115-97 authorized surface development of production and support facilities on up to 2,000 acres of federal land.

Under P.L. 115-97, the first lease sale for the Coastal Plain was conducted on January 6, 2021, toward the end of the first Trump Administration. The lease sale yielded \$14.4 million in high bids, considerably less than had been anticipated in some estimates.<sup>45</sup> BLM issued nine leases from the sale.<sup>46</sup> Shortly after taking office, President Biden issued Executive Order 13990, which ordered the Secretary of the Interior to place a temporary moratorium on all federal activities related to implementation of the Coastal Plain oil and gas leasing program, pending a new analysis of the program's potential environmental impacts.<sup>47</sup> The moratorium prohibited exploration and development of the leased lands while the new environmental analysis was ongoing. Further, in September 2023, DOI canceled the ANWR leases issued in the first sale, citing "fundamental legal deficiencies" in the environmental analysis underlying the sale.<sup>48</sup> BLM subsequently released a new supplemental environmental impact statement (SEIS) for the program.<sup>49</sup> The SEIS informed DOI decisions regarding the second lease sale required under P.L. 115-97, which is scheduled for January 10, 2025.<sup>50</sup> Based on its analysis, DOI decided that the second lease sale will offer the minimum statutorily required acreage (400,000 acres), of which

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<sup>43</sup> This split differs from the standard revenue arrangement for Alaska established by the Mineral Leasing Act of 1920 (MLA), under which the State of Alaska typically receives 90% of the revenue from federal onshore oil and gas leases within the state, with 10% deposited in the Treasury as miscellaneous receipts (30 U.S.C. §§181 et seq.). All other states receive 50% of the revenues from leases within their states (minus a 2% cost-sharing deduction) under the MLA, while 40% are deposited in the Reclamation Fund (which funds certain federally owned and operated western water and power projects) and 10% are deposited in the Treasury as miscellaneous receipts.

<sup>44</sup> 43 C.F.R. §§3130, 3137, 3150, 3152, and 3160.

<sup>45</sup> For example, during congressional consideration of P.L. 115-97, the Congressional Budget Office (CBO) had estimated that the first Coastal Plain lease sale would generate bid revenues of approximately \$1.45 billion, resulting in a reduction in direct federal spending of \$725 million after 50% of revenues were disbursed to Alaska (CBO, "Cost Estimate: Reconciliation Recommendations of the Senate Committee on Energy and Natural Resources," November 21, 2017, <https://www.cbo.gov/system/files/115th-congress-2017-2018/costestimate/senreconciliationrecommendations.pdf>).

<sup>46</sup> BLM, "2021 Coastal Plain Leasing Report," [https://www.blm.gov/sites/default/files/docs/2021-01/AK\\_CoastalPlain\\_OilandGas\\_LeaseReport\\_January%202021\\_508.pdf](https://www.blm.gov/sites/default/files/docs/2021-01/AK_CoastalPlain_OilandGas_LeaseReport_January%202021_508.pdf).

<sup>47</sup> Executive Order (E.O.) 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," January 20, 2021; see esp. Section 4. Also see DOI Secretarial Order 3401, June 1, 2021, implementing E.O. 13990.

<sup>48</sup> DOI, , September 6, 2023, press release. Prior to the lease cancellation, two companies had relinquished their leases. The seven remaining leases were held by the Alaska Industrial Development and Export Authority.

<sup>49</sup> BLM, *Coastal Plain Oil and Gas Leasing Program: Supplemental Environmental Impact Statement—FINAL*, November 2024, <https://eplanning.blm.gov/eplanning-ui/project/2015144/570>.

<sup>50</sup> The sale was originally scheduled for January 9, 2025, but BLM rescheduled the sale for January 10, 2025, in light of the National Day of Mourning for President Jimmy Carter on January 9, 2025. BLM, December 9, 2024, press release; and BLM, December 31, 2024, press release.

approximately 80% will be subject to restrictions on surface occupancy, use, and/or timing of exploration and development activities.<sup>51</sup>

As discussed above, the 1983 Chandler Lake Agreement had prohibited oil and gas development on the Alaska Native lands in and around the Coastal Plain unless legislation were enacted to allow Coastal Plain oil and gas development.<sup>52</sup> P.L. 115-97 thus had the effect of opening not only the Coastal Plain's federal lands but also the adjacent Alaska Native lands for development. The Native lands do not appear to be subject to the limitation in P.L. 115-97 on the maximum number of surface acres that may be developed. For the winter season of 2020-2021, KIC requested a permit to conduct a three-dimensional seismic survey on its lands, but BLM did not issue a final decision prior to the pause on ANWR oil and gas activities under President Biden's Executive Order 13990.<sup>53</sup> Also, FWS did not finalize a required incidental harassment authorization related to the survey's potential effects on polar bears under the Marine Mammal Protection Act.<sup>54</sup> To date, no exploration and development activities have been approved for the Alaska Native lands since enactment of P.L. 115-97.<sup>55</sup>

## The Energy Resources

The developed parts of Alaska's North Slope, including Prudhoe Bay and other fields in the area (see **Figure 1**), suggest promise for energy prospects in the adjoining ANWR. Petroleum-bearing strata extend eastward from structures in the NPR-A through the Prudhoe Bay field, and they may continue into and through ANWR's Coastal Plain.<sup>56</sup> Both changing prices and changing costs affect oil and natural gas prospects. New technologies may help alleviate some environmental concerns and cut costs. However, any ANWR resources would be expensive to produce (relative to typical production costs in the lower 48 states) and would require construction of new infrastructure, such as pipelines and processing units, due to location and environmental conditions. Physical changes in the Arctic such as warming ocean, soil, and air temperatures; melting permafrost; and shifting vegetation and animal abundances may complicate project construction or raise costs. Additionally, such physical changes could shorten the drilling season.

<sup>51</sup> See the section on "Management of Exploration and Development" for further discussion.

<sup>52</sup> See note 33 for discussion of statutory definitions of the Coastal Plain with respect to Alaska Native lands in this part of the Refuge.

<sup>53</sup> BLM had issued an environmental assessment and a draft finding of no new significant impact for KIC's seismic survey application, but the draft finding was not finalized. 85 *Federal Register* 81485, December 16, 2020. See BLM, *Marsh Creek East 3-D Seismic Survey Environmental Assessment*, December 2020, and BLM, *Draft Finding of No New Significant Impact: Marsh Creek East 3-D Seismic Survey*, December 2020, both available at <https://eplanning.blm.gov/eplanning-ui/project/2003258/510>.

<sup>54</sup> For more information on incidental harassment authorizations (IHAs) under the Marine Mammal Protection Act (16 U.S.C. §§1361 et seq.), see CRS Report R47892, *The Marine Mammal Protection Act (P.L. 92-522): Primer and Issues for Congress*, by Anthony R. Marshak. Polar bears are considered marine mammals, given their dependence on sea ice (see, e.g., Marine Mammal Commission, "Polar Bear," <https://www.mmc.gov/priority-topics/species-of-concern/polar-bear/>). FWS had issued a proposed IHA for the KIC seismic survey in December 2020 (85 *Federal Register* 79082, December 8, 2020), but it was not finalized.

