

WP22-07 Executive Summary

Interagency Staff Committee Comments Cont.	Council submitted this proposal because of concerns brought to them by the affected Federally-qualified subsistence users in Angoon about not meeting subsistence needs for deer. The proposal review process allowed them to review the available data and hear testimony from all affected users of the resources. During the meeting, they acknowledged that the data in the State reporting system used to measure effort does not reflect success in subsistence hunting because subsistence hunting of deer is opportunistic and users generally only report when they are successful. They crafted a modification in area and season that limits the impacts to the non-federally qualified users and addresses the needs of subsistence users.
ADF&G Comments	Oppose Proposal WP22-07
Written Public Comments	57 oppose, 1 neutral
Notes	<p>This is an executive summary from the Proposal WP22-07 analysis, which was included in the Federal Subsistence Board April 2022 meeting book. The following analysis has been updated and revised based on the Board's deferral of this proposal at their April 2022 meeting.</p> <p>The Southeast Council's recommendation has been maintained at the end of this analysis for reference. ADF&G's full comments and all of the written public comments can be found in the April 2022 version of the analysis on the Office of Subsistence Management website at: https://www.doi.gov/subsistence/wildlife.</p>

STAFF ANALYSIS
WP22-07

ISSUES

Wildlife Proposal WP22-07, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests that Federal public lands of Admiralty Island draining into Chatham Strait between Point Marsden and Point Gardner in Unit 4 be closed to deer hunting Sept. 15 – Nov. 30, except by Federally qualified subsistence users.

DISCUSSION

The proponent states that it recently became more challenging for subsistence hunters in Angoon to harvest sufficient deer to meet their subsistence needs due to increased hunting pressure from non-Federally qualified users. They state that regulatory change is needed to protect the deer population from further depletion and increase opportunity for Federally qualified subsistence users.

Existing Federal Regulation

Unit 4 - Deer

Unit 4 — 6 deer; however, female deer may be taken only from Sept. 15 – Jan. 31. Aug. 1 – Jan. 31

Proposed Federal Regulation

Unit 4 - Deer

Unit 4 — 6 deer; however, female deer may be taken only from Sept. 15 – Jan. 31. Aug. 1 – Jan. 31

Federal public lands of Admiralty Island draining into Chatham Strait between Point Marsden and Point Gardner are closed to deer hunting Sept. 15 – Nov. 30, except by Federally qualified subsistence users hunting under these regulations.

Existing State Regulation

Unit 4 - Deer

Chichagof Island east of Port Frederick and north of Tenakee Inlet

<i>Residents and Nonresidents - 3 deer total</i>	<i>Bucks</i>	<i>HT</i>	<i>Aug. 1 - Sept. 14</i>
	<i>Any deer</i>	<i>HT</i>	<i>Sept. 15 - Dec. 31</i>

Remainder

<i>Residents and Non-residents - 6 deer total</i>	<i>Bucks</i>	<i>HT</i>	<i>Aug. 1 - Sept. 14</i>
	<i>Any deer</i>	<i>HT</i>	<i>Sept. 15 - Dec. 31</i>

Extent of Federal Public Lands

Unit 4 is comprised of approximately 96% Federal Public Lands, of which of 99% are U.S. Forest Service (USFS) managed lands and less than 1% National Park Service or U.S. Fish and Wildlife Service managed lands (**Figure 1**). It consists primarily of Admiralty, Baranof, and Chichagof Islands, along with some smaller adjacent islands.

Most of the area addressed in this proposal is within the Admiralty Island National Monument and the Kootznoowoo Wilderness. The most notable non-Federal land holdings are the area immediately surrounding the village of Angoon, and a strip of land surrounding most of Mitchell, Kanalku, and Favorite Bays, where the Kootznoowoo Corporation manages lands within 660 feet of tidewater (Alaska National Interest Lands Conservation Act, Section 506(a)(3)(c)).

Customary and Traditional Use Determination

Rural residents of Units 1, 2, 3, 4 and 5 have a customary and traditional use determination for deer in Unit 4.

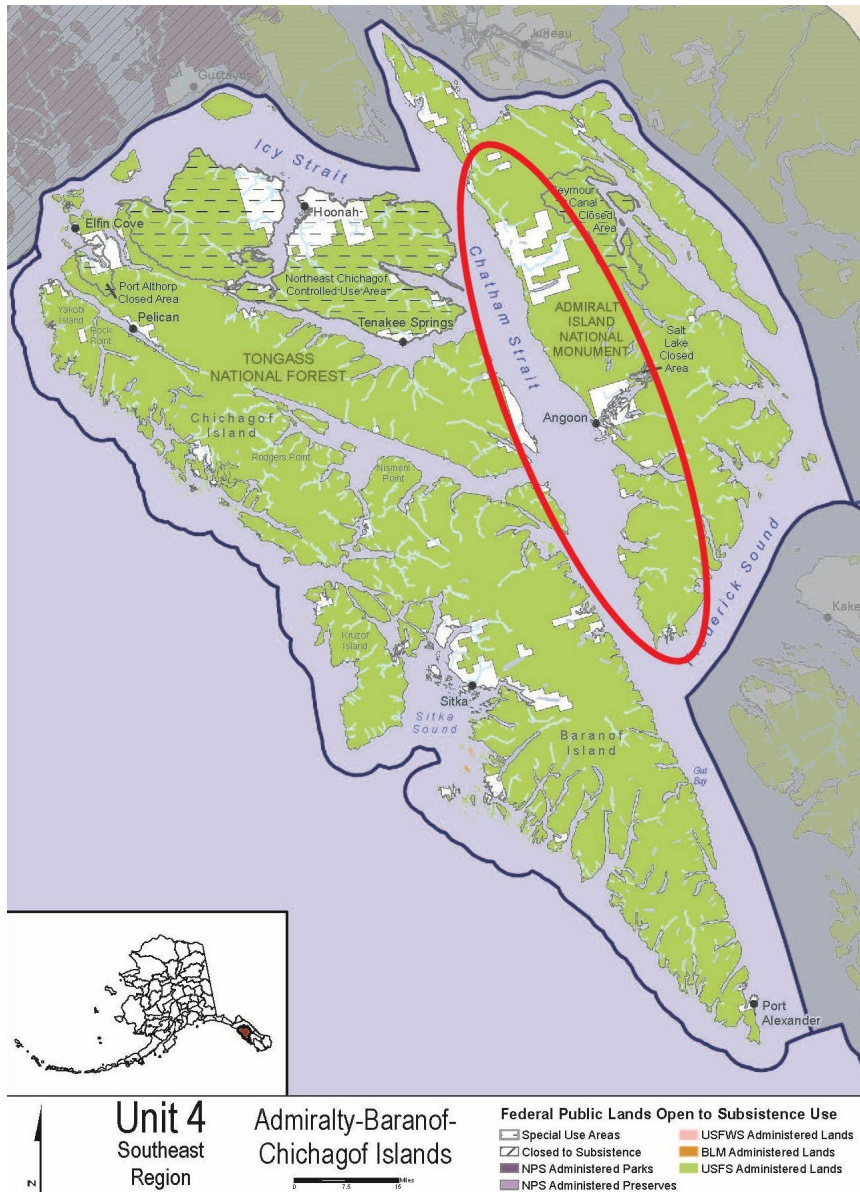


Figure 1. Unit 4 map with proposal analysis area encircled in red.

Regulatory History

Except for the 1992/93 and 1993/94 regulatory years, the Federal harvest season for deer in Unit 4 has been from August 1 to January 31, with a harvest limit of six deer. Harvest of antlerless deer has been permitted from September 15 to January 31. In 1992, in response to several deep snow winters, the northern Baranof Island area harvest limit was reduced to four deer, the season was shortened to December 31, and the area closed to non-Federally qualified users. In 1993, the northeast Chichagof Island area was closed to non-Federally qualified users after November 1.

Since 1992, the State season has been from August 1 through December 31 with the antlerless deer season from September 15 through December 31. For Chichagof Island east of Port Frederick and north of Tenakee Inlet including all drainages into Tenakee Inlet, the harvest limit has been three deer while the harvest limit for the remainder of Unit 4 has been four deer. From the late 1980s through 1991, the State general season in the northeast Chichagof area had a harvest limit of three deer. However, the State subsistence season allowed six deer and the season was extended from August 1 until January 31. In 2019, the Board of Game increased the State bag limit from 4 to 6 deer in the Unit 4 remainder area, excluding Chichagof Island east of Port Frederick and north of Tenakee Inlet.

There were three regulatory proposals during the 2010 Federal subsistence wildlife cycle addressing Unit 4 deer regulations following the steep population drop that occurred during the prior harsh winters. These proposals analyzed a variety of timing and harvest restrictions to protect the deer population and subsistence priority. None of the proposals were adopted. Instead, Federal and State managers closed the doe harvest season in the Northeast Chichagof Controlled Use Area (NECCUA) for the 2010 regulatory year and portions of the 2011 and 2012 regulatory years to help the deer population recover from deep-snow winters of 2006 through 2009.

Proposal WP12-06 sought to rescind the January Federal deer season in Unit 4 but was rejected by the Federal Subsistence Board because it would not address a conservation concern and the January season is important for Federally qualified subsistence users. There have been no Federal regulatory changes since 2012.

In 2019, the Alaska Board of Game (BOG) adopted Proposal 18 to increase the deer harvest limit in Unit 4, remainder to six deer.

