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Arctic National Wildlife Refuge: Legislative Issues

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SUMMARY

One important element of the energy debate in the 107th Congress is whether to approve energy development in the Arctic National Wildlife Refuge (ANWR) in northeastern Alaska, and if so, under what conditions, or whether to continue to prohibit development in order to protect the area's biological resources. ANWR is an area rich in fauna, flora, and commercial oil potential. Shortages of gasoline and natural gas and resulting increased prices from late 2000 to early 2001, followed by terrorist attacks, renewed the ANWR debate for the first time in 5 years; however, its development has been debated for over 40 years. Few U.S. locations stir as much industry interest as the northern area of ANWR. Current law forbids energy leasing in the Refuge.

Six bills have been introduced in the 107th Congress that would directly affect the future of ANWR. Four of these (H.R. 4, H.R. 39, H.R. 2436, and S. 388) would open the refuge to development; they share many overlapping provisions. Two (H.R. 770 and S. 411) would designate the coast of ANWR as wilderness. The following actions have been taken on these bills.

On July 25, 2001, the House Resources Committee reported H.R. 2436. Its Title V would open the Refuge to exploration and development. These provisions were then incorporated into H.R. 4, an omnibus energy package. An amendment was passed to limit some types of surface development to a total of 2,000 acres; another amendment to strike Title V was defeated. H.R. 4 passed the House on August 2, 2001. H.R. 39 has had no action to date, while hearings have been held on S. 388. H.R. 770 and S. 411 have had no hearings to date.

A comprehensive energy bill, but one that *lacks r*efuge development provisions, was offered by Senator Daschle as an amendment (S.Amdt. 2917) to S. 517, the bill which served as the vehicle for Senate floor consideration of omnibus energy legislation. An amendment package to open the Refuge by Senators Murkowski and Stevens was filibustered; cloture motions on the amendments lost, and the amendments were withdrawn. The text of S. 517 (amended) was passed in lieu of the House version of H.R. 4. Conferees will meet to reconcile the two versions of H.R. 4.

Development advocates argue that ANWR oil would reduce U.S. energy markets' exposure to crises in the Middle East; boost North Slope oil production and extend the economic life of the TransAlaska Pipeline System; and create many jobs in Alaska and elsewhere. They maintain that ANWR oil could be developed with minimal environmental harm, with a footprint limited to 2000 acres. Opponents argue that intrusion on this ecosystem cannot be justified on any terms; that it should be designated as wilderness; that oil found (if any) would provide little energy security and could be replaced by cost-effective alternatives; and that job claims are overstated.

If Congress does not act, the status quo, which prohibits development unless Congress acts, will continue.

On April 18, the Senate essentially voted to prevent energy drilling in ANWR. The defeat came on a 46 to 54 vote against a cloture motion to block a threatened filibuster on Senator Murkowski's amendment to S. 517, which would have ended debate and moved the chamber to a direct vote on the ANWR issue.

MOST RECENT DEVELOPMENTS

On February 15, 2002, the Senate began floor consideration of S. 517, to which Senator Daschle offered S.Amdt. 2917, an omnibus energy bill. On April 16, Senators Murkowski and Stevens introduced two amendments (S.Amdt. 3132 and S.Amdt. 3133) to open the Refuge to development. While the language of the two amendments was similar in many respects to that of H.R. 4, some significant revisions included allowing oil export to Israel, requiring a presidential determination to proceed to leasing, and (in S.Amdt. 3133) allocation of federal revenues to benefit retired steelworkers and modernize the steel industry. The national security threat, budgetary considerations, and maintenance of the investment in the Alaskan oil infrastructure are key factors in the renewed interest in energy development in the (ANWR).

On April 18, the Senate essentially voted to prevent drilling for oil and gas in the Refuge. The action came on vote of 46 yeas to 54 nays on a cloture motion to block a threatened filibuster on Senator Murkowski's amendment to the Senate energy bill, which would have ended debate and moved the chamber to a direct vote on the ANWR issue. Lacking a provision to develop ANWR, the text of S. 517, as amended, was substituted for the text of the House-passed H.R. 4, and passed the Senate (88 yeas to 11 nays) on April 25. Conferees will attempt to iron out the substantial differences between the two versions.

BACKGROUND AND ANALYSIS

The Arctic National Wildlife Refuge (ANWR) consists of 19 million acres in northeast Alaska. It is administered by the Fish and Wildlife Service (FWS) in the Department of the Interior (DOI). Its 1.5 million acre coastal plain is currently viewed as one of the most likely U.S. onshore oil and gas prospects. Together, the fields on this federal land could hold as much economically recoverable oil as the giant field at Prudhoe Bay, found in 1967 on the state-owned portion of the coastal plain west of ANWR, now estimated to have held 11-13 billion barrels.

At the same time, the Refuge, and especially the coastal plain, is home to a wide variety of plants and animals. The presence of caribou, polar bears, grizzly bears, wolves, migratory birds, and many other species in a nearly undisturbed state has led some to call the area "America's Serengeti." The Refuge and two neighboring parks in Canada have been proposed for an international park, and several species found in the area (including polar bears, caribou, migratory birds, and whales) are protected by international treaties or agreements. The analysis below covers, first, the economic and geological factors that have triggered new interest in development, followed by the philosophical, biological, and environmental quality factors that have triggered opposition to it.

