

Alaska Department of Fish and Game
Draft Comments

Wildlife Proposal 22-07

This proposal would close federal public lands on Admiralty Island draining into Chatham Strait between Point Marsden and Point Gardner to deer hunting by non-federally qualified users (NFQU) from September 15 – November 30 (Figure 1). Federally qualified users (FQU) would be able to continue to hunt in this area through January 31.



Figure 1. Map of the western Admiralty Island proposal and boundaries of the ADF&G Wildlife Analysis Areas for deer hunter data used to analyze effects of the proposal.

Background

The proposal by the Southeast Alaska Subsistence Regional Advisory Council (SERAC) states that over the past years it has become more challenging for FQUs from Angoon to meet their subsistence needs for deer due to increasing competition from NFQUs. To reduce competition and conserve the deer population, the proposal asked the Federal Subsistence Board to close federal lands on most of western Admiralty Island to NFQU deer hunters from September 15 – November 30.

GMU 4 encompasses the ABC Islands (Admiralty, Baranof, and Chichagof) and the surrounding archipelago. All residents of Southeast Alaska (GMUs 1-5) excluding residents of Juneau and Ketchikan are eligible to harvest deer in GMU 4 under federal subsistence regulations. The current federal deer season for this area is August 1 to January 31 with a bag limit of 6 deer (bucks only August 1 – September 14). The current State season is August 1 to December 31 with a bag limit of 6 deer (bucks only August 1 – September 14). In 2019, the Alaska Board of Game (BOG) increased the deer bag limit in GMU 4 from 4 to 6 deer because there is such a healthy population of deer within this GMU.

In 1992, the Alaska Board of Game established an annual amount reasonably necessary for subsistence (ANS) for deer in GMU 4 of 5,200-6,000 deer. ANS differs from the undefined term “subsistence need” used in Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA). Under Alaska law ANS is the harvestable portion of a game population that is sufficient to provide a reasonable opportunity for subsistence uses. “Reasonable opportunity” is that which allows a normally diligent hunter a reasonable expectation of success. The BOG establishes an ANS for a game population through review of long-term population and harvest information. A portion of the state-designated Juneau Nonsubsistence Area extends into GMU 4 on northern and eastern Admiralty Island.

These comments analyze indices of deer abundance, deer hunter effort, and harvest in GMU 4. Deer abundance trends are derived from annual deer pellet group transects, aerial alpine surveys, and spring mortality surveys. Hunter effort and harvest are derived from the annual deer hunter survey (1997-2010), and mandatory deer harvest ticket reports (2011 - present). Collectively, these data gathered by the Alaska Department of Fish and Game (ADF&G) are the only annually collected, objective, and quantitative information on deer abundance, hunter effort, and harvest available for Southeast Alaska

GMU 4-Wide Population and Harvest

Monitoring deer abundance in forested habitat is challenging as deer cannot be directly counted through ground or aerial surveys, so we currently look at several types of survey data. Since the 1980s ADF&G has used spring pellet group counts to monitor broad ($\geq 30\%$) changes in deer abundance. Spring pellet group surveys are conducted in numerous US Forest Service Value Comparison Units across Southeast Alaska after snow melts and before spring green-up.

GMU 4 consistently has the highest pellet group counts in Southeast Alaska (Figure 2). Pellet group counts < 1.0 group/plot generally correspond to low density populations, 1.0 - 1.99 group/plot to moderately dense populations and > 2.0 group/plot correspond to high density populations. Pellet group counts in GMU 4 are usually well above the high-density threshold and are often double the counts in other GMUs. Although the specific area affected by this proposal is rarely sampled, this broad index of deer abundance suggests the GMU 4 population remains at high levels with no indication of depleted populations or conservation concerns.

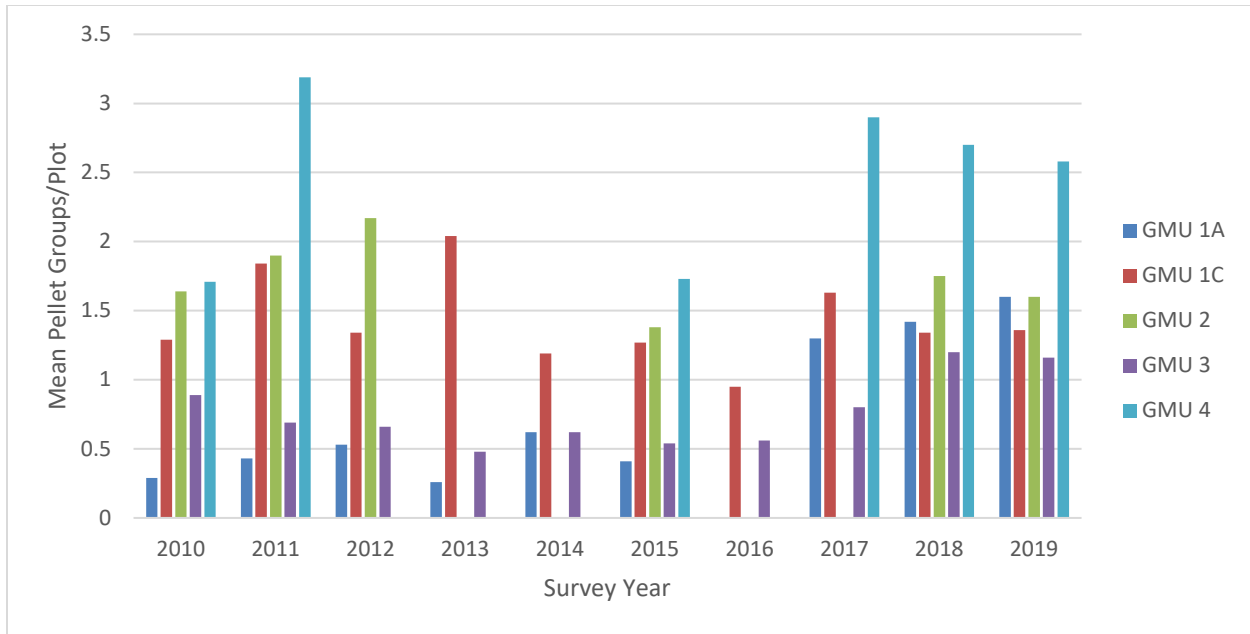


Figure 2. Mean number of deer pellet groups/plot for Southeast Alaska by GMU, 2010-2019.

In 2013, ADF&G began evaluating mid-summer aerial counts of deer in alpine habitat as an index of deer abundance. Surveys were conducted for 2 locations in GMU 4, Southern Admiralty Island (2015-2017) and Northeast Chichagof Island (2017-2018). The findings of those surveys were summarized as deer counted per hour of survey time (Figure 3). Southern Admiralty had the highest deer/hour of any survey area in Southeast Alaska. Estimates from Northeast Chichagof were similar to Prince of Wales Island (POW) and higher than all other survey areas except Southern Admiralty and POW.