Current Events

Three other proposals concerning deer in Unit 4 were submitted for the 2022 wildlife regulatory cycle. Proposal WP22-08, submitted by the Southeast Council, requests that the Northeast Chichagof Controlled Use Area (NECCUA) annual deer harvest limit for non-Federally qualified users be reduced to two male deer.

Proposal WP22-09, also submitted by the Southeast Council, requested that Federal public lands draining into Lisianski Inlet, Lisianski Strait, and Stag Bay south of the latitude of Mite Cove (58° 4' N) and north of the latitude of Lost Cove (57° 52' N) be closed to deer hunting Oct. 15 – Dec. 31, except by Federally qualified subsistence users.

Proposal WP22-10, submitted by Patricia Phillips of Pelican, requests that the deer harvest limit for non-Federally qualified users in Lisianski Inlet and Lisianski Strait be reduced to 4 deer.

At its April 2020 meeting, the Board rejected WP22-09 as part of the consensus agenda. The Board deferred Proposals WP22-07, -08, and -10 to its winter 2023 regulatory meeting, requesting user groups to work together to come up with better solutions.

State Proposals 10 and 11 request reducing the harvest limit to four deer in Unit 4, remainder and will be considered by the BOG at their January 2023 meeting (ADF&G 2022c). The proponents for both proposals list the possible closure of Federal lands to deer hunting by non-Federally qualified users as a factor in putting forth their proposals. Both proponents suggest that a harvest limit reduction will help reduce user conflicts in Unit 4 and avoid a closure of Federal public lands to non-Federally qualified users.

Open Meeting Summary

In its deferral of the Unit 4 deer proposals, the Board asked user groups to work together to come up with better solutions. In response to this request, the Office of Subsistence Management (OSM) organized an open meeting in August 2022 to gather more information on these proposals and to facilitate discussion amongst user groups. The press release announcing the meeting included several questions for participants to consider to help focus and guide the discussion. Participants were asked to discuss their recent deer hunting experiences in Unit 4, their plans for future harvest, and how the proposals could affect them. Additionally, participants were asked if they had specific recommendations on these proposals or if they had any other suggestions for the Board that would help resolve these issues. The meeting was formatted to consider each of the three proposals separately; however, participants were welcome to provide comments on any proposal throughout the meeting.

OSM, USFS, and ADF&G staff as well as members of the public participated in the meeting. Eleven members of the public provided comments, and all commenters either opposed the proposals or did not give an explicit position. A common theme mentioned by nine of the public participants was that they never experienced any difficulties harvesting deer in Unit 4, including several participants with 30-50 years of experience hunting deer in Unit 4. Several participants emphasized that there are plenty of deer for everyone in Unit 4 and that the data as well as local observations indicate a healthy, abundant deer population. One participant further stated that the available data does not support a closure for either conservation or continuation of subsistence, and that non-Federally qualified users are not the problem.

Several participants explained that snow drives deer down to the beaches, so the lack of snow during the past several winters may have caused a perceived decline in the deer population since deer were not concentrated on the beaches, but were spread-out across the interior of the islands, requiring more effort to harvest them. Participant harvest varied widely from one to six deer per year.

Participants also commented on potential impacts of these proposals, including decreased hunting opportunity for non-Federally qualified users. Two participants stressed that if these areas are closed, then non-Federally qualified users will have to hunt the beaches, which would likely result in more user conflicts since the beaches are a popular hunting area for subsistence users. Other participants stated that an unintended consequence of these proposed closures is that they would prevent family members who have moved to non-rural areas from returning to their traditional areas to hunt with relatives. The president of Territorial Sportsmen expressed concern over the precedent adoption of these closures would set for potential closures in other areas since Unit 4 has the highest deer population in the state.

ADF&G maintained its opposition to these proposals, stating that these closures do not meet requirements

set forth in ANILCA. ADF&G also provided updates on 2022 biological surveys and 2021 harvest reports, which are detailed elsewhere in this analysis (see Biological Background and Harvest History sections).

Some discussion occurred about the proposal process and how the Board considers differing recommendations from OSM, ADF&G, and the Council. The USFS Board member stated that he appreciated this meeting to gather more information and was listening to everyone's comments to inform his decision on these proposals.

In regards to Proposal WP22-07, a resident of Juneau with family ties in Angoon, stated that his family has traditionally hunted between Point Marsden and Point Gardner for over 40 years. He personally has witnessed only a few non-locals hunting on the west side of Admiralty Island, usually people from Tenakee Springs and once in a while people from Sitka or Kake. Earlier in August, he had hunted in the alpine south of Angoon and saw around 28 deer in a small area.

In regards to Proposal WP22-10, two Pelican residents stated that accessing Pelican was a logistical nightmare due to high costs, finding a boat or plane to get there, and the risk of getting weathered in. Therefore, one stated he didn't think many non-Federally qualified hunters would ever hunt around Pelican, although the hunting was fantastic.

A 50-year resident of Pelican opined that low salmon returns in recent years resulted in higher bear predation of deer, causing deer to stay in the alpine areas and avoid the beaches. This led to perceived declines in the deer population and the submittal of Proposal WP22-10. However, she believes the deer population has since rebounded, while the bear population has declined. She further stated that high speed outboards can disturb the deer, causing them to be skittish and stay inside the timber. She also outlined the different deer hunting areas: along the beach, in the forest, and in the alpine. Hunting along the beaches is the least strenuous method of harvesting deer, and residents prefer hunting closer to town if deer are available. Deer is a vital food source for Pelican residents, especially because freighting meat into the community is so expensive. She also mentioned that participation by Pelican residents in this meeting was low because it was peak fishing season.

Alternative solutions provided by participants included submitting proposals to the BOG, developing a cultural training program, and taking a step back to look at the larger picture. Specifically, one participant mentioned that he had submitted a proposal to the BOG to lower the harvest limit for Unit 4 deer under State regulations from six deer back down to four deer. Another participant suggested closing Unit 4 to non-resident deer hunters; dividing Unit 4 into three subunits: Admiralty, Baranof, and Chichagof, since the landscapes are different; and increasing the locking-tag fee to \$500 per tag. However, ADF&G clarified that increasing tag fees is a legislative function, requiring a statute change. Another person mentioned that an aging population could be contributing to decreased hunting efforts by Federally qualified subsistence users because the younger generation is not interested in hunting. To that end, he suggested the Board, in cooperation with knowledgeable hunters, develop a cultural training program to help inject deer hunting back into the subsistence lifestyle. A representative of the Juneau Douglas Fish and Game Advisory Committee emphasized their willingness to work with federally qualified subsistence

users and the Southeast Council to come up with alternative solutions through the state process.

Biological Background

Sitka black-tailed deer spend the winter and early spring at low elevation where less snow accumulates, and forests provide increased foraging opportunities. Fawning occurs in late May and early June as vegetation greens-up, providing abundant forage to meet the energetic needs of lactating does. Migratory deer follow the greening vegetation up to alpine for the summer. Resident deer remain at lower elevations. The breeding season, or rut, generally occurs in October through November and peaks in late November (ADF&G 2009). Wolves and black bears are not present in Unit 4, so the primary predator, besides humans, are brown bears. Brown bears are estimated to kill an amount of deer equal to 15%-20% of the annual total deer harvested by hunters (Mooney 2009). Unit 4 deer population levels fluctuate, primarily because of winter snow depths (Olson 1979).

ADF&G monitors deer abundance in Unit 4 using three methods: deer pellet counts, aerial alpine surveys, and harvest. For all three of these metrics, Unit 4 supports the highest numbers in the region. During the fall 2021 Southeast Council meeting, the ADF&G regional supervisor stated, “deer pellet densities in Unit 4, no matter where you do them, are always the highest in the region.” For the aerial alpine surveys, “Unit 4 has by far the highest deer counts,” measured as deer seen per hour. Additionally, “Unit 4 supports the highest deer harvest in the state” (SEARAC 2021b).

Habitat

Old-growth forests are considered primary deer winter range, in part because the complex canopy cover allows sufficient sunlight through for forage plants to grow but intercepts snow, making it easier for deer to move and forage during winters when deep snow hinders access to other habitats. Some areas of Unit 4 have been impacted by large scale changes in habitat, while the habitat is largely intact in other areas. Areas with substantial timber harvest, such as northeastern Chichagof and northwestern Baranof Islands, are expected to have lower long-term carrying capacity compared to pre-harvest conditions. Most of the area covered under this proposal is located in productive old-growth forests within Admiralty Island National Monument and Kootznoowoo Wilderness.

Population Information

McCoy (2017) outlines the limitations of estimating deer populations, while Bethune (2020) discusses the most recent deer population status in Unit 4. Overall, the deer population in Unit 4 has recovered from the mortality incurred during the severe winters of 2006-2008 and is probably reaching winter carrying capacity in some areas. Most recently, the heavy snowfall during the winter of 2021-22 led to concerns about possible heavy mortality. However, mortality surveys in the spring of 2022 found that there was not higher than normal winter mortality, and that the body condition of live deer was similar to that in previous years (Bethune 2022).

While no pellet surveys have been recently conducted in the proposal area, surveys in other portions of Unit 4 have shown increases from prior years (McCoy 2019). Pellet counts conducted in 2019 in Pybus

Bay, on the eastern side of Admiralty Island, increased by 106% from the previous survey in 1998, and surveys in other nearby Unit 4 areas (Pavlof Harbor and Kelp Bay) also indicated increasing populations.