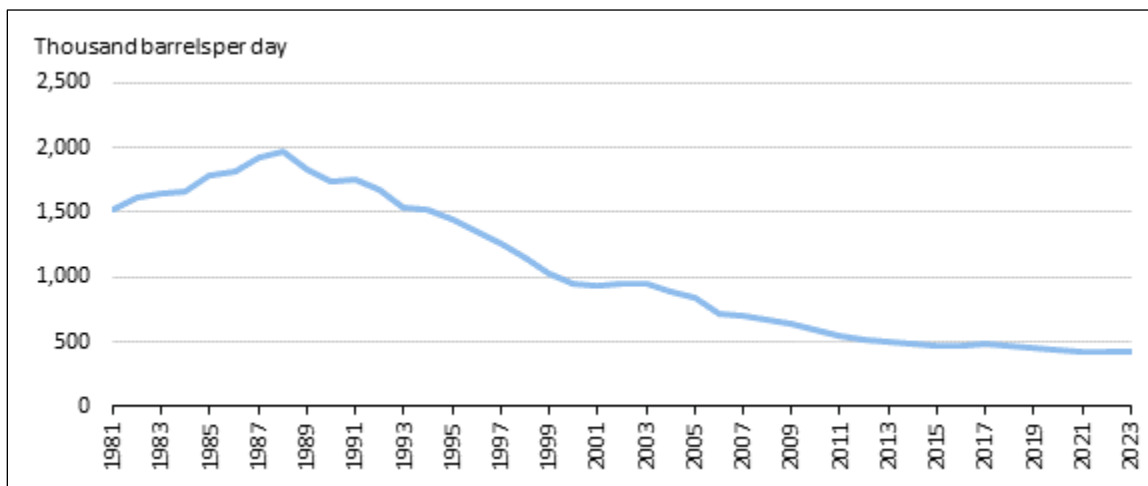
<sup>55</sup> Two companies reportedly held long-standing leases on the Alaska Native lands, awarded by ASRC in the 1980s. However, these companies reportedly terminated their leases in 2021. See Nathaniel Herz, "2 Oil Companies Quietly Spent \$10 Million to Exit Arctic Refuge Leases," *Anchorage Daily News*, May 27, 2022, <https://www.adn.com/business-economy/energy/2022/05/27/two-oil-companies-quietly-spent-10-million-to-exit-arctic-refuge-leases/>.

<sup>56</sup> For recent maps of Alaska North Slope oil and gas fields and of project units on both state and federal lands, see Alaska Department of Natural Resources, Division of Oil and Gas, "North Slope: Working Interest Ownership Maps," <https://dog.dnr.alaska.gov/Information/MapsAndGis>.

## Oil and Gas Production of Adjacent Areas

Although ANWR currently has no oil and gas development,<sup>57</sup> the bulk of Alaskan oil production—0.43 million barrels (bbl)/day—is from the North Slope region where the Refuge is located (**Figure 1**). North Slope production accounted for approximately 98% of oil produced in Alaska in 2023. The same year, production from Alaska accounted for about 3.3% of total U.S. oil production. North Slope oil production has declined almost every year since peaking in 1989 (see **Figure 2**).<sup>58</sup>

**Figure 2. Alaska North Slope Crude Oil Production, 1981-2023**



**Source:** CRS, using U.S. Energy Information Administration, “Petroleum and Other Liquids: Crude Oil Production,” [http://www.eia.gov/dnav/pet/pet\\_crud\\_crpdn\\_adc\\_mbbldpd\\_a.htm](http://www.eia.gov/dnav/pet/pet_crud_crpdn_adc_mbbldpd_a.htm).

Petroleum is produced on lands near the ANWR Coastal Plain, including on state lands, in the federally owned NPR-A, and offshore. In the NPR-A, ConocoPhillips is developing the Willow Project,<sup>59</sup> which BLM estimated may produce a total of 576 million barrels of oil and non-gas liquids.<sup>60</sup> In terms of offshore resources, the Beaufort Sea has some producing wells in state waters and from a joint federal-state unit.<sup>61</sup>

<sup>57</sup> As discussed above (see section on “Alaska Native Claims Settlement Act (1971) and Chandler Lake Agreement (1983)”), one exploratory well was drilled in the Coastal Plain in the 1980s; the results remain confidential. Steve Eder and Henry Fountain, “A Key to the Arctic’s Oil Riches Lies Hidden in Ohio,” *New York Times*, April 2, 2019, <https://www.nytimes.com/2019/04/02/us/arctic-oil-drilling-well-data.html>.

<sup>58</sup> U.S. Energy Information Administration (EIA), “Petroleum and Other Liquids: Crude Oil Production,” [http://www.eia.gov/dnav/pet/pet\\_crud\\_crpdn\\_adc\\_mbbldpd\\_a.htm](http://www.eia.gov/dnav/pet/pet_crud_crpdn_adc_mbbldpd_a.htm).

<sup>59</sup> See CRS Legal Sidebar LSB10943, *The Willow Project: History and Litigation*, by Adam Vann.

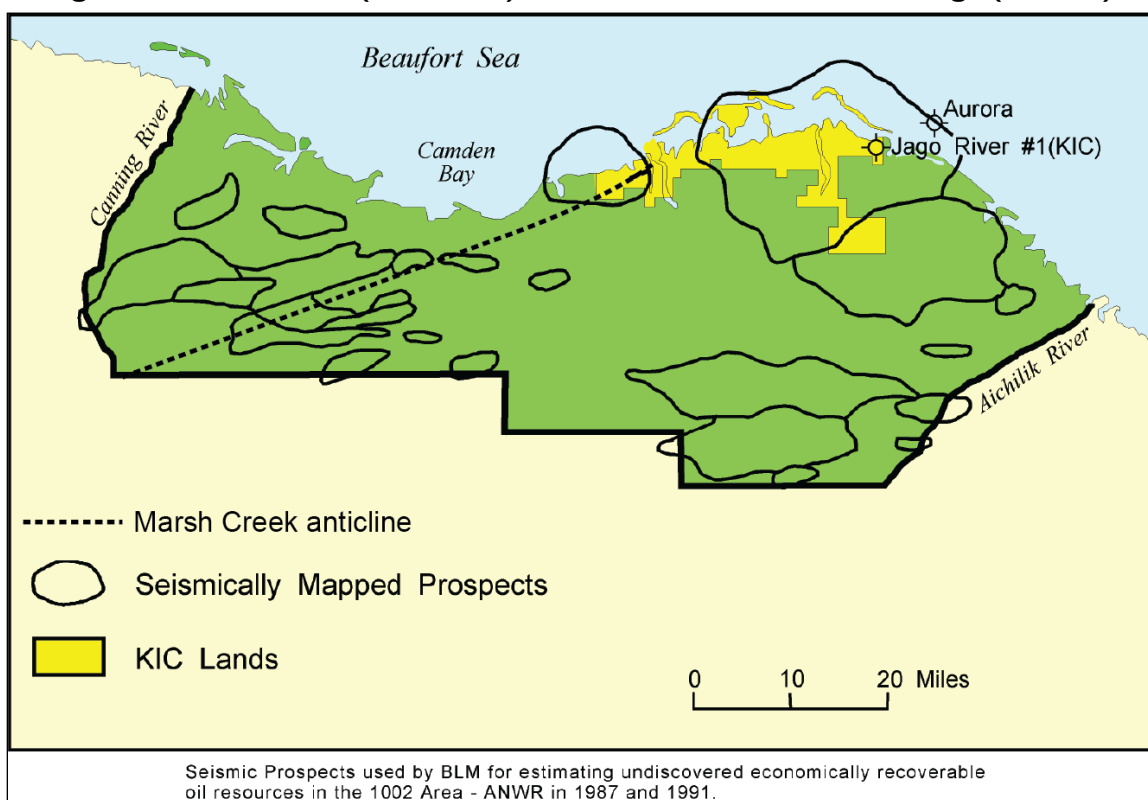
<sup>60</sup> BLM, *Willow Master Development Plan Record of Decision*, March 2023, [https://eplanning.blm.gov/public\\_projects/109410/200258032/20075029/250081211/2023%20Willow%20MDP%20Record%20of%20Decision.pdf](https://eplanning.blm.gov/public_projects/109410/200258032/20075029/250081211/2023%20Willow%20MDP%20Record%20of%20Decision.pdf).

