Draft Wildlife Closure Review
WCR26-01

ISSUE: WCR26-01 is a standard review of a Federal subsistence wildlife closure to the harvest of deer by non-federally qualified users (NFQUs) on Federal public lands in a portion of Prince of Wales Island (POW) in Unit 2 from Aug. 1-15. WCR26-01 also reviews the two buck harvest limit restriction for NFQUs in all of Unit 2 (see **Map 1**). It is the Federal Subsistence Board's (Board) policy that Federal public lands should be reopened when a closure is no longer necessary, and that closures will be reviewed at least once every four years. The purpose of this review is to determine if the August closure and harvest limit restriction to NFQUs on POW is still warranted.

Closure Location and Species: Unit 2, Prince of Wales Island, excluding the southeast portion (land south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait) (Unit 2 POW) – Deer

Closure Dates: August 1 – August 15; two buck harvest limit restriction: year-round

Current Federal Regulations

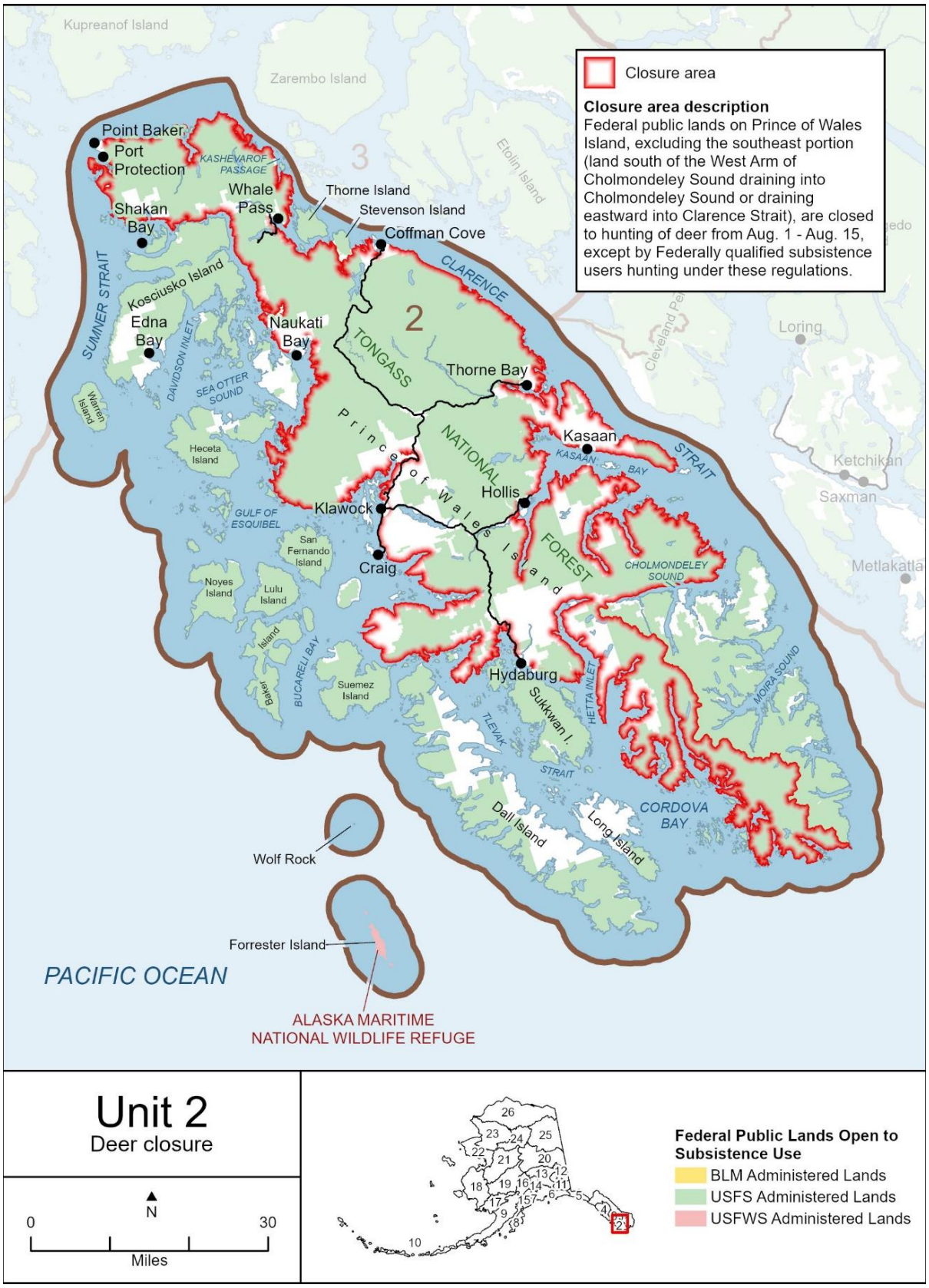
Unit 2—Deer

5 deer; however, no more than one may be a female deer. Female deer may be taken only during the period Oct.15-Jan. 31. Harvest ticket number five must be used when recording the harvest of a female deer but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.	*Jul. 24 – Jan. 31*
Federal public lands on Prince of Wales Island, excluding the southeast portion (land south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 - Aug. 15, except by Federally qualified subsistence users hunting under these regulations.	
Non-federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.	

Current State Regulations

Unit 2−Deer

Residents and Nonresidents: 4 Bucks	*Harvest tickets must be validated in sequential order, and unused tickets must be carried when you hunt.* *In all hunts limited to one sex, evidence of sex must remain naturally attached to the meat or antlers must remain naturally attached to the entire carcass, with or without viscera.*	*HT*	*Aug. 1 – Dec. 31*



Map 1. Deer Closure on Federal Public Lands in Unit 2.

Regulatory Year Initiated: 2003: Closure on POW from Aug. 1-21; 2004: Closure on POW from Aug. 1-15; 2006: Closure on northwest portion of POW from Aug. 1-15; 2018: NFQUs harvest limit reduced to 2 bucks in Unit 2.

Closure last reviewed: 2022 - WCR22-01

Justification for Original Closure

Section 815(3) of ANILCA states:

> *Nothing in this title shall be construed as – (3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on public lands (other than national parks and monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law…*

The Federal Subsistence Board (Board) adopted Proposal WP03-05 with modification to close Federal public lands on POW to deer hunting by NFQUs for one regulatory year from Aug. 1 – Aug. 21, 2003, for the continuation of subsistence uses. A number of interrelated reasons were discussed as justification for the closure, including: a long-term trend of declining deer habitat (only 6% of clearcuts remained "huntable"); declining deer populations; increasing hunter participation; and increasing competition between user groups, resulting in decreased subsistence opportunity. Many of these issues were cited as being particularly prevalent in the most road-accessible portions of POW.

In 2004, the Board adopted Proposal WP04-15, reducing the closure period to Aug. 1-15 and maintaining the closure in codified regulations indefinitely with no sunset clause.

Council Recommendation for Original Closure

Support: The Southeast Alaska Subsistence Regional Advisory Council (Southeast Council) supported the original proposal (WP03-05) with modification to close Federal public lands to NFQUs from Aug. 1-Aug. 10, instead of Aug. 1- Sept.1 as proposed, and reduce the harvest limit for NFQUs hunting in Unit 2 from four deer to two deer. The Council concluded that there was substantial evidence that the deer population on POW had declined and that this decline was likely to continue as habitat changes persisted.

State Recommendation for Original Closure

Oppose: The State noted that the Board is not authorized to regulate non-federally qualified users in the manner requested in WP03-05 as it was submitted (reducing NFQU's harvest limits). In November 2002, the Alaska Board of Game (BOG) rejected a proposal to reduce the harvest limit for deer in Unit 2 from 4 to 2 bucks, concluding that a reduction in harvest opportunity was not needed for conservation reasons at that time. They noted that hunters may have reported seeing fewer deer in the area as a result of thicker secondary growth in the abundant clearcuts on POW.

Extent of Federal Public Select Land or Water

Unit 2 is made up of approximately 74% Federal public lands, consisting of 73% U.S. Forest Service (USFS) managed lands and less than 1% U.S. Fish and Wildlife Service (USFWS) managed lands (**Map 1**).

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 2.

Regulatory History

In 2003, WP03-04 was submitted by the Southeast Council, requesting to extend the deer hunting season in Unit 2 to increase hunting opportunities for residents earlier in the season. The Board subsequently adopted this proposal to provide greater subsistence harvest opportunity, extending the deer hunting season for federally qualified subsistence users (FQSUs) in Unit 2 from Aug. 1-Dec. 31, to Jul. 24-Dec. 31. Also in 2003, Craig Community Association and Klawock Cooperative Association submitted WP03-05, requesting to close Federal public lands in Unit 2 to the harvest of deer by non-federally qualified users (NFQUs) from Aug.1-Sept.1, and to reduce the harvest limit for NFQUs hunting in Unit 2 to two bucks. This proposal was submitted to conserve the deer population and continue subsistence uses, as the proponents noted increasing competition for a declining deer population in Unit 2.

In the analysis of WP03-05, it was noted that August and November were generally the two months when the greatest amount of deer harvest took place in Unit 2 (OSM 2003). It was also noted that August was the preferred time for hunting by Ketchikan residents, followed by mid-October to late November (OSM 2003). The Southeast Council supported WP03-05 with modification to establish a closure to NFQUs hunting deer on the Federal public lands of Unit 2 from Aug.1-10, and to reduce the harvest limit for NFQUs from 4 deer to 2 deer. The Board subsequently adopted proposal WP03-05 with further modification, enacting a one-year closure to NFQUs hunting deer on Federal public lands in Unit 2 from Aug. 1-21. The Board cited the need to continue subsistence uses of deer as justification for the closure. However, at this time, the Board noted that they did not have the authority to change harvest limits for NFQUs. Overall, the adoption of these two proposals provided FQSUs a total of 28 days to hunt deer in Unit 2 without competition from NFQUs.