The conflict between high oil potential and nearly pristine nature creates a dilemma: should Congress open the area for oil and gas development or should the area's ecosystem be given permanent protection from development? What factors should determine whether to open the area? If the area is opened, how can damages be avoided, minimized, or mitigated? To what extent should Congress legislate special management of the area (if it is developed) and to what extent should federal agencies be allowed to manage the area under existing law? (Basic information on the Refuge can be found in CRS Report

RL31278, *Arctic National Wildlife Refuge: Background and Issues* and at the FWS web site, [http://www.r7.fws.gov/nwr/arctic], which includes links to a number of other organizations interested in the area. A presentation of development arguments can be found at [http://www.anwr.org], sponsored by a consortium of groups. Opponents' arguments can be found at [http://www.alaskawild.org], [http://www.protectthearctic.com/], or [http://www.tws.org/arctic/]. Maps of the coastal plain showing existing oil development areas on state land can be found at [http://www.dog.dnr.state.ak.us/oil/products/maps/maps.htm].)

History of the Refuge

The energy and biological resources of northern Alaska have raised controversy for decades, from legislation in the 1970s, to a 1989 oil spill, to more recent efforts to use ANWR resources to address energy needs or to help balance the federal budget. In November 1957, an application for the withdrawal of lands in northeastern Alaska to create an "Arctic National Wildlife *Range*" was filed. The first group actually to propose to Congress that the area become a national wildlife range, in recognition of the many game species found in the area, was the Tanana Valley (Alaska) Sportsmen's Association in 1959. On December 6, 1960, after statehood, the Secretary of the Interior issued Public Land Order 2214 reserving the area as the "Arctic National Wildlife Range."

In 1971, Congress enacted the Alaska Native Claims Settlement Act (ANCSA) to resolve all Native aboriginal land claims against the United States. ANCSA provided for monetary payments and also created Village Corporations that received the surface estate to approximately 22 million acres of lands in Alaska. Village selection rights included the right to choose the surface estate in a certain amount of lands within the National Wildlife Refuge System. Under §22(g) of ANCSA, the chosen lands were to remain subject to the laws and regulations governing use and development of the particular Refuge. Kaktovik Inupiat Corporation (KIC, the local corporation) received rights to three townships along the coast of ANWR. ANCSA also created Regional Corporations which could select subsurface rights to some lands and full title to others. Subsurface rights in National Wildlife Refuges were not available, but in-lieu selections to substitute for such lands were provided.

In 1980, Congress enacted the Alaska National Interest Lands Conservation Act (ANILCA, P.L. 96-487, 94 Stat. 2371), which included several sections about ANWR. The Arctic Range was renamed the Arctic National Wildlife Refuge, and was expanded, mostly southward and westward, to include an additional 9.2 million acres. Section 702(3) of ANILCA designated much of the original Refuge as a wilderness area, but not the coastal plain.[1] Instead, Congress postponed decisions on the development or further protection of the coastal plain. Section 1002 of ANILCA directed a study of the "coastal plain" (which therefore is often referred to as the "1002 area") and its resources be completed within 5 years and 9 months of enactment. The resulting 1987 report was called the *1002 report* or the Final Legislative Environmental Impact Statement (FLEIS). ANILCA defined the "coastal plain" as the lands on a specified map – language that was interpreted as excluding most Native lands, even though these lands are *geographically* part of the coastal plain.

Section 1003 of ANILCA prohibited oil and gas development in the entire Refuge, or "leasing or other development leading to production of oil and gas from the range" unless

[1] Newer portions of the Refuge were not included in the wilderness system.

authorized by an Act of Congress. (For more history of legislation on ANWR and related developments, see CRS Report RL31278, *Arctic National Wildlife Refuge: Background and Issues*; for legal issues, see CRS Report RL31115, *Legal Issues Related to Proposed Drilling for Oil and Gas in the Arctic National Wildlife Refuge*.)

In recent years, Congress attempted to authorize the opening of ANWR in the FY1996 reconciliation bill (H.R. 2491, §§5312-5344), but the measure was vetoed. President Clinton cited the ANWR sections as one of his reasons for vetoing the measure. (For key provisions of that legislation, see Archived Issue Brief 95071, available from the author.)

While bills were introduced, the ANWR issue was not debated in the 105th Congress. In the 106th Congress, bills to designate the 1002 area of the Refuge as wilderness and others to open the Refuge to energy development were introduced. Assumptions about ANWR revenues were included in the FY2001 budget resolution (S.Con.Res. 101) as reported by the Senate Budget Committee on March 31, 2000. An amendment to remove the language was tabled. However, conferees rejected the language. The conference report on H.Con.Res. 290 did not contain this assumption, and the report was passed by both Houses on April 13. S. 2557 was introduced May 16, 2000; it included a title to open the Refuge to development.

Only three recorded votes relating directly to ANWR development occurred from the 101st to the 106th Congress. All were in the Senate:

- In the 104th Congress, on May 24 1995, there was a motion to table an amendment that would have stripped ANWR development titles from the Senate version of H.R. 2491. The motion passed (Roll Call #190).
- In the same Congress, on October 27, 1995 there was another motion to table a similar amendment to H.R. 2491. This motion also passed (Roll Call #525).
- In the 106th Congress, the vote to table an amendment to strip ANWR revenue assumptions from the budget resolution (S.Con.Res. 101;see above) was passed (April 6, 2000, Roll Call #58).

