|                            | WP26-03/-04/-05 Executive Summary                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| General Description        | Wildlife Proposal WP26-03 requests closing Federal public lands in Unit 2 to deer hunting by non-federally qualified users (NFQUs). Submitted by: Southeast Alaska Subsistence Regional Advisory Council                                                                                                                                                                                                               |  |  |  |  |
|                            | Wildlife Proposal WP26-04 requests conducting an ANILCA §804 subsistence user prioritization analysis for Unit 2 deer. Submitted by: Southeast Alaska Subsistence Regional Advisory Council                                                                                                                                                                                                                            |  |  |  |  |
|                            | Wildlife Proposal WP26-05 requests restricting NFQUs to the harvest of one buck only in Unit 2, with the season starting for NFQUs on Aug. 15. WP26-05 also requests restricting federally qualified subsistence users who do not reside on Prince of Wales Island to the harvest of two bucks in Unit 2, via an ANILCA §804 subsistence user prioritization analysis. <i>Submitted by: Ketchikan Indian Community</i> |  |  |  |  |
|                            | These three proposals all reference conservation concerns for the Unit 2 deer population and the need to continue subsistence uses as the basis for the regulatory changes requested. These proposals are being analyzed together because they are related. Restrictions to NFQUs are enacted before §804 subsistence user restrictions are enacted.                                                                   |  |  |  |  |
| <b>Proposed Regulation</b> | <u>WP26-03</u>                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |
|                            | Unit 2—Deer                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |
|                            | 5 deer; however, no more than one may be a female deer. Female deer Jul. 24 – Jan. 31 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.                                  |  |  |  |  |
|                            | Federal public lands o <del>n 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.</del>                                                      |  |  |  |  |
|                            | Non-federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.                                                                                                                                                                                                                                                                                                                    |  |  |  |  |

# WP26-03/-04/-05 Executive Summary

# WP26-04

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.

Federal public lands in Unit 2 are closed to deer hunting except by residents of (communities to be determined via a §804 analysis) hunting under these regulations.

#### WP26-05

#### 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.

Federally qualified subsistence users who are residents of Units 1, 3, 4, and 5 may only harvest 2 male deer on Federal public lands in Unit 2.

Non-federally qualified users may only harvest <del>up to 2</del> 1 male deer on Federal public lands in Unit 2.

# OSM Preliminary Conclusion

**Oppose** WP26-03 due to the existing closure and harvest limit restrictions for NFQUs already in codified regulations.

**Support** WP26-04 **with modification** to close only the northwestern portion of Prince of Wales Island from Jul. 24 - Aug. 15 to non-prioritized FQSUs, and reduce the harvest limit of non-prioritized FQSUs to two bucks.

**Take no Action** on WP26-05 due to the actions taken on WP26-03 and WP26-04.

|                                                                       | WP26-03/-04/-05 Executive Summary                                                                                                                                                                         |  |  |  |  |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Southeast Alaska Subsistence Regional Advisory Council Recommendation |                                                                                                                                                                                                           |  |  |  |  |
| Interagency Staff Committee Comments                                  |                                                                                                                                                                                                           |  |  |  |  |
| ADF&G Comments                                                        |                                                                                                                                                                                                           |  |  |  |  |
| Written Public<br>Comments                                            | 1 Support; 1 Oppose  Please see the Written Public Comments on Wildlife Proposals and Closure Reviews section of the meeting book or  www.doi.gov/subsistence/wildlife/public_comments for full comments. |  |  |  |  |

# DRAFT STAFF ANALYSIS WP25-03/-04/-05

#### **ISSUES**

Wildlife Proposal WP26-03, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Southeast Council), requests closing Federal public lands in Unit 2 to deer hunting by non-federally qualified users (NFQUs) due to ongoing conservation concerns and the need to continue subsistence uses among federally qualified subsistence users (FQSUs).

Wildlife Proposal WP26-04, submitted by the Southeast Council, requests conducting an Alaska National Interest Lands Conservation Act (ANILCA) Section §804 subsistence user prioritization analysis for Unit 2 deer due to ongoing conservation concerns and the need to continue subsistence uses among a subset of local subsistence users who are most dependent upon the resource.

Wildlife Proposal WP26-05, submitted by the Ketchikan Indian Community (KIC), requests restricting NFQUs to the harvest of one buck only in Unit 2, with the season starting for NFQUs on Aug.15. WP26-05 also requests restricting FQSUs who do not reside on POWI to the harvest of two bucks in Unit 2, via an ANILCA Section §804 subsistence user prioritization analysis. WP26-05 was submitted due to conservation concerns for the Unit 2 deer population and the need to continue subsistence uses.

All three proposals are being analyzed together because they are related. Restrictions to NFQUs are enacted before restricting FQSUs via §804 subsistence user prioritization.

**Note:** Wildlife Proposals requesting to eliminate the Federal doe hunt in Unit 2 (WP26-06/-07) and to eliminate the January hunt in Unit 2 (WP26-08) have also been submitted due to conservation concerns for the Unit 2 deer population. These proposals are examined in separate analyses.

# **Proponent Statement**

The proponent of WP26-03/-04 states that a closure to NFQUs and a Section §804 subsistence user prioritization is necessary for the conservation of a healthy deer population in Unit 2, and to continue the subsistence uses of deer by Unit 2 residents. The proponent explains that deer are one of the most important subsistence resources for Prince of Wales (POWI) residents, but residents have not been meeting their subsistence needs for deer in recent years. They note that recent reductions in the Unit 2 deer population are exacerbated by substantial competition with NFQUs and other non-local users who come to Unit 2 to hunt deer. The proponent is also concerned about the age structure of the Unit 2 deer population as many hunters often target large bucks, which negatively impacts reproduction because does are less likely to breed with younger bucks.

The proponent of WP26-03/-04 argues that biological data are lacking with no actual population estimates, and that tracking of the Unit 2 deer population has been limited to reported hunter participation and harvest data in recent years. However, they note that traditional ecological knowledge (TEK) from POWI residents and public comments received during Council meetings strongly attest to a substantial

decline of the Unit 2 deer population. Using harvest as index for population size, they note that this TEK is corroborated by substantial declines in reported deer harvest taken from Unit 2 since approximately 2015. Of particular concern to the proponent, the Unit 2 deer population does not appear to have positively responded to the mild winters of the past two years. They explain that deer populations usually increase during mild winters due to higher over winter survival rates, because forage is more accessible. However, the proponent of WP26-03/-04 notes that while Units 1, 3, and 4 saw a recent increase in deer harvest following these mild winters, Unit 2 harvest slightly declined.

The proponent of WP26-03/-04 further explains that the recent designation of Ketchikan as a rural community within the Federal Subsistence Management Program (NDP25-01) could have detrimental impacts on Unit 2 deer populations and local hunter opportunity, as without any accompanying regulatory changes, Ketchikan residents will have expanded hunting seasons and greater harvest limits in Unit 2 as FQSUs. The proponent also notes that during deliberations on Ketchikan's rural status, Ketchikan residents and members of the Federal Subsistence Board (Board) suggested that the Section §804 subsistence user prioritization process was an appropriate and effective measure to deal with the negative impacts that Ketchikan's change in rural status might have on local subsistence resources and the continuation of subsistence uses, particularly regarding Unit 2 deer populations and POWI hunters. The proponent of WP26-03/-04 also recognizes that restricting NFQUs is necessary before Section §804 restrictions to subsistence users may occur.

The proponent of WP26-05 views their requested regulatory changes as an effective way to allow the Unit 2 deer population to recover and mitigate outside hunting pressure on POWI, while also assuring hunting opportunities for new FQSUs from Ketchikan. The proponent notes they submitted this proposal in solidarity with Craig Tribal Association and other sovereign Tribes on POWI. The submitted proposal requests restricting nonresidents to one buck with a season starting August 15. However, upon further discussion with the proponent, they amended their request to NFQUs as they understand the Federal program cannot distinguish between nonresidents and residents.

The proponents of all three proposals view their requested changes as proactive measures to conserve the Unit 2 deer population and continue subsistence uses for local users. The proponent of WP26-03/-04 argues that these proactive measures are an important step to prevent the situation from potentially getting worse, as one bad winter could devastate the population and greatly prolong recovery. The proponent of WP26-03/-04 also notes that while multiple, interactive factors such as predation, habitat loss, and weather have contributed to the decline of the Unit 2 deer population, hunting and harvest mortality are the most controllable factors.

## **Existing Federal Regulation**

Unit 2—Deer

5 deer; however, no more than one may be a female deer. Female deer Jul. 24 – Jan. 31 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.

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.

# **Proposed Federal Regulation**

# WP26-03

#### 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

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Non-federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

## WP26-04

#### 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

Jul. 24 – Jan. 31

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Non-federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

Federal public lands in Unit 2 are closed to deer hunting except by residents of (communities to be determined via a §804 analysis) hunting under these regulations.

# **WP26-05**

#### 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.

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Federally qualified subsistence users who are residents of Units 1, 3, 4, and 5 may only harvest 2 male deer on Federal public lands in Unit 2.

Non-federally qualified users may only harvest up to 2 1 male deer on Federal public lands in Unit 2.

Jul. 24 – Jan. 31

# **Relevant Federal Regulation**

# **ANILCA Section §804 Preference for Subsistence Uses:**

SEC. 804. Except as otherwise provided in this Act and other Federal laws, the taking on public lands of fish and wildlife for nonwasteful subsistence uses shall be accorded priority over the taking on such lands of fish and wildlife for other purposes. Whenever it is necessary to restrict the taking of populations of fish and wildlife on such lands for subsistence uses in order to protect the continued viability of such populations, or to continue such uses, such priority shall be implemented through appropriate limitations based on the application of the following criteria:

- (1) customary and direct dependence upon the populations as the mainstay of livelihood;
- (2) local residency; and
- (3) the availability of alternative resources.

## **ANILCA §815 Limitations, Savings Clauses**

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

## **Existing State Regulation**

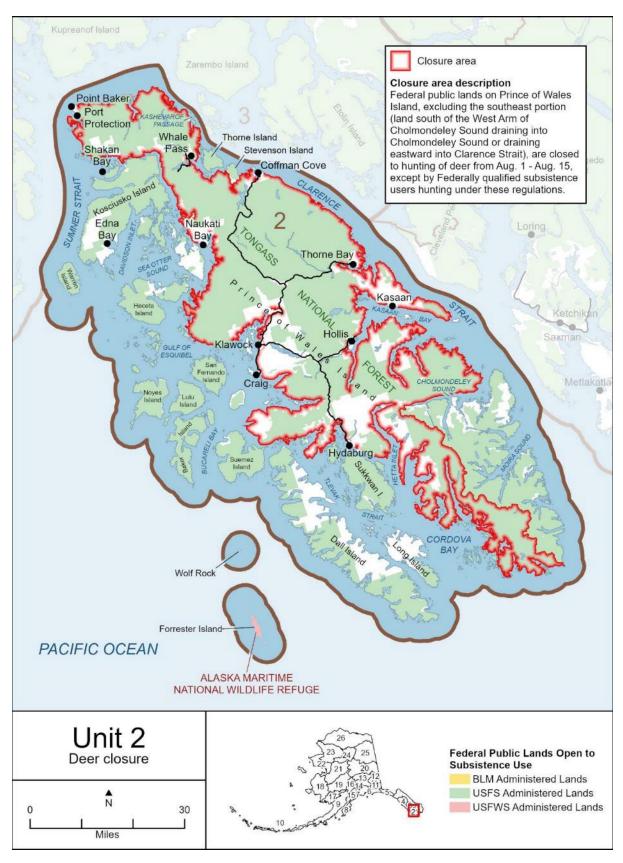
Unit 2-Deer

Residents and Nonresidents: 4 Bucks HT Aug. 1 – Dec. 31

Same-day airborne hunting of deer allowed. 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.