<sup>61</sup> Bureau of Ocean Energy Management (BOEM), “BP Exploration (Alaska) (BPXA)—Northstar,” <http://www.boem.gov/About-BOEM/BOEM-Regions/Alaska-Region/Leasing-and-Plans/Plans/BP-North-Star.aspx>; Alaska Department of Natural Resources, Division of Oil and Gas, “Acreage by Lessee—Summary,” January 4, 2024, [https://dog.dnr.alaska.gov/Documents/Leasing/PeriodicReports/Lease\\_AcreageByLesseeSummary.pdf](https://dog.dnr.alaska.gov/Documents/Leasing/PeriodicReports/Lease_AcreageByLesseeSummary.pdf). For more information, see CRS Report R41153, *Changes in the Arctic: Background and Issues for Congress*, coordinated by Ronald O’Rourke, section on “Offshore Oil and Gas Exploration.”

## Oil Resource Potential of the Coastal Plain

USGS estimates that the federal lands on the Coastal Plain may contain 4.3 billion to 11.8 billion barrels of technically recoverable oil on federal lands, with a mean estimate of 7.7 billion barrels.<sup>62</sup> With Alaska Native lands and adjacent waters included, the mean estimate is 10.4 billion barrels.<sup>63</sup> These estimates of ANWR's oil potential are based on limited, older data. (See **text box** above, "Old Geological Data, Ongoing Interest.") Early attention focused on the northern and eastern parts of the Coastal Plain. Since the 1990s, interest has shifted to parts of the Coastal Plain west and north of the Marsh Creek anticline, roughly a third of the 1002 Area. (See **Figure 3**.) The shift was driven mainly by a reevaluation of geological data from nearby formations.

**Figure 3. Coastal Plain (1002 Area) of Arctic National Wildlife Refuge (ANWR)**



**Sources:** CRS, based on Bureau of Land Management, *Comparisons Between Petroleum Systems in the Arctic National Wildlife Refuge, Alaska*, September 1998. Marsh Creek anticline added by CRS based on Figure 2 in the U.S. Geological Survey's map in *Undiscovered Oil Resources in the Federal Portion of the 1002 Area of the Arctic National Wildlife Refuge: An Economic Update*, 2005, <http://pubs.usgs.gov/of/2005/1217/pdf/2005-1217.pdf>.

**Notes:** KIC = Kaktovik Inupiat Corporation.

The amount of oil that would be economically recoverable depends in part on the price of oil.<sup>64</sup> More resources may be accessible in times of sustained high oil prices compared with times when

<sup>62</sup> USGS, *1002 Area Regional Assessment*, 2005, p. 2. The estimates cover a 95%-5% probability range; that is, USGS estimates a 95% probability that the area contains at least 4.3 billion barrels of oil and a 5% probability that it could contain as much as 11.8 billion barrels.

<sup>63</sup> Ibid.

<sup>64</sup> See note 13 for discussion of *technically* versus *economically* recoverable oil.

prices are low. USGS published its last economic assessment of ANWR in 2005, when oil prices averaged approximately \$57/barrel (approximately \$87/barrel in 2024 dollars).<sup>65</sup> For comparison, oil prices in 2024 averaged approximately \$77/barrel.<sup>66</sup> New drilling technology, geopolitical events, and petroleum market dynamics have impacted oil prices and may continue to do so, thus potentially impacting interest and ability to operate in ANWR.

As noted above, about one-third more oil may be under adjacent state waters and Native lands than is available in the Coastal Plain alone. The state waters adjacent to the Coastal Plain are far from any support system or land-based development and would require additional infrastructure to bring them to market. To the extent that onshore development occurs, leases in state waters could benefit from onshore transportation systems (e.g., airstrips, haul roads, pipelines) and supply bases (e.g., gravel mines, water treatment plants, staging areas), and these areas might become more attractive to industry. In addition, lifting the statutory prohibition on oil and natural gas development in the Refuge not only lifts the ban on development of the Native lands but may also make smaller fields on Native lands more attractive, if they are able to share facilities with nearby development or if they become preferred locations for support facilities due to fewer restrictions on surface development.

## Prices Unlikely to Support Natural Gas Development

USGS has projected that, in addition to oil, large quantities of natural gas may be found in the Coastal Plain, as in other areas on the North Slope. Unlike oil, the United States imports little natural gas (about 9% of consumption in 2023, predominantly from Canada).<sup>67</sup> Prices for natural gas are more regionally based than oil and, with ample supplies, North America has experienced relatively low prices compared with other parts of the world, even following major disruptions like the COVID-19 pandemic and Russia's invasion of Ukraine.<sup>68</sup>

Current North American natural gas prices likely would not support building the infrastructure, including a pipeline, that would be required to transport ANWR natural gas to the lower 48 states or Canada. Natural gas prices in the United States, on average, are projected to stay relatively flat for the rest of the decade and beyond.<sup>69</sup> Low prices present an economic obstacle to developing ANWR's natural gas resources as well as those throughout northern Alaska. Natural gas produced in Prudhoe Bay is mainly reinjected into oil fields to boost production, since no infrastructure exists to transport gas to markets beyond the local area. Additionally, flaring gas is prohibited, so reinjection is the only option for the quantities of natural gas produced with the oil from the field.

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<sup>65</sup> Annual West Texas Intermediate (WTI) spot prices, available at EIA, "Petroleum and Other Liquids: Cushing OK WTI Spot Price FOB," <https://www.eia.gov/dnav/pet/hist/RWTCD.htm>. USGS, *1002 Area Regional Assessment*, 2005, Table 4. Adjustment to 2024 dollars uses the GDP Chained Price Index from the White House Office of Management and Budget, Historical Tables, Table 10.1, "Gross Domestic Product and Deflators Used in the Historical Tables—1940-2023," <https://www.whitehouse.gov/omb/budget/historical-tables/>.

<sup>66</sup> Annual WTI spot prices, available at EIA, "Petroleum and Other Liquids: Cushing OK WTI Spot Price FOB," <https://www.eia.gov/dnav/pet/hist/RWTCD.htm>, accessed January 3, 2025.

<sup>67</sup> For comparison, the United States imports significant quantities of petroleum, even though the United States is a net exporter. For example, in 2023 the United States imported about 8.53 million barrels per day of petroleum products and exported about 10.24 million barrels per day. For more information, see EIA, "Oil and Petroleum Products Explained," <https://www.eia.gov/energyexplained/oil-and-petroleum-products/imports-and-exports.php>.

<sup>68</sup> BP, *BP Statistical Review of World Energy*, 2022, June 2022, p. 33, <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf>.

<sup>69</sup> EIA, *Annual Energy Outlook 2023*, Reference Case, Table: Energy Prices by Sector and Source, <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=2-AEO2023&cases=ref2023&sourcekey=0>.

The State of Alaska, through the Alaska Gasline Development Corporation, has taken over as the lead developer of a project to export liquefied North Slope natural gas after partners Exxon Mobil, BP, and ConocoPhillips backed out in 2016.<sup>70</sup> If completed, the Alaska LNG project would consist of gas processing facilities on the North Slope, an 800-mile pipeline, and a liquefaction facility for export. The estimated cost is between \$45 billion and \$60 billion. The Department of Energy authorized the facility's export application in 2023.<sup>71</sup> Neither the export facility nor the pipeline has broken ground.<sup>72</sup>

## Technologies and Infrastructure in Development and Production

The cost of operating oil and natural gas facilities in Arctic conditions is higher than the industry costs in other parts of the United States, in part due to the remoteness of the area. This cost differential, along with related difficulties and challenges of producing oil and natural gas in Arctic conditions, highlights the need for substantial finds of oil and natural gas to cover the higher costs. The presumed dispersed nature of ANWR's oil and natural gas resources could make development costly to pursue.