Legislation in the 107th Congress. The vehicle for Senate floor consideration was S. 517, which concerns energy technology development. On February 15, 2002, Senator Daschle offered an amendment (S.Amdt. 2917), an omnibus energy bill. It did not contain provisions to develop the Refuge, but two amendments (S.Amdt. 3132 and S.Amdt. 3133) to do so were offered on April 16. The language of the two amendments was, in most sections, identical to that of H.R. 4 (Division F, Title V). Key differences included a requirement for a presidential determination before development could proceed, a exception for exports to Israel in the oil export prohibition, and a number of changes in allocation of any development revenues, as well as allowing some of those revenues to be spent without further appropriation. On April 18, the Senate essentially voted to prevent drilling for oil and gas in the Refuge. The defeat came on a vote of 46 yeas to 54 nays on a cloture motion to block a threatened filibuster on Senator Murkowski's amendment to S. 517, which would have ended debate and moved the chamber to a direct vote on the ANWR issue.

The language of H.R. 4, the two amendments, and S. 411 and H.R. 770 are compared below. In the first session, Senator Lott (on behalf of himself and Senators Murkowski and Brownback) offered an amendment (S.Amdt. 2171) to an amendment on pension reform (S.Amdt. 2170) to H.R. 10, a bill also on pension reform. Their amendment included, among other energy provisions, the ANWR development title in H.R. 4, as passed by the House. Their amendment also included provisions prohibiting cloning of human tissue. A cloture

motion was filed on the Lott amendment, and the Senate failed to invoke cloture (1-94, Roll Call No. 344) on December 3, 2001. Instead, the Senate voted the same day in favor of invoking cloture on the underlying amendment (S.Amdt. 2170), by a vote of 81-15 (Roll Call No. 345). Because cloture was invoked on the underlying amendment, Senate rules required that subsequent and pending amendments to it be germane. The Senate's presiding officer subsequently sustained a point of order against the Lott amendment, which was still pending, on the grounds that it was not germane to the underlying amendment, and thus the amendment fell.

H.R. 4, containing ANWR development provisions passed the House on August 2, 2002. Title V, Division F, was the text of H.R. 2436 (H.Rept. 107-160, Part I; yeas 240, nays 189; Roll Call No. 320). The measure would open ANWR to exploration and development. The previous day, an amendment by Representative Sununu to limit specified surface development to 2,000 acres was passed (yeas 228, nays 201; Roll Call No. 316). Representatives Markey and Johnson (CT) offered an amendment to strike the title; this was defeated (yeas 206, nays 223; Roll Call No. 317).

Finally, H.R. 770 and S. 411 would designate the 1002 area as wilderness, but no action has been taken on either bill. The issues most commonly arising in the current legislative debate are described below under *Major Legislative Issues in the 107th Congress*, along with the treatment of these issues by these four bills (H.R. 4, the proposed amendments to S. 517, S. 411, and H.R. 770).

The Energy Resource

Parts of Alaska's North Slope (ANS) coastal plain have proved abundant in oil and gas reserves, and its geology holds promise for ANWR. The oil-bearing strata extend eastward from structures in the National Petroleum Reserve-Alaska past the Prudhoe Bay field, and may continue into and through ANWR's 1002 area. (For economic impacts of development, see CRS Report RS21030.)

Oil. Estimates of ANWR oil potential, both old and new, depend upon limited data and numerous assumptions about geology and economics. The most recent government study of oil and natural gas prospects in ANWR, completed in 1998 by the U.S. Geological Survey (USGS),[2] found that there is an excellent chance (95%) that at least 11.6 billion barrels of oil are present on federal lands in the 1002 area. There also is a small chance (5%) that 31.5 billion barrels or more are present. USGS estimates there is an excellent chance (95%) that 4.3 billion barrels or more are technically recoverable (costs not considered); and there is a small chance (5%) that 11.8 billion barrels or more are technically recoverable. But the proportion that would be *economically* recoverable depends upon the price of oil. The USGS estimated that, at $24/barrel (in 1996 dollars), there is a 95% chance that 2.0 billion barrels or more could be economically recovered and a 5% chance of 9.4 billion barrels or more.

[2] U.S. Dept. of the Interior, Geological Survey. *The Oil and Gas Potential of the Arctic National Wildlife Refuge 1002 Area, Alaska.* U.S.G.S. Open File Report 98-34. (Washington, DC: 1999). Summary and Table EA4.

Roughly one-third more oil may be under adjacent state waters and Native lands.[3] However, these areas would be difficult to develop without access through Federal land.

Oil prices, geologic characteristics such as permeability and porosity, cash flow, and any transportation constraints, would be among the most important factors affecting the development rates and production levels that would be associated with given volumes of oil resources. The Energy Information Administration estimated that at a faster development rate, production would peak 15-20 years after the start of development, with maximum daily production rates of roughly 0.00015 (0.015%) of the resource. Production associated with the slower rate would peak about 25 years after the start of development at a daily rate equal to about 0.000105 (0.0105%) of the resource. Peak production associated with a technically recoverable resource of 5.0 billion barrels (bbls) at the faster development rate would be 750,000 bbls per day. U.S. petroleum consumption is about 19 million bbls per day .