#### **Extent of Federal Public Lands**

Unit 2 is made up of approximately 78% Federal public lands, all of which are U.S. Forest Service (USFS) managed lands within Tongass National Forest, except for that portion of the Alaska Maritime National Wildlife Refuge located on Forrester Island (0.1%) (Map 1).



Map 1. Map of Unit 2 with outline of current deer closure on Federal Public Lands shown in red.

# **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 1992, the Federal Subsistence Management Program announced codified subsistence regulations. These regulations incorporated many provisions from State subsistence regulations, including customary and traditional use determinations. At this time, rural residents of Units 1(A), 2, and 3 had a customary and traditional use determination for deer in Unit 2 (57 Fed. Reg. 104. 22958 [May 29, 1992]). The Unit 2 deer hunt ran from Aug.1-Dec.31, with a harvest limit of four antlered deer (57 Fed. Reg. 103. 22540 [May 28, 1992]).

In 1994, the Southeast Council submitted Proposal P95-01, requesting to establish an antlerless deer season in Unit 2 (OSM 1995). The Board subsequently adopted this proposal as modified by the Southeast Council, to allow for the harvest of one antlerless deer to be taken from Oct.15-Dec.31 (OSM 1995). The Board's justification was that this change would assure conservation of the species, while allowing for some additional subsistence harvest during a time when antlered deer were traditionally not as desirable (OSM 1995). This regulatory change was followed by several proposals submitted from 1997 to 2001 (P97-07, P98-09, P98-10, P98-11, P98-12, P00-05, and P01-03) requesting to reduce or rescind the antlerless deer season and/or reduce the length of the antlered deer season in Unit 2 due to conservation concerns. These proposals were all rejected by the Board due to a lack of sufficient evidence of a conservation concern and the potential negative impacts of such changes to subsistence users (OSM 1997, 1998, 2000, 2001).

In 2002, 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 FQSUs in Unit 2 from Aug. 1-Dec. 31, to Jul. 24-Dec. 31.

Also in 2002, 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 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 bucks to 2 bucks. 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 29 days (Jul.24-Aug.21) 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 (WP04-03/-04/-05/-06/-07/-08/-09/-10/-11/-12/-13/-14/-15) 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 (OSM 2004). 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 POWI 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 POWI from Aug. 1-15. The Board cited the continuation of subsistence uses as justification for the closure, and impending work by a Southeast Council subcommittee on deer management on POWI 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 (FSB 2004). The Board took no action on the other twelve proposals, WP04-03/-04/-05/-06/-07/-08/-09/-10/-11/-12/-13/-14, consistent with the recommendations of the Southeast Council.

In 2006, the Board adopted Proposal WP06-08 to exclude the southeastern portion of POWI from the Federal closure area to NFQUs in Unit 2 (FSB 2006). This decision made the closure more consistent with prior ADF&G recommendations and ensured opportunity for State residents, as well as other hunters (**Map 1**).

In 2015, the Craig Tribal Association submitted proposal WP16-01, requesting to limit NFQUs to the harvest of two deer on Federal public lands in Unit 2, and to extend the Federal deer season in Unit 2 to run through January 31, instead of December 31. The Southeast Council supported extending the deer season through January because it would allow subsistence users to harvest deer if they needed additional resources late in the season (OSM 2016). However, the Southeast Council did not support limiting NFQUs to the harvest of two deer because they felt there was no conservation concern to justify limiting NFQUs' harvest opportunity at that time (OSM 2016). The Board subsequently adopted WP16-01 with modification, consistent with the Southeast Council's recommendation, extending the deer season through January 31.

In 2017, 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 (OSM 2018a). The Southeast Council submitted this proposal after hearing extensive testimony from POWI 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, citing the continuation of subsistence uses as justification (FSB 2018).

The Southeast Council also submitted proposal WP18-02 during the same regulatory cycle, requesting to expand the customary and traditional determinations for deer in Units 1 through 5 so that all rural residents of these units would be eligible to hunt deer under Federal subsistence regulations in Units 1 through 5 (OSM 2018b). The Southeast Council noted that this change was in keeping with traditional Southeast practices of traveling to harvest resources and visit family and friends, and that customary and traditional use determinations should not be used to limit or restrict subsistence uses (OSM 2018b). The Council noted that ANILCA §804 subsistence user prioritization was the more appropriate mechanism to use in cases of resource shortages, if the needs of all subsistence users cannot be met (OSM 2018b). The Board adopted this proposal in deference to the Southeast Council's efforts to recognize customary and traditional uses as inclusively as possible (FSB 2018).

In 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. The Unit 2 deer closure to NFQUs enacted under WP03-05 and WP04-15 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 continuing subsistence opportunities for FQSUs in the area. The Board subsequently retained the closure, consistent with the Southeast Council's recommendation (FSB 2022). **Table 1** below summarizes key actions taken regarding Unit 2 deer regulations since 2010.

In February 2025, the Board adopted proposal NDP25-01, changing Ketchikan to a rural status community. Ketchikan residents officially became rural, FQSUs with a customary and traditional use determination for deer in Unit 2 upon the publication of the new Federal subsistence regulations in the Federal Register in July 2025.

Table 1: Federal regulatory history related to Unit 2 deer closure since 2010

| Proposal number | Reg.<br>Year | Proponent                        | Proposal request                                                                                                                                     | FSB action                                                                                                                              |
|-----------------|--------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| WCR10-<br>01    | 2010         | Standard<br>Review               | Closure review                                                                                                                                       | N/A                                                                                                                                     |
| WP16-01         | 2016         | Craig Tribal<br>Association      | Reduce harvest limit for<br>NFQUs to two deer and ex-<br>tend hunting season for<br>FQSUs to run through Jan. 31                                     | Adopted with modification extending hunting season for FQSUs to run through Jan 31. only (rejected harvest limit reductions for NFQUs). |
| WP16-05         | 2016         | Southeast<br>Council             | Remove regulatory language stating that Unit 2 deer harvest limit may be reduced to four deer in times of conservation                               | Adopted                                                                                                                                 |
| WP18-01         | 2018         | Southeast<br>Council             | Reduce harvest limit for<br>NFQUs to two deer and re-<br>duce season for NFQUs by<br>one week or more                                                | Adopted with modification to reduce harvest limit for NFQUs to two deer only (rejected season reduction for NFQUs).                     |
| WP18-02         | 2018         | Southeast<br>Council             | 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                                                                                                                                 |
| WCR22-<br>01    | 2022         | Standard<br>Review               | Closure review                                                                                                                                       | Closure retained                                                                                                                        |
| NDP25-<br>01    | 2025         | Ketchikan<br>Indian<br>Community | Change Ketchikan to a rural status community within the Federal Subsistence Management Program                                                       | Adopted                                                                                                                                 |

#### **Current Events**

# Regulatory Events

Ketchikan residents were previously one of the key groups of NFQUs that hunted deer in Unit 2. Ketchikan residents became FQSUs, with a customary and traditional use determination for deer in Unit 2 after the Board adopted NDP25-01 in February 2025 and their rural status change was officially published in the Federal Register in July 2025. This change increases the deer harvest limits and season length on Federal public lands in Unit 2 for Ketchikan residents.

At their March 2025 meeting, the Southeast Council voted to submitted two wildlife special action requests that are similar to the formal regulatory proposals under consideration in this analysis (WP26-03/-04/-05). WSA25-01 requested a closure to deer hunting by NFQUs on Federal public lands in Unit 2 for the 2025/26 regulatory year, and WSA25-03 requested a Section §804 subsistence user prioritization be conducted for FQSUs hunting deer in Unit 2 during the 2025/26 regulatory year. The

Southeast Council also submitted wildlife special action WSA25-02 at their March 2025 meeting, requesting to eliminate the doe hunt in Unit 2 for the 2025/26 regulatory year, if the final rule establishing Ketchikan as a rural community publishes before the end of the Unit 2 deer hunting season. All three special actions were submitted due to conservation concerns and the need to continue subsistence uses of deer on POW. Formal regulatory proposals, WP26-06 and WP26-07, have also been submitted by the East POWI Advisory Committee (East POWI AC) and the Klawock Advisory Committee (Klawock AC), respectively. Both of these proposals request eliminating the doe hunt in Unit 2 due to conservation concerns.

Concurrent with the aforementioned special action requests and regulatory proposals, several additional regulatory items are also in process concerning Unit 2 deer. Wildlife Closure Review WCR26-01 is reviewing the existing, codified deer hunting closure and harvest limit restriction to NFQUs in Unit 2. Wildlife Proposal WP26-08, submitted by the East POWI AC, requests eliminating the January season for deer in Unit 2 due to conservation concerns. Analyses of all proposals and closure reviews will be presented at the Southeast Council's October 2025 meeting for public comment, Tribal comment, and the Council's recommendation. Additionally, Tribal and ANCSA Corporation consultations will be held with the Board to discuss all 2026 cycle wildlife regulatory proposals prior to the Board's regulatory meeting in April 2026.

# Summary of Public Hearing on Wildlife Special Actions

A public hearing on WSA25-01/-02/-03 took place at Generations Southeast in Klawock, POWI, on May 12, 2025 (OSM 2025a). Approximately sixty-eight people attended this hearing in person, online, or via phone. Nineteen attendees provided testimony. Testifiers in favor of WSA25-01 and WSA25-03 noted that the Unit 2 deer population had declined in recent years due to several interrelated factors that included habitat loss associated with logging, predation by wolves and bears, and insufficient enforcement of hunting regulations. As a result, it was becoming harder and more time consuming to harvest sufficient deer to meet local subsistence needs. Some of these testifiers noted that these issues would likely be compounded by Ketchikan's recent rural status change. Those in favor of WSA25-03 noted that local users should have priority in these situations (OSM 2025a).

Testifiers who opposed WSA25-01 and WSA25-03 noted that there would be significant, broader economic impacts resulting from a full closure to NFQUs and restrictions on non-local FQSUs on Federal lands in Unit 2 because many lodges, guides, outfitters, and associated businesses depended on revenues from non-local clients. Testifiers who opposed WSA25-01 and WSA25-03 also noted that participation by NFQUs had declined in recent years, that logging related habitat loss and closure of logging roads was the primary reason for declining access to Unit 2 deer populations, that predation by wolves and bears was the primary issue that needed to be addressed to help rebuild Unit 2 deer populations and improve hunter success, and that hunter competition and deer population issues were only a problem along the most accessible portions of the POWI road system but not elsewhere (OSM 2025a).

Testifiers who supported WSA25-02 at the public hearing noted that restricting doe harvest is a well-established conservation method that was currently necessary in this circumstance. Testifiers who opposed WSA25-02 noted that doe harvest is a customary and traditional practice on POWI and that sometimes residents must make the choice between taking a doe or going hungry (OSM 2025a).