The adoption of proposals WP03-04 and WP03-05 was controversial, and in 2004, a total of thirteen proposals were submitted by various stakeholders requesting to either maintain, enhance, or reduce/rescind the regulatory changes adopted under WP03-04 and WP03-05 in 2003 (see **Table 1**). One of these proposals, WP04-15, was submitted by the Southeast Council, requesting to maintain the season date extension adopted under WP03-04, and to maintain the closure adopted under WP03-05 moving forward. The Southeast Council subsequently voted to support WP04-15 with modification to reduce the closure period to NFQUs hunting deer on the Federal public lands of POW from Aug.1-21, to Aug.1-15. At their regulatory meeting, the Board adopted WP04-15 with the Southeast Council's

modification to maintain a closure to NFQUs hunting deer on the Federal public lands of POW from Aug. 1-15. The Board cited the continuation of subsistence uses as justification for the closure, and also cited impending work by a Southeast Council subcommittee on deer management on POW as an additional reason to maintain current regulations relatively unchanged until the work of the subcommittee could be reviewed in the following wildlife regulatory cycle. The Board took no action on the other twelve proposals, WP04-03/-04/-05/-06/-07/-08/-09/-10/-11/-12/-13/-14 (see **Table 1**), consistent with the recommendations of the Southeast Council.

Table 1. Unit 2 deer proposals considered during the 2004 Board meeting.

Proposal numbers	Proponent	Proposal request
WP04-03; WP04-11; WP04-12	POW Tribal Coalition; Steve Hoffman	Change the timing and extend the length of the closure to NFQUs in Unit 2
WP04-03; WP04-09; WP04-10; WP04-11; WP04-12; WP04-13; WP04-14	POW Tribal Coalition; Steve Hoffman; Steve Hoffman; POW Tribal Coalition; Steve Hoffman; Jay O'Brien; William Welton	Reduce or eliminate the recently extended July 24-31 harvest period for FQSUs in Unit 2
WP04-03; WP04-05; WP04-10; WP04-11	POW Tribal Coalition; Dolly Garza; Steve Hoffman; POW Tribal Coalition	Reduce harvest limits for NFQUs hunting in Unit 2
WP04-04; WP04-09; WP04-10; WP04-12	Dick Stokes; Steve Hoffman; Steve Hoffman; Steve Hoffman	Eliminate or reduce the length of the antlerless deer season in Unit 2
WP04-05; WP04-06; WP04-07; WP04-08; WP04-12; WP04-13	Dolly Garza; Andy Mathews; Eric Eichner; Mike Mood; Steve Hoffman; Jay O'Brien	Reduce or eliminate the closure to NFQUs hunting in Unit 2
WP04-09	Steve Hoffman	Antler restrictions for NFQUs
WP04-12	Steve Hoffman	Extend the deer season in Unit 2 to run through Jan. 31
WP04-15	Southeast Council	Maintain the current deer hunting regulations as previously adopted under WP03-04 and WP03-05

In 2006, the Board adopted Proposal WP06-08 to exclude the southeastern portion of Prince of Wales Island (POW) from the Federal closure area in Unit 2. This decision made the closure more consistent with prior ADF&G recommendations and ensured opportunity for State residents, as well as other hunters. **Table 2** summarizes key actions taken regarding Unit 2 deer regulations since 2010.

In 2018, the Southeast Council submitted proposal WP18-01, requesting that NFQUs be limited to the harvest of two bucks on Federal public lands in Unit 2, and that the season for NFQUs hunting in Unit 2 be reduced by a week or more. The Southeast Council submitted this proposal after hearing extensive testimony from POW residents that they were having to work much harder to meet their subsistence needs for deer due to competition and changing habitat conditions, and as a result, their subsistence needs for deer were often not being met (FSB 2018). The Southeast Council subsequently voted to support the harvest limit reduction for NFQUs hunting in Unit 2, but it did not support the season length reduction for NFQUs hunting in Unit 2 (FSB 2018). The Board adopted WP18-01 as modified by the Southeast Council at their regulatory meeting. The Board cited the continuation of subsistence uses as justification for this action (FSB 2018).

In August 2020, the Board approved a revised closure policy, which stipulated that all closures must be reviewed every four years. The policy also specified that closures, similar to regulatory proposals, would be presented to the Councils for a recommendation and then to the Board for a final decision. Previously, closure reviews were presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure. This closure was first reviewed under the revised closure policy in 2022 (WCR22-01). At that time, the Southeast Council recommended retaining the closure because they felt that it was still serving an important role in conserving Unit 2 deer populations and providing subsistence opportunities to FQSUs in the area. The Board retained the closure, consistent with the Southeast Council's recommendation.

Table 2: Federal regulatory history related to Unit 2 deer closure

Proposal number	Reg. Year	Proponent	Proposal request	FSB action
WCR10-01	2010	Standard Review	Closure review	N/A
WP16-01	2016	Craig Tribal Association	Reduce harvest limit for NFQUs to two deer and extend hunting season for FQSUs to run through Jan. 31	Adopted with modification extending hunting season for FQSUs to run through Jan 31., but opposed harvest limit reductions for NFQUs
WP16-05	2016	SERAC	Remove regulatory language stating that Unit 2 deer harvest limit may be reduced to four deer in times of conservation	Adopted
WP18-01	2018	SERAC	Reduce harvest limit for NFQUs to two deer and reduce season for NFQUs by one week or more	Adopted with modification to reduce harvest limit for NFQUs to two deer but opposed season reduction for NFQUs.
WP18-02	2018	SERAC	Modify customary & traditional use determinations (C&T) in Southeast Alaska so that all rural residents of Units 1-5 have C&T for deer in Units 1-5.	Adopted

Proposal number	Reg. Year	Proponent	Proposal request	FSB action
WCR22-01	2022	Standard Review	Closure review	Closure retained

Current Events

The Alaska Department of Fish and Game, Mule Deer Foundation, U.S. Forest Service, University of Alaska Fairbanks, and Natural Resources Conservation Service have recently partnered on an effort to implement wildlife habitat improvements on POW and document their effects to improve deer habitat on a landscape scale that could result in a measurable increase in deer numbers. Included in this effort is working with all landowners in Southeast to map and prioritize areas where restoration should occur on the landscape, with an emphasis on U.S. Forest Service project areas, while including adjacent landowners to maximize restoration opportunities.

A proposal (NRD25-01) has been put forward by the Ketchikan Indian Community (KIC) to change the status of Ketchikan to a rural area. Ketchikan residents are currently one of the primary groups of NFQUs that hunt deer in Unit 2. Ketchikan residents would become FQSUs with a customary and traditional use determination for deer in Unit 2 if Ketchikan were to become a rural area. A change in the status of the Ketchikan Area, therefore, could substantially impact the number of people qualified to hunt deer on POW during the August closure, if the closure is maintained. The Southeast Council recommended against changing Ketchikan to rural status at its October 2024 meeting, and the Board will deliberate on the proposal at its February 2025 meeting.

Biological Background

Sitka black-tailed deer spend the winter and early spring at low elevation on steep slopes where there is less snow accumulation and old-growth forests provide snow-intercept and foraging opportunities. Fawning occurs in late May and early June as vegetation greens-up, providing abundant forage to meet energetic needs of lactating does. Some deer migrate and follow the greening vegetation up to alpine for the summer, while others remain at lower elevations. The breeding season, or rut, occurs from late October through late November, peaking around mid-November (ADF&G 2009).

<u>Habitat</u>

Commercial logging has greatly altered forest habitat and human access to forest-based resources in Unit 2 (Hasbrouck 2023). Since 1954, POW has been the site of the most logging activity in the Southeast region, resulting in a 94% reduction of contiguous high-volume forest for lumber production (Albert and Schoen 2013). Overall, logging activity is estimated to have reduced deer habitat by 46% in north central POW, and by 18% in south POW (USDA 2016). However, many of these logged and unlogged areas are more accessible because logging associated road construction in Unit 2 has created the highest density of roads in Southeast Alaska, with approximately 2,500 miles of drivable roads located on National Forest and Native Corporation lands here (Hasbrouck 2023).

Old-growth forests are considered primary deer winter range in Southeast Alaska because the complex canopy cover allows sufficient sunlight through for forage plants to grow and intercepts snow, making it easier for deer to move and forage during winters when deep snow often hinders access to other habitats. ADF&G estimates that over 40% of the old-growth forest once present in Unit 2 has been logged over the past 50 years (Hasbrouck 2023). Clearcutting can result in relatively quick regeneration of abundant forage for deer (Hasbrouck 2023). However, this forage is not accessible during periods of deep snow (Hasbrouck 2023). Furthermore, the regenerating forest enters a stem-exclusion stage after about 25 years of regrowth, where the evergreen canopy closes, shading out understory forage vegetation (Hasbrouck 2023: 3).

Habitat in some areas of Unit 2 have been affected by large scale timber harvest, while habitat remains largely intact in other areas. Young-growth forest treatments (e.g. thinning, small gap creation, branch pruning) can benefit deer forage development in previously harvested stands. Regardless, areas with substantial timber harvest are expected to have lower long-term deer carrying capacity compared to pre-harvest conditions.