ADF&G also conducts aerial surveys during summer in alpine habitat. Between 2014 and 2016, five aerial surveys were conducted on Admiralty Island with increasing results (**Figure 2**, Lowell and Valkenburg 2017). The metrics specific to Admiralty Island were highest of all survey areas in Unit 4 (**Figure 3**).

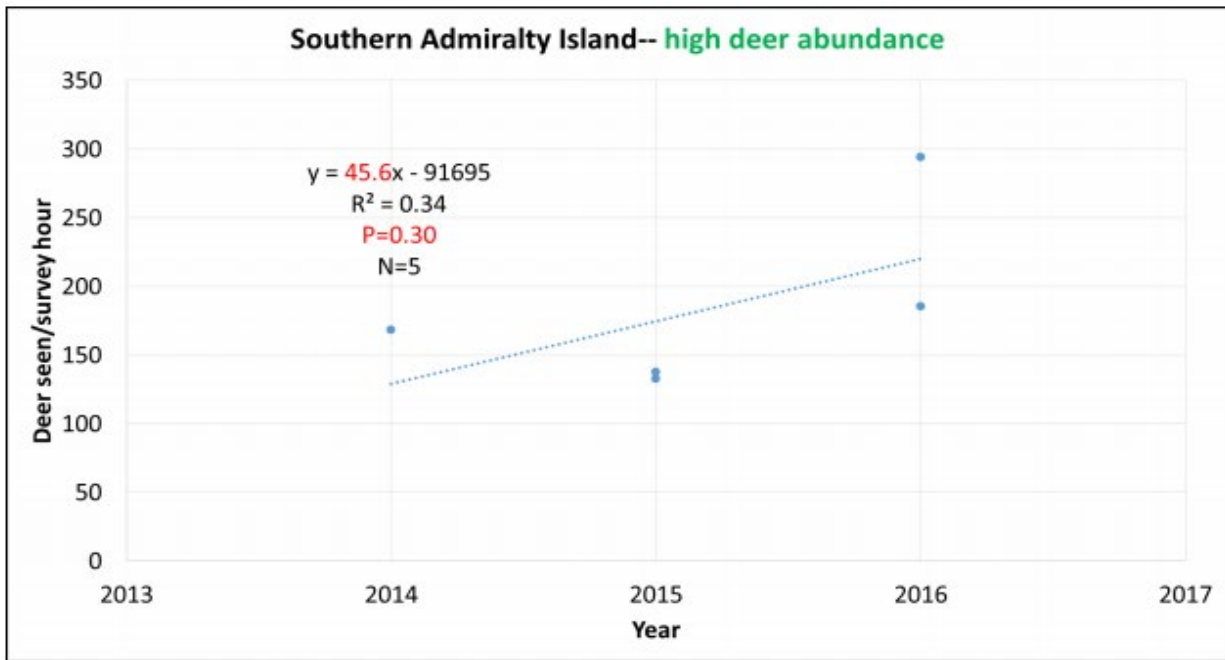


Figure 2. Number of deer observed during five aerial surveys on Admiralty Island. (Lowell and Valkenburg 2017).

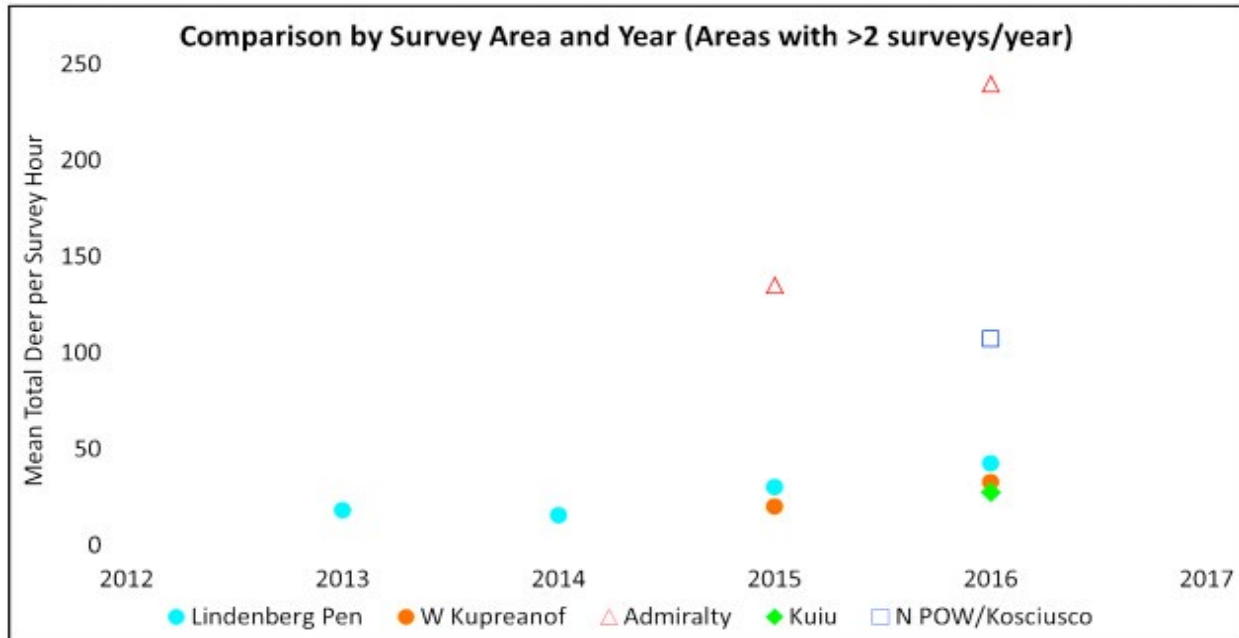


Figure 3. Average number of deer observed per hour during aerial alpine surveys in Southeast Alaska. (Lowell and Valkenburg 2017).

Cultural Practices and Traditional Knowledge

Angoon is a primarily Tlingit community of long standing located on the southwestern shore of Admiralty Island at the entrance to Kootznahoo Inlet about 55 miles east from Juneau, accessible only by floatplane or boat. An Alaska State ferry is scheduled to visit Angoon up to twice a week October through December and March through April, however, the ferry is occasionally canceled for various reasons. The ferry is not scheduled to visit Angoon from January through February (Juneau Empire 2022).

Most Angoon residents were born in the community or are from other Southeast Alaska towns (George and Kookesh 1982, Sill and Koster 2017). Angoon’s population has been declining since the mid-1990s (**Table 1**). Loss of commercial fishing permits, boats, and associated income likely contributed to the decline with people moving from the community in search of cash income. For example, in 1986 there were 162 commercial fishing permits issued to Angoon residents for all commercial fisheries, and in 2012 there were 17 permits issued. Other cash income opportunities such as in logging or tourism are not well-developed in Angoon. Commercial fishing has been the mainstay of the cash economy of Angoon Tlingit since the late 1800s (Sill and Koster 2017, ADLWD 2022).

Participation in the commercial seine fishery allowed Angoon fishermen the capability of traveling long distances safely and of harvesting various foods including while they were traveling to deliver their commercial catches to canneries. The cannery owned by Angoon burned down in 1961, and the fire was partly responsible for Angoon residents selling their seine boats because boat owners no longer had their own company to fish for, to extend credit, or a place to store and repair boats (George and Bosworth

1988). An Angoon resident described these changes,

In 1988 we had ferry service you could rely on. The price of food was reasonable. Every home in Angoon had a commercial permit so we were able to support ourselves with financial opportunity through fishing. We had food security because we could go out and rely on the resources our elders decided were here when we stopped in and decided this is where we're going to be (SEASRAC 2021b:335–336).

An increase in the hand troll fleet and the use of skiffs paralleled the decline of large seiners in the community and in the commercial fishing industry in Southeast Alaska. Loss of seiners and declines in fishing as an economic activity required a shift in subsistence harvest technologies to smaller boats making day trips. Small vessels for commercial fishing, mainly hand trolling, along with other work skiffs, are used extensively in the fall for hunting trips to destinations that are reached along the marine passages in all directions from Angoon (George and Bosworth 1988; SEASRAC 2021a, 2021b).

Angoon deer hunters have a long history of hunting Admiralty, Baranof, and Chichagof Islands, traveling farther in pursuit of deer than any other resource (Goldschmidt and Haas 2000). Angoon residents were taking many deer along west Chatham Strait and northwest Admiralty Island in close correspondence with years when canneries were operating in these areas, likely because Angoon commercial fishermen delivered their catches to canneries in these areas, were familiar with these areas, and took opportunities to hunt deer in these areas, either opportunistically whenever deer were observed or purposefully during the deer hunting season. Currently, Angoon hunters prefer to hunt on western Admiralty Island closer to their community.

Residents of Angoon participated in documenting their harvest and use of deer in the 1980s, 1990s, and 2010s (George and Kookesh 1982, George and Bosworth 1988, Sill and Koster 2017). For example, their estimated harvest based on household surveys was 454 deer in 1984, 474 deer in 1987, 282 deer in 1996, and 218 deer in 2012 (**Table 2**). The population of Angoon may be a factor in overall deer harvest during this period.

The average October live weight of adult Sitka black-tailed deer is about 80 pounds for does and 120 pounds for bucks with a 100-pound deer yielding about 35 pounds of meat (ADF&G 2022b).