# Summary of Tribal and ANCSA Consultation on Wildlife Special Actions

A joint Tribal and ANCSA corporation consultation on WSA25-01/-02/-03 was held in Hydaburg, POWI, on May 15, 2025 (OSM 2025b). Approximately twenty-four people attended this consultation in person, online, or via phone. Five attendees provided testimony. Testifiers in favor of WSA25-01 and WSA25-03 noted a substantial decline in the Unit 2 deer population resulting primarily from habitat loss associated with logging and predation by wolves and bears. They noted that TEK from local elders confirmed that local hunters are having to travel farther and work harder to get fewer deer in recent years, and that WSA25-01 and WSA25-03 were also supported by recent harvest reporting data and ecological data on deer habitat on POWI. They also noted that closing Federal public lands in Unit 2 to hunting by NFQUs would not completely restrict non-local hunting because there are private and corporate lands that would continue to be accessible to non-local hunters.

Tribal/ANCSA consultation attendees testifying in favor of WSA25-01 and WSA25-03 also explained that residents of POWI were generally getting older, and as a result, many of them now depended on being able to hunt along the road system. However, hunting competition along the road system is quite high now. Those testifying specifically in favor of WSA25-03 noted that they were concerned about the potential impacts of an influx of new FQSUs from Ketchikan on Unit 2 deer populations and local harvest opportunities. These testifiers explained that while they recognized the Ketchikan Indian Community's (KIC) customary rights and practices of harvesting deer on POWI, they did not believe that KIC possessed greater rights to harvest than residents of POWI, and that POWI residents should have priority in this situation (OSM 2025b).

Tribal/ANCSA consultation attendees testifying in opposition to WSA25-01 and WSA25-03 noted that they felt these proposed special actions represented an attempt by the Southeast Council to circumvent the Board's recent decision to change Ketchikan's rural status by limiting Ketchikan hunters' rights as FQSUs. However, they also explained that local users on POWI were best positioned to determine how to conserve the Unit 2 deer population and maintain subsistence uses of that population, and that they would support harvest restrictions on non-local users if illustrated by the data and deemed necessary by POWI residents (OSM 2025b).

Some Tribal/ANCSA consultation attendees testified in reluctant support of WSA25-02 because they noted that doe harvest restrictions are a well-established conservation method, but that doe harvests are also a customary and traditional practice on POWI and particularly important for elders. Tribal/ANCSA consultation attendees testifying in opposition to WSA25-02 noted that doe harvests are a customary and traditional practice on POWI, and that some residents who rely on deer must make the choice between taking a doe or going hungry (OSM 2025b).

# Board Decision on Wildlife Special Actions

Wildlife Special Action requests WSA25-01/-02/-03 were subsequently rejected by the Board at its meeting on July 17, 2025. The Board's justification was that there was not sufficient evidence of a conservation concern or threat to the continuation of subsistence uses of Unit 2 deer to warrant adopting the requests. The Board stated that it is pre-mature to restrict Ketchikan residents or close doe hunting as the impacts of the change in Ketchikan's status to rural are not yet known and existing data do not support implementing emergency regulation changes at this time. The Board noted that these issues might be more appropriately addressed through several wildlife proposals undergoing the full regulatory process.

# Requests for Reconsideration on Ketchikan's Rural Status Change (NDP25-01)

Formal requests for reconsideration on Ketchikan's recent rural status change (NDP25-01) have been submitted by Craig Tribal Association and Shaan Seet Incorporated. These requests will be reviewed to determine if they meet the threshold criteria for reconsideration. The Board accepts requests for reconsideration if they meet one or more of the following criteria:

- 1. The Request for Reconsideration is based upon information not previously considered by the Roard
- 2. The Request for Reconsideration demonstrates that information used by the Board was incorrect
- 3. The Request for Reconsideration demonstrates that the Board's interpretation of information, applicable law, or regulation is in error or contrary to existing law

The threshold analysis of these requests for reconsideration will be presented to the Board at its April 2026 regulatory meeting. If it is determined that these requests meet the threshold for reconsideration, the full analysis of the requests will be presented to the Board for a final decision during its 2027 regulatory meeting.

# Habitat Improvement Work

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 POWI 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 the 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.

# **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 the 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, generally peaking around mid-November (ADF&G 2009).

## Habitat

Logging associated habitat loss, wolf and bear predation, hunting, and winter weather are the main factors impacting POWI deer population levels. Commercial logging has greatly altered forest habitat and human access to forest-based resources in Unit 2 (Hasbrouck 2023). Specifically, logging in Unit 2 has substantially reduced the amount of old growth forest available for deer to utilize in the winter, substantially increased the amount of undesirable stem-exclusion stage forest, and it has led to an overall decrease in habitat connectivity (Dunn pers. comm. 2025). Since 1954, POWI 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 about 46% in north central POWI, and by 18% in south POWI (USDA 2016). However, many of these logged and unlogged areas are more accessible to hunters 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 in this area (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, while intercepting snow in a way that makes it easier for deer to move and forage during winters when deep snow often hinders access to other habitats. However, ADF&G estimates that over 40% (~ 360,000 acres) of the old-growth forest once present in Unit 2 has been logged over the past 50 years, and that "the lasting legacy of previous timber harvest will continue to have negative impacts on wildlife populations" (Hasbrouck 2023: 16) and hunter success on Prince of Wales. According to Hicks (1999: 30-33; also U.S. Forest Service 1989; Mazza 2003; Brinkman et al. 2009):

As clear-cut logging continues to reduce old-growth habitat in portions of Unit 2, deer populations are expected to decline. Population models indicate declines in carrying capacity of 50 to 60 percent by the end of the logging rotation in 2054. Long-term implications of habitat loss include the inability to provide for subsistence needs and the loss of deer hunting opportunities...The most serious effects are in the higher volume stands at low elevations, which are critical to deer during years of heavy snowfall. U.S. Forest Service and ADF&G habitat models predict the forest's capacity to support deer in average winter conditions will decline by nearly half by the end of the logging rotation in 2054. Because of extensive loss of critical winter habitat in some areas, declines may substantially exceed 60% following severe winters. By 2054, we expect few areas will meet projected hunter demand within road-accessible areas and logged portions of Unit 2.

Clearcutting can result in relatively quick regeneration of abundant forage for deer (Hasbrouck 2023). Yet, this forage is often not accessible during periods of deep snow (Hasbrouck 2023). Furthermore, without precommercial thinning, the regenerating forest enters a stem-exclusion stage after about 25-30 years of regrowth (Gregovich et al. 2024). During this stem-exclusion stage the evergreen canopy closes and shades out understory forage vegetation, resulting in substantially reduced deer forage and habitat (Gregovich et al. 2024). A recent study on POWI suggests that deer preferentially avoid habitat with greater canopy cover in favor of habitat with greater understory forage, and that the amount of available understory forage may be more influential in terms of habitat selection, even in winter (Gregovich et al. 2024). Further, logged forests on POWI may not fully regain the structural attributes and associated value as deer habitat of their previous old-growth condition for more than 250 years after logging (Gregovich et al. 2024).

Approximately 169,000 acres of forestland were in the stem-exclusion stage of regrowth on POWI, with another 115,000 acres close to entering this stage in 2018 (Nature Conservancy 2018; Hasbrouck 2023). As Hasbrouck (2023: 16) notes, "the stem exclusion stage provides poor quality deer habitat, as well as poor quality hunting conditions. Access to preferred hunting locations is as important for successful harvest as having abundant deer densities (Brinkman et al. 2009), and therefore habitat changes may play a detrimental role in hunters' ability to locate deer." Younggrowth forest treatments (e.g., thinning, small gap creation, branch pruning) can benefit deer forage development in previously harvested stands; however, areas that have undergone substantial timber harvest are generally expected to have lower long-term deer carrying capacity compared to preharvest conditions (OSM 2022).

On average, Wildlife Analysis Areas (WAAs) in Unit 2 have 68% of their deer winter habitat remaining (see **Table 2**). Deer winter habitat is defined as high volume, old growth forest on south facing slopes below 800 feet in elevation (OSM 2022). However, many WAAs in northern POWI 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 because there is less habitat available to sustain them (OSM 2022). 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) is a long process (OSM 2022). **Map 2** displays deer winter habitat conditions in Unit 2, by WAA. **Table 2** 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 (OSM 2022). This is likely due to greater access from logging roads and higher concentrations of deer in the remaining suitable habitat in these WAAs (OSM 2022). From 2016-2020, WAAs near communities (WAAs 1315, 1318, 1319, 1420, and 1422) received the greatest harvest pressure (Hasbrouck 2023). All these WAAs are believed to contain less than 50% deep snow winter habitat (Hasbrouck 2023; **Table 2**; **Map 2**).

Mild winters and later snow arrival over the last few years may have helped 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 (OSM 2022). However, the only current

index of Unit 2 deer populations since deer pellet surveys were discontinued in 2019 (Hasbrouck 2023) is deer harvest and harvest per unit of effort. Unit 2 deer harvest has declined substantially since 2015, which may be partially explained by the harvest limit restrictions for NFQUs that have been in place since 2018 (McCoy 2019a; Churchwell 2024). At their March 2025 meeting, members of the Southeast Council noted concern that, based on harvest metrics, the Unit 2 deer population does not appear to have positively responded to recent mild winters (SERAC 2025). While deer harvests in Units 1, 3, and 4 increased somewhat following recent mild winters, the Unit 2 harvest slightly declined (SERAC 2025).

# Predation

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 also reported that deer abundance typically decreases as the density of wolves increases (SERAC 2017a, 2021, 2025), and that wolf trapping can increase the success rates of deer hunters in the area of trapping (Brooks et al. 2024; SERAC 2025). High densities of these predators may reduce deer populations or increase the time needed for deer populations to recover after severe winters (OSM 2022; SERAC 2025). Gregovich and colleagues (2024) observed radio collared deer on POWI tended to avoid habitat near closed roads to a certain extent, reasoning that it may be related to the presence of wolves. They noted that wolf use of closed roads less traveled by humans may be greater than that of open roads, as previous research has shown that the rate of wolf-prey encounter and acquisition increases as the density of closed roads increases within a given area (Gregovich et al. 2024).