On average, Wildlife Analysis Areas (WAAs) in Unit 2 have 68% of their deer winter habitat remaining (see **Table 3**). Deer winter habitat is defined as high volume, old growth forest on south facing slopes below 800 feet in elevation. However, many WAAs have less than 50% of deep snow winter habitat remaining due to past timber harvest and road building (see **Map 2**). When severe winter weather occurs, deer mortality is likely greater in these WAAs because there is less habitat available to sustain them. The stem-exclusion growth stage of regenerating forests can last from 25 years post-harvest to 150 years post-harvest, meaning habitat improvement without intervention (e.g. thinning, pruning) is a long process. **Map 2** displays deer winter habitat conditions in Unit 2, by WAA. **Table 8** lists the WAAs where the greatest amount of timber harvest has taken place, and the estimated deer winter habitat remaining in these areas. In general, WAAs with less than 50% deep snow winter habitat have exhibited the highest deer harvest rates. This is likely due to greater access from logging roads and higher concentrations of deer in the remaining suitable habitat in these WAAs.

Predation is also a significant factor affecting the deer population in Unit 2. Black bears are known to target young fawns during the birthing season (Gilbert 2015). Unit 2 residents have reported that deer abundance typically decreases as the density of wolves increases (SERAC 2017a, 2021), and that wolf trapping can increase the success rates of deer hunters in the area of trapping (Brooks et al. 2024). High densities of these predators may reduce deer populations or increase the time needed for deer populations to recover after severe winters.

According to ADF&G's most recently published Unit 2 wolf management report and plan, the Department's wolf management objective is to provide for a sustainable harvest while maintaining an estimated fall population of 150 to 200 wolves (Hasbrouck 2022). ADF&G, with support from the U.S. Forest Service (USFS) and Hydaburg Cooperative Association, currently estimates wolf abundance in Unit 2 using a DNA-based mark-recapture method (FSB 2024). In the fall of 2023, ADF&G estimated the preharvest wolf population in Unit 2 to be approximately 238 wolves, with a true population range of 184 to 308 wolves (FSB 2024). Unit 2 wolf populations are currently

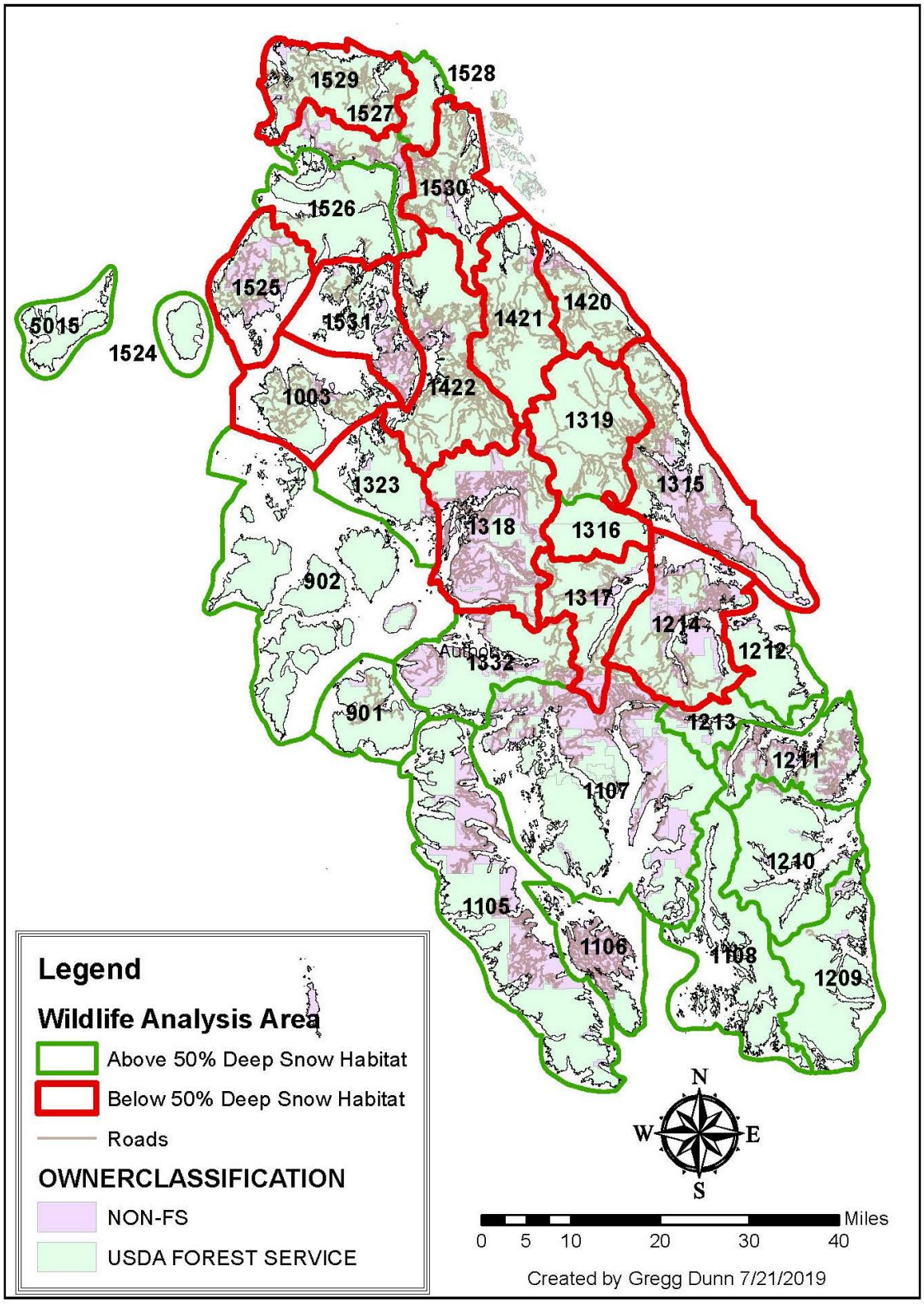
managed using variable trapping seasons designed to promote sustainable harvest based upon the estimated size of the population and average daily harvest rate (FSB 2024) Since initiating this management strategy in 2019, the average daily harvest rate in Unit 2 has been 2.4 wolves per day (FSB 2024). A Wildlife Special Action was recently issued to allow for a 31-day wolf trapping season take place in Unit 2 from Nov. 15 – Dec. 15, 2024 (FSB 2024). It is estimated that this amount of harvest opportunity is likely to result in the harvest of about 74 wolves in 2024 (FSB 2024).

Mild winters and later snow arrival over the last few years may have helped to stabilize deer populations in Unit 2, allowing deer to forage longer at higher altitudes and in areas such as muskegs (OSM 2022). Prolonged snowpack during a severe winter, or during prolonged winters, can have a great impact on deer survival because less habitat is available for foraging. However, the only current index of Unit 2 deer populations since deer pellet surveys were discontinued in 2020 (Hasbrouck 2023) is deer harvest, and Unit 2 deer harvest has declined substantially since 2015 (McCoy 2019b; Churchwell 2024). Some of this reduction in harvest could be related to the harvest limit restrictions for NFQUs that have been in place in Unit 2 since 2018.

Table 3. Percent of historical deep snow winter habitat (High Productive Old Growth below 800 feet on south facing slopes) remaining by WAA in Unit 2 since 1954 (the beginning of large-scale logging), percent productive old growth remaining, average annual deer harvest from 2005-2020, and harvest trend (OSM 2022).

WAA	Remaining Productive Old Growth since 1954 (%)	Remaining Deep Snow Deer Winter Habitat (%)	Average Reported Deer Harvest by WAA since 2005 and trend
1530	50	37	145 ↑
1003	51	49	46 ↑
1422	51	29	386 ↓
1525	51	40	21 ↑
1420	54	27	308 ↑
1315	55	29	350 ↑
1529	55	46	144 ↓
1531	55	49	37 ↓
1317	56	23	145 ↑
1214	67	48	245 ↑
1527	67	61	23 ↓
1421	71	44	107 ↓
1319	74	61	229 ↓
1318	78	49	220 ↑
1332	80	72	76 →
1528	82	84	37 →
1211	83	78	36 ↑
901	89	85	69 ↑
1323	90	76	18 ↓

WAA	Remaining Productive Old Growth since 1954 (%)	Remaining Deep Snow Deer Winter Habitat (%)	Average Reported Deer Harvest by WAA since 2005 and trend
1526	93	83	18 ↑
1107	97	93	138 ↑
1105	99	99	84 ↑
1108	99	99	17 ↑
1210	99	99	50 ↑
1213	99	99	21 ↑
1316	99	100	27 ↓
902	100	100	79 ↓
1106	100	100	25 ↓
1209	100	100	10 ↑
Average	**77**	**68**	**107**



Map 2. Availability of Unit 2 deep snow deer winter habitat by WAAs. Note: WAA 5015 is not part of Unit 2 (OSM 2022).

Population Management

Managing Sitka black-tailed deer and deer harvest is a difficult task in this region, as there are no methods to directly count deer in Southeast Alaska. ADF&G has long relied on indices such as deer pellet counts, aerial surveys, and harvest reporting statistics (**Figure 1, Figure 2)** to assess deer population trends (Hasbrouck 2023).