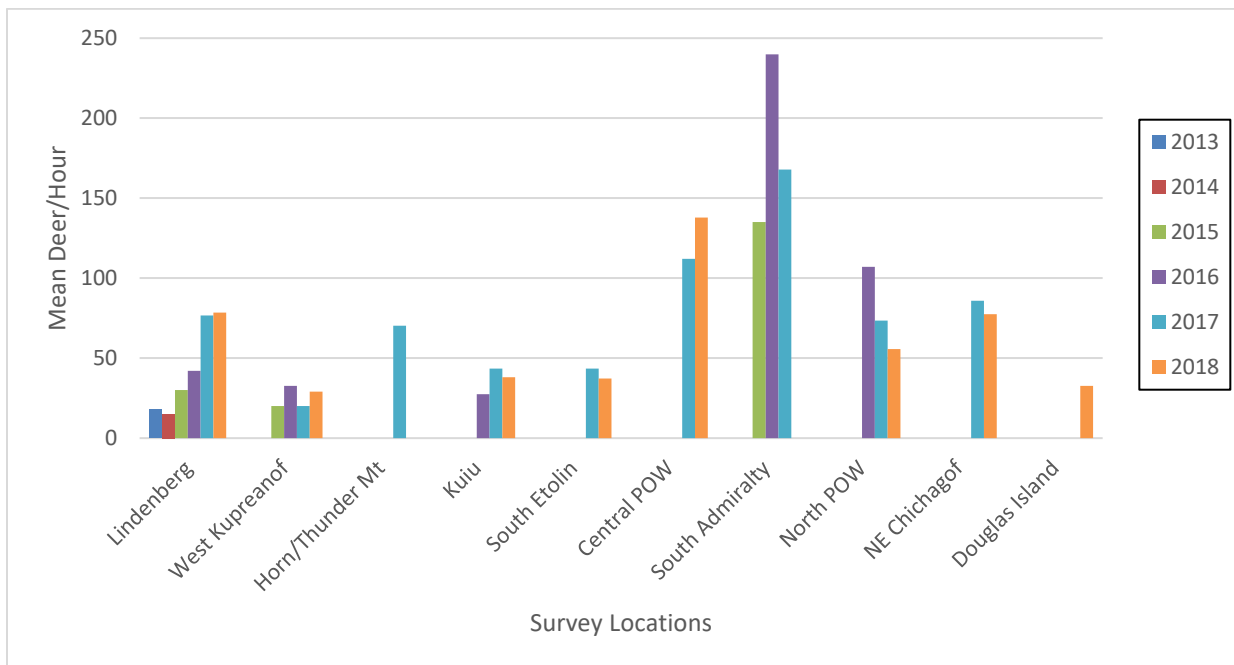


Figure 3. Mean number of deer counted per hour during mid-summer aerial alpine deer surveys in Southeast Alaska, 2013-2018.

Management biologists in GMU 4 began conducting beach mortality transects in the early 1990s. Although these mortality surveys are a relatively insensitive indicator of population trend, they are an indicator of mortality resulting from severe winters which is the most limiting factor for Sitka black-tailed deer populations in GMU 4. In addition to the total count of carcasses per mile, the proportion of adult male, adult female and fawn mortalities also indicates winter severity. Usually fawns die first, followed by adult males and then adult females. The winter of 2006/2007 was the most severe on record, and in some parts of GMU 4 managers estimated up to 75% of deer died. Note the very high number of carcasses found during spring 2007 surveys (Figure 4). In the years since then, few carcasses were found indicating high overwinter survival and no winter related population declines.

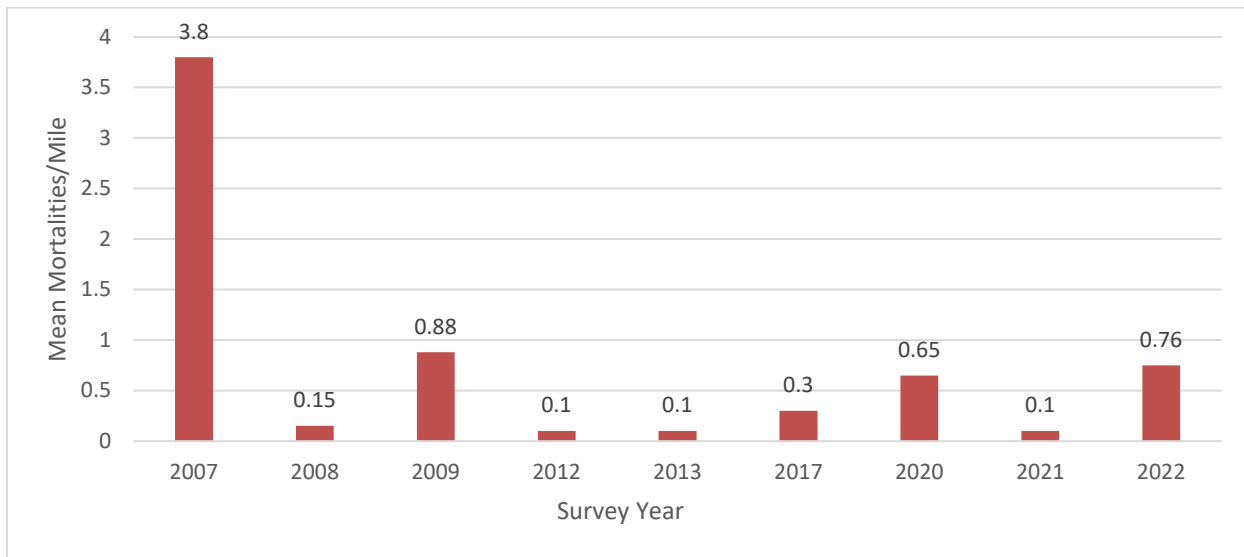


Figure 4. Mean number of winter-killed deer per mile of beach surveyed during spring in GMU 4.

Taken together, these indices of deer abundance (pellet group surveys, alpine counts, mortality transects) indicate the GMU 4 deer population is high and stable. None of these indices suggests a decline in deer abundance or a conservation concern for the GMU 4 deer population.

Hunter Effort and Harvest

GMU 4 managers also use harvest as an indicator of trend in the deer population. ADF&G estimates hunter effort and harvest using information provided by hunters. To hunt deer in Southeast Alaska all hunters must obtain harvest tickets. Prior to 2011, ADF&G mailed survey forms to one third of the hunters in each community who obtained harvest tickets. Since 2011 harvest tickets have come with a mandatory reporting requirement. People who obtain harvest tickets are required to report whether they (or a proxy or federal designated hunter) hunted or not. Those who did hunt are required to report where they hunted, days of hunting effort, and information about deer they harvested.