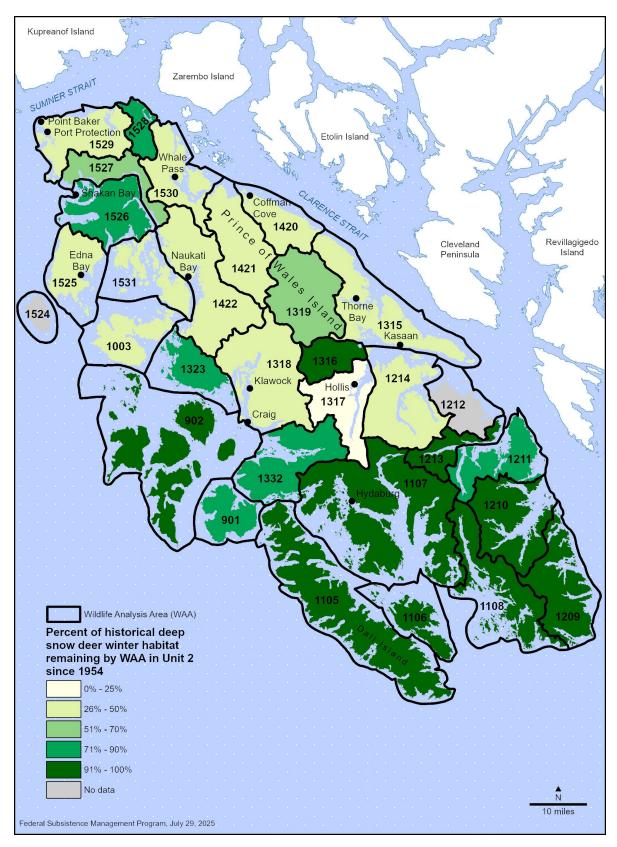
However, predation by black bears and wolves does not seem to be the primary factor affecting deer survival in this area. In a study of the environmental factors impacting deer survival on central POWI, Gilbert (2015) captured and radio-collared 63 adult female deer between 2010 and 2012. Survival of the radio-collared deer was high (90%) and varied little among years. The largest source of mortality was hunting (3 deer), followed by malnutrition (2 deer) and black bear predation (1 deer). None of the radio collared deer were killed by wolves (Gilbert 2015). A similar study (Farmer et. al. 2006) conducted between 1996 and 1999 on Heceta Island, adjacent to POWI, examined the influence of habitat use on deer mortality. Over the course of the study, 49 adult and yearling females were successfully captured and monitored (Farmer et al. 2006). Ten of these deer were killed by wolves, but three of them were severely malnourished at the time of death, following a moderately severe winter (Farmer et al. 2006). An additional four females were illegally killed by hunters, though no female deer were harvested during the legal Federal antlerless deer season in place at the time (Farmer et al. 2006).

According to ADF&G's most recently published Unit 2 wolf management report and plan, their 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 about 2.4 wolves per day (FSB 2024). A Special Action and Emergency Order were issued to allow for a 31-day wolf trapping season to take place in Unit 2 from Nov. 15-Dec. 15, 2024, under both Federal and State regulations (FSB 2024; ADF&G 2024). It was estimated that this amount of harvest opportunity would likely result in the harvest of about 74 wolves (FSB 2024).

**Table 2**. 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<br>Old Growth since<br>1954 (%) | Growth since Winter Habitat (%) |       |
|---------|------------------------------------------------------|---------------------------------|-------|
| 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 ↓  |
| 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 Wildlife Analysis Areas (WAAs).

# 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**) to assess deer population trends (Hasbrouck 2023). The Unit 2 deer population was roughly estimated at approximately 55,000 deer in previous reports (Porter 2005), and the Alaska Board of Game (BOG) has established a current population objective of 71,000 deer for Unit 2 (Hasbrouck 2023). However, there are currently no precise population estimates available to conclusively determine if this Unit 2 deer population objective is being met.

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). Recent deer pellet counts conducted from 2016-2019 generally indicated a moderate density deer population in the areas studied on POWI (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 mean pellet groups per plot (Hasbrouck 2023). However, pellet counts were recently discontinued because they were found to be insensitive to small to moderate population changes, and also highly variable depending on factors such as winter severity and snowfall patterns, temperature and humidity, variability in survey effort and surveyor experience, the length of time since the last survey, timing of vegetation green-up, changes in pellet group detectability, and changes in habitat (see McCoy 2017; Hasbrouck 2023; also Brinkman et al. 2011, 2013). While pellet counts are no longer being conducted, the current ADF&G deer management objective in Unit 2 is to "Maintain a population that can sustain a bag limit of at least 4 bucks. If harsh winters occur, or other factors suggest a decrease in the population, submit a proposal to BOG to reduce the bag limit for deer to allow the population to rise while still allowing for some harvest (Hasbrouck 2023: 19).

ADF&G began testing aerial alpine survey techniques to monitor Southeast deer populations in 2013 (Hasbrouck 2023). Aerial surveys were conducted three to five times per year over northern POWI from 2016-2019, and over central POWI from 2017-2019 (see Figure 1; 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 POWI than on northern POWI. The data appears to indicate that deer per hour increased over time on central POWI but decreased over time in northern POWI." Central POWI exhibited the highest number of deer observed per hour in 2018, however, Admiralty Island was not reexamined in 2018 after exhibiting the highest deer observed per hour in 2017 (Figure 1). Central POWI exhibited the second highest number of deer observed per hour in 2017 of all the Southeast Alaskan areas surveyed during these years (Figure 1). However, ADF&G analyzed aerial survey data from across the Southeast region and found that observer bias influenced measures of deer seen per hour of flight time (Eacker 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 in a given area (Eacker 2020).

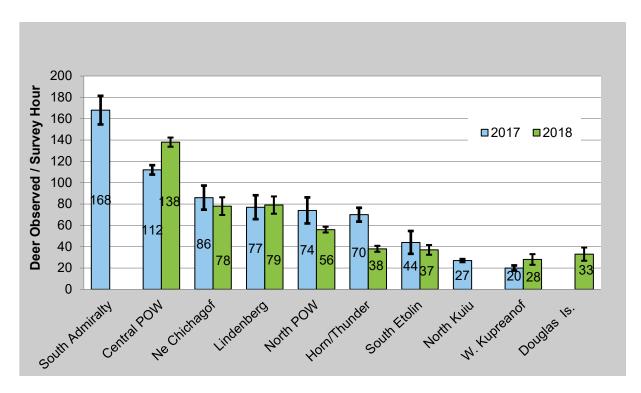
Currently, the use of hunter self-reported harvest and effort information as an index of deer population trends is the only quantitative method available for monitoring Unit 2 deer populations. However, hunter self-reported harvest and effort data should also be interpreted cautiously, as reporting rates are often too low to generate accurate statistical estimates (Hasbrouck 2023), and deer harvest is influenced by factors other than just deer abundance. Southeast Council members have also noted that calculations of hunter effort and harvest success based on reporting data may be misleading because subsistence users often only document their successful hunts (SERAC 2021). The harvest history section discusses the limitations of self-reported harvest data in more detail.

With this in mind, the estimated total deer harvest for all users averaged 2,884 deer per year in Unit 2 from 1997-2017, but the average total harvest fell to approximately 1,833 deer per year from 2018-2024 (**Figure 2**), suggesting a potential decrease in the Unit 2 deer population. However, this decline in total average harvest coincides with a similar decline in the number of hunters (**Figure 3**), as well as declines in the average number of deer harvested per user (**Figure 4**) and declines in hunter success rate (harvest of at least one deer) (**Table 3**).

While declining hunter numbers may partially explain decreases in harvest, a holistic analysis of all these harvest metrics seems to suggest a declining, or at least less accessible, deer population making it increasingly difficult and time-consuming for hunters to harvest sufficient deer to justify their efforts and expenditures. Additionally, observations and local knowledge shared by Southeast Council members and public testifiers at Southeast Council meetings indicates that the Unit 2 deer population is declining (SERAC 2025).

Maintaining an optimum sex ratio is a common goal of wildlife management. The only available sex ratios for Unit 2 deer come from unpublished data from DNA based analysis of fecal pellets conducted in limited areas of POWI in 2006-2008, 2019-2021, and 2023. The average ratio for both the 2006-2008 timeframe (n = 760 deer) and the 2019-2023 timeframe (n = 146 deer) was 33 bucks:100 does. For reference, Chichagof Island had a ratio of 50 bucks:100 does in 2016 (n = 142 deer) (Brinkman 2025, pers. comm.). Despite the lower buck:doe ratio on POWI, pregnancy rates remain high (Gilbert et al. 2020). Gilbert and colleagues (2020) found that pregnancy rates in central POWI deer averaged 89% across three years. However, the summer survival rates of fawns averaged only 41%, largely due to predation by black bears (Gilbert et al. 2020). The mortality rate of fawns due to black bears averaged 46%, with 11% due to other causes (Gilbert et al. 2020).

Another issue for consideration is that changes in the ADF&G harvest permit system may have reduced the effectiveness of the enforcement tool used to limit doe harvest. Under the current regulation, harvest ticket number five must be used when harvesting a doe. This provision originated when each hunter was issued a single set of pre-printed harvest tickets, and it was intended to provide a mechanism to limit each hunter to a single doe. However, under the ADF&G online permit system, hunters are provided with an electronic copy of their harvest tickets, which can be printed multiple times. This eliminates the enforceability of the harvest ticket system to be used for the harvest of a single doe, as users themselves can potentially print multiple copies of harvest ticket number five now.



**Figure 1**. Aerial alpine surveys across southeast Alaska for 2017 and 2018 (McCoy 2019a). Central POWI and North POWI are the areas surveyed in Unit 2.

# **Harvest History**

Deer harvest in Southeast Alaska has been estimated using both mail-in surveys 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 to the survey was approximately 60%. 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 (Hasbrouck 2023). This issue can be problematic in smaller rural communities where reporting rates are often low (SERAC 2010, Bethune 2020). 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). "ADF&G believes Unit 2 has one of the highest illegal and unreported harvests in the region" (Hasbrouck 2023: 17), and unreported harvest has previously been estimated to be equal to the Unit 2 reported harvest (Person 2010). As Brinkman and colleagues (2009: 38) conclude, "Reliable estimates of the deer harvest [on POWI] are unavailable, but the total [yearly] harvest is thought to be around 6,000 deer, with most being taken by island residents and the neighboring off-island communities of Ketchikan and Saxman.

The harvest of five deer, only one of which may be a female, has been allowed under Federal regulations in Unit 2 since 2006. NFQUs have generally been able to harvest up to four bucks in Unit 2. However, since 2018, NFQUs have been restricted to a harvest of two bucks on Federal public lands in Unit 2, following the August closure in the northwestern portion of POWI.

The BOG has established a population objective of 71,000 deer, an amount of harvest reasonably necessary for subsistence (ANS) of 1,500–1,600 deer per year, and an overall yearly harvest objective of 2,700 deer for Unit 2 (Hasbrouck 2023). Estimated harvest was below the current 2,700 deer objective during eight of the nine years between 1997 and 2005 (**Figure 2**). Estimated harvest increased from 2006–2016, peaking at historically high levels in 2015 (4,244 deer), and remaining at or above the current harvest objective during this eleven-year period. Unit 2 estimated deer harvest declined again more recently, falling below the current harvest objective from 2017–2024 (**Figure 2**). The lowest total estimated harvest during this twenty-eight-year period occurred in 2023 (1,603 deer), and the second lowest total estimated harvest occurred in 2022 (1,692 deer) (**Figure 2**). Total harvest increased somewhat during the most recent 2024 hunting season (1,810 deer).

Between 1997 and 2024, an estimated average of 1,045 FQSUs and 950 NFQUs harvested approximately 2,621 deer each year from Unit 2 (**Figures 2 & 3**; **Appendix A**). The estimated total harvest by all users in Unit 2 averaged 2,179 deer per year from 1997–2005, then increased to an average of 3,502 deer per year from 2006-2016, before dropping to a low of 1,908 deer per year from 2017–2024 (**Figure 2**). This represents a 45% reduction in average yearly harvest between the 2006–2016 and 2017–2024 time periods. However, the difference in average yearly harvest between the 1997–2005 and 2017–2024 time periods is smaller (-12%). It is unclear which of these three average yearly harvest rates is most historically representative for Unit 2. Further, because the amount of unreported and illegal deer harvest has been estimated to be approximately equal to that of reported harvest (see Person 2010), the actual average deer harvest in Unit 2 may have been closer to 5,242 deer per year from 1997–2024 (**Figure 2**). If this amount of potentially unreported harvest is taken into account, then the Unit 2 harvest objective of 2,700 deer per year has been met or greatly exceeded every year from 1997 to 2024 (**Figure 2**).