Deer pellet surveys were used in the Southeast region from 1981 to 2019 to monitor deer population trends and document substantial changes in deer density in specific watersheds (McCoy 2017). An average of <1.00 pellet group per survey plot generally indicated a low-density deer population, an average of 1.00 – 1.99 pellet groups per survey plot indicated a moderate-density population, and an average of >2.00 pellet groups per survey plot typically indicated a high-density population (Kirchoff and Pitcher 1988). Pellet-count data in Unit 2 suggests an increasing population trend since the population lows seen in the late 1990s and early 2000s (**Figure 1**). Recent deer pellet counts conducted from 2016-2019 have generally indicated a moderate density deer population in the areas studied on POW (Red Bay, Sarkar, Snakey Lake, and Twelve Mile Arm) (Hasbrouck 2023). Pellet counts conducted at Thorne Lake in 2018 and 2019 were the only counts to exceed the high-density threshold of 2.0 (Hasbrouck 2023). Pellet counts were not conducted in Unit 2 in 2020 due to the COVID-19 pandemic and have since been discontinued due to their inaccuracy (Hasbrouck 2023). While pellet counts are no longer being conducted, the ADF&G deer management objective in Unit 2 is to "maintain populations at greater than 45 deer per square mile of winter range, as determined by mean densities of 1.4 pellet groups per plot." (Kirchoff 1990 in Hasbrouck 2023: 4).

Deer pellet survey data, however, should be interpreted with caution, "as factors other than deer population size can affect deer pellet-group density" (McCoy 2017: 2). Issues such as winter severity and snowfall patterns, temperature and humidity, variability in survey effort, the length of time since the last survey, timing of vegetation green-up, changes in pellet group detectability, and changes in habitat can all impact pellet-group density and/or detection (McCoy 2017). A deer pellet study conducted by Brinkman and colleagues (2011, 2013) on POW using DNA-based methods found that the deer pellet survey techniques historically used by ADF&G/USFS in Southeast Alaska did not provide an accurate index of deer populations when extrapolated across time, or beyond the local scale of the survey. ADF&G stopped conducting deer pellet count surveys on POW after 2020, due to "the insensitive outputs of pellet-transect data" (Hasbrouck 2023: 7). ADF&G is currently determining if camera-based survey methods could be feasible for long term deer monitoring in Unit 2, as the DNA based survey methods developed by Brinkman and colleagues (2011) are currently too expensive to implement for ongoing monitoring in Unit 2 (Hasbrouck 2023).

ADF&G began testing alpine aerial survey techniques to monitor deer populations in 2013 and conducted its surveys over POW in 2016 (Hasbrouck 2023). Aerial surveys were conducted three to five times per year over northern POW from 2016-2019, and over central POW from 2017-2019 (see **Figure 2**; Hasbrouck 2023). The number of deer observed in these locations varied within years, between years, and between study areas (Hasbrouck 2023). As Hasbrouck (2023: 8) notes, "Overall, more deer per hour were observed on central POW than on northern POW. The data appears to

indicate that deer per hour increased over time on central POW but decreased over time in northern POW." Central POW exhibited the highest number of deer observed per hour in 2018, and the second highest number observed per hour in 2017 of all the Southeast Alaskan areas surveyed during these years (**Figure 2**). Aerial surveys were not conducted over POW in 2020 due to the COVID-19 pandemic (Hasbrouck 2023). However, ADF&G analyzed aerial survey data from across the Southeast region and found that observer bias influenced measures of deer observed per hour of flight time (Eacker in ADF&G 2020). ADF&G decided to discontinue aerial alpine survey efforts due to the difficulty of determining exactly how deer seen per hour in the alpine relates to the overall deer population (Eacker in ADF&G 2020).

Currently, Unit 2 deer populations are monitored using reported harvest data. However, hunter self-reported harvest and effort data should also be interpreted cautiously, as reporting rates can be less than ideal (Hasbrouck 2023). Deer harvest reporting is required but no penalties are enforced for not reporting (Hasbrouck 2023). This issue can be particularly problematic in smaller rural communities where reporting rates are often much lower than elsewhere (Bethune 2020, SERAC 2010). Resource managers typically call hunters to ask about their hunting efforts and harvests to try to achieve a 60% reporting rate when response rates are low (Bethune 2020). However, to account for hunters who do not report, data are proportionally expanded by community size (Bethune 2020; Hasbrouck 2023). Therefore, "in small communities with low reporting rates, expanded data may be based on the reports of only a handful of hunters, resulting in a good deal of uncertainty about the [accuracy of] expanded data" (Bethune 2020: 16). Southeast Council members have also noted recently that calculations of hunter effort and harvest success based on this reported data may be misleading because subsistence users often only document their successful hunts (SERAC 2021).

The estimated total harvest for all users averaged 3,425 deer/year in Unit 2 from 2005-2017, but the average total harvest fell to 1,833 deer/year from 2018-2023 (**Figure 3)**. This decline in total average harvest coincides with a similar decline in reported effort by both user groups, as measured by the number of hunters (**Figure 4**). While the estimated number of hunters has declined for both groups, the number of NFQUs has declined slightly more than that of FQSUs. The harvest limit reduction for NFQUs has been in effect in Unit 2 since 2018, and this could account for some of the difference in effort reported by NFQUs between these two periods. However, decreasing harvests and hunter effort in Unit 2 could also be an indication of a declining, or less accessible, deer population making it increasingly difficult and time-consuming for hunters to harvest sufficient deer to justify their efforts and expenditures.

Between 2005 and 2015, the number of deer harvested per NFQUs averaged 1.3 deer/year, and the number harvested per FQSUs averaged 1.8 deer/year (**Figure 5**). Since then, the number of deer harvested per hunter has fallen for both user groups, with NFQUs averaging 0.75 deer/year, and FQSUs averaging 1.3 deer/year from 2020 to 2023 (Churchwell 2024). Similarly, the number of days reported hunted per successful deer harvest has increased for both user groups (Hasbrouck 2023), while the success rate (harvest of at least one deer) for both groups has fallen in recent years (**Table 8**). These issues are discussed in more detail in the harvest history section.

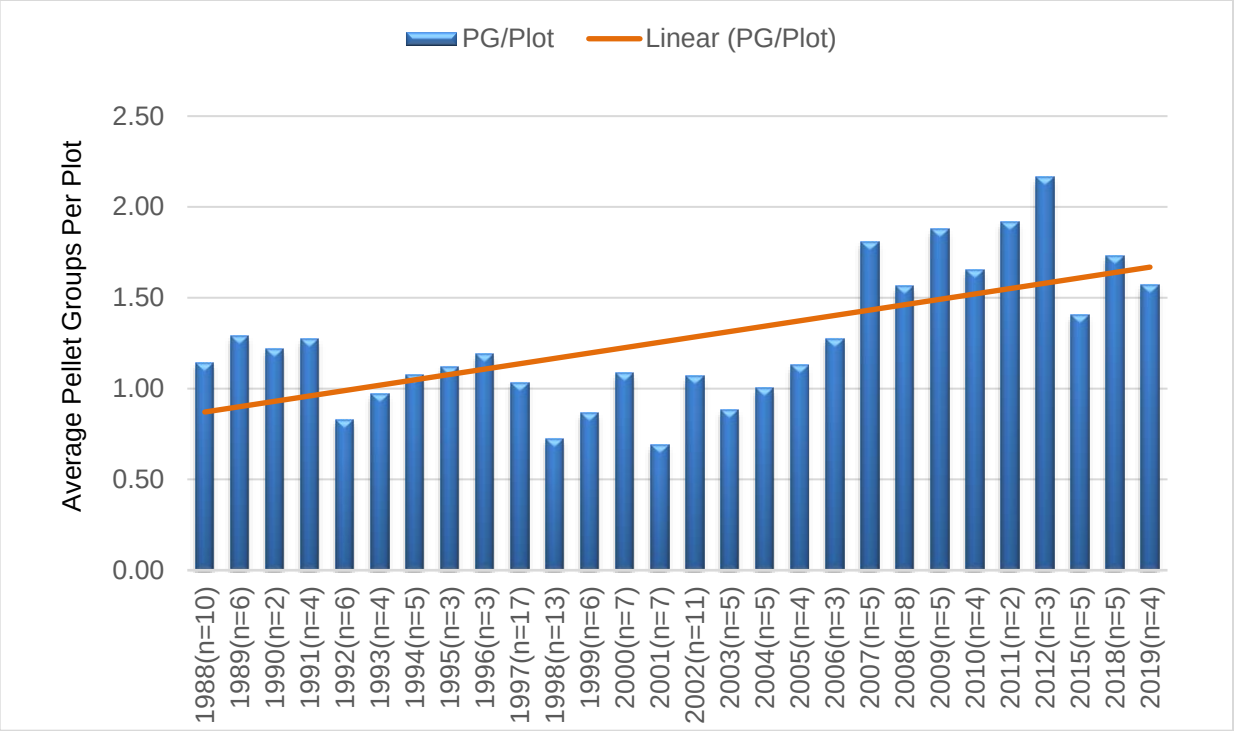


Figure 1. Annual average pellet group counts and general population trend for deer in Unit 2, 1988-2019 (McCoy 2019a). N = number of locations surveyed