Reducing the infrastructure footprint of development has been a major goal of industry, partly in an effort to reduce costs. Environmental concerns have also prompted companies to reduce their footprint in the greater North Slope region, which has resulted in smaller production sites, among other changes. As North Slope development proceeded after the initial discovery at Prudhoe Bay, oil field operators developed less environmentally intrusive ways to develop Arctic oil, primarily through innovations in technology. New drill bits and fluids and advanced forms of drilling—such as extended reach, horizontal, and “designer” wells—permit drilling to reach laterally far beyond a drill platform. Advanced drilling technologies are commonly more costly than simpler techniques.

Better development and operating technologies compared with older technologies could reduce or mitigate some environmental impacts of drilling operations on the Coastal Plain, although they would not eliminate them entirely. P.L. 115-97 limits surface development facilities on the Coastal Plain to 2,000 acres, which need not be concentrated in a single area. Sites would likely spread out and be connected by pipelines and probably roads, as has been the case in other fields on the North Slope, such as the Alpine development in the NPR-A.<sup>73</sup> P.L. 115-97 specifies that “airstrips and any area covered by gravel berms or piers in support of pipelines” shall be included in the 2,000-acre limit.<sup>74</sup>

In the Coastal Plain, ice-based transportation infrastructure may be modified or limited because of safety concerns resulting from the rolling terrain.<sup>75</sup> Normally, ice-based infrastructure can serve remote areas during the exploratory drilling phase on ice roads and on insulated ice pads at the drill site, which are smaller than gravel pads used during production.

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<sup>70</sup> Margaret Kriz Hobson, “Alaska Advances LNG Project Against Long Odds,” *Energywire*, February 6, 2017.

<sup>71</sup> U.S. Department of Energy (DOE), “Alaska LNG Project LLC; Order Affirming and Amending DOE/FE Order No. 3643–A Following Partial Grant of Rehearing,” 88 *Federal Register* 26533, May 21, 2023.

<sup>72</sup> See U.S. DOE, “DOE/EIS-0512: Alaska LNG Project; Alaska,” <https://www.energy.gov/nepa/doeeis-0512-alaska-lng-project-alaska>.

<sup>73</sup> Run by ConocoPhillips, the Alpine field initially consisted of two pads with a connecting road and airstrip, totaling about 100 acres, but in subsequent years additional pads and new roads and airstrips were added.

<sup>74</sup> P.L. 115-97, Section 20001(c)(3).

<sup>75</sup> On a slope, gravel structures provide greater traction than ice structures and have been permitted instead of ice pads for exploration on state lands south of Prudhoe Bay.



## Impact of Climate Change on Developing Resources

Although oil and natural gas development is becoming more dependent on ice roads and pads in some areas of Alaska, warming trends in Arctic latitudes have shortened heavy equipment winter access across the tundra and led to changes in the standards for use of ice roads.<sup>76</sup> Industry has responded by creating new technologies to begin construction of ice roads earlier in the winter, using different kinds of vehicles. Over the long term, if warming trends continue, heavy reliance on ice technology could be reduced further and might force greater reliance on gravel structures, with inherently longer-lasting impacts and higher costs. Adherence to ice technology (instead of more expensive gravel construction) might put some marginal fields out of reach due to the shorter drilling season or difficult terrain. Companies have taken steps to adapt to the changing conditions, in some cases using two drilling rigs, starting ice road construction from both ends simultaneously, using aircraft to reach remote sites, and prepositioning equipment and materials so that tasks can be accomplished more quickly during the shorter winter season. Nevertheless, it is expected that projects such as the development of ANWR would need to adapt to a shorter development and maintenance season.

## The Biological Resources

The biological value of the Coastal Plain rests on intense productivity in the short Arctic summer; many species arrive or awake from dormancy to take advantage of this biological richness and leave or become dormant during the remainder of the year. Caribou have long been central to the debate over the biological impacts of Refuge development. Among the other species most frequently mentioned are polar bears (which were listed under the Endangered Species Act [ESA] as threatened in 2008),<sup>77</sup> musk oxen, and multiple species of migratory birds that breed or feed there.<sup>78</sup> In addition, the effects of energy development on marine mammals (many of which are protected under the ESA and all of which are protected under the Marine Mammal Protection Act)<sup>79</sup> could become an issue if expanded infrastructure development onshore made nearby offshore development more economically attractive.<sup>80</sup>

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<sup>76</sup> Examining winter travel season lengths from 1969 through 2013, the Pacific Marine Environmental Laboratory (PMEL) at the National Oceanic and Atmospheric Administration (NOAA) summarized the situation:

Rising temperatures are leading to a shortening of ice road transport seasons and the melting ice roads are creating transportation challenges. The opening dates for tundra roads in northern Alaska has shifted two months later from early November (pre-1991) to January (recent years), dramatically decreasing the potential work period during which ice roads can be used for transportation. It should be noted that the decrease in time of tundra travel is not only a function of warming, but also of changes in regulatory criteria.

Recently, the ice road season has been extended by using low impact vehicles for initial pre-packing activities, careful choice of routes based on vegetation and landforms that are more resistant to damage, amending with snow and/or ice chips and new methods of ice road construction.

NOAA, PMEL, “Arctic Change: Land – Roads,” <http://www.pmel.noaa.gov/arctic-zone/detect/land-road.shtml?page=land>, citing Alaska Department of Environmental Conservation, *2013 Arctic/Cold Regions Oil Pipeline Conference Report (Final Jan 2014)*.

<sup>77</sup> 16 U.S.C. §§1531-1544; For more information on the Endangered Species Act, see CRS Report R46677, *The Endangered Species Act: Overview and Implementation*, by Pervaze A. Sheikh and Erin H. Ward.

<sup>78</sup> *1002 Report*, p. 37.

<sup>79</sup> 16 U.S.C. §§1361-1423h.

<sup>80</sup> For more information on biological resources of the 1002 Area, see the January 2015 ANWR Revised (continued...)

## Research on Caribou and Other Species

The Biological Resources Division of USGS published an assessment of the array of biological resources in the Coastal Plain in 2002.<sup>81</sup> The report analyzed information about caribou, musk oxen, snow geese, and other species in the Refuge, and it concluded that impacts of energy development on wildlife would be significant.<sup>82</sup> A subsequent memorandum on caribou by one of the assessment's authors clarified that if development were restricted to the western portion of the Refuge (an option being considered at that time by the George W. Bush Administration), the Porcupine caribou herd would not be affected during the early calving period, since the herd is not normally found in the area at that time.<sup>83</sup>

A 2018 update of the 2002 report analyzed new research on caribou, polar bears, musk oxen, and environmental conditions, among other topics.<sup>84</sup> The research showed a continued warming trend with associated effects on wildlife. It further showed that polar bears have become more dependent on onshore habitat for denning purposes and that the number of musk oxen has decreased in the Coastal Plain.<sup>85</sup> The report indicated that Caribou herds, including the Porcupine and Central Arctic herds, have continued to be documented using the calving grounds in the Coastal Plain, but this use has been variable between years.<sup>86</sup>

Separately, a 2003 report by the National Research Council (NRC) highlighted impacts of existing development at Prudhoe Bay on Arctic ecosystems.<sup>87</sup> NRC noted harmful environmental impacts, including changes in the migration of bowhead whales, in distribution and reproduction of caribou, and in populations of predators and scavengers that prey on birds. NRC also credited industry for its strides in decreasing or mitigating environmental impacts. NRC cited some beneficial economic and social effects of oil development in northern Alaska, although it also said that some social and economic impacts have been harmful.<sup>88</sup> The NRC report specifically avoided weighing beneficial effects against harmful effects.