Natural Gas. Substantial quantities of natural gas are estimated to be in the 1002 area as well. However, as with the abundant natural gas discovered at Prudhoe Bay, there is currently no way to deliver this gas to market. There has been considerable recent interest in construction of a pipeline to transport natural gas directly to North American markets and/or a warm-water port for shipment in tankers. Either option could enhance the commercial prospects of the 1002 area – and the rest of the ANS. The prospect of being able to sell its abundant gas would also enhance Prudhoe Bay economics – oil as well as gas. Until recently, estimated costs of transporting the gas precluded serious consideration of pipeline construction.

Advanced Technologies. As development has proceeded since the discovery of Prudhoe Bay, North Slope oil field operators have developed less environmentally intrusive ways to develop arctic oil, primarily through innovations in technology.

Field exploration has benefitted from new seismic technology. Advanced analytical methods generate high resolution images of geologic structures and resolve hydrocarbon accumulations. And improved ice-based transportation infrastructure serves remote areas during exploration drilling on newly developed insulated ice pads. More powerful computers allow the manipulation of vastly more data, yielding more precise well locations and, consequently, reduce the number of wells needed to find hydrocarbon accumulations.

Recent advances in drilling also lessen the footprint of petroleum operations. New drilling 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, with the current record being seven miles at one site in China. Other advances reduce the space needed for a drilling rig, reduce equipment volume and weight, and lessen the generation of drilling waste. Modules that perform many functions also make production facilities more compact. Production drilling techniques using slim-hole technology such as coiled tubing and multilateral drilling also decrease the footprint, reduce waste, and increase recovery of hydrocarbons per well.

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[3] Statement based upon data in USGS. *Frontier Areas and Resource Assessment: the Case of the 1002 Area of the Alaska North Slope.* By Emil D. Attanasi and John D. Scheunemeyer. USGS Open File Report 02-119, March 2002.

Proponents of opening ANWR note that these technologies could mitigate the environmental impact of petroleum operations, but not eliminate it. Opponents maintain that a facility of any size would still be an industrial site and change the character of the Refuge. They argue that whether environmental impacts would be minimized would depend in part on the wording of legislation, and that there still would be the need for gravel and the scarce water resources of the 1002 area; and permanent roads, port facilities, and airstrips would follow the initial roadless construction. They also note that spills may occur.

The Biological Resources

The FLEIS rated the Refuge's resources highly: "The Arctic Refuge is the only conservation system unit that protects, in an undisturbed condition, a complete spectrum of the arctic ecosystems in North America" (p. 46). It also said "The 1002 area is the most biologically productive part of the Arctic Refuge for wildlife and is the center of wildlife activity" (p. 46). The biological value of the 1002 area rests on the very intense productivity in the short arctic summer; many species arrive or awake from dormancy to take advantage of this richness, and leave or become dormant during the remainder of the year. Caribou have long been the center of the debate over the biological impacts of Refuge development, but other species have also been at issue. Among the other species most frequently mentioned are polar bears, musk oxen, and the 135 species of migratory birds that breed or feed there.

The species which has drawn the most attention in this debate is the caribou. The Porcupine Caribou Herd (PCH) calves in or near the 1002 area in most years [http://www.r7.fws.gov/nwr/arctic/pchmaps.html], and winters south of the Brooks Range in Alaska or Canada; it is the subject of a 1987 executive Agreement Between the United Sates and Canada on the Conservation of the Porcupine Caribou Herd. The herd is currently estimated at 130,000, but caribou population numbers fluctuate markedly. In both countries it is an important food source to Native people and others – especially since other meat is either expensive or unavailable. Some scientists cite studies that show a reduction in density of cows with calves near roads and developed areas around Kuparuk (Nellemann and Cameron, 1998). They fear that development and production in the 1002 area could cause cows to calve in less desirable locations or prevent the herd's access to sites where they can escape from the voracious insects common in early summer.

Based on the Prudhoe Bay experience, it appears that individual animals, especially adult males, habituate to the disturbance, and sometimes seek out gravel pads and roads, where insect attacks may be less severe. However, cows with young calves appear to be more sensitive, and during the first few weeks after calving, avoid roads and other human disturbance for distances of a mile or more. The calving area of ANWR is more confined than that of Prudhoe Bay and vicinity, and nearby areas of similar habitat may not be available.

When cows are slowed by late thaws or heavy snows, they may not reach the 1002 area. This displacement, though natural, can have severe consequences. For example, in 2000, when heavy snowfall delayed cows in reaching the 1002 area before calving, the June calf survival rate and the July calf to cow ratio were the lowest ever recorded. This reduced calving success served to highlight the importance of the preferred area. In the narrow coastal plain of the 1002 area, any cows displaced southward would calve in or nearer the Brooks Range, where bears, golden eagles, and wolves (all calf predators) are more abundant than on the plain.

An updated assessment of an array of biological resources in the coastal plain was recently published by the Biological Research Division of USGS. The report analyzed new information about caribou, musk oxen, snow geese and other species in ANWR. The authors concluded that development impacts would be significant. A follow-up memo by one of the authors to the director of USGS clarified that if development were restricted to the western portion of the refuge (an option that was being considered then by the 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. Any impacts that might occur when the herd subsequently moves into the area were not discussed in the memo.