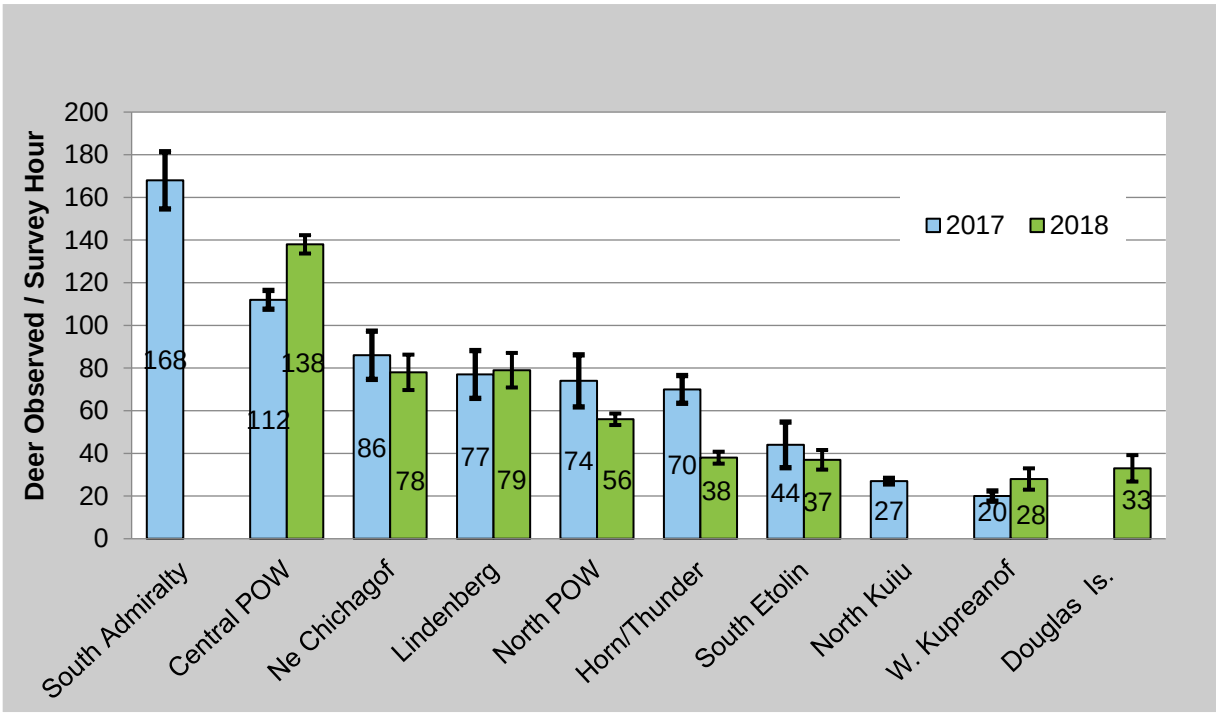


Figure 2. Aerial alpine surveys across southeast Alaska for 2017 and 2018 (McCoy 2019b). Central POW and North POW are the areas surveyed in Unit 2.

Cultural Knowledge and Traditional Practices

People have made their living on Prince of Wales Island (POW) harvesting a variety of fish, wildlife, and plant resources for generations (Goldschmidt and Haas 1998). Archaeological evidence indicates that POW has been inhabited by humans for approximately 10,000 years, with the earliest human remains found at On Your Knees Cave, on the northern side of POW (Sill 2017). POW was initially occupied and controlled by the Tlingit (Grant and Sill 2017). However, in the late 1700s and early 1800s, the Kaigani Haida emigrated to southern POW from Haida Gwaii in what is now British Columbia (Grant and Sill 2017). Some sources state that Haida territory came to include POW south of the Klawock River across to Thorne Bay, part of Heceta Island, and all of Noyes, Lulu, San Fernando, Suemez, and Dall Islands, whereas others consider Haida territory to begin further south on POW (Moss 2008).

Many of the larger and/or older communities on POW today such as Craig, Klawock, Kasaan, and Hydaburg are located on or near former Tlingit and Haida villages or camps (Goldschmidt and Haas 1998; see also **Table 4**). Several of the newer and/or smaller communities on POW such as Thorne Bay, Whale Pass, and Naukati Bay are the site of former logging camps that were permanently settled by loggers and homesteaders from the continental US through State land selection programs in the mid-to-late 1900s (ADCCED 2024; see also **Table 4**).

Most POW communities have been heavily involved in the commercial fishing, fish processing, and/or timber industries since the late 1800s or early 1900s (ADCCED 2024). Many POW residents continue to combine work in these industries with extensive subsistence harvesting for their livelihoods (ADCCED 2024; see also **Table 5**).

The extensive clearcut logging that has taken place on POW has significantly altered deer habitats, with corresponding impacts on local deer populations, hunting opportunities, and hunting competition (Brinkman et al. 2009, 2011). As Brinkman and colleagues (2009: 37) explain:

> Intensive logging between 1950 and 1990 led to the construction of roads, changes in forest habitat, and a dramatic increase in the human population [on POW]…Greater access via logging roads increased the availability of deer and the dependence of local residents on deer meat…In 1974, ferry service linked POW to other parts of Alaska, Canada, and the continental US, which further changed its community demographics.

As **Tables 6 and 7** illustrate, deer has been the most significant terrestrial source of meat for POW residents for the past several decades for which data has been collected (see also OSM 2023; Brinkman et al. 2009). Since the 1980s, deer has consistently ranked as one of the top five resources in terms of bulk contribution to local subsistence harvests on POW, at times trailing only salmon, non-salmon fish, marine invertebrates, and/or halibut (**Table 6**). The average annual subsistence harvest of deer per POW resident has been approximately 50 pounds, accounting for an average of about 19% of the overall per capita subsistence harvest in each of the subsistence surveys shown in **Table 6**. An average of about 76% of POW households reported using deer during these surveys, while an average of 66% reported hunting deer (**Table 7**). Further, deer is the most extensively harvested big-game species for

both subsistence and sport hunters in Southeast Alaska, and replacing deer meat with store-bought foods during times of harvest difficulty can represent a substantial cost for POW households, particularly lower income households (Brinkman et al. 2009). Communities on POW that have increased their per capita deer harvest have generally also shown an increase in the number of people living below the Federal poverty level (Mazza 2003 in Brinkman et al. 2009).

The most recent comprehensive subsistence surveys conducted on POW took place in Whale Pass (Sill 2017) and Hydaburg (Grant and Sill 2017) for the 2012 harvest season. Deer were reported as one of the most harvested and utilized subsistence resources in each community, composing 91% of the large land mammal harvest in Whale Pass (Sill 2017), and 100% of the large land mammal harvest in Hydaburg during this time (Grant and Sill 2017). In Whale Pass, 25% of responding households reported that they used roughly the same amount of large land mammals in 2012 as they had in previous years, while 60% reported using less, and 15% reported using more (Sill 2017). The most frequently cited reason (55%) for using less large land mammals in Whale Pass was that the resource was less available in 2012 (Sill 2017). Whale Pass households that reported using more large land mammals noted that they did so because of increased effort (33%), increased need (33%), or because they used more deer instead of other resources (33%) (Sill 2017). Still, of the 38% of Whale Pass households that reported not getting enough subsistence resources in 2012, deer was the resource that these households most frequently reported needing more of (37%) during the year (Sill 2017). "When asked to evaluate the impact of not getting enough large game, 60% [of surveyed households] described the impact as minor, 30% explained that not getting enough large land mammals had a major effect on their household, and 10% stated that the impact was severe. Households that did not get enough large land mammals adapted by using more commercial foods" (Sill 2017: 339).

Though Whale Pass households generally reported high or marginal levels of food security in 2012, access to subsistence resources throughout the year appeared to be a greater food security issue for residents than access to store-bought foods, even though the closest grocery store was several hours away by car (Sill 2017: 292). December and January were the months noted by food insecure households as being the most problematic, because hunting and fishing is more difficult in the winter and roads to larger communities and stores are often in poor condition (Sill 2017). Many Whale Pass survey respondents noted concerns about the impacts of non-local hunters, as well as hunting violations and inadequate enforcement on what they perceived to be a declining POW deer population (Sill 2017).

In Hydaburg, 53% of responding households reported that they used roughly the same amount of large land mammals in 2012 as they had in previous years, while 30% reported using less, and 11% reported using more (Grant and Sill 2017). The most frequently cited reason (29%) for using less large land mammals in Hydaburg was less sharing (Grant and Sill 2017). Hydaburg households that reported using more large land mammals in 2012 noted that they did so because they needed more (60%), received more (40%), or because the resource was more available (20%) (Grant and Sill 2017). Still, of the 29% of Hydaburg households that reported not getting enough subsistence resources in 2012, deer was the resource that these households most frequently reported needing more of (35%) during the year (Grant and Sill 2017). When asked to evaluate the impact of not getting enough large land

mammals in 2012, approximately 67% of surveyed Hydaburg households described the impact as minor, 20% explained that not getting enough large land mammals had a major effect on their household, and 13% stated that the impact was severe (Grant and Sill 2017).

The percentage of surveyed Hydaburg households reporting food insecure conditions (21%) was almost twice the average for the State of Alaska (12%) (Grant and Sill 2017). Some of these conditions included worrying about having enough food, lacking the resources to get store-bought and/or subsistence foods, and running out of food (Grant and Sill 2017). "More than twice as many households experienced times where subsistence foods did not last, in comparison to times when store-bought foods did not last" (Grant and Sill 2017: 369). Like Whale Pass, food insecure conditions tended to peak in Hydaburg during the winter months (Grant and Sill 2017). As Grant and Sill explained (2017: 369), "given the seasonal availability of subsistence foods and employment in the area, it seems reasonable that food insecure conditions increase during the months when subsistence harvests and employment are low." Like Whale Pass, many Hydaburg survey respondents noted concerns about the amount of competition and harvest taken by non-local deer hunters on POW (Grant and Sill 2017; also SERAC 2017a, 2017b). Similarly, as a representative of the Hydaburg Cooperative Association noted during testimony at a 2017 Southeast Council meeting, recent problems with deer harvests on POW include a number of interrelated factors, such as: increasing competition with non-local hunters, high populations of predators like wolves and bears, changing forest habitat and reductions in the number of deer on the landscape and/or changes in the location of deer on the landscape, and declining road access (SERAC 2017a). He explained (SERAC 2017a: 161 & 171-172):