Industry supporters contend that impacts of energy development on wildlife can be reduced or mitigated by various measures. Among these are restricting exploration activities to the winter

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Comprehensive Conservation Plan, <https://www.fws.gov/refuge/arctic/what-we-do>. For more on climate change effects on the polar environment, see CRS Report R41153, *Changes in the Arctic: Background and Issues for Congress*, coordinated by Ronald O'Rourke.

<sup>81</sup> USGS, *Arctic Refuge Coastal Plain Terrestrial Wildlife Research Summaries*, Biological Science Report: USGS/BRD/BSR-2002-0001, 2002.

<sup>82</sup> Ibid. For example, see pages 33-34 regarding caribou; pages 62-63 regarding musk oxen; pages 67-69 regarding polar bears; and pages 73-74 regarding snow geese.

<sup>83</sup> Brad Griffith (USGS, Alaska Cooperative Fish and Wildlife Research Unit), Memorandum to USGS Director, "Evaluation of additional potential development scenarios for the 1002 Area of the Arctic National Wildlife Refuge," April 4, 2002.

<sup>84</sup> John M. Pearce et al., *Summary of Wildlife-Related Research on the Coastal Plain of the Arctic National Wildlife Refuge, Alaska, 2002-2017*, USGS Open-File Report 2018-1003, <https://pubs.usgs.gov/of/2018/1003/ofr20181003.pdf>; hereinafter Pearce et al., *Summary 2002-2017*.

<sup>85</sup> Pearce et al., *Summary 2002-2017*, pp. 7-8; FWS, *Species Status Assessment for the Polar Bear (Ursus maritimus)*, August 18, 2023, p. 32, <https://ecos.fws.gov/ServCat/DownloadFile/238581>.

<sup>86</sup> Pearce et al., *Summary 2002-2017*, pp. 4-5.

<sup>87</sup> National Research Council (NRC), *Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope*, March 2003, p. 452, <https://nap.nationalacademies.org/catalog/10639/cumulative-environmental-effects-of-oil-and-gas-activities-on-alaskas-north-slope>.

<sup>88</sup> Examples of impacts include marked increases in average local personal income of North Slope residents, changes in cultural traditions to both inland (Gwich'in) and coastal (Iñupiat) peoples, dependence on a monetary economy that would eventually require significant sources of external revenue to maintain, lack of jobs in industry, effects on subsistence hunting and whaling, health impacts, and more. See NRC report, pp. 214-240.

season, with maximum use of ice roads and ice platforms, and reducing the footprint of development. Supporters also contend that improvements in production technology will significantly reduce environmental impacts, helping to minimize the footprint of oil and gas production activities.<sup>89</sup> Under P.L. 115-97, oil and gas activity in the Coastal Plain remains subject to environmental regulations and requirements of the National Environmental Policy Act (NEPA).<sup>90</sup>

## Polar Bears

In 2008, FWS listed polar bears as threatened under the ESA.<sup>91</sup> The primary factors in listing the species were the effects of accelerated polar climate change on polar bears and their prey (primarily seals) and the effects of oil and natural gas development.<sup>92</sup> The ESA prohibits activities that harass or harm listed species.<sup>93</sup> The listing of polar bears could impact energy development in ANWR, because studies have stressed the unusual importance of the Coastal Plain as a location for dens of pregnant female polar bears.<sup>94</sup> Female polar bears are known to abandon their dens when disturbed. If cubs are young and unable to maintain body temperature, a mother's abandonment of her den would probably be fatal to the cubs. The arguments against listing, as cited by FWS in the final rule to list the species, included observations that the species was increasing in population in some parts of the Arctic; the possibility that some species of seals (a common prey for polar bears) might increase; questions concerning the accuracy of climate models as they might affect population levels of the species; and claims that existing regulations were adequate to maintain population levels. FWS analyzed these arguments, holding that, on balance, the species warranted listing as threatened throughout its range.<sup>95</sup> In 2023, FWS completed a species status review and concluded that the polar bear continued to meet the definition of a threatened species.<sup>96</sup>

<sup>89</sup> For example, see testimony provided during U.S. Congress, Senate Committee on Energy and Natural Resources, *Full Committee Hearing to Receive Testimony on the Potential for Oil and Gas Exploration in the 1002 Area*, 115<sup>th</sup> Cong., 1<sup>st</sup> sess., November 2, 2017. More recently, in comments on FWS's polar bear five-year status review, the Alaska Oil and Gas Association (AOGA) contended that technological advancements in seismic data acquisition can be used to reduce the impacts of seismic survey activities on polar bears. AOGA, "Comments on Polar Bear Status Review Docket No. FWS-R7-ES-2021-0075-0015," December 6, 2021, <https://www.regulations.gov/comment/FWS-R7-ES-2021-0075-0015>.

<sup>90</sup> National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. For more information on NEPA compliance requirements, see CRS In Focus IF12560, *National Environmental Policy Act: An Overview*, by Kristen Hite.

<sup>91</sup> FWS, "Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Polar Bear (*Ursus maritimus*) Throughout Its Range," 73 *Federal Register* 28212-28303, May 15, 2008; 50 C.F.R. §17.11(h); FWS, "Endangered and Threatened Wildlife and Plants; Special Rule for the Polar Bear; Interim Final Rule," 73 *Federal Register* 28305-28318, May 15, 2008; 50 C.F.R. §17.40(q).

<sup>92</sup> FWS, *Species Status Assessment for the Polar Bear (*Ursus maritimus*)*, August 18, 2023, pp. 26-32; FWS, *Polar Bear (*Ursus maritimus*) 5-year Review 2023*, August 30, 2023, p. 5, [https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public\\_docs/species\\_nonpublish/10143.pdf](https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/10143.pdf).

<sup>93</sup> 16 U.S.C. §1532(19); 16 U.S.C. §1538(A)(1); and 50 C.F.R. §17.3.

<sup>94</sup> *1002 Report*, p. 30. More recent studies have continued to identify the Coastal Plain as a denning location. See USGS, *Analyses on Subpopulation Abundance and Annual Number of Maternal Dens for the U.S. Fish and Wildlife Service on Polar Bears (*Ursus maritimus*) in the Southern Beaufort Sea, Alaska*, Open-File Report 2020-1087, 2020, <https://pubs.usgs.gov/of/2020/1087/ofr20201087.pdf>; and USGS, *Catalog of Polar Bear (*Ursus maritimus*) Maternal Den Locations in the Beaufort and Chukchi Seas and Nearby Areas, 1910-2018*, Data Series 1121, 2020, <https://pubs.usgs.gov/ds/1121/ds1121.pdf>.

<sup>95</sup> FWS, "Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Polar Bear (*Ursus maritimus*) Throughout Its Range," 73 *Federal Register* 28212-28303, May 15, 2008.

<sup>96</sup> The primary factors in the decision remained the same as those given in the 2008 listing. FWS, "The U.S. Fish and (continued...)"