Effects on polar bear dens in the Refuge have been an issue. Modern winter exploration technology, while an improvement on environmental impact over previous technologies in many respects, would be more likely to affect polar bears' winter dens, or conversely, the mitigation required to protect bear dens could increase the cost of exploration, development and production. Polar bears are the subject of the international Agreement on the Conservation of Polar Bears, to which the United States is a party. Musk oxen, snow geese, and other species have also featured in the ANWR debate. (For more about these species, see CRS Report RL31278.)

For opponents of development, the central issue is whether the area should be maintained as an intact ecosystem – off limits to development – not whether development can be accomplished in an environmentally sound manner. In terms that emphasize deeply held values, supporters of wilderness designation argue that few places as untrammeled as the 1002 area remain on the planet, and fewer still on the same magnificent scale. Any but the most transitory intrusions (e.g., visits for recreation, hunting, fishing, subsistence use, research, etc.) would, in their view, damage the "sense of wonder" they see the area as instilling. The mere knowledge that a pristine place exists, whether one ever visits it, can be important to those who view the debate in this light.

Major Legislative Issues in the 107th Congress

The primary energy-related issue in the 107th Congress is whether to approve energy development in the Arctic National Wildlife Refuge (ANWR) in northeastern Alaska, and if so, under what restrictions, or whether to continue to prohibit energy development in order to protect the area's biological resource and wilderness values. Some of the issues that have been raised most frequently in the current ANWR debate are described briefly below. In addition to the issue of whether development should be permitted at all, key aspects of the current debate include specifications that might be provided in legislation, including the physical size, or footprint, of development; the activities that might be permitted on Native lands; the disposition of revenues; labor issues; oil export restrictions; compliance with the National Environmental Policy Act, and other matters. (References below to the "Secretary" refer to the Secretary of the Interior, unless stated otherwise.)

H.R. 4, as passed by the House, was used as the model for two Senate amendments (S.Amdt. 3132 and S.Amdt. 3133), with some important variations. H.R. 4 is analyzed below, along with a few of the major features of the rejected Senate amendments to S. 517, and the two wilderness bills.

Environmental Direction. Congress could choose to leave environmental matters to administrative agencies under existing laws. Alternatively, Congress could impose a higher standard of environmental protection because the area is in a national wildlife refuge

or because of the fragility of the arctic environment, or it could legislate a lower standard to facilitate development. The degree of discretion given to the administering agency could also affect the stringency of environmental protection. For example, Congress could include provisions requiring use of "the best available technology" or "the best commercially available technology" or similar general standards; alternatively it could limit judicial review of environmental standards. One issue would be the use of gravel and water resources essential for oil exploration and development. Other legislative issues include limitations on miles of roads or other surface occupancy; the adequacy of existing pollution standards; prevention and treatment of spills; the adequacy of current environmental requirements; and aircraft overflights, among other things.

H.R. 4 (§6507(a)) requires the Secretary to administer the leasing program so as to "result in no significant adverse effect on fish and wildlife, their habitat, subsistence resources, and the environment, ... including ... requiring the application of the best commercially available technology ...." H.R. 4 (§6503(a)(2)) also requires that this program be done "in a manner that ensures the receipt of fair market value by the public for the mineral resources to be leased." It is unclear how the two goals of environmental protection and of fair market value relate to each other (e.g., if environmental restrictions might make some fields uneconomic). H.R. 4 (§6506(a)(3) and (5)) requires lessees to be responsible and liable for reclamation of lands within the Coastal Plain to support pre-leasing uses or to a higher use approved by the Secretary. There are requirements for mitigation, development of regulations and other measures to protect the environment. These include prohibitions on public access to service roads and other transportation restrictions. Other provisions may also affect environmental protection. H.R. 770 and S. 411 would designate the area as wilderness, as discussed below.

The Size of the Footprint – Federal Lands. H.R. 4 (§6507(d)(9)) provides for consolidation of leasing operations; among other things, consolidation would tend to reduce environmental impacts of development. H.R. 4 (§6507(a)(3)) would further require, "consistent with the provisions of section 6503" (which include ensuring receipt of fair market value), that the Secretary administer the leasing program to "ensure that the maximum amount of surface acreage covered by production and support facilities, including airstrips and any areas covered by gravel berms or piers for the support of pipelines, does not exceed 2,000 acres on the Coastal Plain." A floor amendment to H.R. 4 with this acreage restriction was passed on August 1, 2001(yeas 228, nays 201; Roll Call No. 316). The terms used have not been defined in the bill (nor discussed in the committee report), and therefore the full set of structures falling under the restriction is arguable (*e.g.*, whether roads, gravel mines, and structures on Native lands would be included under this provision). Floor debate focused on the extent to which the facilities covered in the amendment would be widely distributed around the Refuge. In this light, it is noteworthy that one single compact facility of 2,000 acres (3.1 square miles) would not permit full development of the 1002 area, since current technology under optimum circumstances permits directional drilling at most 7 miles from the wellhead. The result would be that at most about 11% of the Coastal Plain could be developed. Instead, full development of the 1002 area would require that facilities (even if limited to 2,000 acres total) be more widely dispersed around the Coastal Plain. Also, the acreage limitation appears not to apply to Native lands.