The recent decline in average yearly harvest estimated from hunter reporting data coincides with a decline in the number of hunters estimated for both federally qualified and non-federally qualified user groups (**Figure 3**). However, for both user groups, the proportional decline in hunters witnessed during this period is less than the proportional decline in their harvests (**Table 3**). The total number of hunters in Unit 2 rose fairly steadily from 2005 through 2015, then dropped sharply from 2016 to 2018, before leveling off between 2019 and 2024 (**Figure 3**). The average total number of hunters hunting in Unit 2 from 2017–2024 (1,770 hunters per year) is most similar to that estimated for the 1997–2005 period (1,781 hunters per year).

While estimated hunter numbers have recently declined for both user groups, the number of NFQUs has declined slightly more (**Figure 3**). From 2006 through 2016, the average yearly number of deer hunters in Unit 2 was split nearly evenly between the two groups (~1,186 FQSUs and 1,149 NFQUs). In more recent years (2017–2024), that proportion has shifted slightly to an average of 54% FQSU and

46% NFQU hunters (~947 FQSUs and 822 NFQUs per year). The estimated average hunter numbers for the 2017–2024 period are almost identical to those estimated for the 1997–2005 period (~961 FQSUs and 820 NFQUs). 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 hunter numbers reported by NFQUs between these two periods (see Hasbrouck 2023: 17). However, decreasing harvests and hunter participation in Unit 2 could also be an indication of a declining and/or less accessible deer population resulting from declining habitat, making it increasingly difficult and time-consuming for hunters to harvest sufficient deer to justify their efforts and expenditures. This could particularly be the case for an aging POWI population (see **Figure 8**) that must increasingly expend greater effort to hike through secondary growth forest to find deer in more favorable locations in the alpine (see Brinkman et al. 2009; SERAC 2017a, OSM 2025b).

Considering harvest trends and changes in average deer harvest per unit effort is currently the only quantitative index available to gauge potential changes in Unit 2 deer populations, as increasing amounts of effort required to harvest would tend to indicate a declining or less accessible deer population and vice versa. However, the use of this metric is potentially complicated by low hunter reporting rates, and the tendency for many hunters to only report successful hunts in a way that does not accurately reflect their actual hunting effort (SERAC 2021a). Still, from 1997–2024, the estimated average number of deer harvested per NFQU and FQSU was 1.0 deer per year and 1.6 deer per year, respectively (McCoy 2019a; Churchwell 2024, 2025). NFQUs harvested at an average rate of 5.0 hunting days per deer, while for FQSUs harvested at an average rate 3.6 hunting days per deer during this period (McCoy 2019a; Churchwell 2024, 2025). Similarly, from 1997–2005, the estimated average number of deer harvested per NFQU was just under 1 deer per year, at an average rate of 5.1 hunting days per deer (Figures 4 & 5). During the same period, the estimated average number of deer harvested per FQSU was about 1.4 deer per year, at an average rate of 4.5 hunting days per deer (Figures 4 & 5).

From 2006-2016, the estimated average number of deer harvested per NFQU increased slightly to about 1.2 deer per year, at a slightly faster average rate of harvest of 4.4 hunting days per deer (**Figures 4 & 5**). During the same period, the estimated average number of deer harvested per FQSU increased to about 1.8 deer per year, at a faster average rate of 2.9 hunting days per deer (**Figures 4 & 5**). Since then, the number of deer harvested per hunter has fallen for both user groups, with NFQUs averaging 0.8 deer per year, and FQSUs averaging 1.3 deer per year from 2017 to 2024 (Churchwell 2025). Similarly, the number of days reported hunted per deer harvested has increased for both user groups, with NFQUs averaging 6.6 hunting days per deer harvested and FQSUs averaging 4.0 hunting days per deer harvested from 2017 to 2024 (Churchwell 2025; see also Hasbrouck 2023).

FQSUs hunting in Unit 2 generally had higher harvest success rates than other hunters from 1997-2024, with an overall average success rate (harvest of at least one deer) of 70% compared to a 57% success rate for NFQUs (McCoy 2019a; Churchwell 2024, 2025). However, members of the Southeast Council have noted that the use of hunter effort and success data is complicated by the tendency for many hunters to only report successful hunts in a way that does not accurately reflect their actual hunting effort (SERAC 2021a). Still the reported success rate for both user groups has fallen slightly in

recent years, however, with an average success rate of 67% for FQSUs and 54% for NFQUs from 2017 through 2024 (**Table 3**). The percentage of users harvesting more than two deer also declined substantially for both user groups during the 2017-2024 period (**Table 3**). The two buck harvest limit for NFQUs that took effect in 2018 certainly played a role in this trend for NFQUs, but it cannot explain the proportionally similar decline witnessed among FQSUs (**Table 3**).

The two buck harvest limit for NFQUs that took effect in 2018 may have also reduced the overall harvest by NFQUs, but the extent of any change is unclear. Between 1997 and 2017, an average of about 13% of NFQUs harvested more than two deer, which corresponded to an average of 429 deer per year (McCoy 2019a). Since 2018, an average of only 3% of NFQUs have harvested more than 2 deer per year, which corresponds to about 72 deer per year (Churchwell 2024, 2025). Another complicating factor is that the average total annual harvest by NFQUs decreased by about 45% since the two buck limit was imposed, from 1,093 deer per year from 1997-2017, to 602 per year from 2018-2024 (**Figure 2**). This is a 491 deer per year decrease in average annual harvest. 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 harvest limit. The estimated average annual FQSU harvest from 1997-2017 was 1,782 deer per year, while the 2018-2024 average was 1,229 deer per year (**Figure 2**). This represents a 31% decrease in average annual FQSU harvest from 2018-2024 (about 553 fewer deer harvested per year). Overall, NFQUs accounted for 38% and 33% of the Unit 2 deer reported harvest from 1997-2017 and 2018-2024, respectively. Using harvest as an index for population size, these data suggest a decline in the Unit 2 deer population.

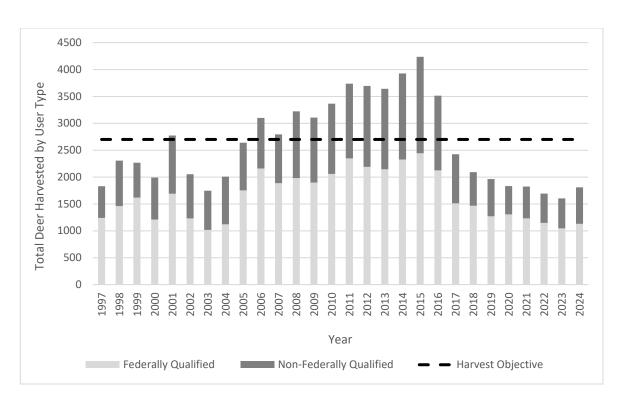
Ketchikan residents were previously the primary group of NFQUs hunting deer in Unit 2. The early season closure to NFQUs that was implemented in 2003 (WP03-05) was intended to address increasing competition for a declining Unit 2 deer population, with Ketchikan residents representing the primary source of non-local competition for Unit 2 deer at the time (OSM 2003). An average of approximately 630 NFQUs from Ketchikan harvested an estimated 665 deer from Unit 2 each year from 1997 to 2002 (McCoy 2019a). From 2003 to 2017, an average of approximately 631 NFQUs from Ketchikan hunted deer in Unit 2 each year, harvesting an estimated 830 deer per year (McCoy 2019a, Churchwell 2024, 2025). Significantly, the number of Ketchikan hunters and harvests taking place in Unit 2 steadily increased from about 2005 to 2015 (McCoy 2019a, Churchwell 2024, 2025). In the years leading up to the 2018 NFQU harvest restrictions (2014-2017), the average estimated number of Ketchikan hunters hunting in Unit 2 increased to 716 hunters per year, while the average estimated number of deer harvested by these hunters increased to 912 deer per year (McCoy 2019a; Churchwell 2025).

Ketchikan residents previously explained that the more extensive road system on POWI facilitates more efficient hunting, as Ketchikan has far fewer miles of paved road to provide hunting access in Unit 1A (SERAC 2022a). 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 POWI, 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).

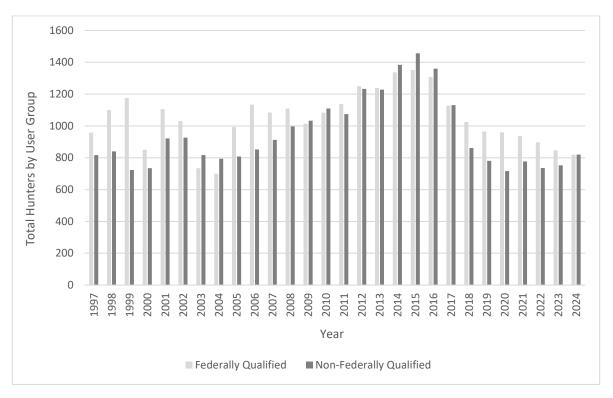
However, Ketchikan residents have reported doing less deer hunting in Unit 2 (POWI) in recent years (Churchwell 2024, 2025), and it appears that the harvest limit restrictions adopted for NFQUs in 2018 may have been more effective in this respect than the early season closure adopted in 2003. The number of Ketchikan area residents hunting and harvesting deer in Unit 2 decreased substantially following the implementation of the 2018 harvest restrictions, with an average of 324 NFOUs from Ketchikan harvesting an estimated 289 deer per year in Unit 2 from 2018 to 2024 (Churchwell 2024, 2025). However, these Ketchikan hunters still accounted for about 42% of the total NFQU deer hunters and 48% of all NFOU deer harvests in Unit 2 during this period (Churchwell 2024, 2025). One Ketchikan resident explained that because of the recent harvest limit restrictions placed on NFOUs in Unit 2, "a lot of families I know, including my family, skipped their annual hunting trip to POWI because of the lower [harvest] limits for deer. It just isn't cost efficient anymore" (SERAC 2019b: 218). Deer hunting has also increased substantially on Gravina Island in Unit 1A 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.). This situation may change, however, when Ketchikan residents officially become rural, FQSUs with customary and traditional use determinations for deer in Unit 2 because FQSUs currently have a longer deer hunting season and higher harvest limits than NFQUs hunting in Unit 2.

Regardless of user group, much of the deer harvest in Unit 2 takes place during two time periods: late July/August, and November (**Table 4**). The July/August period corresponds to the opening of the hunt in Unit 2, and people typically hunt in alpine areas for mature bucks during this period of the season. 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 occurs in August during and after the closure period. Like most places, 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 November rut (**Table 4**). FQSUs' ability to hunt deer in January appears to be useful in times of necessity or opportunistic encounters, but it is not a preferred hunting period due to the typically poor condition of deer and the severity of weather in January (**Table 4**; SERAC 2023). The January hunting period has accounted for less than 1% of the overall yearly deer harvest in Unit 2 since 2016 (**Table 4**).