In Angoon, hunting strategies align with the yearly cycle of deer (George and Kookesh 1982). Fawns are born in late spring in trees edging muskeg or beach. In summer, deer move into the alpine areas until the fall when they enter the mature forests. During winter, deer live in the forest below the snow line until heavy snows drive them down to the beaches where the forest fringe of old growth timber keeps the ground relatively snow free. Thus, Angoon residents describe using three hunting strategies depending on the season, deer habits, and weather: Alpine Hunt, Muskeg and Forest Hunt, and Beach Hunt. Beach hunting, however, is the dominant strategy and continues throughout the season. This hunting strategy may be more efficient than the others in terms of effort. Boats are used extensively in the fall for hunting trips to destinations that are reached along the marine passages in all directions from Angoon. The most common boat used is a 16 or 17 foot outboard motor skiff. A small skiff can negotiate intertidal areas while looking for deer. Also, skiffs may be pulled onto shore or anchored in shallow embayments while a

hunting party walks along the beach or inland. In addition to trips focused on deer hunting, hunters opportunistically hunt the beaches whenever travelling by boat along the coastline (George and Kookesh 1982; SEASRAC 2021a, 2021b). Where and when Angoon residents seek deer is influenced by the presence of deer, less competition from other hunters, proximity to Angoon, knowledge of the area, and beaches suitable for boat landing. Weather plays an important role in where and when they hunt because they are hunting primarily in skiffs instead of larger, safer seine boats once owned by most Angoon families. Snow is the most important factor, bringing deer to the beach, along with calm seas and visibility (George and Kookesh 1982).

Not everyone can afford the gas to search for deer in a wide area of shoreline. Hunters who can afford it seek deer further from the community leaving the local area for hunters who can't afford as much gas and have smaller boats and motors (Sill and Koster 2017; SEASRAC 2021a, 2021b).

It has been shown that recreational hunting for game is a strategy among some groups of hunters and is characterized by the ethics of "sport" and "gaming" (Wolfe and Ellanna 1983). This contrasts with the characteristics of subsistence hunting, which is premised on efficiency of effort (using the least amount of resources such as gas and time to be successful), taking only what is needed (below the harvest limit), respect for animals (for example, not shooting at them without careful consideration of success), and sharing. Sharing promotes future hunter success (Langdon and Worl 1981, Langdon 2021). Information collected during periodic house to house harvest surveys reveals a heavy reliance on sharing to distribute meat among Angoon residents, by half of households each survey year (ADF&G 2022a). "Tlingits in particular regard subsistence as an intricate and profound set of relationships with particular geographic settings where their social groups have dwelled historically. For them subsistence is *haa Kusteeyi*, 'our way of living,' 'real being,' and 'enriching existence,' and not 'the minimum (food, etc.) necessary to support life'" (Thornton 2008:117). For example, a local Angoon perspective is, "We've learned this from our father and our grandfathers, that we hunt these areas because there's always somewhere to hide from the weather in a small boat, and [these areas] have become important to us" (SEASRAC 2021b:386).

Another local Angoon perspective is that many non-local hunters are participating in recreation more than subsistence hunting. For example, one said "We don't do it for fun" (SEASRAC 2021a:20), and "You see a big boat towing several other boats and they're just out having a good time" (SEASRAC 2021a:20). A local perspective is that the mountain climbing necessary for Alpine hunting should be left to the more "sport-oriented," non-local hunters, revealing a local perspective that mountain climbing to reach Alpine areas is less efficient than hunting in lower elevations or along shorelines, and therefore, Alpine hunting is pursued primarily by non-local hunters seeking recreation as well as deer (SEASRAC 2021a, 2021b).

A local perspective is that Angoon residents have difficulty finding deer within Angoon's core subsistence area, mainly shoreline, around the community and that this is because of the presence of non-local hunters harvesting deer when they could be, instead, hunting further from the village. One said, "[Non-local hunters] go into a bay and eliminate all the deer in that bay. [Localized depletion of deer], you don't see in the data" (2021b:422). Additionally, there is concern that non-local hunters, including hunters primarily seeking bear, fire at deer making them shy from the shoreline and harder to locate, for example "You used to be able to drive up to a deer, get out of the boat within reasonable range and take

the deer. Now, you have to stop 400 or 500 yards away” (SESRAC 2021a:59), and “This is something my dad taught me, his dad taught him, and my mother’s father taught me: you shoot at a deer [and miss], you’re never going to see that deer again... That’s the nature of deer” (SEASRAC 2021b:397). Regarding competition with other hunters, one person said, “We don’t ask for anything but an opportunity to hunt in peace off the resources that our fathers and grandfathers decided was here when they settled here. We didn’t settle in Juneau, we didn’t settle anywhere else, we settled here” (SEASRAC 2021b:411).

Table 1. The population of Angoon from 1960 to 2020 based on the US Census (Source: ADLWD 2022).

Year:	1960	1970	1980	1990	2000	2010	2020
Population:	395	400	465	638	572	459	357

Table 2. The estimated harvest and use of deer by residents of Angoon based on household surveys. (Source: ADF&G 2022a)

Study year	Number of households interviewed	Percentage of households using deer	Estimated harvest	Lower harvest estimate	Upper harvest estimate	Per person harvest in pounds edible weight
1984	38	90%	454	283	625	58
1987	46	100%	474	330	618	73
1996	51	74%	370	282	458	51
2012	51	84%	218	147	289	51

Harvest History

The harvest data reported below is based on both mail-out surveys (pre-2011) and returned harvest reports (2011 and later) (ADF&G 2021, Bethune 2020, ADF&G 2022d). The overall average reporting rate is about 60-70%, but may be much lower in some small rural communities. The response rate may be even lower among hunters who don’t report unsuccessful hunts. To account for hunters who did not report, data are proportionally expanded by community size. Additionally, if the response rate is low within a community, ADF&G staff call hunters to ask about their hunting efforts and harvests in an effort to achieve a 60% reporting rate. As confidence intervals are not available for these data, harvest numbers should be considered estimates and used with caution. Trends observed, especially at larger scales, are more likely to be indicative of general population changes, however (SEARC 2021b).

Harvest data from 2000 through 2021 (ADF&G 2022d) were used to evaluate the deer harvest patterns and trends within the portion of western Admiralty Island addressed by the proposal (the “proposal area.”) Harvest and effort were grouped by Wildlife Analysis Area (WAA), which roughly correspond to major

watersheds or other distinct geographic areas. Since effort was calculated by WAA, individual hunters using multiple WAAs in a regulatory year may be counted multiple times and over-represented in calculations. The WAAs used to represent the proposal area for the purposes of this analysis are displayed in **Figure 4**.

About two-thirds of deer harvest and effort by Angoon residents occur in WAAs within the proposal area (**Table 3**). The Angoon area (4042) and Hood Bay/Chaik (4055) WAAs account for almost half of the total deer harvested by Angoon residents. Outside the proposal area, Pybus Bay (3939) is the most heavily used location. Conversely, Central Admiralty Lakes (4043) and Shee-Atika drainages (4044) account for the least (2%) of the total deer harvested by Angoon residents. The location of about 20% of the total reported harvest from Angoon residents could not be determined, and is unknown.

The amount of hunter effort in the proposal area, as measured by numbers of hunters and hunter-days, stayed relatively stable between 2000 and 2021 (**Figure 5, Figure 6**). Most of the effort is from non-Federally qualified users, mostly from Juneau, and represented 68% of the hunters and 72% of the hunter-days. The remaining 32% of hunters and 28% of the hunter-days are from Federally qualified subsistence users, the majority residing in Angoon.

Within the proposal area, Juneau residents comprised 61% of the hunter-days between 2000 and 2021, and Angoon residents comprised 21% (ADF&G 2022d). Nonresident effort is low, representing only 4% of the hunter days. Angoon is the only community within the proposal area, and about 65% of the deer hunting effort and harvest by Angoon residents occurs within the proposal area. Most of Angoon's remaining hunting effort and harvest takes place elsewhere on Admiralty Island or on the east coast of Chichagof and Baranof Islands, across Chatham Strait from Angoon.

Two measures were used to assess the success rate of hunters over this time period: days hunted per deer harvested, and deer harvested per hunter. Between 2000 and 2021, the number of days it took to harvest a deer was variable (**Figure 7**). Federally qualified subsistence users generally required fewer days to harvest a deer compared to non-Federally qualified users, however. In 2021, despite reports of favorable hunting conditions throughout Unit 4, there was a sharp increase in the number of days hunted per deer harvested for both Federally qualified and non-Federally qualified users.

The number of deer harvested per Federally qualified subsistence user declined between 2006 and 2009 but has remained relatively stable since then (**Figure 8**). Since 2009, the number of deer harvested per hunter has been roughly similar between Federally qualified and non-Federally qualified users. A caveat to keep in mind is that until 2019, the deer harvest limit under State regulations was four deer. In 2019, the State harvest limit increased to six deer.

The total number of deer harvested in the proposal area by both Federally qualified and non-Federally qualified users has varied over the years, likely due to variability in deer abundance (**Figure 9**). Most years, non-Federally qualified users harvested more deer from the proposal area due to the larger number hunters. Some of the variability in the harvest by Federally qualified subsistence users may be due to shifts in hunting locations. In recent years, the overall number of deer harvested by Angoon residents has remained relatively high, but a larger proportion has been taken from outside the proposal area, or from

unknown locations (**Figure 10**). Between 2012 and 2019, much of the harvest shifted out of the proposal area, but in 2020 and 2021 the majority of harvest was again within the proposal area.