Native Lands. The Alaska Native Claims Settlement Act (ANCSA) of 1971 resolved aboriginal claims against the United States by (among other things) creating Village Corporations that could select lands to which they held the surface estate, and Regional Corporations that could select surface and subsurface rights as well. The surface lands

(originally approximately three townships) selected by Kaktovik Inupiat Village (KIC) are along the coastal plain of ANWR (but were administratively excluded from being considered as within the "1002 Coastal Plain"). These lands and a fourth township that is within the defined Coastal Plain (totaling approximately 92,000 acres) are all within the Refuge and subject to regulations of the Refuge. The Arctic Slope Regional Corporation (ASRC) obtained subsurface rights beneath the KIC lands pursuant to a 1983 land exchange agreement. In addition, there are currently more than 10,000 acres of conveyed and individually owned Native allotments in the area of the Refuge that are not subject to Refuge regulations.

H.R. 4 would repeal the ANILCA prohibition on oil and gas development. Once oil and gas development is authorized for the federal lands in the Refuge, development can occur on the more than 100,000 acres of Native lands, arguably free of any acreage limitation applying to development on the federal lands. The extent to which the Native lands could be regulated to protect the environment is uncertain, given the status of allotments and some of the language in the 1983 Agreement with ASRC. After the cloture vote on S.Amdt. 3132 on April 18, 2002, Senator Stevens publically stated his intent to offer an amendment to open Native lands in this part of the Refuge to energy development, but subsequently decided not to do so.

Revenue Disposition. Another issue that has arisen during debates over leasing in the ANWR is that of disposition of possible revenues – whether Congress may validly provide for a disposition of revenues formula other than the 90/10 percent split mentioned in the Alaska Statehood Act. A court in *Alaska v. United States* (35 Fed. Cl. 685, 701 (1996) seems to have indicated that the language in the Statehood Act means that Alaska is to be treated like other states under the Mineral Leasing Act (MLA), which contains (basically) a 90/10 split. However, Congress can establish a non-MLA leasing regimen – for example, the separate leasing arrangements that govern the National Petroleum Reserve-Alaska – where the revenue sharing formula is 50/50.

Several sections of H.R. 4 relate to revenues. Section 6512 would provide that 50% of adjusted revenues be paid to Alaska. Then 50% of revenues from bonus payments go into a Renewable Energy Technology Investment Fund; and 50% from rents and royalties go into a Royalties Conservation Fund. It is not clear whether the basis for the shared revenues is to be gross or net receipts. More fundamentally, under §6503(a), the Secretary is to establish and implement a leasing program *under the Mineral Leasing Act,* yet §6512 directs a revenue sharing program different from that in the MLA. Establishing a leasing program under the MLA, yet providing for a different revenue disposition may again raise validity questions. If the alternative disposition were struck down and the revenue provisions were determined to be severable, it is possible that Alaska could receive 90% of the revenues from ANWR.

Project Labor Agreements. A recurring issue in federal and federally-funded projects is whether project owners or contractors effectively should be required, by "agreement," to use union workers. Project labor agreements (PLAs) are agreements between a project owner or main contractor and the union(s) representing the craft workers for a particular project that establish the terms and conditions of work that will apply for the particular project. The agreement may also specify a source (such as a union hiring hall) to supply the craft workers for the project. Typically, the agreement is binding on all contractors and subcontractors working on the project, and specifies wage rates and benefits, discusses procedures for resolving labor and jurisdictional disputes, and includes a no-strike clause. Proponents argue that PLAs ensure a reliable, efficient labor source and help keep

costs down. Opponents contend that PLAs inflate project costs and decrease competition. There is little independent information and data to sort out these conflicting assertions and demonstrate whether PLAs contribute to lower or higher project costs. Construction and other unions and their supporters strongly favor PLAs because they believe that PLAs help ensure access for union members to federal and federally funded projects. Nonunion firms and their supporters believe that PLAs unfairly restrict their access to those projects.

H.R. 4 (§6506) directs the Secretary to require lessees "to negotiate to obtain a project labor agreement." The Secretary would do so "recognizing the Government's proprietary interest in labor stability and the ability of construction labor and management to meet the particular needs and conditions of projects to be developed ...." In §714 of the Senate-passed version of H.R. 4, the Senate "urges" the sponsors of any natural gas pipeline project "to negotiate a project labor agreement to expedite construction of the pipeline."

Oil Export Restrictions. Export of North Slope oil in general, and any ANWR oil in particular, has been an issue, beginning at least with the authorization of the TransAlaska Pipeline and continuing into the current ANWR debate. Much of the pipeline's route is on federal lands and the Mineral Leasing Act of 1920 prohibits export of oil transported through pipelines granted rights-of-way over federal lands (16 U.S.C. 185(u)). The Trans-Alaska Pipeline Authorization Act (P.L. 93-153, 87 Stat. 584, 43 U.S.C. 1651 *et seq*.), signed November 16, 1973, specified that oil shipped through it could be exported only under very restrictive conditions. Subsequent legislation strengthened the export restrictions further.[4] Exports of North Slope oil became effectively banned. Oil began to be shipped through the pipeline in increasing amounts as North Slope oilfield development grew. With exports effectively banned, much of North Slope oil went to West Coast destinations; the rest was shipped to the Gulf Coast via the Panama Canal or overland across the isthmus. In the early and mid-1990s, the combination of Californian and federal offshore production, North Slope oil, and imports resulted in such large quantities relative to demand that crude oil prices in California fell below those elsewhere in the United States, eliciting complaints from Californian and North Slope producers. By 1995, three or four years of low world oil prices and relative calm in the Mideast had reduced concern about petroleum.