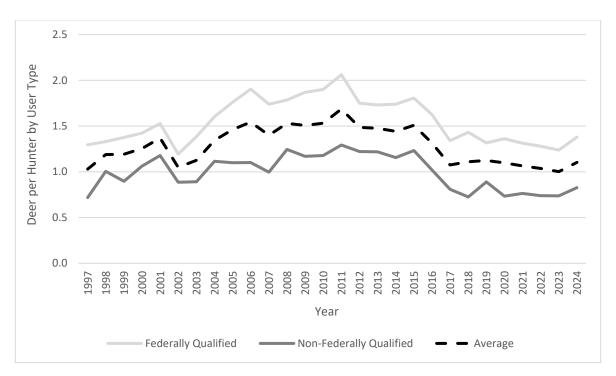
**Figure 6** provides information on the average total amount of precipitation occurring on POWI during the deer hunting season each year from 1999-2024. There is a weak correlation between increasing total precipitation and decreasing deer hunter participation and harvest (calculated from McCoy 2019a; Churchwell 2024, 2025; Alaska Climate Research Center 2025). This correlation is slightly stronger for NFQUs than FQSUs; however, the relationship is not statistically significant for either user group. Though the amount of total precipitation occurring on POWI during the deer hunting season has been trending upward since 2018, it is difficult to draw strong conclusions about the relationships between weather, hunter participation, and deer harvests from this data (**Figure 6**).



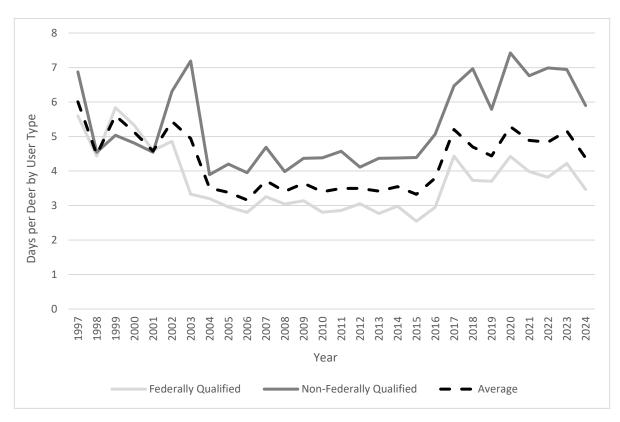
**Figure 2.** Total estimated deer harvest in Unit 2 from 1997-2024, by user type (McCoy 2019a; Churchwell 2024, 2025). \*2,700 deer is the current Unit 2 deer harvest objective established by the BOG (see Hasbrouck 2023).



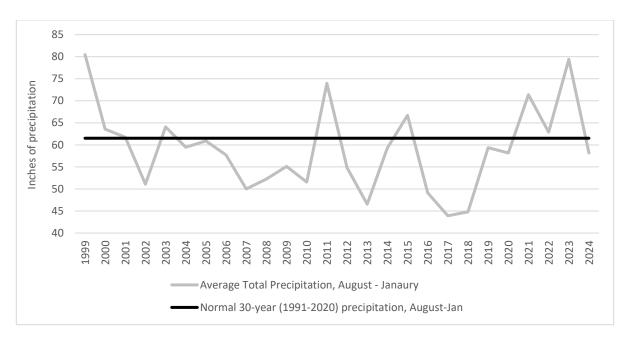
**Figure 3.** Total estimated number of hunters in Unit 2 by User Group from 1997-2024 (McCoy 2019a; Churchwell 2024, 2025).



**Figure 4.** Average number of deer harvested per hunter in Unit 2 from 1997-2024, by user type (McCoy 2019a; Churchwell 2024, 2025).



**Figure 5.** Average number of days hunted per deer harvested in Unit 2 from 1997-2024, by user type (McCoy 2019a; Churchwell 2024, 2025).



**Figure 6.** Average total monthly precipitation recorded on POWI during deer hunting season from 1999-2024 (Alaska Climate Research Center 2025). (\*Average of monthly precipitation recorded at Point Baker, Klawock, Craig, and Hollis Weather Stations. \*Average of monthly 30-year normal precipitation for Point Baker, Thorne Bay, Edna Bay, and Craig weather stations).

**Table 3**. Number of deer and percent reported harvested by hunter type and overall success rate from 1997-2024 (McCoy 2019a; Churchwell 2024, 2025). Note: NFQUs may harvest up to four bucks (two on Federal lands). \*Success is measured as harvesting at least one deer.

| Time<br>Period | Hunter<br>Type | No Deer | 1-2 Deer | 3-4 Deer | 5 Deer | Overall Success |
|----------------|----------------|---------|----------|----------|--------|-----------------|
| 1997-2005      | FQSUs          | 30%     | 48%      | 22%      | 0.3%   | 70%             |
|                | NFQUs          | 44%     | 45%      | 12%      | 0%     | 56%             |
|                |                |         |          |          |        |                 |
| 2006-2016      | FQSUs          | 19%     | 46%      | 24%      | 3%     | 72%             |
|                | NFQUs          | 36%     | 46%      | 14%      | 0%     | 60%             |
|                |                |         |          |          |        |                 |
| 2017-2024      | FQSUs          | 31%     | 50%      | 16%      | 1%     | 67%             |
|                | NFQUs          | 44%     | 52%      | 3%       | 0%     | 54%             |
|                |                |         |          |          |        |                 |
| Average        | FQSUs          | 26%     | 47%      | 21%      | 1.5%   | 70%             |
| 1997-2024      | NFQUs          | 41%     | 47%      | 10%      | 0%     | 57%             |

**Table 4**. Percent of harvest by month from 1997-2023 (McCoy 2019a; Churchwell 2024, 2025). \*Harvest in January began in 2016 and is only calculated for 2016-2023.

| Time<br>Period       | July/August | September | October | November | December | January |
|----------------------|-------------|-----------|---------|----------|----------|---------|
| 1997-2005            | 26%         | 15%       | 15%     | 34%      | 3%       | 0.0%*   |
| 2006-2016            | 19%         | 9%        | 16%     | 50%      | 5%       | 0.1%*   |
| 2017-2023            | 23%         | 8%        | 12%     | 54%      | 3%       | 0.2%*   |
| Average<br>1997-2023 | 22%         | 11%       | 17%     | 46%      | 4%       | 0.1%*   |

# ANILCA Section §804 user prioritization

An ANILCA section 804 analysis identifies which FQSUs should have a priority for the take of a limited resource in a particular area, when it is determined that harvest restrictions are needed due to significant conservation concerns or the need to ensure the continuation of subsistence uses among a subset of users most dependent on the resource. Three criteria are used to make this priority determination:

- (1) Customary and direct dependence upon the populations as the mainstay of livelihood
- (2) Local residency
- (3) Availability of alternative resources

Proposals WP26-04 and WP26-05 ask the Board to make a section 804 priority determination for Unit 2 deer, and the goal of the rest of this analysis is to help the Board determine if this is necessary, and if so, which FQSUs exhibit the greatest case for priority based on the three criteria above.

# <u>Criteria 1 and 2: Local Residency and Customary and Direct Dependence upon the Population as the</u> Mainstay of Livelihood

The current customary and traditional use determination for deer in Unit 2 includes all rural residents of Units 1-5. As a result, there are 34 rural communities throughout Southeast Alaska with a customary and traditional use determination for deer in Unit 2. **Table 5** shows recent population and economic information for each of these communities, organized by Wildlife Management Unit. It also provides an estimate of how far each community is from Unit 2.

**Table 5**. Information on the Population, Economy, and Distance to Unit 2 for Communities with Customary and Traditional Use Determinations for Deer in Unit 2 (ADLWD 2025; US Census 2025). \*(The Census Bureau often does not publish specific income and poverty rate information for smaller communities due to sample size limitations and confidentiality concerns. This is why there is no economic information for some of the communities in this table).

| Unit    | Community                                  | Population<br>in<br>2024 | Distance <sup>1</sup><br>to<br>Unit 2<br>(miles) | Median<br>Household<br>Income<br>2019 - 2023 | Poverty<br>Rate<br>2019 - 2023<br>(%) |
|---------|--------------------------------------------|--------------------------|--------------------------------------------------|----------------------------------------------|---------------------------------------|
|         | Coffman Cove                               | 209                      | -                                                | \$60,417                                     | 15.3%                                 |
|         | Craig                                      | 972                      | -                                                | \$67,788                                     | 9.4%                                  |
|         | Edna Bay                                   | 44                       | -                                                | _2                                           | -                                     |
|         | Hollis                                     | 155                      | -                                                | \$56,691                                     | 45.6%                                 |
|         | Hydaburg                                   | 354                      | -                                                | \$49,375                                     | 18.2%                                 |
|         | Kasaan                                     | 45                       | -                                                | \$91,667                                     | 15.6%                                 |
|         | Klawock                                    | 734                      | -                                                | \$49,063                                     | 19.4%                                 |
| Unit 2  | Naukati Bay                                | 125                      | -                                                | -                                            | -                                     |
|         | Point Baker                                | 11                       | -                                                | -                                            | -                                     |
|         | Port Protection                            | 31                       | -                                                | -                                            | -                                     |
|         | Shakan Bay                                 | 0                        | -                                                | -                                            |                                       |
|         | Thorne Bay                                 | 497                      | -                                                | \$61,750                                     | 8.2%                                  |
|         | Whale Pass                                 | 96                       | -                                                | \$32,500                                     | 34.4%                                 |
|         | Total <sup>3</sup>                         | 3,273                    | -                                                |                                              |                                       |
|         | Average                                    |                          | -                                                | \$58,656                                     | 20.8%                                 |
|         |                                            |                          |                                                  |                                              |                                       |
|         | Ketchikan Gateway Borough excluding Saxman | 13,058                   | 45                                               | \$89,155                                     | 9.5%                                  |
| Unit 1A | Hyder                                      | 42                       | 109                                              | -                                            | -                                     |
| OHIL IA | Metlakatla                                 | 1,389                    | 67                                               | \$69,107                                     | 15.1%                                 |
|         | Saxman                                     | 362                      | 48                                               | \$49,808                                     | 20.1%                                 |
|         | Total                                      | 14,851                   |                                                  |                                              |                                       |
|         | Average                                    |                          | 67                                               | \$69,357                                     | 14.9%                                 |
|         |                                            |                          |                                                  |                                              |                                       |
| Unit 1C | Gustavus                                   | 659                      | 225                                              | \$64,167                                     | 10.7%                                 |
|         |                                            |                          |                                                  |                                              |                                       |
| Unit 1D | Haines                                     | 1,774                    | 258                                              | \$72,250                                     | 5.6%                                  |

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<sup>&</sup>lt;sup>1</sup> Linear Distance that does not account for variations according to standard boat, ferry, or plane routes.

<sup>&</sup>lt;sup>2</sup> Dashed Lines indicate that this data is not applicable or not available.