From 1997-2021 the estimated average annual harvest in GMU 4 has been 5,680 deer taken by 3,275 hunters (Figure 5). Currently, GMU 4 supports the highest deer harvest in the state with harvest remaining stable with between 5,000-7,000 deer harvested annually. The exception being the severe winter of 2006/2007 when high harvest was followed by significant overwinter

mortality of deer throughout GMU 4. This resulted in a precipitous decline in harvest from 7,734 deer in 2006 to 1,933 deer in 2007. Based on harvest and other indicators of deer abundance, managers believe the deer population had fully recovered by the 2013 season.

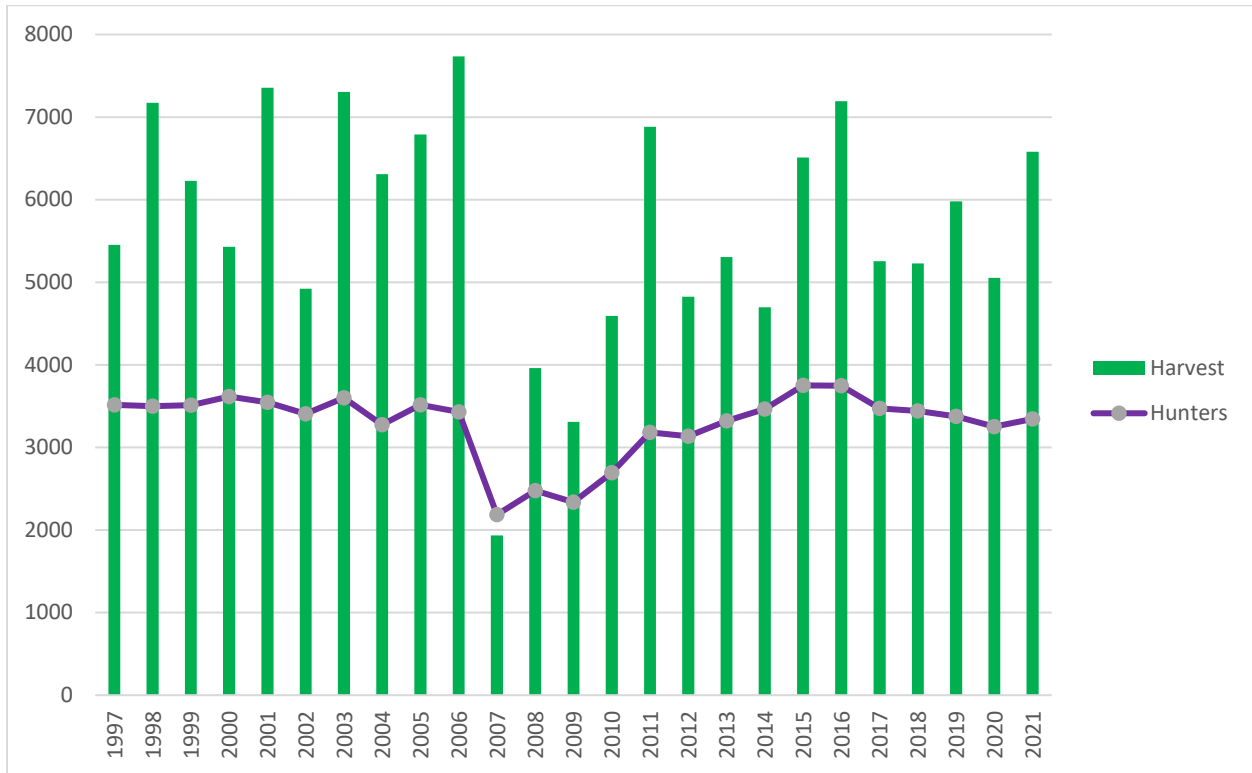


Figure 5. Numbers of people hunting deer and estimated deer harvest for GMU 4, RY97-RY21.

Data Summaries for the Impacted Area

The following analyses present data summarized for FQUs and NFQUs in the 6 ADF&G Wildlife Analysis Areas (WAAs 4041-4044, 4054 and 4055) that intersect with the area this proposal covers (Figure 1). WAA boundaries generally correspond with watersheds and are the finest scale at which data can be meaningfully summarized. For this proposal, WAA boundaries directly correspond to the proposal area.

Long-term records indicate a declining trend in harvest for both FQUs and NFQUs (Figure 6). From 1997 to 2006, FQUs harvested on average 157 deer annually. Harvest declined with the severe winter of 2006/2007. Since 2013, when ADF&G considered the deer population recovered, FQUs have harvested an average of 58 deer annually. This represents an approximate 65% decline. There is a similar pattern for NFQUs, who averaged 200 deer annually from RY97 to RY06. Since RY13, that average has declined to 115 deer annually.