However, market forces eventually created pressure to change the law. On November 28, 1995, P.L. 104-58 (109 Stat. 557) was enacted, Title II of which amended the Mineral Leasing Act to provide that oil transported through the Pipeline may be exported unless the President finds, after considering stated criteria, that it is *not* in the national interest. The President may impose terms and conditions; and authority to export may be modified or revoked. Beginning with 36,000 bbl/d in 1996, ANS exports rose to a peak of 74,000 bbl/d in 1999, representing 7% of North Slope production. ANS oil exports ceased voluntarily in May 2000.

H.R. 4, §6506 (a)(8)would require the prohibition of the export of oil produced under a lease in the 1002 Area as a condition of a lease.

NEPA Compliance. The National Environmental Policy Act (NEPA) requires the preparation of an environmental impact statement (EIS) to examine the effects of major

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[4] The Energy Policy and Conservation Act of 1975 (P.L. 94-163), the 1977 amendments to the Export Administration Act (P.L. 95-52 and P.L. 95-223), and the Export Administration Act of 1979 (P.L. 96-72), which replaced the Export Administration Act of 1969.

federal actions on the environment. The last full EIS examining the effects of leasing development in ANWR was completed in 1987 and some observers assert that a new EIS is needed to support development now. Both bills address the issue.

Section 6503(c) of H.R. 4 deems the 1987 EIS adequate with respect to actions by the Secretary to develop leasing regulations, yet requires the Secretary to prepare an EIS with respect to other actions, some of which might usually require only a (shorter) "environmental assessment." Consideration of alternatives is to be limited to two choices, a preferred option and a "single leasing alternative." (Generally, an EIS analyzes several alternatives, including a "no action" alternative.)

Compatibility with Refuge Purposes. Under current law for the management of national wildlife refuges (16 U.S.C. §668dd), an activity may be allowed in a refuge only if it is compatible with the purposes of the particular Refuge and with those of the Refuge System as a whole. Section 6503(c) of H.R. 4 states that the oil and gas leasing program and activities in the coastal plain are deemed to be compatible with the purposes for which the ANWR was established and that no further findings or decisions are required to implement this determination. This language appears to answer the compatibility question and to eliminate the usual compatibility determination processes. The general statement that leasing "activities" are compatible arguably encompasses necessary support activities such as construction and operation of port facilities, staging areas, personnel centers, etc.

Judicial Review. H.R. 4 contemplates prompt action to put a leasing program in place and have sections on expedited judicial review. H.R. 4 requires that complaints be filed within 90 days. Sections 6508(a)(1) and (a)(2) of H.R. 4 appear to contradict each other as to where suits are to be filed and it is possible part of a sentence may have been omitted. H.R. 4 (§6508(a)(3)) would also limit the scope of review by stating that review of a Secretarial decision, including environmental analyses, shall be limited to whether the Secretary complies with the terms of Division F of H.R. 4, be based on the administrative record, and that the Secretary's analysis of environmental effects is "presumed to be correct unless shown otherwise by clear and convincing evidence to the contrary." This standard in this context arguably would make overturning a decision more difficult.

Special Areas. Some have raised the possibility of setting aside certain special areas described in the FLEIS for their ecological or cultural values. This could be done either by designating the areas specifically in legislation, or by authorizing the Secretary to set aside areas to be selected after enactment. Development of such areas could be forbidden and/or surface occupancy could be limited. H.R. 4 (§6503(e)) allows the Secretary to set aside up to 45,000 acres of special areas, and names one specific area to be included in which leases, if permitted, would forbid surface occupancy. The FLEIS identified four special areas which together total more than 52,000 acres, so the Secretary would be required to select among these areas or any others that may seem significant. H.R. 770 and S. 411 would designate the entire 1002 area as wilderness.

Non-Development Options. Several options are available to Congress that would either postpone or forbid development, unless Congress were later to change the law. These options are allowing exploration only, designating the 1002 area as wilderness, and taking no action.

Exploration Only. Some have argued that the 1002 area should be opened to exploration first, before a decision is made on whether to proceed to leasing. Those with this

view hold that with greater certainty about the presence or absence of energy resources, a better decision could be made about whether to open the coastal plain for full leasing. This idea has had relatively little support over the years. For those opposed to energy development, the reasons are fairly clear: if exploration results in no or insufficient economic discoveries, any damage from exploration would remain. If there were economic discoveries, support for further development might be unstoppable. Those who support development see unacceptable risks in such a proposal. First, who would be charged with carrying out exploration, who would pay for it, and to whom would the results be available? Second, if no economic discoveries are made, would that be because the "best" places (in the eyes of whatever observer) were not examined? Third, might any small discoveries become economic in the future? Fourth, if discoveries did occur, could industry still be foreclosed from development, or might sparse but promising data elevate bidding to unreasonable levels? Fifth, if exploration is authorized, what provisions should pertain to Native lands? In short, various advocates see insufficient gain from such a proposal. While an exploration bill has been mentioned in the past, none has been introduced in the 107th Congress.