The Southeast Alaska Subsistence Regional Advisory Council (SEASRAC) recommended adopting WP22-07 with modification to remove WAAs 4043 and 4044 from the proposal area (SEASRAC 2021b). These areas were identified as the ones used most by Juneau hunters and least by Angoon residents within the proposal area, and were removed to reduce the impact of the closure on non-Federally qualified users. Under the proposed modification, the amount of harvest and effort by non-Federally qualified hunters within the proposal area is decreased by about two-thirds (**Table 4**). The Central Admiralty Lakes (4043) WAA accounted for 44% of the hunter days and 25% of the harvest by non-Federally qualified users within the proposal area, and the Shee-Atika drainages (4044) accounted for 37% of the hunter days and 51% of the harvest by non-Federally qualified users within the proposal area (ADF&G 2021).

While complete data from recent hunting seasons is not available, deer harvest in Unit 4 during the 2021 regulatory year was higher than normal. An estimated total of 6,600 deer were harvested throughout Unit 4, about 1,000 more than the 10-year average. The heavy snows in November and December likely played a role, as deer were pushed to the beaches and made more available to hunters (Bethune 2022).

The State deer hunting season in the proposal area runs from August through December. Subsistence users hunting under Federal regulations are permitted to harvest deer during the month of January, as well. Most harvest occurs later in the season, as snow forces deer to lower elevations where they are easier to harvest. Nearly half (45%) of the harvest in Unit 4 occurs during the month of November; and 67% occurs from September through November (**Table 5**). Data are available on a monthly basis, so the proportion of deer taken before and after September 15 (the proposed start date of the seasonal closure) could not be calculated.



Figure 4. Wildlife Analysis Areas within the WP22-07 analysis area.

Table 3. Distribution of Unit 4 deer hunting effort and harvest by Angoon residents by Wildlife Analysis Area (WAA), 2000-2019 (ADF&G 2021).

Wildlife Analysis Area	Hunter days	Total harvest	Percent Days	Percent harvest
Within proposal area				
4041 WHITEWATER BAY, WILSON COVE	25.4	59.2	1%	3%
4042 ANGOON AREA	933.5	562.8	24%	27%
4043 CENTRAL ADMIRALTY LAKES	28.9	18.1	1%	1%
4044 SHEE-ATIKA DRAINAGES	66.3	22.8	2%	1%
4054 FISHERY, THAYER CREEKS	504.6	341.3	13%	16%
4055 HOOD BAY, CHAIK BAY DRAINAGES	962	369	25%	18%
Total within proposal area	2520.7	1373.2	65%	66%
Outside of proposal area				
3308 KOOK LAKE, SITKOH BAY, FALSE IS.	190.1	108.4	5%	5%
3315 CATHERINE ISLAND, LAKE EVA, HANUS BAY	157.9	72.8	4%	3%
3417 WEST COAST CHICHAGOF	22.6	18.1	1%	1%
3525 FRESHWATER BAY DRAINAGES	8.3	8.3	0%	0%
3526 NORTH SHORE TENAKEE INLET	31.9	0	1%	0%
3551 WHITESTONE HARBOR, FALSE BAY DRAINAGES	88.6	7.4	2%	0%
3731 KELP BAY-TAKATZ BAY	15.6	9.4	0%	0%
3733 WHALE BAY DRAINAGES, WILDERNESS COAST	5.4	5.4	0%	0%
3835 NORTHERN MANSFIELD PENIN.	6.2	6.2	0%	0%
3837 WHEELER, GREENS CREEKS DRAINAGES	24.7	24.7	1%	1%
3939 PYBUS BAY DRAINAGES	598.7	360.6	15%	17%
3940 PT. GARDNER, ELIZA HARBOR	53.8	33.6	1%	2%
4145 TIEDEMAN IS.-MOLE HARBOR AREA	69.7	30.6	2%	1%
4149 EAST SIDE GLASS PENIN.	4.1	0	0%	0%
4150 GRAND IS., OLIVER INLET, STINK CREEK	20.7	8.3	1%	0%
4222 PT. ADOLPHUS, MUD BAY AREA	52.6	26.3	1%	1%
Total outside proposal area	1350.9	720.1	35%	34%
Total (known harvest area)	3871.6	2093.3		
Unknown harvest area	875.9	516.2		

Table 4. Average annual effort (number of hunters, hunter days) and success (deer per hunter, days per deer, total harvest) of Federally qualified (FQU) and non-Federally qualified (NFQU) hunters in both the original and Southeast Council’s modified closure area as proposed in WP22-07, 2011-2019. (ADF&G 2021)

2011-2019 average		Proposal area	
		Original	Modified
Number of hunters	FQU	43.4	37.9
	NFQU	101.6	33.1
Hunter Days	FQU	110.9	88.3
	NFQU	397.3	119.5
Deer per hunter	FQU	1.16	1.45
	NFQU	1.38	1.35
Days per deer	FQU	1.57	1.53
	NFQU	3.53	2.06
Total harvest	FQU	58.9	53.1
	NFQU	112.4	45.1

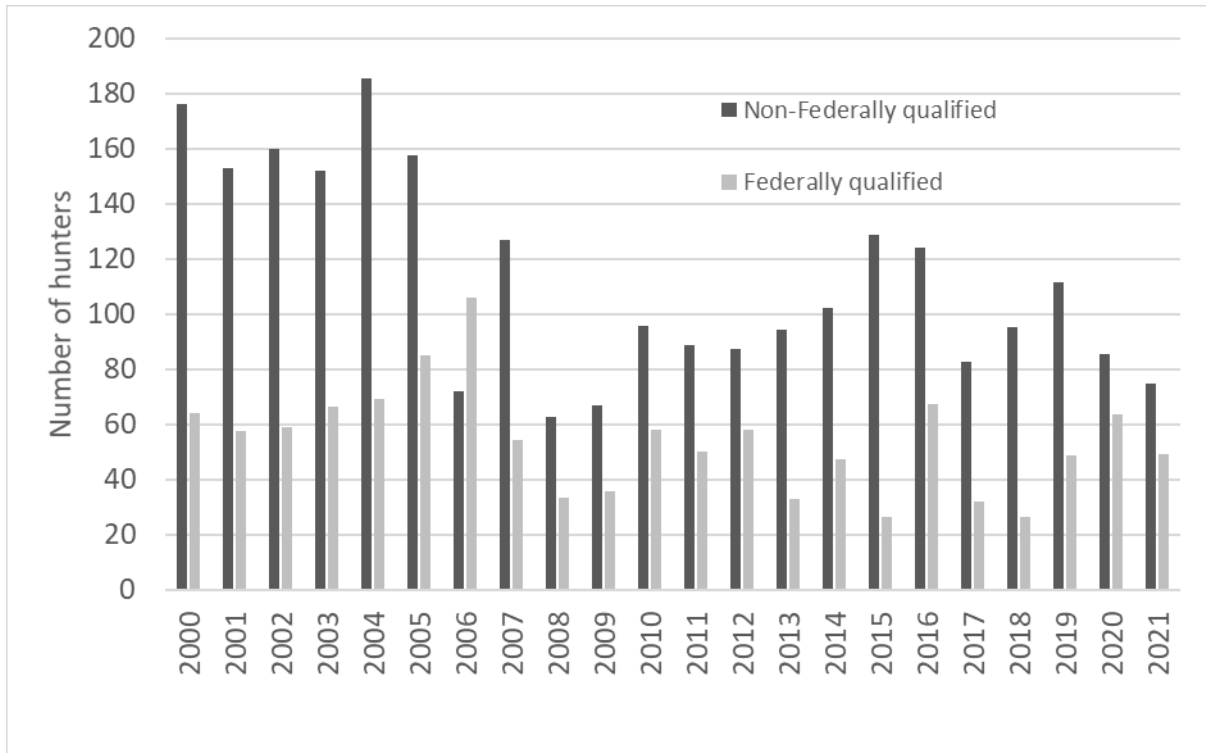


Figure 5. Number of Federally qualified and non-Federally qualified users using the proposal area, 2000-2021. (Source: ADF&G 2022d)