<sup>&</sup>lt;sup>3</sup> This total may underestimate total population size of Prince of Wales Island. POW is within the POW-Hyder census area, which includes Prince of Wales Island, Metlakatla, and Hyder. This census area had an estimated "balance" population of 451 people in 2024. However, it is not possible from population data to determine which of these people reside on POWI, Annette Island, or in the vicinity of Hyder.

| Unit               | Community                    | Population<br>in<br>2024 | Distance <sup>1</sup><br>to<br>Unit 2<br>(miles) | Median<br>Household<br>Income<br>2019 - 2023 | Poverty<br>Rate<br>2019 - 2023<br>(%) |
|--------------------|------------------------------|--------------------------|--------------------------------------------------|----------------------------------------------|---------------------------------------|
|                    | Klukwan                      | 84                       | 274                                              | \$24,375                                     | 16.9%                                 |
|                    | Skagway +<br>Skagway Balance | 1,123                    | 270                                              | \$85,893                                     | 6.7%                                  |
|                    | Total                        | 2,981                    |                                                  |                                              |                                       |
|                    | Average                      |                          | 267                                              | \$60,839                                     | 9.7%                                  |
|                    |                              |                          |                                                  |                                              |                                       |
|                    | Kake                         | 522                      | 93                                               | \$50,833                                     | 17.4%                                 |
|                    | Petersburg                   | 3,060                    | 72                                               | \$74,466                                     | 5.8%                                  |
| Unit 3             | Wrangell                     | 2,030                    | 51                                               | \$64,545                                     | 10.9%                                 |
|                    | Total                        | 5,612                    |                                                  |                                              |                                       |
|                    | Average                      |                          | 72                                               | \$63,281                                     | 11.4%                                 |
|                    |                              |                          |                                                  |                                              |                                       |
|                    | Angoon                       | 350                      | 136                                              | \$45,938                                     | 18.0%                                 |
|                    | Elfin Cove                   | 41                       | 213                                              | -                                            | -                                     |
|                    | Game Creek                   | 16                       | 188                                              | -                                            | -                                     |
|                    | Hoonah                       | 835                      | 189                                              | \$81,406                                     | 13.2%                                 |
|                    | Pelican                      | 89                       | 198                                              | \$38,750                                     | -                                     |
| Unit 4             | Port Alexander               | 63                       | 78                                               | \$37,917                                     | 11.5%                                 |
|                    | Sitka                        | 8,063                    | 130                                              | \$101,207                                    | 8.4%                                  |
|                    | Tenakee Springs              | 123                      | 165                                              | \$54,375                                     | 5.2%                                  |
|                    | Whitestone<br>Logging Camp   | 2                        | 187                                              | -                                            | -                                     |
|                    | Total                        | 9,582                    |                                                  |                                              |                                       |
|                    | Average                      |                          | 165                                              | \$59,932                                     | 11.3%                                 |
|                    |                              |                          |                                                  |                                              |                                       |
| Unit 5             | Yakutat                      | 632                      | 364                                              | \$80,625                                     | 7.8%                                  |
|                    |                              |                          |                                                  |                                              |                                       |
| Overall Total      |                              | 37,590                   |                                                  |                                              |                                       |
| Overall<br>Average |                              |                          | 160                                              | \$62,163                                     | 14.5%                                 |

In total, the 34 rural communities with a customary and traditional use determination for deer in Unit 2 had an estimated population of 37,590 people in 2024 (**Table 5**). Units 1A, 3, and 4 had the largest rural populations in the region from 2000 – 2024 (see **Figure 7**). Yet, overall, rural communities in Southeast Alaska generally exhibited a slight downward trend (-7.3% or -2,957 people) in population during this period (**Figure 7**). Unit 2 exhibited the greatest overall percentage decrease in population (-16.2% or -634 people) over this period, much of which is likely attributable to downturns in the local timber and fishing industries (OSM 2025c). The population of the Prince of Wales Census Area has also generally been getting older, with a steadily increasing percentage of people aged 60+, and a decreasing percentage of people who are less than 40 years old (see **Figure 8**). Together, these demographic trends could be playing a role in the decreased rates of hunter participation reported in

Unit 2 in recent years (**Figures 2 & 3**). Unit 1C (+53.6% or +230 people) and Unit 1D (+6% or +169 people) were the only portions of the region where the population of rural communities generally grew from 2000 – 2024 (**Figure 7**). However, on average, rural residents of Units 1C and 1D do not appear to exert much deer hunting pressure in Unit 2 (see **Table 6**).

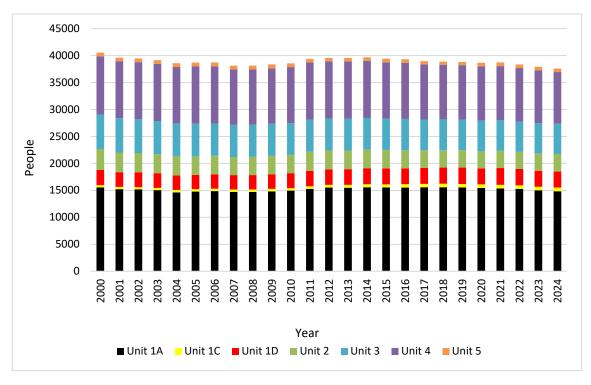
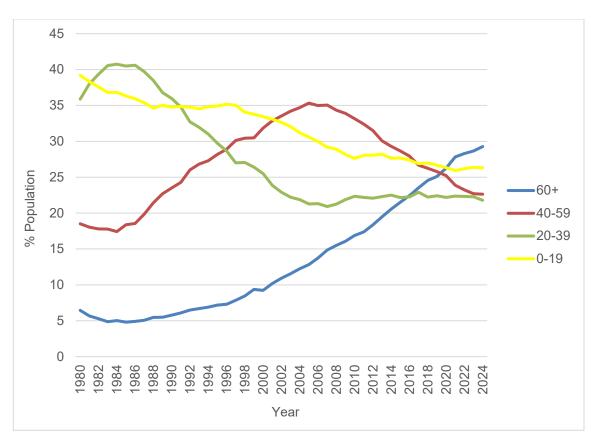


Figure 7. Human population in rural communities located in Units 1-5 from 2000-2024 (ADLWD 2025).



**Figure 8**. Change in human population age structure within the Prince of Wales Census Area from 1980 – 2024 (ADLWD 2025).

While there are roughly 37,590 rural residents with customary and traditional use determinations for Unit 2 deer, a much smaller number of users typically report hunting and harvesting deer from Unit 2 each year. Even though the amount of hunter participation and harvest taking place in Unit 2 varies somewhat each year due to a variety of factors, an estimated average of 1,045 FQSUs and 950 NFQUs have harvested approximately 2,621 deer each year from Unit 2 between 1997 and 2024 (see **Table 6**). On average, FQSUs accounted for about 63% of this harvest total each year, with NFQUs accounting for the remaining 37% of the harvest (**Table 6**).

Despite recent declines in reported hunter participation and harvest among both federally qualified and non-federally qualified user groups, most of the deer harvest and hunter effort in Unit 2 continues to be attributable to hunters residing in closest proximity to the unit (see **Table 6**). From 1997-2024, residents of Unit 2 and Unit 1A accounted for a combined average of 75% of all hunters and 83% of all harvests taken from Unit 2 each year (**Table 6**). Federally qualified residents of Unit 2 accounted for the greatest overall number of hunters (~46%) and harvests (~56%) each year during this period (**Table 6**). Federally qualified residents of Unit 3 accounted for about 5% of all hunters and harvests in Unit 2 during this period (**Table 6**). Residents of more distant communities in Units 1C, 1D, 4, and 5 combined to account for only 3.5% of all deer hunters and about 3% of the deer harvest in Unit 2 each year over the same period (**Table 6**). In the past, NFQUs from Ketchikan in Unit 1A accounted for about 28% of all hunters and 25% of all harvest in Unit 2, while NFQUs from outside Units 1-5

accounted for a combined average of about 16% of all hunters and 9% of all harvests taking place in Unit 2 each year during this period (**Table 6**). It is important to note that rural residents of Units 1C, 1D, 4, and 5A did not gain customary and traditional use determinations for deer in Unit 2 until 2018, but residents of these units were still able to hunt deer in Unit 2 under State regulations.

**Table 6**. Average Hunters, Hunter Days, and Harvest per year in Unit 2 by Unit of Residence and User Type, from 1997-2024 (McCoy 2019a; Churchwell 2024, 2025). \*(Rural residents of Units 1C, 1D, 4, and 5A did not gain customary and traditional use determinations for deer in Unit 2 until 2018, but they were still able to hunt deer in Unit 2 under State regulations).

| Time<br>Period | Resident Unit           | User Type | Average<br>Hunters | Average<br>Hunter Days | Average<br>Harvest |
|----------------|-------------------------|-----------|--------------------|------------------------|--------------------|
|                | 1A                      | FQSU      | 11                 | 48                     | 11                 |
|                | IA                      | NFQU      | 599                | 3065                   | 659                |
|                | 1C                      | NFQU      | 27                 | 109                    | 29                 |
|                | 1D                      | NFQU      | 9                  | 36                     | 18                 |
|                | 2                       | FQSU      | 844                | 5675                   | 1243               |
|                | 3                       | FQSU      | 106                | 413                    | 117                |
|                | 4                       | NFQU      | 13                 | 37                     | 10                 |
| 1997-2005      | Other Alaska            | NFQU      | 56                 | 280                    | 47                 |
|                | Outside Alaska          | NFQU      | 118                | 631                    | 46                 |
|                | Avg. Total<br>FQSUs     |           | 961                | 6137                   | 1371               |
|                | Avg. Total<br>NFQUs     |           | 820                | 4157                   | 808                |
|                | Avg. Total All<br>Users |           | 1781               | 10294                  | 2179               |
|                |                         |           |                    |                        |                    |
|                | 1A                      | FQSU      | 46                 | 215                    | 54                 |
|                |                         | NFQU      | 658                | 3302                   | 902                |
|                | 1C                      | NFQU      | 58                 | 285                    | 64                 |
|                | 1D                      | NFQU      | 7                  | 44                     | 9                  |
|                | 2                       | FQSU      | 997                | 5324                   | 1875               |
|                | 3                       | FQSU      | 143                | 705                    | 213                |
|                | 4                       | NFQU      | 24                 | 97                     | 35                 |
|                | 5A                      | NFQU      | 1.0                | 3.5                    | 1.6                |
| 2006-2016      | 6                       | NFQU      | 2.2                | 12.7                   | 4.0                |
|                | 8                       | NFQU      | 3.2                | 12.1                   | 3.2                |
|                | 14C                     | NFQU      | 50                 | 289                    | 53                 |
|                | Other Alaska            | NFQU      | 109                | 642                    | 117                |
|                | Outside Alaska          | NFQU      | 237                | 1214                   | 155                |
|                | Unknown                 |           | 15                 | 66                     | 17                 |
|                | Avg. Total<br>FQSUs     |           | 1186               | 6244                   | 2142               |