Wilderness Designation. Energy development is not permitted in wilderness areas, unless there are pre-existing rights or unless Congress specifically allows it or later reverses the designation. Development of the surface and subsurface holdings of Native corporations would be precluded inside wilderness boundaries (though compensation might be owed). It would also preserve existing recreational opportunities and jobs, as well as the existing level of protection of subsistence resources, including the Porcupine Caribou Herd. H.R. 770 and S.411 would designate the 1002 area as wilderness.

Presidential Certification. Under the two Senate amendments to S. 517 (which were ultimately rejected by the Senate), the leasing provisions would have taken effect upon a determination and certification by the President that development of the Coastal Plain is in the national economic and security interests of the United States. This determination and certification were to be in the sole discretion of the President and are not reviewable. This option has not been raised in other bills.

No Action. Because current law prohibits development unless Congress acts, this option also prevents energy development. Those supporting delay often argue that not enough is known about either the probability of discoveries or about the environmental impact if development is permitted. Others argue that oil deposits should be saved for an unspecified "right time."

LEGISLATION

H.R. 4 (Tauzin)

Division F, Title V, contains the provisions of H.R. 2436, with the inclusion of a new provision for a 50:50 federal:state revenue split. Introduced July 27, 2001; referred to Committees on Energy and Commerce, Science, Ways and Means, Resources, Education and the Workforce, Transportation and Infrastructure, the Budget, and Financial Services. August 1, 2001, House passed Sununu amendment to limit specified surface development to 2,000 acres (yeas 228, nays 201; Roll Call No. 316) and defeated Markey-Johnson (CT) amendment to strike Title V defeated (yeas 206, nays 223; Roll Call No. 317). Passed House August 2, 2001 (yeas 240, nays 189; Roll Call No. 320). Senate struck all after enacting clause and substituted text of S. 517 (amended); passed Senate April 25, 2002 (yeas 88, nays 11, Roll Call No. 94). Senate appointed conferees May 1, 2002.

H.R. 39 (D. Young)

Repeals current prohibition against ANWR leasing; directs Secretary to establish competitive oil and gas leasing program; specifies that the 1987 FLEIS is sufficient for compliance with the National Environmental Policy Act; authorizes set-asides up to 45,000 acres of Special Areas that restrict surface occupancy; sets minimum for royalty payments and for tract sizes; and for other purposes. Introduced January 3, 2001; referred to Committee on Resources.

H.R. 770 (Markey)

Designates Arctic coastal plain of ANWR as wilderness. Introduced February 28, 2001; referred to Committee on Resources.

H.R. 2436 (Hansen)

Title V repeals current prohibition against ANWR leasing; directs Secretary to establish competitive oil and gas leasing program; specifies that the 1987 FLEIS is sufficient for compliance with the National Environmental Policy Act; authorizes set-asides up to 45,000 acres of Special Areas that restrict surface occupancy; sets minimum acreage for the first lease sale and minimum royalty payments; prohibits ANWR oil export; specifies project labor agreements; and for other purposes. Introduced July 10, 2001; referred to Committee on Resources and on Energy and Commerce. Reported (amended) by Resources on July 25 (H.Rept. 107-160, Part I) and discharged by Energy and Commerce on July 25, 2001. Provisions incorporated into H.R. 4.

S. 388 (Murkowski)

Title V opens the 1002 area to energy leasing; provides for the timing and size of lease sales; specifies that the 1987 FLEIS is sufficient for compliance with the National Environmental Policy Act; requires posting of bonds for reclamation; requires expedited judicial review; authorizes set-asides up to 45,000 acres of Special Areas that restrict surface occupancy; provides for a 50:50 revenue split with the State; requires on-site inspections, provides for use of any federal revenues; and other purposes. Introduced February 26, 2001; referred to Committee on Energy and Natural Resources.

S. 411 (Lieberman)

Designates Arctic coastal plain of ANWR as wilderness. Introduced February 28, 2001; referred to Committee on Environment and Public Works.

S. 517 (Bingaman)

Authorizes a program for technology transfer in the Department of Energy. Introduced March 12, 2001; referred to Committee on Energy and Natural Resources. Reported June 6, 2001 (S.Rept. 107-30). February 15, 2002, laid before Senate by unanimous consent. February 15, 2002, S.Amdt. 2917 (Daschle) proposed; authorizes an omnibus energy program. S.Amdt. 3132 (Murkowski) and S.Amdt. 3133 (Stevens) would open the Refuge to energy development; filed April 16, 2002; S.Amdt. 3133 failed cloture motion (36 yeas to 64 nays, Roll call no. 70) and was withdrawn, April 18, 2002. S.Amdt. 3132 failed cloture motion (46 yeas to 54 nays, Roll call no. 71) on April 18, 2002. A cloture motion was filed on S.517 on April 18, 2002; cloture invoked April 23 (yeas 86, nays 13, Roll call no. 77). Senate incorporated this measure in H.R.4 as an amendment, April 25, 2002.

S. 1766 (Daschle)

Alters national energy programs in a variety of ways; lacks provisions to open ANWR. Introduced Dec. 5, 2001; not referred to Committee.

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