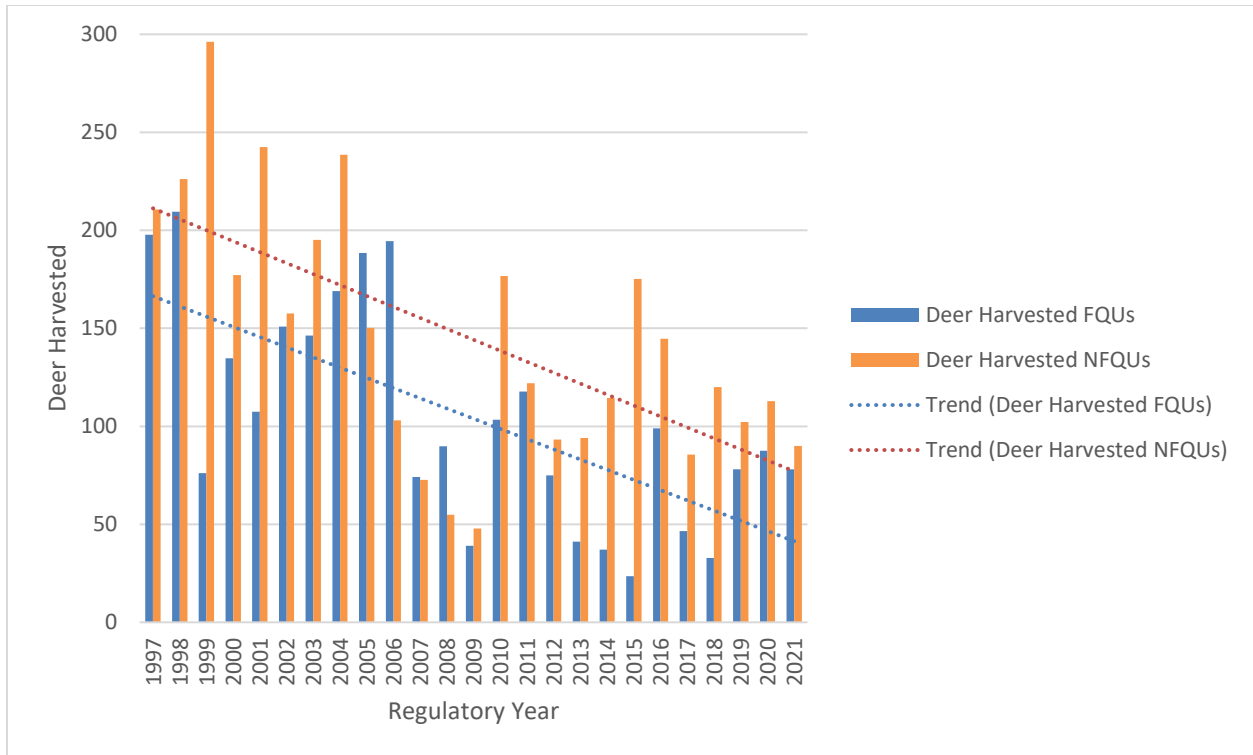


Figure 6. Trends of estimated deer harvest by FQU and NFQUs, western Admiralty Island, RY97-RY21.

To evaluate potential reasons for the decline in deer harvest we examined trends in the numbers of FQU and NFQU hunters and days of hunting effort by those hunters. Since 1997, the number of FQUs and NFQUs have both declined (Figure 7). From 1997-2006 the number of FQUs averaged 72 hunters and NFQUs averaged 143 hunters. The severe winter of 2006/2007 resulted in a decline in the deer population and hunting activity for several years. By 2013 ADF&G considered the deer population recovered. From RY13-RY21 the numbers of FQUs averaged only 37 hunters, a decline of 50 percent. For that same period the number of NFQUs averaged 98 hunters, a decline of 30 percent.

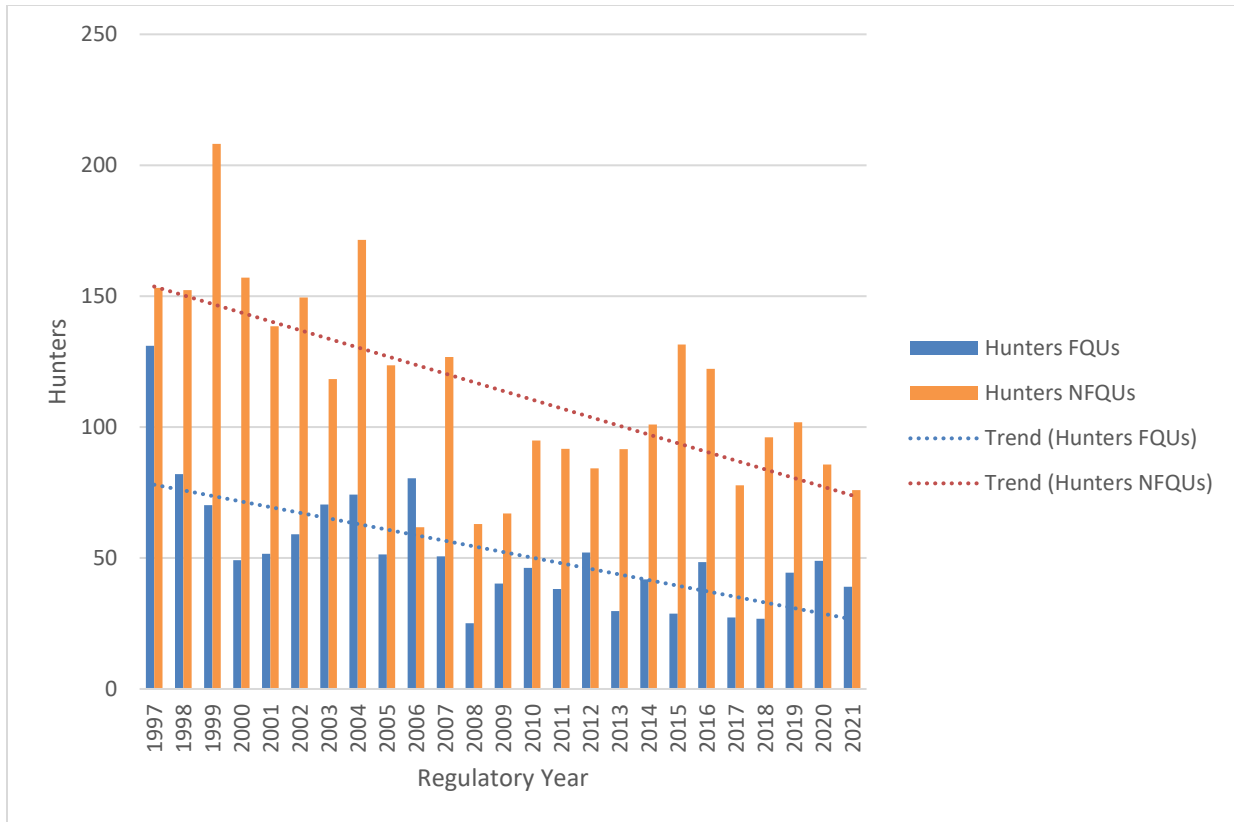


Figure 7. Trends in number of FQUs and NFQUs, western Admiralty Island, RY97-RY21.

In Angoon specifically, there has been a declining trend in the number of residents who have obtained deer harvest tickets (Figure 8). In RY21, only 58 Angoon residents obtained deer harvest tickets, half the number of RY97.

Trends in days hunted are similar to trends for number of FQUs and NFQUs (Figure 8). Days of hunting effort by FQUs and NFQUs both declined, but the decline for FQUs has been greater. FQUs spent as many as 631 days afield in RY97 and as few as 33 days in RY15. Decreasing numbers of hunters and days hunted indicate reduced effort for both NFQU and FQUs for this area of GMU 4

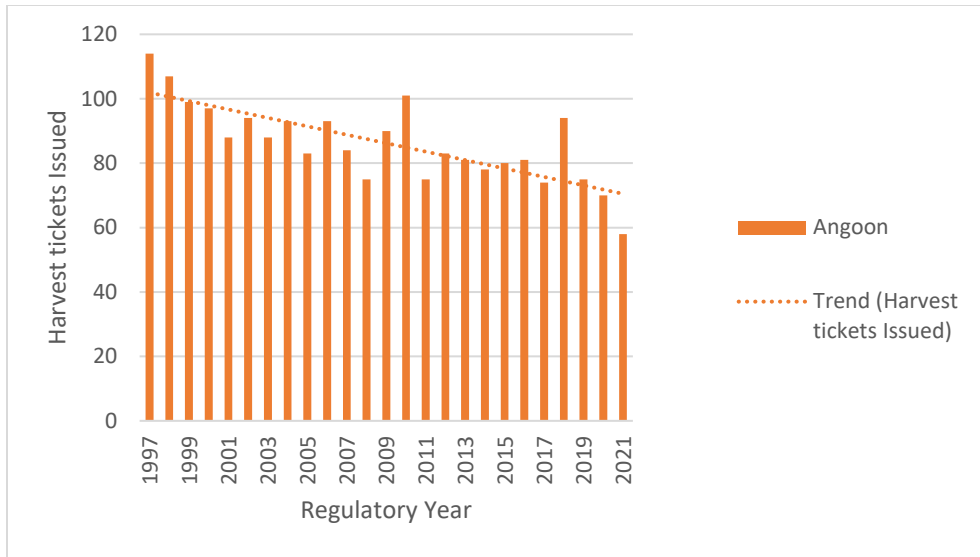


Figure 8. Deer Harvest Tickets Issued in Angoon RY97-RY21.