In 2010, FWS established a wide area in northern Alaska, including the Coastal Plain and a considerable area offshore, as critical habitat under the ESA for polar bears.<sup>97</sup> Under the ESA, federal agencies must avoid actions that jeopardize listed species or that destroy or adversely modify their designated critical habitat.<sup>98</sup> The agency considering the action must consult with FWS (or the National Marine Fisheries Service for some species) to determine whether such jeopardy or destruction might occur. If there is such a risk, the action agency must modify the action to reduce the risk.<sup>99</sup> Scientists have also cited research on the risk to polar bears from changing sea ice conditions off the coast of Alaska: Many female polar bears have responded to thinning or vanishing offshore ice by moving more of their dens to locations onshore, and many females that historically denned on land to the west of Prudhoe Bay have moved their dens to the east, into or nearer the Refuge.<sup>100</sup> This shift could increase the importance of the Refuge's Coastal Plain to the polar bear population and add to the significance of consultation under ESA in any federal action related to exploration.<sup>101</sup>

## Issues for Congress

A fundamental ANWR question for Congress in past decades was whether to permit energy development in the Coastal Plain. P.L. 115-97 addressed the question by establishing an oil and gas leasing program for this area. Since enactment of P.L. 115-97, Congress has continued to debate Coastal Plain oil and gas leasing and development, with some Members seeking to promote these activities and others seeking to repeal the leasing program and prohibit oil and gas development. Members have also expressed interest in the management of exploration and development on awarded leases, the financial returns to the federal government from Coastal Plain leasing, and activities on the Alaska Native lands, among other matters. Congress could choose to address some of these issues in future legislation or could decide that the provisions of P.L. 115-97 already provide sufficient guidance for the program.

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Wildlife Service Finds Polar Bear Status Remains Threatened,” press release, September 25, 2023, <https://www.fws.gov/press-release/2023-09/us-fish-and-wildlife-service-finds-polar-bear-status-remains-threatened>.

<sup>97</sup> FWS, “Designation of Critical Habitat for the Polar Bear (*Ursus maritimus*) in the United States; Final Rule,” 75 *Federal Register* 76086, December 7, 2010. This designation was later set aside as a result of legal action but was then reinstated through a subsequent reversal. The relevant onshore area designated as critical habitat includes onshore lands within 32 kilometers of the northern coast of Alaska between the Canadian border and the Kavik River. For more information on the polar bear ESA listing and critical habitat designation, see U.S. Fish and Wildlife Environmental Conservation Online System, <https://ecos.fws.gov/ecp/species/4958>.

<sup>98</sup> 16 U.S.C. §1536.

<sup>99</sup> For a more detailed discussion of consultation under ESA Section 7, see CRS In Focus IF12423, *Endangered Species Act (ESA) Section 7 Consultation*, by Erin H. Ward and Pervaze A. Sheikh.

<sup>100</sup> The proportion of dens on pack ice declined from 62% in 1985-1994 to 37% in 1998-2004. See A. S. Fischbach et al., “Landward and Eastward Shift of Alaskan Polar Bear Denning Associated with Recent Sea Ice Changes,” *Polar Biology*, vol. 30 (2007), pp. 1395-1405. The authors concluded that the changes in denning related to changing ice conditions. A more recent study found that of the denning events recorded, “[l]and denning constituted 34.4% (21 of 61) of dens in 1985-1995, 54.6% (24 of 44) in 1996-2006, and 55.2% (16 of 29) in 2007-2013.” See J. W. Olson et al., “Collar Temperature Sensor Data Reveal Long-Term Patterns in Southern Beaufort Sea Polar Bear Den Distribution on Pack Ice and Land,” *Marine Ecology Progress Series*, vol. 564 (2017), pp. 211-224.

<sup>101</sup> USGS, *Analyses on Subpopulation Abundance and Annual Number of Maternal Dens for the U.S. Fish and Wildlife Service on Polar Bears (*Ursus maritimus*) in the Southern Beaufort Sea, Alaska*, Open-File Report 2020-1087, 2020, p. 2: “[A]s sea ice has become a less-stable substrate for maternal denning, there has been a pronounced shift in the distribution of dens in the [southern Beaufort Sea] from sea ice to land.... The growing reliance on land by [southern Beaufort Sea] polar bears elevates the importance of mitigating potential disturbances to polar bears denning on the Arctic Coastal Plain of Alaska.”

## Extent of Future Coastal Plain Leasing

P.L. 115-97 required at least two lease sales for the Coastal Plain in first 10 years after the law’s enactment.<sup>102</sup> The first required sale was conducted in January 2021, but the leases from this sale were cancelled and did not result in oil and gas development. The second lease sale is scheduled for January 10, 2025. Under the current statutory framework, decisions about any future leasing beyond the two required sales would be made by DOI. P.L. 115-97 did not provide specific criteria for DOI to consider regarding future leasing, but it directed that the Coastal Plain leasing program be managed in a manner “similar to” the administration of the NPR-A oil and gas leasing program under the NPRPA. DOI’s leasing decisions for the NPR-A have evolved over time based on resource management planning, evaluations of leasing impacts under NEPA, and consideration of heightened protections for “special areas.”<sup>103</sup>

Congress could continue the current framework, under which the executive branch would determine any future leasing in the Coastal Plain. Alternatively, Congress could address future leasing in legislation, either to require additional sales or to prohibit them. Proponents of additional leasing assert that Coastal Plain energy development will increase American energy security and could provide new resources to replace energy developed overseas with comparatively fewer environmental safeguards. Supporters also point to potential economic benefits for the Refuge’s Alaska Native communities and for the state of Alaska generally. Opponents contend that ANWR energy development will damage wildlife habitat and Alaska Native subsistence uses and, more broadly, that such development represents a long-term investment in fossil fuels that would slow efforts to address climate change. Some leasing opponents have sought to designate the Coastal Plain as wilderness, which generally would prohibit commercial activities, including energy development.<sup>104</sup>

## Management of Exploration and Development

P.L. 115-97 states that BLM shall authorize up to 2,000 surface acres of the Coastal Plain to be covered by production and support facilities during exploration and development of leased lands.<sup>105</sup> The act specifies that “airstrips and any area covered by gravel berms or piers in support of pipelines” are included in the 2,000-acre limit. It is unclear whether other potential disturbances—for instance, temporary roads or areas under a pipeline that might be temporarily disturbed during construction—would be included within the limit. Under BLM’s approved terms for the January 2025 lease sale, the agency expects development activities to disturb no more than

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<sup>102</sup> P.L. 115-97, Section 20001(c)(1)(A).

<sup>103</sup> For more information, see BLM, “National Petroleum Reserve in Alaska,” <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about/alaska/NPR-A>. Also see Harvard Law School, Environmental and Energy Law Program, “Oil and Gas Development in Alaska’s National Petroleum Reserve,” <https://eelp.law.harvard.edu/tracker/national-petroleum-reserve-oil-and-gas-development/>.

<sup>104</sup> Bills to designate the Coastal Plain as wilderness have included H.R. 724 and S. 282 in the 118<sup>th</sup> Congress; H.R. 815, S. 282, and the House-passed version of H.R. 5376 in the 117<sup>th</sup> Congress; H.R. 5999, S. 2461, and the House-passed version of H.R. 7608 in the 116<sup>th</sup> Congress; and H.R. 1889, H.R. 5911, and S. 820 in the 115<sup>th</sup> Congress. For more information on wilderness designation, see CRS Report RL31447, *Wilderness: Overview, Management, and Statistics*, by Anne A. Riddle and Katie Hoover. Some have also sought to preserve the Coastal Plain as a national monument using the President’s power under the Antiquities Act (e.g., Sierra Club, “Arctic 50<sup>th</sup> Anniversary: Make It a Monument, Citizens Say,” press release, December 6, 2010). However, ANILCA’s Section 1326 (16 U.S.C. §3213) limits withdrawals from the public lands in Alaska to 5,000 acres unless Congress passes a joint resolution to approve the withdrawal within one year of the President’s proclamation. For more information on national monument proclamations, see CRS Report R41330, *National Monuments and the Antiquities Act*, by Carol Hardy Vincent.