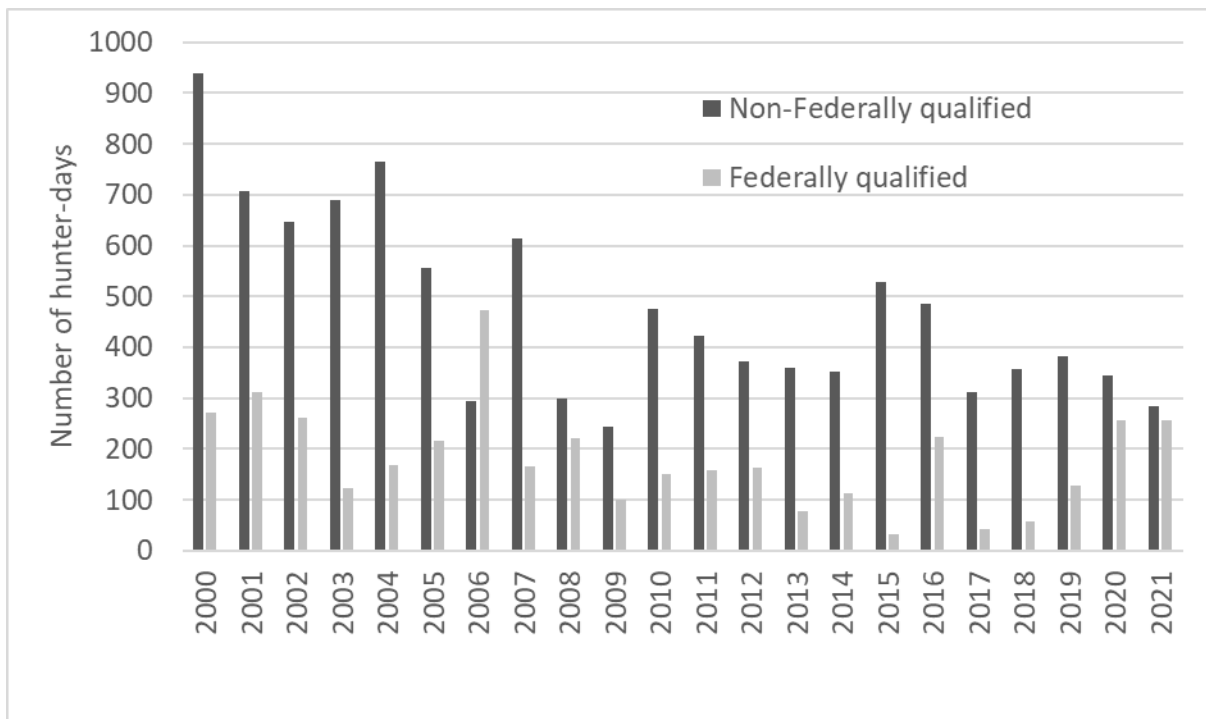


Figure 6. Number of hunter-days by Federally qualified and non-Federally qualified users within the proposal area, 2000-2021. (Source: ADF&G 2022d)

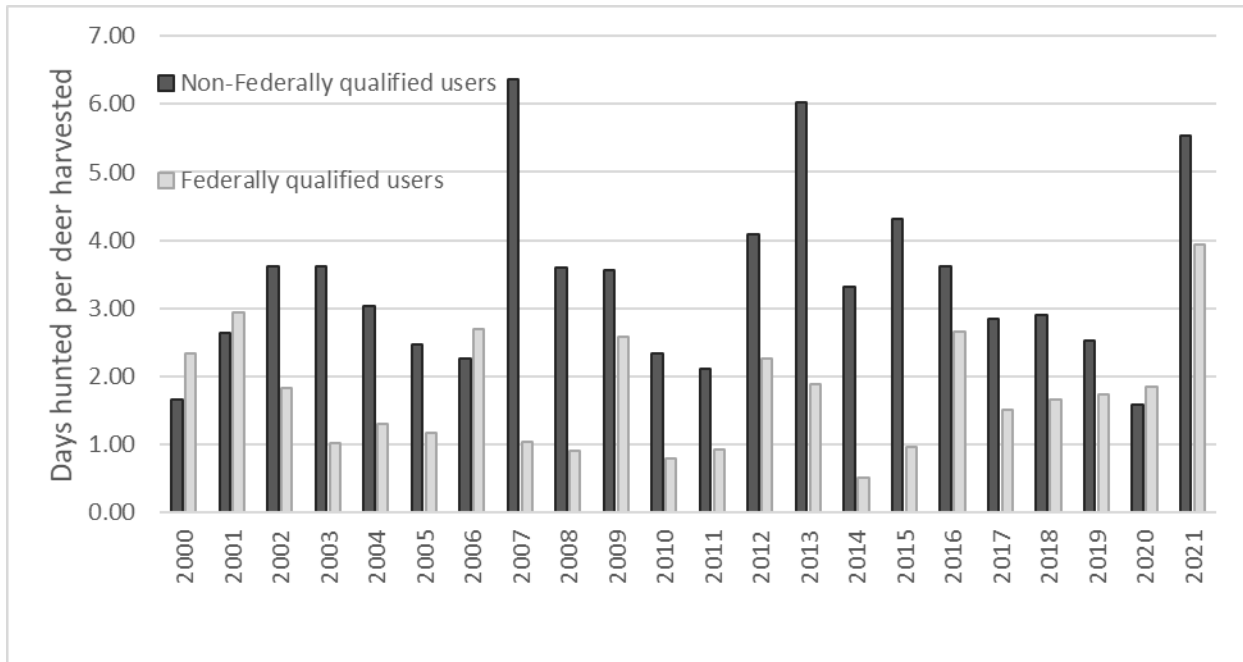


Figure 7. Number of days hunted per deer harvested by Federally qualified and non-Federally qualified users in the proposal area, 2000-2021. (Source: ADF&G 2022d)

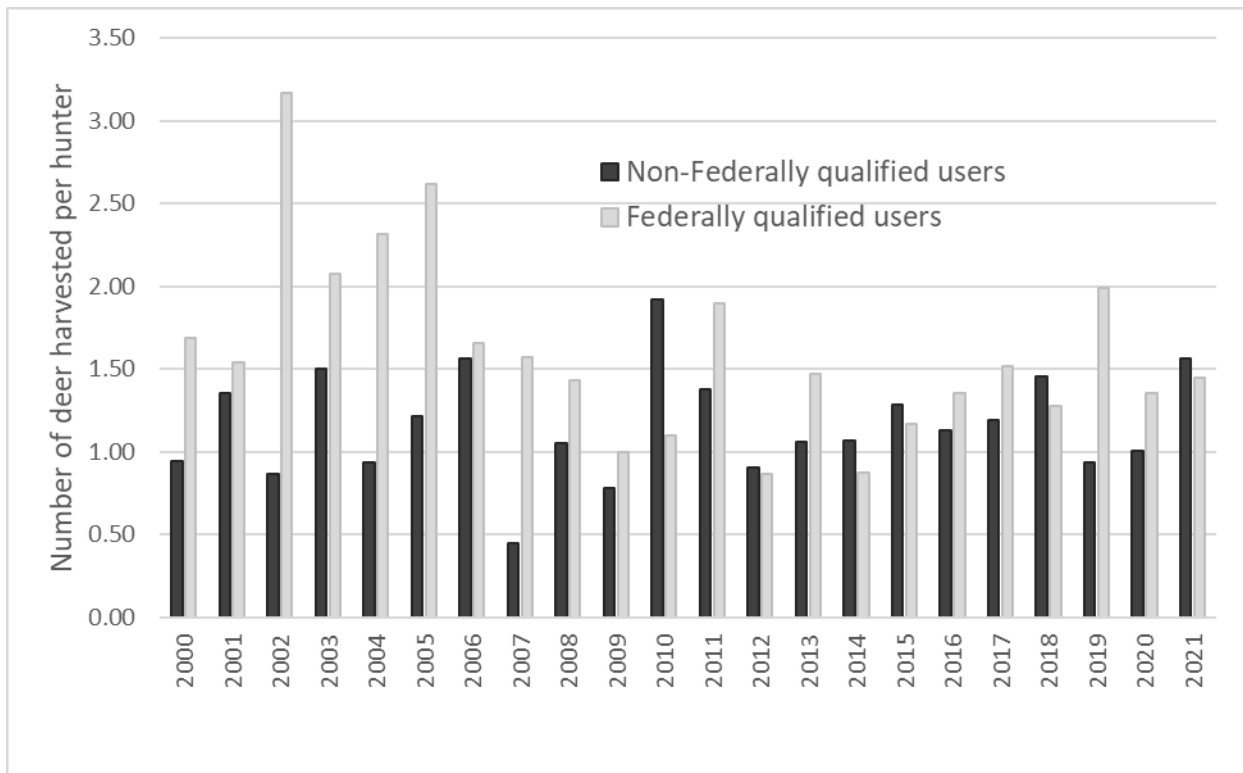


Figure 8. Number of deer harvested per hunter by Federally qualified and non-Federally qualified users in the proposal area, 2000-2021. (Source: ADF&G 2022d)