Trends in Hunter Efficiency

Hunter efficiency, or the days of hunting effort required to harvest 1 deer, is another indicator of the availability of deer to GMU 4 hunters. FQUs are consistently more efficient than NFQUs in time it takes to harvest a deer (Figure 9). Since 1997 FQUs hunting in the proposal area have required an average of only 2.0 days of hunting effort to harvest 1 deer, whereas NFQUs have required 3.5 days of effort.

Compared to deer hunter effort required to harvest a deer elsewhere in the state this is an extremely efficient hunt. In comparison, hunters on Prince of Wales Island (GMU 2) average 3.9 days of hunting per deer harvested, Kodiak (GMU 8) averages 3.6 days/deer, GMU 1A (Ketchikan) averages 5.4 days/deer, GMU 3 (Petersburg/Wrangell) averages 6.3 days/deer, and in GMU 1C (Juneau) hunters average 8.1 days/deer (ADF&G 2013-2019). The effort required to harvest one deer in GMU 4 is lower than anywhere in Alaska.

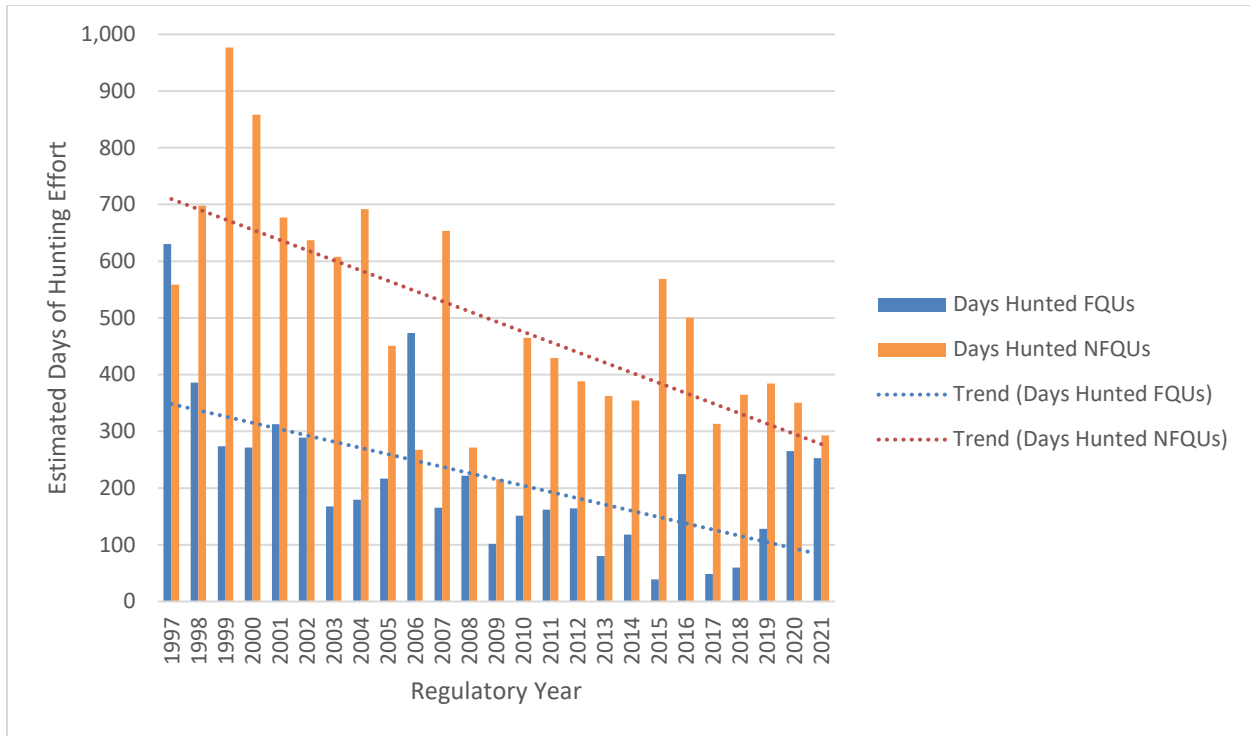


Figure 9. Trends in estimated days of hunting effort by FQUs and NFQUs, western Admiralty Island, RY97-RY21.

Trends in Hunter Efficiency

Hunter efficiency, or the days of hunting effort required to harvest 1 deer, is another indicator of the availability of deer to GMU 4 hunters. FQUs are consistently more efficient than NFQUs in time it takes to harvest a deer (Figure 10). Since 1997 FQUs hunting in the proposal area have required an average of only 2.1 days of hunting effort to harvest 1 deer, whereas NFQUs have required 3.4 days of effort.

Compared to deer hunter effort required to harvest a deer elsewhere in the state this is an extremely efficient hunt. In comparison, hunters on Prince of Wales Island (GMU 2) average 4.1 days of hunting per deer harvested, Kodiak (GMU 8) averages 3.6 days/deer, GMU 1A (Ketchikan) averages 4.8 days/deer, GMU 3 (Petersburg/Wrangell) averages 6.0 days/deer, GMU 6D (Prince William Sound) averages 2.9 days/deer and in GMU 1C (Juneau) hunters average 7.9 days/deer. The effort required to harvest one deer in GMU 4 (2.3 days/deer) is lower than anywhere in Alaska (ADF&G RY2013-RY2021).