<sup>105</sup> P.L. 115-97, Section 20001(c)(3).

995 surface acres.<sup>106</sup> Of the 400,000 acres to be offered at the lease sale, BLM designates 231,700 acres (58%) as prohibited from surface occupancy, 84,300 acres (21%) as subject to “controlled” surface use, and 3,100 acres (1%) as subject primarily to timing limitations for development activities.<sup>107</sup> The remainder of the acreage (20%) would be subject only to “standard lease terms and conditions.”<sup>108</sup>

Beyond the surface occupancy limitation, some earlier ANWR bills introduced prior to enactment of P.L. 115-97 contained other requirements for management of a Coastal Plain leasing program that were not included in P.L. 115-97.<sup>109</sup> For example, H.R. 49 and S. 49 in the 115<sup>th</sup> Congress would have provided additional environmental protections beyond the 2,000-acre surface development limitation. These included, among others, requirements to minimize the adverse effects of oil and gas development on fish and wildlife, their habitat, subsistence resources, and the environment; requirements for site-specific analyses of the probable environmental effects of individual drilling proposals and for mitigation plans to avoid significant adverse effects; and requirements to apply the best commercially available technology for all new exploration, development, and production operations. H.R. 49 and S. 49 would also have authorized the Secretary of the Interior to designate up to 45,000 acres of the Coastal Plain as “special areas” that could be excluded from leasing if the Secretary determined that their “unique character and interest” was such as to require special protection. P.L. 115-97 did not contain these provisions. Congress could consider whether to legislate additional management requirements in the future or allow DOI to determine the levels and types of environmental protections to be applied in the program through its existing framework.

DOI’s different leasing decisions for the January 2021 and January 2025 lease sales were shaped by evolving environmental analyses under NEPA in two presidential administrations. In preparation for the January 2021 lease sale, BLM had developed an environmental impact statement (EIS) and issued a record of decision (ROD) that made most of the federal lands in the Coastal Plain available for leasing.<sup>110</sup> In contrast to the 400,000 acres to be offered in the January 2025 sale, the January 2021 lease sale offered more than 1 million acres; bids were received on more than 500,000 acres.<sup>111</sup> Some 118<sup>th</sup> Congress legislation would have required that future ANWR leasing comply with the EIS and ROD for the January 2021 lease sale, rather than BLM’s

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<sup>106</sup> BLM, *Coastal Plain Oil and Gas Leasing Program: Record of Decision*, December 2024, p. 5, [https://eplanning.blm.gov/public\\_projects/2015144/200492847/20124527/251024507/CoastalPlainSEIS\\_ROD\\_20241208\\_508.pdf](https://eplanning.blm.gov/public_projects/2015144/200492847/20124527/251024507/CoastalPlainSEIS_ROD_20241208_508.pdf) (hereinafter BLM, December 2024 ROD).

<sup>107</sup> BLM, December 2024 ROD, p. 5. BLM defines *controlled surface use* as “a category of moderate constraint stipulations” in which BLM may require “special operational constraints” such as shifting the location of activities to protect a specified resource or value. BLM defines *timing limitations* as constraints in which specified areas are closed to development activities during identified time frames (such as when species are calving in an area). Areas designated for controlled surface use may also be subject to timing limitations.

<sup>108</sup> *Ibid.*

<sup>109</sup> This may be partly due to limitations imposed by the budget reconciliation process on the matters that can be considered in reconciliation legislation. For more information, see CRS Report RL30862, *The Budget Reconciliation Process: The Senate’s “Byrd Rule”*, by Bill Heniff Jr. For information on earlier bills, see CRS Report RL32838, *Arctic National Wildlife Refuge (ANWR): Votes and Legislative Actions, 96th-114th Congresses*, by Laura B. Comay.

<sup>110</sup> BLM, *Coastal Plain Oil and Gas Leasing Program: Environmental Impact Statement—FINAL*, September 2019 (hereinafter BLM, September 2019 Final EIS); and BLM, *Coastal Plain Oil and Gas Leasing Program: Record of Decision*, August 2020, both available at <https://eplanning.blm.gov/eplanning-ui/project/102555/570>.

<sup>111</sup> BLM, “2021 Coastal Plain Lease Sale Bid Recap,” January 6, 2021, [https://www.blm.gov/sites/default/files/docs/2021-01/BLM-Alaska\\_2021-Coastal-Plain-Sale-Bid-Recap\\_20210106.pdf](https://www.blm.gov/sites/default/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf).

newer analysis, and would have stated that previous permits and authorizations are sufficient to satisfy requirements of multiple laws including NEPA and the ESA.<sup>112</sup>

## Financial Return to the Federal Government from Coastal Plain Leasing

The January 2021 Coastal Plain lease sale yielded high bids of \$14.4 million in total (for all the leases collectively).<sup>113</sup> This was substantially less than had been anticipated in some earlier estimates, including cost estimates prepared by the Congressional Budget Office during consideration of P.L. 115-97, which had anticipated high bids of approximately \$1.45 billion at the first lease sale, \$725 million of which would be retained by the federal government (with a 50% revenue share going to Alaska under P.L. 115-97).<sup>114</sup> The lower-than-anticipated revenues from the 2021 lease sale fueled concerns by environmental groups and some Members of Congress that the nation was receiving an inadequate return for leasing development rights in a valued natural area.<sup>115</sup> Some others expressed that, regardless of the bidding results, the leases promised to generate substantial royalty revenues once developed, which would accrue to both the State of Alaska and the United States in future years.<sup>116</sup>

Some Members concerned about the adequacy of bid revenues have advocated for Congress to direct BLM concerning minimum acceptable bids for ANWR Coastal Plain leases. In the lead-up to the 2021 sale, H.R. 3055, the House-passed version of FY2020 Consolidated Appropriations, would have provided that no funds made available by the act could be used to conduct a Coastal Plain lease sale unless the minimum acceptable bid was set so as to produce federal revenues of at least \$500 million for the Treasury. This provision was not included in the final appropriations act.<sup>117</sup> Congress could consider whether to mandate a minimum acceptable bid for future lease sales, in order to ensure that development rights were not sold for amounts less than Congress's valuation of those rights. Alternatively, some might take the view that BLM's policies for

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<sup>112</sup> See H.R. 6285 in the 118<sup>th</sup> Congress. This bill would also have nullified any presidential or secretarial orders or actions that result in a moratorium, suspension, or pause of the leasing program. The bill would also have set terms for judicial review of any challenges to leasing program permits and approvals.

<sup>113</sup> BLM, "2021 Coastal Plain Lease Sale Bid Recap Jan. 6, 2021," [https://www.blm.gov/sites/default/files/docs/2021-01/BLM-Alaska\\_2021-Coastal-Plain-Sale-Bid-Recap\\_20210106.pdf](https://www.blm.gov/sites/default/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf). The bid payments were later returned to lessees whose leases were cancelled in September 2023.

<sup>114</sup> CBO, "Cost Estimate: Reconciliation Recommendations of the Senate Committee on Energy and Natural Resources," November 21, 2017, <https://www.cbo.gov/system/files/115th-congress-2017-2018/costestimate/senreconciliationrecommendations.pdf>.