> I can speak for Hydaburg when I say that the deer harvest this year did not even come close to meeting the needs of our community. This year [2016 hunting season] was probably the hardest year I've seen for deer in all the time I've been hunting. And we've seen a lot of wolf, and, we all know the hunting pressure on the island has increased tenfold in the last ten years. And then you couple that with reduced access. Again, that was adding access through logging, but reduced after they cut down a bunch of roads which bottlenecked a lot of people to a lot less roads on the island. And then you couple that with some of the ANCSA corporations not doing any kind of land management practices. We're ending up with biological deserts in our area, namely Deer Bay and the Chomley area that are almost inaccessible to hunting either by road or even through a clear cut. And so, we can either hunt the beach or we can muscle our way up to the top of an alpine area, but anything in between is pretty much off the hunting area and, we've gotten so much pressure in our area from outside hunters that the land manager for the Haida Corporation cut off access to the land this year and was strongly urging SEALASKA to do the same, due to the inability of the shareholders and community members to get enough deer..
>
> And so, access has been an issue. Increased pressure and competition between user groups. You know, it's tough. You can go from Hydaburg to the cutoff and there will be 30 cars parked on the side of the road. That's one area – 0.7 miles. And that's a reality. You can go down Soda Bay. Last year, you needed a stop sign to keep up with the traffic driving down there during the rut because it's renowned for the big bucks that we have. You know, we went down one day to count the cars – 32 cars down Soda Bay one day hunting. Now, that really lowers the success

> rate of your community to meet its needs when there's 32 other trucks driving with four guns poking out all four windows, looking for the same deer you are. And it just gets to be a little bit disheartening when you have two days on the weekend to do it because we are working citizens as well. Or taking the time off to do it. And we are meeting a large competitive hunter out there. And again, like you said, we're not above sharing the resource or finding common ground to make sure everybody has access, but that's the issues we're hearing from our community members.

Hydaburg residents also voiced more general concerns for the future about the availability of subsistence foods, ongoing competition with outside influences, and climatic/ environmental changes resulting in warmer winter weather and stronger storms (Grant and Sill 2017). Likewise, a recent research project investigating the perceptions and impacts of climate change in eleven communities in Southeast Alaska (three in Unit 2) and northern British Columbia revealed significant environmental changes over research participants' lifetimes, including accelerating changes to weather patterns as well as changing distributions, behaviors, and availability of key plants and animals over the past fifteen to twenty years (Wyllie de Echeverria and Thornton 2019). Participants noted that weather in the region was generally becoming warmer, with less snow, more rain, and more frequent and unpredictable storms (Wyllie de Echeverria and Thornton 2019). Because of these types of changes, it was suggested that deer may be generally less accessible during hunting seasons because smaller amounts of snow are allowing deer to stay higher in the hills, further away from humans. Changing weather patterns may also be influencing the incidence of disease and the quality of deer meat (Wyllie de Echeverria and Thornton 2019).

During the previous review of this closure (WCR22-01), Southeast Council member Douville, from POW, supported maintaining the closure due to the condition of the deer population and habitat at the time (SERAC 2021). He explained (SERAC 2021: 612-616):

> I would be in favor of maintaining the status quo. Living here, it's absolutely correct we have a lot of stem exclusion [forest]. We have, in spite of what some may think, a high wolf population, and a lower deer population that's still trending down. I think it will continue to do so because of the wolf population and continued acreage of stem exclusion. Geography is also a real important thing here. You know, if we have a bad winter here, it's really going to be bad because we have so much stem exclusion and clearcut, along with predation.

Council member Douville also noted that quantitative measurements of hunter effort were not always accurate because "a lot of these hunters only write down the day they got a deer, they don't write down how many times they went hunting. I mean, you'd need quite a logbook to do that. Myself, I've been out three times this year and have only had one success, and I didn't write those [other days] down, but I guess maybe I will" (SERAC 2021: 616).

Table 4. Population change in POW communities from 1930 to 2023 (ADCCED 2024).

Community	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2023
Coffman Cove	0	0	0	0	0	193	186	199	176	127	191
Craig	231	505	374	273	272	527	1260	1397	1201	1036	1019
Hollis	0	0	0	0	0	0	111	139	112	65	145
Hydaburg	319	348	353	251	214	298	384	382	376	380	337
Kasaan	112	85	47	36	30	25	54	39	49	30	71
Klawock	437	455	404	251	213	318	722	854	755	720	696
Naukati Bay	0	0	0	0	0	0	93	135	113	142	130
Point Baker	39	29	0	0	80	90	39	35	15	12	10
Port Protection	0	0	0	0	0	40	62	63	48	36	36
Thorne Bay	0	0	0	0	443	377	569	557	471	476	478
Whale Pass	0	0	0	0	0	90	75	58	31	86	91
Total	1,138	1,422	11,78	811	1,252	1.958	3,555	3,858	3,347	3,110	3,204

Table 5. Economic information for POW communities (Census Reporter 2024a, 2024b, 2024c, 2024d, 2024e, 2024f, 2024g, 2024h, 2024i, 2024j, 2024k).

Community	Median Per Capita Income 2018-2022	Median Household Income 2018-2022	Poverty Rate (%)
Coffman Cove	$38,886	$63,750	11.9%
Craig	$44,566	$55,547	12.2%
Hollis	$26,089	$66,146	38.4%
Hydaburg	$24,781	$53,125	24.7%
Kasaan	$42,202	$87,917	17.3%
Klawock	$33,116	$60,625	17.8%
Naukati Bay	$18,933	-	34.2%
Point Baker	-	-	-
Port Protection	-	-	-
Thorne Bay	$30,905	$63,365	7.6%
Whale Pass	$32,737	$49,063	19.4%
Average	**$32,468**	**$62,442**	**20.4%**

Table 6. Information on harvest amount and rank of deer in terms of bulk contribution to subsistence harvests in POW communities from comprehensive subsistence surveys conducted 1987 – 2012 (ADF&G CSIS 2024).

Community	Study Year	Deer Harvest per Person (lbs.)	Overall Subsistence Harvest per person (lbs.)	Percentage Deer (%)	Large Land Mammal Rank of Deer	Overall Subsistence Rank of Deer
Coffman Cove	1998	55	276	20%	1st	3rd
	1987	60	183	33%	1st	1st
Craig	1999	33	-	-	-	-
	1997	44	231	19%	1st	3rd
	1987	41	185	22%	1st	2nd
Hollis	1998	31	169	18%	1st	3rd
	1987	38	183	21%	1st	3rd
Hydaburg	2012	68	531	13%	1st	5th
	1997	35	384	9%	1st	5th
	1987	43	336	13%	1st	4th
Kasaan	1998	68	452	15%	1st	4th
	1987	40	182	22%	1st	2nd
Klawock	1997	48	320	15%	1st	3rd
	1987	45	247	18%	1st	3rd
Naukati Bay	1998	45	242	19%	1st	4th
Point Baker	1996	46	289	16%	1st	5th
	1987	89	346	26%	1st	2nd
Port Protection	1996	94	451	21%	1st	3rd
	1987	40	304	13%	1st	4th
Thorne Bay	1998	32	179	18%	1st	3rd
	1987	37	189	20%	1st	4th
Whale Pass	2012	73	247	30%	1st	2nd
	1998	51	185	28%	1st	2nd
	1987	50	179	28%	1st	1st
Average[1]	**-**	**50**	**273**	**19%**	**1st**	**3rd**

[1]Standard average with no weight given to number of times a community was surveyed.

Table 7. Information on harvest, use, and sharing of deer in POW communities from comprehensive subsistence surveys conducted 1987 – 2012 (ADF&G CSIS 2024).

Community	Study Year	Households Using (%)	Households Attempting to Harvest (%)	Households Harvesting (%)	Households Receiving (%)	Households Giving (%)
Coffman Cove	1998	70%	88%	62%	18%	24%
	1987	73%	-	57%	27%	22%
Craig	1999	76%	64%	41%	42%	21%
	1997	76%	59%	47%	37%	24%
	1987	80%	-	52%	42%	25%
Hollis	1998	56%	63%	39%	26%	11%
	1987	67%	-	40%	32%	16%
Hydaburg	2012	87%	62%	52%	54%	54%
	1997	69%	45%	33%	49%	27%
	1987	78%	-	37%	55%	27%
Kasaan	1998	86%	64%	57%	29%	43%
	1987	86%	-	43%	64%	21%
Klawock	1997	72%	58%	43%	36%	25%
	1987	74%	-	52%	38%	21%
Naukati Bay	1998	68%	66%	52%	26%	18%
Point Baker	1996	94%	75%	50%	56%	25%
	1987	95%	-	63%	53%	37%
Port Protection	1996	92%	68%	56%	64%	36%
	1987	84%	-	36%	64%	16%
Thorne Bay	1998	54%	71%	42%	16%	4%
	1987	75%	-	58%	37%	28%
Whale Pass	2012	76%	76%	57%	19%	19%
	1998	67%	60%	47%	40%	27%
	1987	78%	-	67%	28%	6%
Average[2]		**76%**	**66%**	**49%**	**40%**	**24%**

[2]Standard average with no weight given to number of times a community was surveyed.

Harvest History

Deer harvest in Southeast Alaska has been estimated using both a mail-in survey and a harvest reporting system. From 1997 to 2010, harvest was estimated using the Region 1 deer survey, a survey mailed to a sample of hunters receiving harvest permits. In general, 35% of hunters from each community were sampled annually and, while response rates varied by community, the overall response rate of sampled hunters throughout the Southeast was approximately 60% each year. Since 2011, deer harvest has been estimated using self-reported data from returned harvest reports. While harvest reporting is mandatory, there is no enforcement mechanism to ensure that hunters return reports, and response rates vary by community. Data from returned reports is extrapolated by

community size to estimate harvest from unreturned reports. As noted above, data from returned harvest reports may not accurately reflect hunter effort due to a tendency to only report successful hunts.