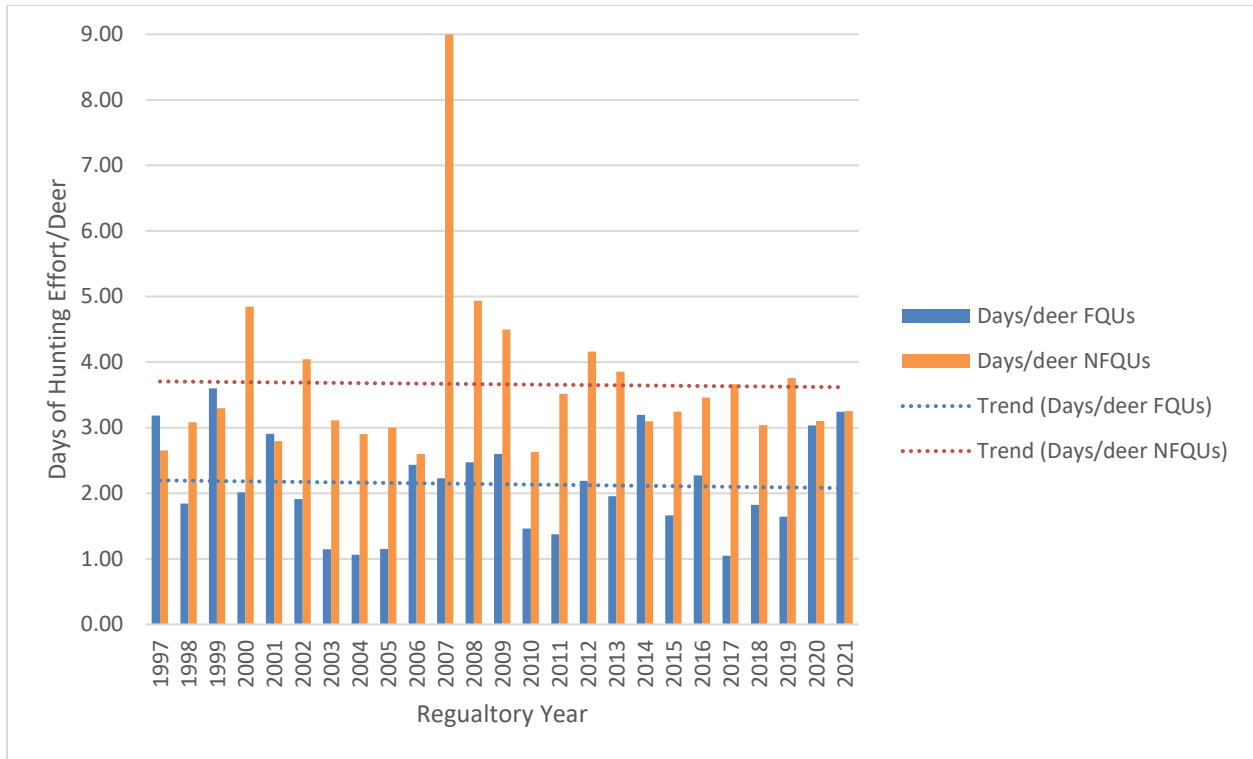


Figure 10. Trends in estimated days of hunting effort required by FQUs and NFQUs to harvest one deer, western Admiralty Island, RY97-RY21.

The number of deer harvested per hunter is another gauge of deer abundance and hunting success. Over the long term this metric has declined for both groups of hunters with the decline for FQUs greater than for NFQUs. However, since RY13 when ADF&G considered the deer population recovered from the severe winter of 2006/2007, the number of deer harvested per NFQU has remained steady and averaged about 1.3 deer/hunter. In contrast, the number of deer harvested per FQUs has trended upwards suggesting that FQUs are experiencing increasing success (Figure 11).

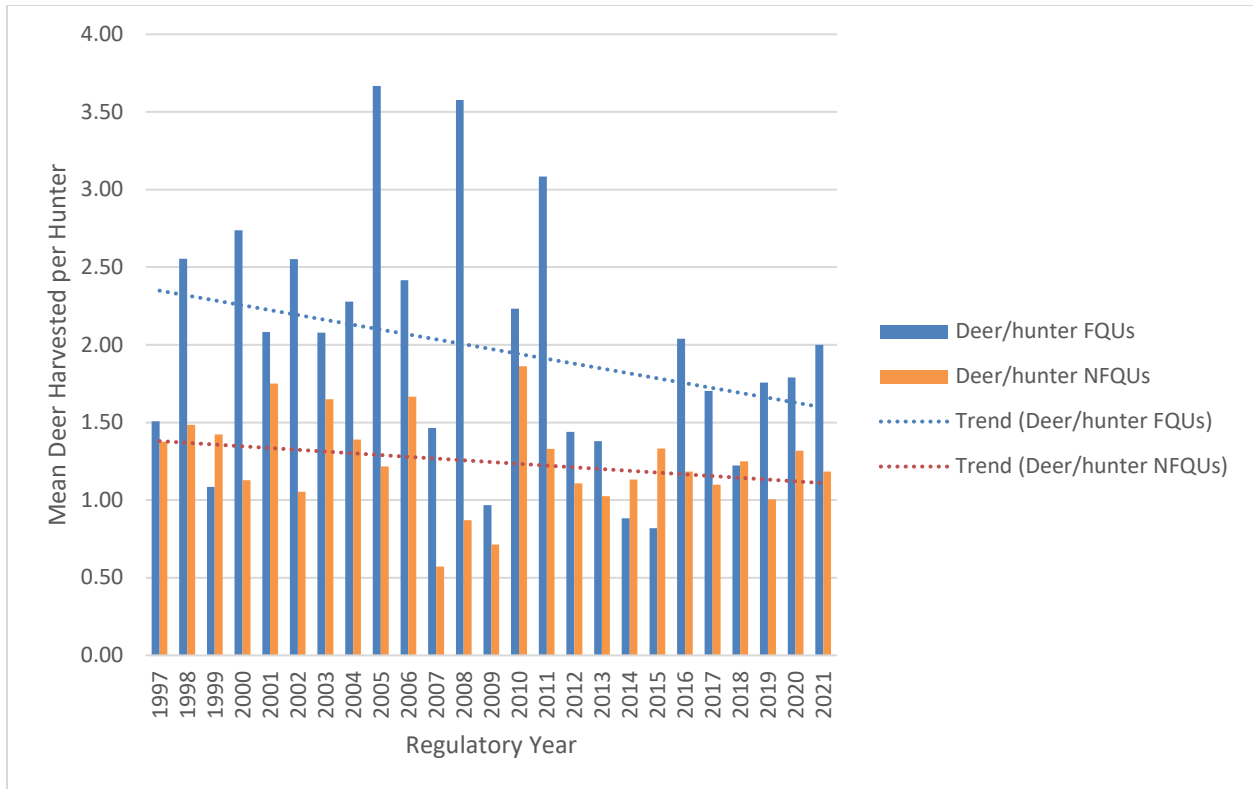


Figure 11. Trends in mean numbers of deer harvested per FQU and NFQU hunters, western Admiralty Island, RY97-RY21.

Hunt Chronology

Mid-October through November is the most popular time for all hunters to pursue deer in GMU 4. Deer activity coinciding with the rut as well as winter snows that push deer to beaches make for more successful hunting than earlier in the season. Hunters report hunting effort and harvest by month, so data can only be summarized by month. The period, September – November, encompasses 63% of hunters, 67% of days hunted, and 62% of the harvest for FQUs hunting in Unit 4. Figures for NFQUs are higher at 69%, 75% and 72% respectively (Table 1).