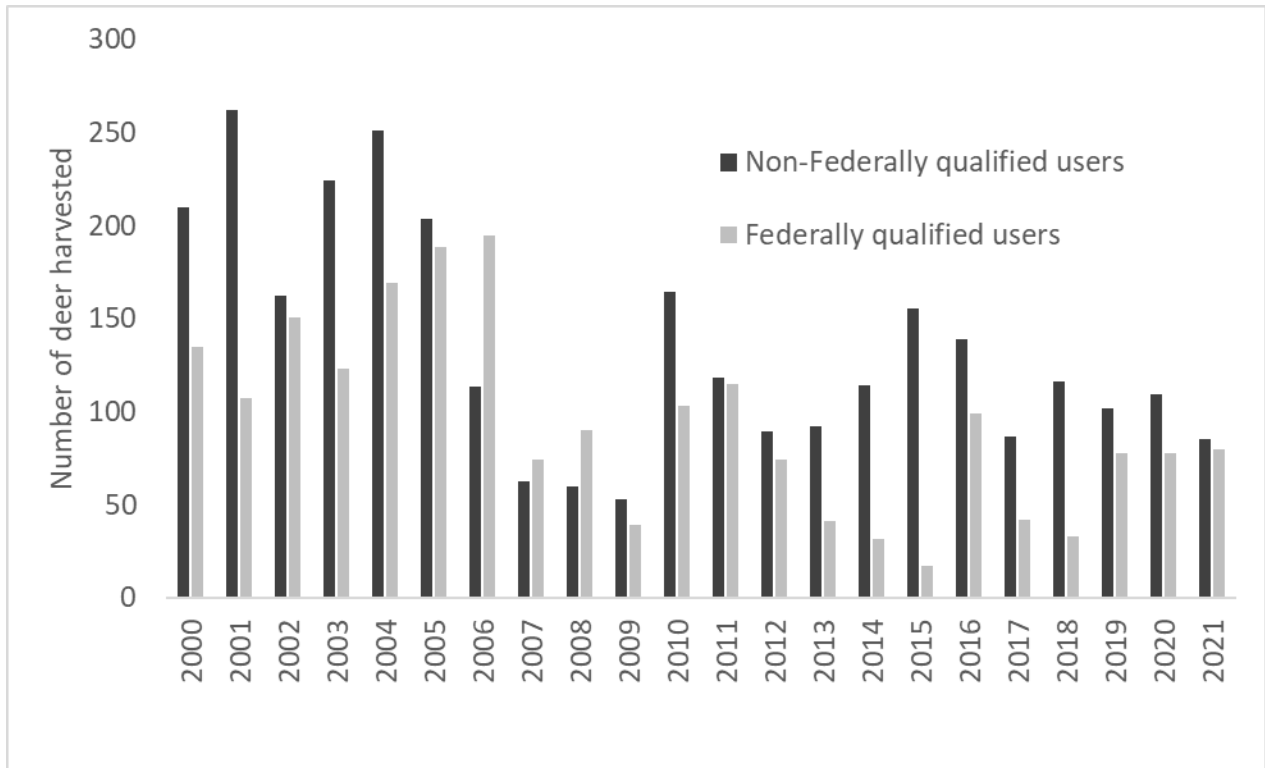


Figure 9. Number of deer reported harvested by Federally qualified and non-Federally qualified users in the proposal area, 2000-2021. (Source: ADF&G 2022d)

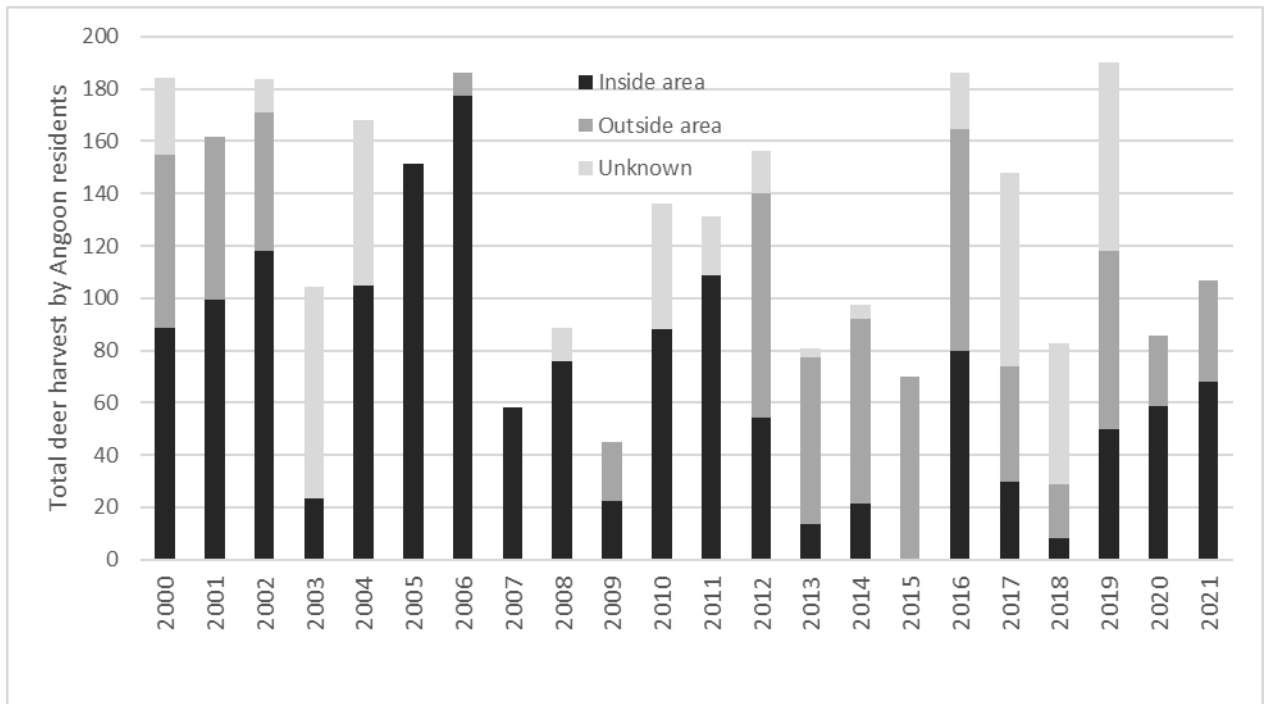


Figure 10. Total number of deer harvested by Angoon residents, by harvest location, 2000-2021. (Source: ADF&G 2022d)

Table 5. Percentage of Unit 4 deer harvest by month and user type, 2000-2019. (Source: ADF&G 2021)

Hunter type	August	September	October	November	December	January
Federally qualified	6%	8%	16%	40%	23%	8%
Non-Federally qualified	5%	6%	13%	53%	22%	0%
Overall	6%	7%	15%	45%	22%	5%

Other Alternatives Considered

Harvest limit reduction: A reduction of the harvest limit for non-Federally qualified users in the proposed closure area would reduce harvest and may reduce competition between non-Federally qualified and Federally qualified subsistence users. However, relatively few hunters harvest the full bag limit, and with high deer abundance, a harvest limit reduction would likely have a negligible effect on the success rate of Federally qualified subsistence users and may represent an unnecessary restriction on non-Federally qualified users, which is contrary to Title VIII of ANILCA. This alternative was brought up by a Council member during their fall 2021 meeting and while the Council member from Angoon said that he would consider such a modification, this alternative was not discussed further (SEARC 2021b).

Reduce extent of closure area: Another alternative is to reduce the extent of the closure area to the WAAs most hunted by Angoon residents (**Table 3**). This could help reduce competition and conflicts between user groups in Angoon’s most heavily-used deer hunting areas, while displacing fewer non-Federally qualified users, especially since their hunting efforts and harvest primarily occur in the WAAs least used by Angoon residents (4044 and 4043). This alternative is reflected in the modification recommended by the Southeast Council during their fall 2021 meeting.

However, even with a reduced area, the proposal may not meet the ANILCA §815(3) criteria for a closure to non-subsistence uses. Deer populations in the area are healthy, and the closure may have little effect on the continuation of subsistence uses since relatively few non-Federally qualified users hunt in the WAAs most frequented by Angoon residents (**Table 4**), and any closures may increase hunting pressure along beaches, resulting in more user conflicts. Thus, this alternative could represent an unnecessary restriction on non-subsistence uses.

Working Group: One alternative considered was to establish a Unit 4 deer working group. This suggestion was mentioned many times by Southeast Council members and public testifiers during the fall 2021 Southeast Council meeting. Developing a “Unit 4 deer management strategy,” which was also suggested multiple times during the fall 2021 Southeast Council meeting, could be one goal of the working group. Several Council members recognized that subsistence uses of deer in Unit 4 was an issue that they wanted to elevate to the Board’s attention, but commented that these specific regulatory proposals (WP22-07, -08, and -10) did not seem to be the best solution.

This alternative would allow consideration of this issue more holistically and on a longer time-scale than the regulatory proposals. It would also enable all alternatives to be considered and could help bring user groups together for discussion, which the Board requested in its deferral. While this alternative is outside the scope of this proposal, it could be considered further by the Southeast Council. If the Council would

like to establish a working group, it could do so at its meeting by selecting Council members to serve on the working group. Federal and State agency staff could also be part of the working group, while members of the public and other organizations could participate in working group meetings if they are announced through press releases.

Effects of the Proposal

This proposal would restrict non-Federally qualified users hunting deer on portions of Admiralty Island during the months of peak effort and harvest. Currently, non-Federally qualified users represent roughly 60-70% of the hunting effort and harvest in the proposal area, which is comprised almost entirely of Federal public lands. The proposed September 15 - November 30 closure for non-Federally qualified users would likely eliminate over half of the hunter effort and harvest of deer in the proposal area. This could lead to increased effort in the proposal area during the month of December, after the closed period has ended, as well as increased hunting pressure along beaches, which are State-managed lands, especially during November. This could increase user conflicts as beaches are a popular hunting area for Federally qualified subsistence users.

Southeast Council members expressed concern over the displacement of non-Federally qualified users to other areas if this proposal was adopted, which one member called “squeezing the balloon”. They were especially concerned about this displacement if all three proposals (WP22-07, -08, and -10) were adopted, stating hunting pressure will just shift and become concentrated in other areas, creating similar problems there instead (SEARAC 2021b). This may be the largest cumulative impact if the Board adopted all three Unit 4 deer proposals. Another concern brought up at the Southeast Council meeting over all three proposals was enforcement. A public testifier stated that he has never seen any Federal officers out during hunting season, and wondered about the effectiveness of these restrictions/closures if no one was enforcing them (SEARAC 2021b). Determining whether or not non-Federally qualified users and deer are below the unmarked mean high tide line on state-owned lands is another enforcement concern.