The harvest of five deer has been allowed under Federal regulations in Unit 2 since 2006. However, only one of these deer may be female. NFQUs may harvest up to four bucks in Unit 2. However, since 2018, only two of these deer may be taken from Federal public lands on POW, following the August closure in the northwestern portion of POW.

The Alaska Board of Game (BOG) has established a population objective of 71,000 deer and a harvest objective of 2,700 deer for Unit 2 (Hasbrouck 2023). Deer harvest reached historically high levels in Unit 2 in 2015, and then began to decline. Harvests were at or above the Unit 2 harvest objective from 2005-2016, but harvests fell below management objectives from 2017-2023. The estimated total harvest averaged 3,425 deer/year in Unit 2 from 2005-2017, but the average harvest fell to 1,833 deer/year from 2018-2023 (**Figure 3)**. This represents a 46% reduction in total average harvest between these two periods.

This decline in average harvest coincides with a similar decline in reported effort by both user groups, as measured by the number of hunters. The number of hunters in Unit 2 rose steadily from 2005 through 2015, then dropped sharply from 2016 to 2018, before leveling off between 2019 and 2023 (**Figure 4**). While effort has declined for both groups, the number of NFQUs has declined slightly more. From 2005 through 2017, the number of Unit 2 hunters was split nearly evenly between the two groups (51% FQSU and 49% NFQU). In the most recent years (2020-2023), that proportion has shifted to an average of 55% FQSU and 45% NFQU hunters. The harvest limit reduction for NFQUs has been in effect in Unit 2 since 2018, and this could account for some of the difference in effort reported by NFQUs between these two periods. However, decreasing harvests and hunter effort in Unit 2 could also be an indication of a declining and/or less accessible deer population making it increasingly difficult and time-consuming for hunters to harvest sufficient deer to justify their efforts and expenditures.

Between 2005 and 2015, the number of deer harvested per NFQUs averaged 1.3 deer/year, and the number harvested per FQSUs averaged 1.8 deer/year (**Figure 5**). Since then, the number of deer harvested per hunter has fallen for both user groups, with NFQUs averaging 0.75 deer/year, and FQSUs averaging 1.3 deer/year from 2020 to 2023 (Churchwell 2024). Similarly, the number of days reported hunted per successful deer harvest has increased for both user groups (Hasbrouck 2023). FQSUs hunting in Unit 2 generally reported higher harvest success rates than other hunters from 1997-2017, with an average success rate (harvest of at least one deer) of 74.4% compared to a 59.6% success rate for NFQUs. The success rate for both groups has fallen in recent years, with an average success rate of 68% for FQSUs and 55% for NFQUs from 2020 through 2023 (**Table 8**).

The two buck harvest limit for NFQUs that took effect in 2018 may have reduced the overall harvest by NFQUs, but the extent of any change is unclear. Between 1997 and 2017, an average of 13.1% of NFQUs harvested more than two deer, which is no longer permitted on Federal lands. Over that time

period (1997-2017), an average of 560 deer in excess of two per hunter were harvested annually by NFQUs. Correspondingly, the average total harvest by NFQUs has fallen since the two buck limit was imposed, from 997 per year in 1997-2017, to 557 per year in 2020-2023, a difference of 540 deer. While it may appear that the two buck limit is largely responsible for the decrease in harvest by NFQUs, harvest by FQSUs has followed a similar pattern despite not being subject to the two buck limit. The average annual FQSU harvest from 1997-2017 was 1,686 deer, while the 2020-2023 average was 1,183 deer, a difference of 503 deer.

Much of the deer harvest in Unit 2 takes place during two time periods: late July/August, and November. The July/August period corresponds to the opening of the hunt in Unit 2, and people typically hunt in alpine areas for mature bucks at this time. This period also includes the Aug. 1 – Aug. 15 closure to NFQUs. However, harvest data is tabulated by month, so it is unknown how much effort and harvest in August occurs during and after the closure period. November is the most popular month to hunt in Unit 2 because it coincides with the rut, when deer are typically easier to harvest. In recent years, the distribution of harvest has changed somewhat, with the harvest becoming even more concentrated during the July/August early season and the November rut (**Table 9**). FQSUs' ability to hunt deer in January appears to be useful in times of necessity or opportunistic encounters, but it does not appear to be a preferred hunting period due to the typical condition of deer and the severity of weather associated with this time of the season (**Table 9**, SERAC 2023). The January hunting period has accounted for less than 1% of the overall yearly deer harvest in Unit 2 since 2016 (**Table 9**).

Ketchikan residents are one of the primary groups of NFQUs that hunt deer in Unit 2. Public testimony at Southeast Council and Federal Subsistence Board meetings documents that Ketchikan residents have historically harvested much of their deer from Unit 2 (POW) (FSB 2006; SERAC 2019a). From 2013-2022, the vast majority of Ketchikan residents' deer hunting and harvests occurred near home in Unit 1A (45% of harvests), or in nearby Unit 2 (52% of harvests) (Schumacher 2024, pers. comm.). Ketchikan residents have explained that the more extensive road system on POW facilitates more efficient hunting, as Ketchikan has far fewer miles of paved road to provide hunting access in Unit 1 (SERAC 2022). As one Ketchikan resident explained, "several years ago [the amount of road in the Ketchikan area] was cut down to 300 miles that they said they can maintain but, it's barely passible. They're not maintained. They're not graded. But, if you go over to POW, I think there's a thousand or two-thousand miles of road, a lot that's paved. In Ketchikan, you really have just 30-some miles of paved road [that is well maintained]" (SERAC 2019a: 43).

However, Ketchikan residents appear to be doing less deer hunting in Unit 2 (POW) in recent years, possibly due in part to the early season closure for NFQUs adopted in 2003, and the harvest limit reductions adopted for NFQUs in 2018 (SERAC 2021). Deer hunting has also increased substantially on Gravina Island in recent years, and the construction of a new road to Shelter Cove has also enabled greater hunting in the Ketchikan Area (Limle 2024, pers. comm.). On average, Ketchikan residents reported harvesting about 70% of their deer in Unit 2 from 2013-2017 (Schumacher 2024, pers. comm.). However, Ketchikan residents reported harvesting an average of 29% of their deer in Unit 2 from 2018-2022 (Schumacher 2024, pers. comm). One Ketchikan resident explained that because of the recent harvest restrictions placed on NFQUs in Unit 2, "A lot of families I know, including my

family, skipped their annual hunting trip to POW because of the lower [harvest] limits for deer. It just isn't cost efficient anymore" (SERAC 2019b: 218).

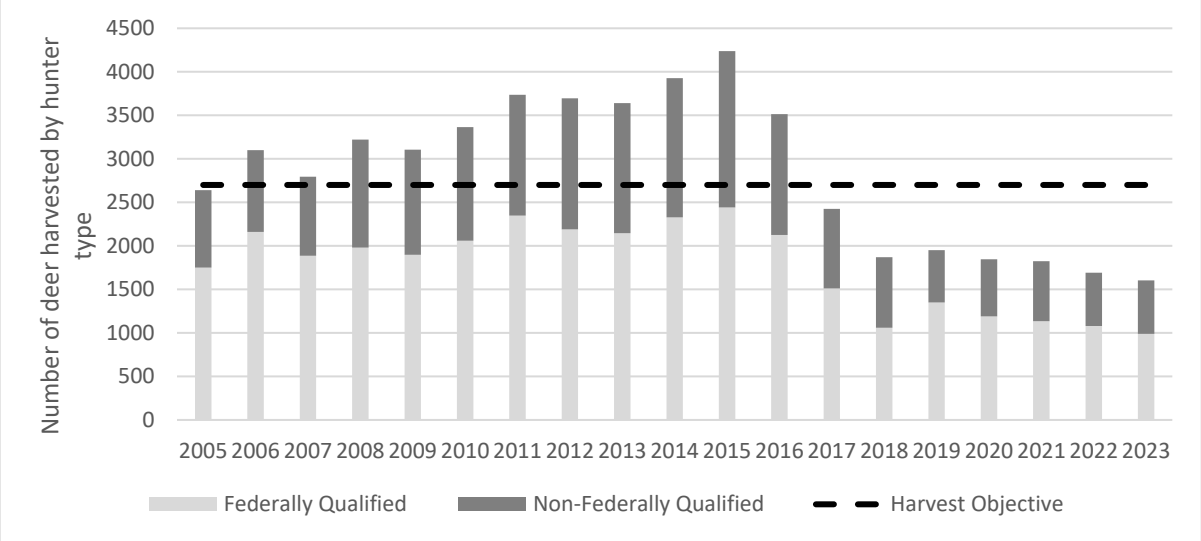


Figure 3: Estimated deer harvest by user group from 2005-2023 in Unit 2. (Data from 2005 – 2019 from McCoy 2019b, data from 2020-2023 from Churchwell 2024).