Table 1. Unit 4 Deer Hunting Chronology of Harvest and Effort for FQUs and NFQUs as both numbers and percentage of total.

FQUs RY13-RY21						
	<u>Hunters</u>		<u>Days</u>		<u>Deer</u>	
	<u>Hunters</u>	<u>%</u>	<u>Hunted</u>	<u>%</u>	<u>Harvested</u>	<u>%</u>
August	2,129	8	3,678	6	1,840	6
September	2,485	10	4,402	8	2,481	8
October	4,259	17	8,470	15	4,596	14
November	9,310	36	24,488	44	12,740	40
December	5,470	21	11,674	21	7,725	24
January	1,901	8	3,439	6	2,561	8
Total	25,554		56,151		31,943	
NFQUs RY13-RY21						
August	1,778	9	3,661	6	1,214	6
September	1,648	8	4,256	6	1,458	7
October	3,314	16	8,905	14	2,442	13
November	9,357	45	34,940	55	10,125	52
December	4,571	22	12,053	19	4,314	22
Total	20,668		63,815		19,553	

Analysis

The analyses presented here are based on several different metrics that came from the only annually collected, objective, and quantitative information available on deer abundance, hunter effort and harvest in the area affected by this proposal. Deer abundance data is monitored by ADF&G through the reporting of effort and harvest data from hunters, including those from Angoon,

The proposal asserts that the deer population on western Admiralty Island is “depleted” and that in recent years FQUs have had increasing difficulty meeting their subsistence needs for deer because of increasing competition with NFQUs. Because the term “subsistence need” is not defined and ANILCA does not require the federal program to quantify historical levels of harvest for subsistence uses, there is no way to objectively verify when those needs are being met. Our analysis focuses on measures of deer abundance and trend in GMU 4 and on trends in effort and harvest by FQUs and NFQUs in the proposal area. Conditions that would support the assertion that NFQUs are hindering deer harvest by FQUs would include increasing numbers of hunters, days of hunting effort, and harvest by NFQUs that coincide with declining harvest by FQUs while the number of FQU hunters and effort by those hunters remained stable or increased.

ADF&G monitors abundance and trend of deer at the scale of the GMU or subunit, so we can only note that the available data indicate GMU 4 deer populations are currently at high and stable

levels. Winter severity, particularly deep and lingering snowpack is the biggest limiting factor for Sitka black-tailed deer in GMU 4. The last winter with above average snowfall occurred in 2011/2012. Since then, winters have been average to mild with little overwinter mortality as corroborated by ADF&G's spring mortality surveys. Pellet group and aerial alpine deer counts also support the conclusion that deer remain abundant throughout GMU 4.

The proposal also asserts that FQUs on western Admiralty Island are having an increasingly difficult time meeting their subsistence needs. The term "subsistence need" as used in Title VIII of ANILCA has no quantitative benchmark analogous to ANS in state regulations. Consequently, there is no way of verifying whether the existing federal regulations are adequately providing for subsistence harvest or not. Because the proposal notes that increasing competition from NFQUs is making subsistence harvest more difficult and because no similar proposal has been submitted before, we can presume that in the past FQUs were able to provide for subsistence uses. Therefore, to evaluate the need for this restriction of NFQU opportunity we investigated harvest and measures of hunter effort for trends of increasing effort and harvest by NFQUs.

We found that the numbers of FQUs and NFQUs hunting deer in this area has declined, but that decline in participation was much greater among FQUs. This decline in hunter participation appears related to the severe winter of 2006/2007. The average number of FQUs hunting deer in this area before RY07 was approximately 50% greater than the average from RY13 to present. We have also seen an historic decline in the number of Angoon residents who acquire deer harvest tickets. Numbers of NFQUs hunting deer in this area also declined, but by only 30%. Days of hunting effort showed a similar trend. The number of days hunted by FQUs has declined from the 1997-2006 average of 320 days per year to an average of only 135 days per year since 2013, a decrease of approximately 60%. The decline in hunting effort by NFQUs for the same periods is approximately 40%. This finding directly contradicts the assertion in the proposal that increasing competition from NFQUs is hindering harvest by FQUs. In fact, total deer hunting effort and the potential for competition between FQUs and NFQUs in this area has substantially declined.

To evaluate whether FQUs are having an increasingly difficult time harvesting deer we looked for trends in the number of days of hunting effort required to harvest 1 deer and number of deer harvested per hunter. Since RY97 days of hunting effort to harvest 1 deer has been stable for both FQUs and NFQUs. Although FQUs are now harvesting fewer deer per hunter than they did prior to RY2007, since RY2013, deer harvested per FQU has been trending upward suggesting FQUs, including Angoon hunters, are enjoying increasing success.

If harvesting deer was becoming more difficult for FQUs, we would expect to see an increase in the number of days of hunting effort required to harvest a deer and a decline in the number of deer harvested per FQU hunter. However, these measures of hunter success based on hunt reports provided by FQUs, including residents of Angoon, indicate that deer hunting conditions on western Admiralty Island remain very good and that in recent years FQUs have enjoyed greater hunting success.

Summary

The proposal asserts that the deer population on western Admiralty Island is depleted and that in recent years FQUs have had difficulty meeting their subsistence needs because of increasing competition from NFQUs. Our analysis of the deer population, hunter effort and harvest trends found no support for either contention. Instead, the available indicators support that deer remain abundant throughout GMU 4. On western Admiralty Island it is unlikely that hunter harvest has reduced deer abundance because total hunting effort is relatively light, and over the last 2 decades hunter effort and harvest have declined.

We could find no support for the contention that competition from NFQUs has increased or that NFQUs are hindering harvest by FQUs. In fact, over the past 2 decades, rather than increasing, the number of NFQUs and days of hunting effort by NFQUs has declined. Further, days of hunting effort by FQUs required to harvest a deer remains very low and the number of deer harvested per FQU has been increasing.

The analysis conducted by ADF&G indicates a decline in the number of deer harvested by FQUs on western Admiralty Island. However, that decline is attributable to a decline in the number of FQUs and days of effort by those hunters. Over the last 20 years the number of FQUs and days of hunting effort by those hunters has declined by half. Deer remain abundant and competition from NFQUs is stable or declining, so we conclude that the decline in federal subsistence harvest of deer results from a decline in participation and effort by FQUs, not depleted deer populations or increasing competition from NFQUs.

Impact on Subsistence Users

The closure of this area may reduce some competition on federal public lands between FQUs and NFQUs between September 15 and November 30. However, NFQUs would still be able to hunt adjacent state-owned tidelands below mean high tide, state public uplands, and private property. .

Impact on Other Users

Opportunity for NFQUs to harvest deer on federal public lands on western Admiralty Island would be severely reduced. Seventy-two percent of the NFQU harvest from this area occurs during the period targeted for closure by this proposal.