The intent of the proposal is to increase opportunity for Federally qualified subsistence users by limiting competition from non-Federally qualified users. However, there is little evidence that the proposed closure would provide much benefit for Federally qualified subsistence users. Deer populations within the proposal area appear to be healthy and close to carrying capacity and, therefore, the elimination of a substantial portion of the harvest is unlikely to result in a significant increase in the deer population. In addition, if a deer population increase did occur, it could result in exceedance of carrying capacity, especially on winter range during years with severe winters, which could negatively affect future Federal subsistence harvest opportunity. Local perceived declines in the Unit 4 deer population may have been due to mild winters, which resulted in deer being spread-out through the forests rather than concentrated and easily observable on beaches.

While the proponent states that subsistence users have had trouble meeting their deer needs due to increased competition from non-Federally qualified users, the effort levels, success rates, and total harvest for all hunters in the proposal area have been stable based on ADF&G harvest report. This harvest data does not indicate any recent increase in the amount of hunting effort or harvest by non-Federally qualified

users, at least over the time period for which data are available. It also shows that within the proposal area, the number of days required to harvest a deer and the number of deer harvested per Federally qualified subsistence user have been fairly consistent for over a decade.

Based on ADF&G harvest data indicating no significant change in the deer harvest and hunting effort by Federally qualified subsistence users in the proposal area, competition from non-Federally qualified users does not appear to have reduced subsistence uses of deer in the proposal area. However, the perception that Federally qualified subsistence users are experiencing more competition may stem from increases in encountering other hunters, or other user conflicts that are not captured in the data. The proposed closure could reduce the number of such conflicts.

Furthermore, local knowledge attests that only one or two boats in an area can negatively affect the success of subsistence hunts because access in some inlets is very small. Therefore, even though ADF&G harvest reports indicate no increase in non-Federally qualified subsistence users hunting in these areas, just a couple can seriously impact subsistence hunts (SEARC 2021b). As one Council member put it, “There’s plenty of water but there’s not enough elbow room at the bar.” High gas prices also impact the ability of local subsistence and non-local hunters from being able to access deer hunting areas. To both these points, the Council member from Angoon provided an example of someone he knew who boated to a preferred deer hunting location with “all his hopes on 10 gallons of gas” only to find three other boats already there.

The proposal may also have the unintended consequence of preventing non-Federally qualified users with local ties to the area from participating in subsistence activities. Many people from Angoon and other rural areas move to Juneau to seek employment but return to these communities to participate in subsistence harvesting with family and friends. Under the proposed regulation, these users would be prevented from hunting deer in the area during the closed season. However, the Southeast Council member from Angoon explained that, “A lot of the young men and women that have moved away will come out when it’s first opened so they can climb the mountain. So that explains the September 15th date. They can come and hunt from August to September 15 as they please” (SEARAC 2021b).

OSM CONCLUSION

Oppose Proposal WP22-07

Justification

§815(3) of ANILCA provides that the Board may restrict non-subsistence uses on Federal public lands only if *necessary* for “the conservation of healthy populations of fish and wildlife” or “to continue subsistence uses of such populations.” The closure of Federal public lands within the proposal area does not meet this criteria. The closure is not necessary for the conservation of healthy deer populations. The Unit 4 deer population is healthy, abundant, and the highest in the state.

The closure is also not necessary for the continuation of subsistence uses based on the available evidence and might adversely affect the ability of Federally qualified subsistence users to meet their subsistence

needs by increasing hunting pressure and user conflicts along beaches. Based on reported harvest data, hunting effort and harvest success rates of Federally qualified subsistence users have generally been stable and favorable over the last 20+ years, while hunting effort by non-Federally qualified users has exhibited a declining trend over the last 20+ years, indicating crowding and competition from non-Federally qualified users has not increased. While the presence of only one other boat or a few hunters can negatively affect the success of a subsistence hunter, the reported harvest data shows non-Federally qualified and Federally qualified subsistence users are mostly hunting in different areas within the proposal area. Therefore, closure of these areas could represent an unnecessary restriction on non-Federally qualified users as it is not expected to substantially benefit or to be necessary for the continuation of subsistence uses.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Support WP22-07 **with modification** to remove wildlife analyses areas 4044 and 4043 from the proposed closure area.

OSM's interpretation of the Council's intent is:

Unit 4 - Deer

Unit 4 — 6 deer; however, female deer may be taken only from Sept. 15 – Jan. 31. Aug. 1 - Jan. 31.

Drainages of Admiralty Island flowing into Chatham Strait between Fishery Point and Point Gardner, except drainages flowing into Thayer Lake, Hasselborg Lake, and Hasselborg Creek are closed to deer hunting Sept. 15 – Nov. 30, except by Federally qualified users.

Harvest data have shown a decline in deer harvest by subsistence users, and the local Council member testified that Angoon residents are having a hard time getting deer. The decrease in competition from other non-Federally qualified users will be beneficial to subsistence users. The proposed closure is not necessary for conservation purposes, but it will be necessary to ensure continued subsistence uses by residents of Angoon whose harvest levels have fallen in recent years. The Council found that the proposal is consistent with established fish and wildlife management principles in that it uses a change in hunting seasons for some users as a tool.

The Council removed sections from the originally proposed closure area that had the highest rates of use by non-Federally qualified users. The intent of the modification was to reduce the impact of the closure on those users. The Council acknowledged that wildlife analysis areas could not be used in Federal regulation and requested that OSM develop modified regulatory language to reflect the Council's intent. The original and modified closure areas are shown in **Figure 11**.

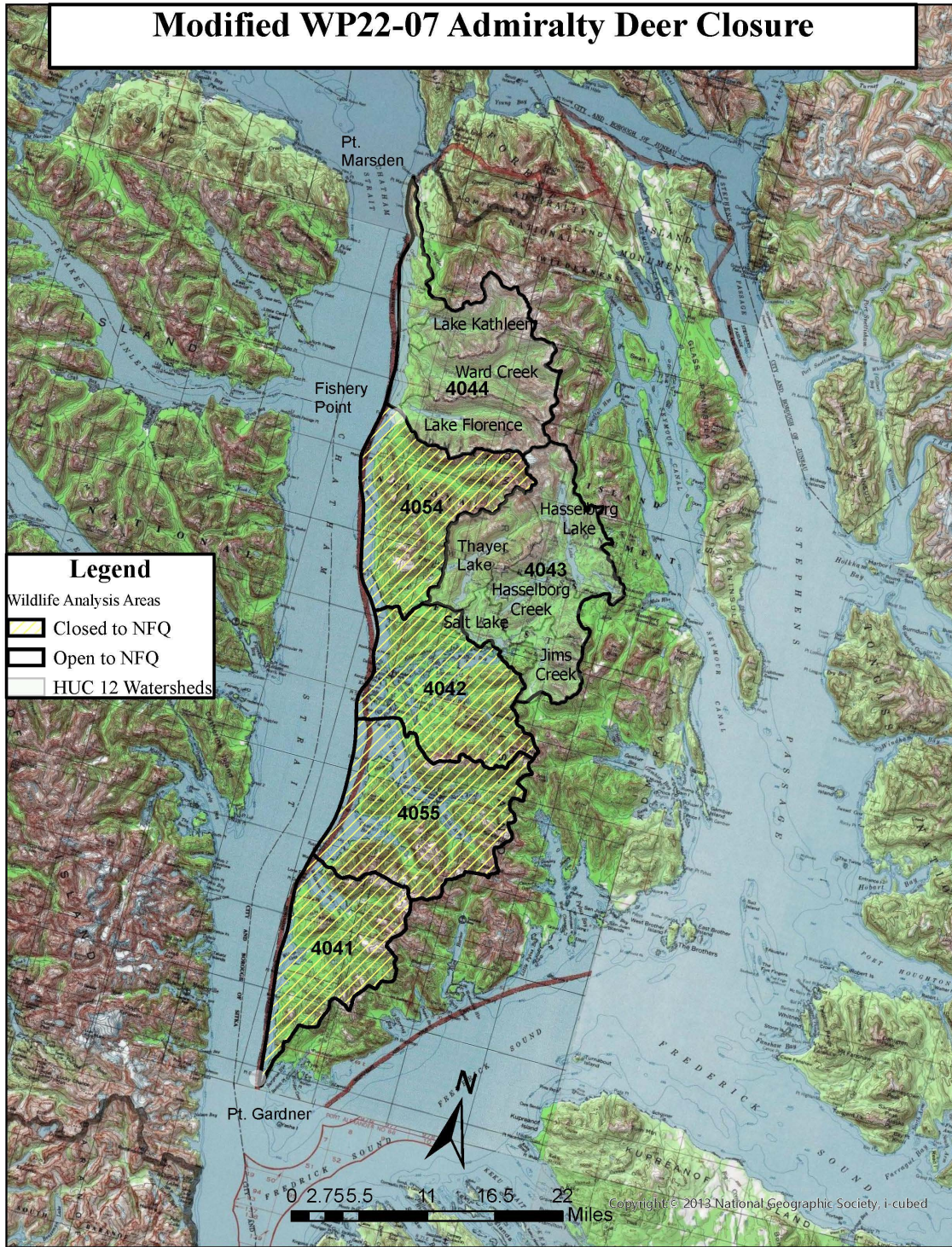


Figure 11. The original (within black outline) and modified (with cross-hatching) proposed closure area.