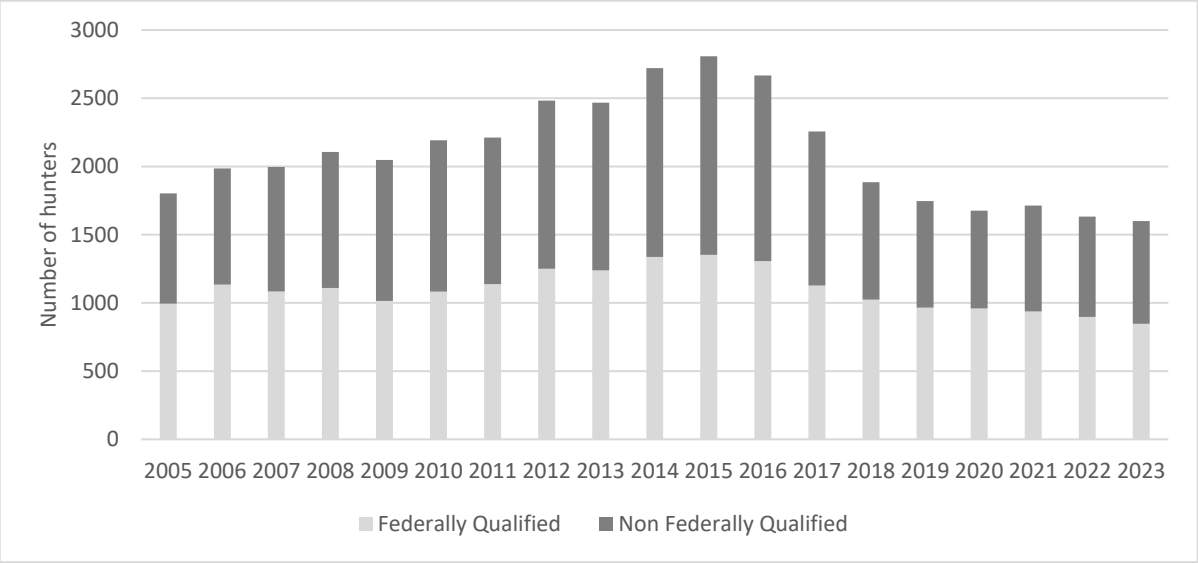


Figure 4: Estimated number of hunters by user group from 2005-2023 in Unit 2. (Data from 2005 – 2019 from McCoy 2019b, data from 2023 from Churchwell 2024).

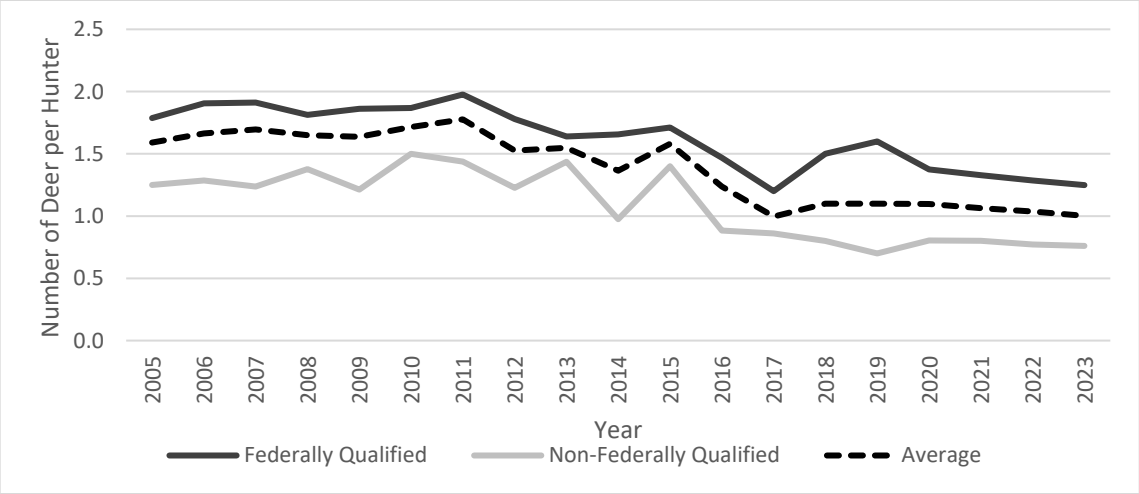


Figure 5: Average number of deer harvested per hunter by user type in Unit 2, 2005-2023. (Data from 2005 – 2019 from McCoy 2019b, data from 2020-2023 from Churchwell 2024).

Table 8. Number of deer and percent reported harvested by hunter type and overall success rate from 1997-2017 (McCoy 2019b) and 2020-2023 (Churchwell 2024). Note: Non-federally qualified users may harvest up to four bucks (two on Federal lands).

Time Period	Hunter Type	No Deer	1-2 Deer	3-4 Deer	5 Deer	Overall Success
1997-2017	FQSUs	26%	49%	24%	2%	74%
	NFQUs	40%	46%	13%	0%	60%
2020-2023	FQSUs	32%	52%	16%	1%	68%
	NFQUs	45%	52%	3%	0%	55%

Table 9: Percent of harvest by month from 2004-2018 (McCoy 2019b) and 2020-2023 (Churchwell 2024). Notes: The January season has only occurred since 2016.

Time Period	July/August	September	October	November	December	January
2004-2018	19%	9%	16%	48%	5%	0.6%*
2020-2023	24%	7%	11%	55%	3%	0.1%

* Harvest in January began in 2016 and is only calculated for 2016-2018.

Alternative(s) Considered

Shift the Closure Period: One alternative considered was to shift the closure to the first two weeks of November because this may provide a greater benefit to subsistence users. Most of the harvest from FQSUs and NFQUs occurs during the month of November because of the rut when deer are more susceptible to harvest. The current August closure period appears to have been originally chosen, at

least in part, because it was a popular month for hunting by Ketchikan residents at the time (OSM 2003). OSM is interested to receive feedback from the Southeast Council and public before considering further whether shifting the current closure period might be warranted.

Maintain the August Closure or the Two Buck Harvest Limit Restriction for NFQUs, but not both: It may be possible to continue providing a meaningful subsistence priority for POW residents while also increasing harvest opportunities for NFQUs by eliminating either the early season closure or the two buck harvest restriction for NFQUs.

Conduct Section 804 Prioritization Analysis: Another alternative considered was to conduct a section 804 user prioritization analysis for deer in Unit 2. If Ketchikan becomes non-rural, the competition for deer during the closure period would be greatly increased. However, Board action on NRD25-01 is uncertain, and this modification is outside the scope of a closure review. A regulatory proposal would need to be submitted to effect this change.

Effects

Rescinding the early season closure would increase harvest opportunities for NFQUs hunting on Federal public lands in Unit 2. However, this change could potentially decrease harvest opportunity for FQSUs through increased competition and additional reductions in the Unit 2 deer population. Modifying the harvest limit reduction that is currently in place for NFQUs may also substantially increase competition and reduce subsistence opportunity, especially since this restriction seems to have reduced competition and harvest by Ketchikan residents.

Overall, it is difficult to estimate the possible impacts of potential regulatory changes on the Unit 2 deer population due to limited population information. The recent decline in the Unit 2 deer harvest corresponds with a decline in the number of hunters. However, recent reductions in the number of deer harvested per year by both FQSUs and NFQUs, coupled with increasing time required to harvest by both user groups, suggests that the Unit 2 deer population may be in decline, the population may be less accessible, and/or competition levels are impacting harvest success and efficiency. Given the unknown status of the Unit 2 deer population, and its possible decline based on declining harvests, rescinding the closure may exacerbate conservation concerns for the POW deer population by increasing disturbance and harvest.

Many preferred hunting areas are no longer huntable or no longer easily accessible, due to changes in the forest habitat. Thus, habitat loss from commercial logging appears to affect the ability of FQSUs to find enough deer to meet their subsistence needs. Local weather patterns are also changing, impacting deer habitat use patterns and associated hunting strategies. For example, snow is not driving deer down to traditional locations that subsistence hunters typically use, making it harder to find deer.

Current Federal regulations allow for a 5 ½ -month season, which may or may not be sufficient to meet subsistence needs. **Table 9** shows that the early July/August hunting period has been one of the most important times for hunting deer Unit 2, accounting for approximately 24% of the deer harvested by all users in recent years (Churchwell 2024). FQSUs' ability to hunt in deer January appears to be useful

in times of necessity or opportunistic encounters, but it does not appear to be a preferred hunting period due to the typical condition of deer and the severity of weather associated with this time of the season (**Table 9**). The January hunting period has accounted for less than 1% of the overall yearly deer harvest in Unit 2 since 2016 (**Table 9**).

OSM PRELIMINARY CONCLUSION

☒ **Retain the Status Quo**
☐ **Rescind the Closure**
☐ **Modify the Closure to** Click or tap here to enter text.
☐ **Defer Decision on the Closure or Take No Action**

Justification

Deer are the most significant terrestrial source of meat for POW residents, and deer have consistently ranked as one of the top resources harvested, utilized, and shared by residents since harvest surveys began being conducted in the 1980s. Reduced access to deer can represent a substantial hardship for POW households with limited means to replace wild food harvests with expensive store-bought foods. The long-term trend of declining deer habitat, decreasing deer populations, and increasing competition between user groups in the most road-accessible portions of the POW warrant retaining the early season closure in northwest POW and the 2-buck harvest limit for NFQUs throughout Unit 2 for the purposes of conservation and the continuation of subsistence uses. Recent reductions in the number of deer harvested per year by both FQSUs and NFQUs, coupled with increasing time required to harvest by both user groups, suggests that the Unit 2 deer population may be in decline, the population may be less accessible, and/or competition levels may still be impacting harvest success and efficiency. Southeast Council members have also explained that harvest report and survey statistics tend to underestimate the amount of hunting effort actually taking place, and overestimate hunting success rates because many users only report their successful hunts. Overall, data presented in this analysis suggests that finding deer in traditional hunting areas is becoming more difficult due to issues related to competition, stem exclusion and reduced winter habitat due to extensive logging, predation, weather, and road access. Deer habitat and deer populations will likely continue to be impacted by the legacy of logging for the next several decades.

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