State Customary and Traditional Use Findings

The Alaska Board of Game has made positive customary and traditional use findings for deer in GMU 4.

Amounts Reasonably Necessary for Subsistence

Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources. The ANS for deer in GMU 4 is 5,200–6,000 deer.

Contrary to its name, ANS does not indicate subsistence “need”. Instead, ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. The ANS for deer in GMU 4 was established in 1992. Hunting

regulations can be re-examined if harvests for customary and traditional uses consistently falls below ANS. However, harvest may decline for many reasons, and in this case it appears to result from declining participation and effort by FQUs in the Angoon area.

Opportunity Provided by the State

The State hunting season and bag limit for deer in GMU 4 including western Admiralty Island is:

<u>GMU 4 Remainder</u>	<u>Bag Limit 6 deer</u> <i>(bucks only to Sep 14th)</i>	<u>Resident</u> <u>Open Season</u> <i>Aug 1 – Dec 31</i> <i>(Harvest ticket)</i>	<u>Nonresident</u> <u>Open Season</u> <i>Aug 1 – Dec 31</i> <i>(Harvest ticket)</i>
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Conservation Issues

There are no conservation issues for the deer population in GMU 4. Following a decade of mild winters, the available population indices suggest the GMU 4 deer population remains high and stable. Deer harvest remains within the historical range and state ANS is met in most years. Population indices and measures of hunter effort and success indicate that GMU 4 has the highest population of deer and highest hunting success of anywhere in the state.

Based on the information provided to ADF&G by GMU 4 deer hunters, population indices, anecdotal reports by local hunters and field observations by management biologists we conclude that there is no conservation concern for the GMU 4 deer population.

Enforcement Issues

Passage of this proposal will create increasingly complex regulations for NFQUs. Enforcement will be challenging because NFQU’s will remain eligible to hunt deer on state-owned tidelands, lands below the line of mean high tide, and on other state and private property. The tideline is not marked, so NFQUs and enforcement officers will have difficulty determining when deer are above or below that line of mean high tide.

Position

ADF&G **OPPOSES** this proposal as originally submitted as well as with the changes suggested by the SERAC during their meeting in October 2021. There is no evidence that hunting by NFQUs has negatively affected FQUs overall ability to harvest deer. There is no conservation concern and therefore no biological justification for this proposal. Adopting this proposal would deprive NFQUs of sustainable deer hunting opportunity contrary to terms laid out in Title VIII of ANILCA. This proposal would also unnecessarily restrict Alaskans, including former residents of the area who have had to move away for a variety of reasons. They would then be put into a situation where they would be restricted in their ability to practice their traditional and cultural way of life.

Approximately 90% of land in GMU 4 is federally managed, and current federal regulations provide greater opportunity to federally qualified deer hunters compared to NFQUs. FQUs are eligible to hunt an entire month longer than NFQUs with a season extending through the month of January as well as a liberal designated hunter program.

In *Alaska v. Federal Subsistence Bd.*, 544 F.3d 1089, 1100 (9th Cir. 2008), the Ninth Circuit ruled that, under ANILCA, the Federal Subsistence Board may regulate subsistence use but is prohibited from limiting nonsubsistence use. A bag limit reduction for NFQUs for deer in GMU 4 is inconsistent with ANILCA under applicable case law on federal preemption. As directed by Congress in Section 802 of ANILCA, subsistence uses of wildlife shall be the priority consumptive use on federal public lands “when it is necessary to restrict taking in order to assure the continued viability of a fish or wildlife population or the continuation of subsistence uses of such population.” Section 815 of ANILCA authorizes federal restrictions on nonsubsistence uses on the public lands only if “necessary for the conservation of healthy populations of fish and wildlife” or if necessary to “continue subsistence uses.” Based on ADF&G’s analysis of the only annually collected, objective, and quantitative data available, none of those reasons apply. There is no conservation concern for the Admiralty Island deer population, and no restrictions on NFQU bag limit are needed to continue subsistence uses of deer. Data largely provided by FQUs residing in Angoon clearly indicate that the decline in harvest by that user group resulted from substantially lower participation and effort by FQU deer hunters.

Data Tables

Table 2. Summary Table Federally Qualified Deer Hunters, WAAs 4041, 4042, 4043, 4044, 4054, and 4055.

Regulatory Year	No. of Hunters	Hunt Days	Total Harvest	Deer/Hunter	Days/Deer
1997	131	630	198	1.51	3.19
1998	82	386	210	2.55	1.84
1999	70	274	76	1.08	3.60
2000	49	272	135	2.74	2.02
2001	52	312	108	2.08	2.91
2002	59	289	151	2.55	1.91
2003	70	168	146	2.08	1.15
2004	74	179	169	2.28	1.06
2005	51	217	189	3.67	1.15
2006	81	474	195	2.42	2.43
2007	51	166	74	1.46	2.23
2008	25	222	90	3.58	2.47
2009	40	101	39	0.97	2.60
2010	46	151	103	2.23	1.46
2011	38	162	118	3.08	1.38
2012	52	164	75	1.44	2.19
2013	30	80	41	1.38	1.96
2014	42	118	37	0.88	3.19
2015	29	39	24	0.82	1.66
2016	49	225	99	2.04	2.27
2017	27	49	47	1.70	1.05
2018	27	60	33	1.22	1.82
2019	44	128	78	1.76	1.64
2020	49	266	88	1.79	3.03
2021	39	253	78	2.00	3.24

Table 3. Summary Table NFQ Deer Hunters, WAAs 4041, 4042, 4043, 4044, 4054 and 4055.

Regulatory Year	No. of Hunters	Hunt Days	Total Harvest	Deer/Hunter	Days/Deer
1997	153	559	211	1.38	2.65
1998	152	698	226	1.49	3.09
1999	208	977	296	1.42	3.30
2000	157	858	177	1.13	4.85
2001	139	677	243	1.75	2.79
2002	150	637	158	1.05	4.05
2003	118	608	195	1.65	3.11
2004	172	692	239	1.39	2.90
2005	124	451	150	1.22	3.00
2006	62	268	103	1.67	2.60
2007	127	653	73	0.57	9.00
2008	63	271	55	0.87	4.94
2009	67	216	48	0.71	4.50
2010	95	465	177	1.86	2.63
2011	92	429	122	1.33	3.52
2012	84	388	93	1.11	4.16
2013	92	363	94	1.03	3.86
2014	101	355	114	1.13	3.10
2015	132	569	175	1.33	3.25
2016	122	500	145	1.18	3.46
2017	78	313	86	1.10	3.66
2018	96	365	120	1.25	3.04
2019	102	384	102	1.00	3.76
2020	86	350	113	1.32	3.10
2021	76	293	90	1.18	3.26