<sup>115</sup> See, for example, Alaska Wilderness League et al., "Arctic Refuge Oil Lease Sale Compromises Vital Alaska Wilderness," January 6, 2021, <https://alaskawild.org/wp-content/uploads/2021/01/Arctic-Refuge-Lease-Sale-Coalition-Statement-FINAL-1-6-2021.pdf>; Rep. Jared Huffman, "In the News: Trump Auctions Off Arctic Refuge Land to Oil Companies," January 15, 2021, <https://huffman.house.gov/media-center/in-the-news/trump-auctions-off-arctic-refuge-land-to-oil-companies>; and Sen. Ed Markey, "Senator Markey and Rep. Huffman Re-Introduce Bicameral Legislation to Protect the Arctic National Wildlife Refuge," press release, February 4, 2021, <https://www.markey.senate.gov/news/press-releases/senator-markey-and-rep-huffman-re-introduce-bicameral-legislation-to-protect-the-arctic-national-wildlife-refuge>.

<sup>116</sup> See, for example, Alaska Congressional Delegation, "This Is a Historic Moment for Alaska: BLM Holds First 1002 Area Lease Sale," press release, January 8, 2021, <https://www.murkowski.senate.gov/press/release/delegation-this-is-a-historic-moment-for-alaska>; and Alaska Oil and Gas Association, "AOGA Statement on Historic ANWR Lease Sale," press release, January 6, 2021, <https://www.aoga.org/news/aoga-statement-on-historic-anwr-lease-sale/>.

<sup>117</sup> For the 2021 lease sale, BLM set the minimum acceptable bid at \$25/acre, which was higher than BLM's nationwide bid minimum for oil and gas leases at the time (\$2/acre). See BLM, "Amendment to the Detailed Statement of Sale," December 18, 2020, [https://www.blm.gov/sites/default/files/docs/2020-12/2021\\_BLM-AK-Coastal-Plain-Detailed-Statement-of-Sale-AMENDMENT-12-18-2020.pdf](https://www.blm.gov/sites/default/files/docs/2020-12/2021_BLM-AK-Coastal-Plain-Detailed-Statement-of-Sale-AMENDMENT-12-18-2020.pdf).

determining a minimum bid, guided by its existing statutory and regulatory framework, are sufficient to ensure that lease auctions achieve an adequate return, or they may feel that auction bid amounts are less important when considered alongside the promise of future royalties for both Alaska and the federal government from development of Coastal Plain leases.

## Alaska Native Interests and Subsistence Uses

The Alaska Native community is divided on the question of energy development in the Refuge, but some patterns can be discerned. Generally, the Alaska Natives along the North Slope (Iñupiat) have supported ANWR development, whereas the Alaska Natives of interior Alaska (Gwich'in) have opposed it, although neither group is unanimous on the question.<sup>118</sup>

Among the Alaska Native groups supporting ANWR development are the ASRC and Doyon Limited (both regional corporations), KIC, and the Native Village of Kaktovik (a federally recognized Tribe in Kaktovik, the only town in the northern part of ANWR).<sup>119</sup> The chief arguments for supporting energy development in the Refuge are the potential increases in North Slope employment and revenues from increased business activity. Many Alaska Native supporters suggest that present and future oil and gas development is the foundation of a sustained local economy and can be balanced with ensuring future subsistence use. They argue that development and production practices can be carried out so as to address other Alaska Native concerns such as avoiding damage to the caribou that calve in the area. Some have asserted that potential roads to facilitate development may actually increase Alaska Native access to the Coastal Plain and therefore support subsistence practices.<sup>120</sup>

Other Alaska Native communities are against energy development because of its potential impacts to subsistence values and uses.<sup>121</sup> Among these opponents are many Gwich'in Tribes, whose members are found both south and east of the Refuge in Alaska and Canada.<sup>122</sup> These communities are heavily dependent for their subsistence uses on the caribou herd that calves in the Coastal Plain, and because of the lengthy migration of the caribou herds, this dependency is an important factor for them even if they live at a distance from the Coastal Plain. Seeing energy development as a threat to the safety or success of the calving season, these groups have opposed drilling the Refuge. Some Alaska Native Tribes have pointed to the potentially harmful impacts of

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<sup>118</sup> For views of Alaska Native groups supporting development, see, for example, testimony of Charles Lampe, President, Kaktovik Iñupiat Corporation, in U.S. Congress, House Committee on Natural Resources, hearing on H.R. 6285, "Alaska's Right to Produce Act of 2023," 118<sup>th</sup> Cong., 1<sup>st</sup> sess., November 29, 2023, [https://naturalresources.house.gov/uploadedfiles/testimony\\_lampe.pdf](https://naturalresources.house.gov/uploadedfiles/testimony_lampe.pdf). For views of Alaska Native groups opposing development, see, for example, Gwich'in Steering Committee, "Resolution to Protect the Birthplace and Nursery Grounds of the Porcupine Caribou Herd," July 19, 2022, [https://trustees.org/wp-content/uploads/2022/07/RES-Gwichin-Niintsyaa\\_PASSED\\_22Jul19.pdf](https://trustees.org/wp-content/uploads/2022/07/RES-Gwichin-Niintsyaa_PASSED_22Jul19.pdf).

<sup>119</sup> A *federally recognized Tribe* is an entity formally recognized as having a government-to-government relationship with the United States, entailing special rights, immunities, and privileges as well as eligibility for certain federal programs and services (25 C.F.R. Part 83).

<sup>120</sup> Statement of Matthew Rexford, Native Village of Kaktovik, Tribal Administrator, in U.S. Congress, House Committee on Natural Resources, Subcommittee on Energy and Mineral Resources, *The Need to Protect the Arctic National Wildlife Refuge Coastal Plain*, hearings, 116<sup>th</sup> Cong., 1<sup>st</sup> sess., March 26, 2019, H.Hrg. 116-1106, <https://www.congress.gov/116/meeting/house/109126/witnesses/HHRG-116-II06-Wstate-RexfordM-20190326.pdf> (hereinafter HNR Hearing, March 2019).

<sup>121</sup> Statement of Bernadette Demientieff, Executive Director, Gwich'in Steering Committee, HNR Hearing, March 2019, <https://www.congress.gov/116/meeting/house/109126/witnesses/HHRG-116-II06-Wstate-DemientieffB-20190326.pdf>.

<sup>122</sup> The Gwich'in Steering Committee is a lead organization expressing this view. See <http://ourarcticrefuge.org/>.



Coastal Plain energy development on subsistence uses, and claim that agencies such as BLM have failed to adequately consider their concerns.<sup>123</sup>

Congress has considered legislation to take into account some of these Alaska Native interests. For example, some in Congress have proposed repealing the Arctic National Wildlife Refuge oil and gas program due to “the inadequate or nonexistent consultation with Alaska Natives ... and the biological and cultural importance of maintaining the current wilderness characteristics of the coastal plain.”<sup>124</sup> Some other Members of Congress, by contrast, have focused on Alaska Native supporters of Coastal Plain oil and gas development and have introduced legislation to expedite NEPA review of oil and gas program actions, which could facilitate exploration and development of both the federal and Alaska Native lands.<sup>125</sup>

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<sup>123</sup> Statement of Chief Galen Gilbert, First Chief of the Arctic Village Council, HNR Hearing, March 2019, pp. 6-7, <https://www.congress.gov/116/meeting/house/109126/witnesses/HHRG-116-II06-Wstate-GilbertG-20190326.pdf>.

<sup>124</sup> H.Rept. 116-133, pp. 3-4, <https://www.congress.gov/116/crpt/hrpt133/CRPT-116hrpt133.pdf>.

<sup>125</sup> See, for example, H.R. 6285 and S. 3289 in the 118<sup>th</sup> Congress, and see statements by Senator Dan Sullivan in Office of Senator Lisa Murkowski, “Alaska Senate Delegation Leads Effort to Restore Energy Production on Alaska’s North Slope,” press release, November 16, 2023, <https://www.murkowski.senate.gov/press/release/11/16/2023/alaska-senate-delegation-leads-effort-to-restore-energy-production-on-alaskas-north-slope>.

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