| Time<br>Period | Resident Unit           | User Type | Average<br>Hunters | Average<br>Hunter Days | Average<br>Harvest |
|----------------|-------------------------|-----------|--------------------|------------------------|--------------------|
|                | Avg. Total<br>NFQUs     |           | 1149               | 5901                   | 1343               |
|                | Avg. Total All<br>Users |           | 2351               | 12211                  | 3502               |
|                |                         |           |                    |                        |                    |
|                | 1A                      | FQSU      | 17                 | 47                     | 16                 |
|                |                         | NFQU      | 363                | 1762                   | 328                |
|                | 1C                      | FQSU      | 0                  | 0                      | 0                  |
|                |                         | NFQU      | 49                 | 224                    | 46                 |
|                | 1D                      | FQSU      | 7                  | 35                     | 7                  |
|                |                         | NFQU      | 0.1                | 1.4                    | 0.3                |
|                | 2                       | FQSU      | 866                | 4737                   | 1169               |
|                | 3                       | FQSU      | 49                 | 196                    | 64                 |
|                | 4                       | FQSU      | 8                  | 20                     | 9                  |
|                |                         | NFQU      | 1.1                | 5.6                    | 1.0                |
|                | 5A                      | FQSU      | 0                  | 0                      | 0                  |
| 2017-2024      | 6                       | NFQU      | 0.6                | 3.6                    | 0.7                |
|                | 8                       | NFQU      | 0.6                | 1.9                    | 0.6                |
|                | 14C                     | NFQU      | 46                 | 233                    | 29                 |
|                | Other Alaska            | NFQU      | 108                | 688                    | 92                 |
|                | Outside Alaska          | NFQU      | 237                | 1219                   | 133                |
|                | Unknown                 |           | 1.5                | 15.2                   | 2.6                |
|                | Avg. Total<br>FQSUs     |           | 947                | 5036                   | 1265               |
|                | Avg. Total<br>NFQUs     |           | 805                | 4139                   | 631                |
|                | Avg. Total All<br>Users |           | 1754               | 9190                   | 1898               |
|                |                         |           |                    |                        |                    |
|                | 1A                      | FQSU      | 27                 | 113                    | 29                 |
|                | 14                      | NFQU      | 555                | 2786                   | 660                |
|                | 1C                      | FQSU      | 0                  | 0                      | 0                  |
|                | 10                      | NFQU      | 45                 | 211                    | 48                 |
|                | 1D                      | FQSU      | 1.9                | 10.0                   | 1.9                |
| 1997-2024      | טו                      | NFQU      | 5.8                | 29.5                   | 9.3                |
|                | 2Z                      | FQSU      | 911                | 5269                   | 1470               |
|                |                         | NFQU      | 0                  | 0                      | 0                  |
|                | 3Z                      | FQSU      | 104                | 466                    | 140                |
|                | ٥L                      | NFQU      | 0                  | 0                      | 0                  |
|                | 47                      | FQSU      | 2.3                | 5.8                    | 2.6                |
|                | 4Z                      | NFQU      | 14                 | 51                     | 17                 |
|                | 5A                      | FQSU      | 0.0                | 0.0                    | 0.0                |

| Time<br>Period | Resident Unit           | User Type | Average<br>Hunters | Average<br>Hunter Days | Average<br>Harvest |
|----------------|-------------------------|-----------|--------------------|------------------------|--------------------|
|                |                         | NFQU      | 0.4                | 1.5                    | 0.8                |
|                | 6Z                      | NFQU      | 1.0                | 6.0                    | 1.8                |
|                | 8Z                      | NFQU      | 1.4                | 5.3                    | 1.4                |
|                | 14C                     | NFQU      | 36                 | 201                    | 32                 |
|                | Other Alaska            | NFQU      | 92                 | 539                    | 87                 |
|                | Outside Alaska          | NFQU      | 199                | 1028                   | 114                |
|                | Unknown                 |           | 6.7                | 31                     | 7.4                |
|                | Avg. Total<br>FQSUs     |           | 1045               | 5864                   | 1643               |
|                | Avg. Total<br>NFQUs     |           | 950                | 4863                   | 970                |
|                | Avg. Total All<br>Users |           | 2002               | 10758                  | 2621               |

Comprehensive subsistence surveys provide an important source of information about recent harvest and use of deer and other wild resources by communities with a customary and traditional use determination for deer in Unit 2. Subsistence surveys seek to capture all harvest, sharing, and use of deer and other resources by surveyed households for a single survey year, under any State or Federal opportunity. However, because these surveys only capture a single year, they may not be representative of a community's typical subsistence patterns. For example, weather, regulatory constraints, social, and economic variables may impact hunting and harvest from year-to-year. Deer harvest may also appear low in some cases because of harvest redistribution between communities.

Comprehensive subsistence surveys began being conducted in Southeast Alaska in the mid-1980s and are intended to be repeated roughly every ten to fifteen years. However, some smaller communities in the region have not been restudied since they were initially surveyed (e.g., Hyder, Metlakatla, Skagway, Elfin Cove, Port Alexander). There has only been one comprehensive subsistence survey conducted in Ketchikan (2005) due to its long-term status as a Federal nonrural community/area located within a State non-subsistence use area. **Tables 7** and **8** use some of the data collected in these surveys to provide a broad overview of rural southeastern communities' subsistence practices and relative reliance on subsistence resources, particularly deer. It should be noted that harvest data shown in these tables is not specific to a particular harvest location. However, subsistence users typically hunt and gather resources in reasonable proximity to their homes (Wheeler and Thornton 2005), so it is likely that most users are generally harvesting within their home units or a nearby unit.

As shown in **Table 7**, the average estimated total pounds of subsistence resources harvested per person in each unit ranged from a high of 354 pounds in Unit 5, to a low of 163 pounds in Unit 1A. However, in units where more than one survey has been conducted, Unit 4 exhibited the highest average deer harvest per person (64 lbs. composing 25% of the total subsistence harvest), followed by Unit 2 (54 lbs. composing 19% of the total subsistence harvest). Unit 5 exhibited the lowest average deer harvest per person (2 lbs. composing 1% of the total subsistence harvest), as moose are the primary large land mammal species targeted in this area (see Sill et al. 2017). Similarly, on average, residents of

communities in Units 2 and 4 generally used, attempted to harvest, successfully harvested, and shared deer at higher rates than residents of communities located in other units (**Tables 7** and **8**). Across all the comprehensive subsistence surveys that have been conducted in Unit 2, an average of about 78% of Unit 2 households have used deer, while 67% of households attempted to harvest deer, 52% successfully harvested deer, 24% gave deer to others, and 41% received deer from others (**Tables 7** & **8**). Based on these harvest practices, patterns of use and sharing, and issues of proximity, residents of Unit 2 display the greatest degree of customary and direct dependence on Unit 2 deer, followed by residents of Units 1A and 3. The remainder of this §804 analysis will focus most specifically on the communities and residents of these three units.

**Table 7**. Subsistence Harvest of Deer and Other Resources in Rural Communities located in Wildlife Management Units 1-5 from 1983 – 2022 (ADF&G CSIS 2025).

| Unit   | Community   | Study<br>Year | Households<br>Attempting<br>to Harvest<br>Deer (%) | Households<br>Harvesting<br>Deer (%) | Deer<br>Harvest<br>per<br>Person<br>(lbs.) | Total<br>Subsistence<br>Harvest per<br>person (lbs.) | Percent<br>of Total<br>Harvest<br>that is<br>Deer |
|--------|-------------|---------------|----------------------------------------------------|--------------------------------------|--------------------------------------------|------------------------------------------------------|---------------------------------------------------|
|        | Coffman     | 1987          | - 4                                                | 57%                                  | 60                                         | 183                                                  | 33%                                               |
|        | Cove        | 1998          | 88%                                                | 62%                                  | 55                                         | 276                                                  | 20%                                               |
|        |             | 1987          | 64%                                                | 52%                                  | 41                                         | 185                                                  | 22%                                               |
|        | Craig       | 1997          | 59%                                                | 47%                                  | 44                                         | 231                                                  | 19%                                               |
|        |             | 1999          | -                                                  | 41%                                  | 33                                         | -                                                    | ı                                                 |
|        | Edna Bay    | 1987          | -                                                  | 85%                                  | 110                                        | 479                                                  | 23%                                               |
|        | Edila Bay   | 1998          | 92%                                                | 83%                                  | 86                                         | 383                                                  | 22%                                               |
|        | Hollis      | 1987          | -                                                  | 40%                                  | 38                                         | 183                                                  | 21%                                               |
|        |             | 1998          | 63%                                                | 39%                                  | 31                                         | 169                                                  | 18%                                               |
|        | Hydaburg    | 1987          | -                                                  | 37%                                  | 43                                         | 336                                                  | 13%                                               |
|        |             | 1997          | 45%                                                | 33%                                  | 35                                         | 384                                                  | 9%                                                |
|        |             | 2012          | 62%                                                | 52%                                  | 68                                         | 531                                                  | 13%                                               |
| Unit 2 |             | 1987          | -                                                  | 43%                                  | 40                                         | 182                                                  | 22%                                               |
|        | Kasaan      | 1998          | 64%                                                | 57%                                  | 68                                         | 452                                                  | 15%                                               |
|        | Klassak     | 1987          | -                                                  | 52%                                  | 45                                         | 247                                                  | 18%                                               |
|        | Klawock     | 1997          | 58%                                                | 43%                                  | 48                                         | 320                                                  | 15%                                               |
|        | Naukati Bay | 1998          | 66%                                                | 52%                                  | 45                                         | 242                                                  | 19%                                               |
|        | Delat Dela  | 1987          | -                                                  | 53%                                  | 89                                         | 346                                                  | 26%                                               |
|        | Point Baker | 1996          | 75%                                                | 50%                                  | 46                                         | 289                                                  | 16%                                               |
|        | Port        | 1987          | -                                                  | 36%                                  | 40                                         | 304                                                  | 13%                                               |
|        | Protection  | 1996          | 68%                                                | 56%                                  | 94                                         | 451                                                  | 21%                                               |
|        | T. D.       | 1987          | -                                                  | 58%                                  | 37                                         | 189                                                  | 20%                                               |
|        | Thorne Bay  | 1998          | 71%                                                | 42%                                  | 32                                         | 179                                                  | 18%                                               |
|        | Whale Pass  | 1987          | -                                                  | 67%                                  | 50                                         | 179                                                  | 28%                                               |

<sup>&</sup>lt;sup>4</sup> The dashes in this column indicate that data was not collected on whether households attempted to harvest deer in surveys conducted in 1987.

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| Unit       | Community       | Study<br>Year | Households<br>Attempting<br>to Harvest<br>Deer (%) | Households<br>Harvesting<br>Deer (%) | Deer<br>Harvest<br>per<br>Person<br>(lbs.) | Total<br>Subsistence<br>Harvest per<br>person (lbs.) | Percent<br>of Total<br>Harvest<br>that is<br>Deer |
|------------|-----------------|---------------|----------------------------------------------------|--------------------------------------|--------------------------------------------|------------------------------------------------------|---------------------------------------------------|
|            |                 | 1998          | 60%                                                | 47%                                  | 51                                         | 185                                                  | 28%                                               |
|            |                 | 2012          | 76%                                                | 57%                                  | 73                                         | 247                                                  | 30%                                               |
|            | Average         |               | 67%                                                | 52%                                  | 54                                         | 286                                                  | 19%                                               |
|            |                 |               |                                                    |                                      |                                            |                                                      |                                                   |
|            | Katabikan       | 1999          | 29%                                                | 7%                                   | 4                                          | -                                                    | -                                                 |
|            | Ketchikan       | 2005          | 21%                                                | 14%                                  | 11                                         | 91                                                   | 12%                                               |
|            | 0               | 1987          | -                                                  | 23%                                  | 17                                         | 94                                                   | 18%                                               |
| Unit<br>1A | Saxman          | 1999          | 36%                                                | 23%                                  | 28                                         | 217                                                  | 13%                                               |
| IA         | Metlakatla      | 1987          | -                                                  | 16%                                  | 11                                         | 70                                                   | 15%                                               |
|            | Hyder           | 1987          | -                                                  | 0%                                   | 0                                          | 345                                                  | 0%                                                |
|            | Average         |               | 29%                                                | 14%                                  | 12                                         | 163                                                  | 7%                                                |
|            |                 |               |                                                    |                                      |                                            |                                                      |                                                   |
| Unit<br>1C | Gustavus        | 1987          | -                                                  | 48%                                  | 64                                         | 241                                                  | 27%                                               |
|            |                 | 4000          | 400/                                               | 00/                                  | -                                          | 400                                                  | 40/                                               |
|            | Haines          | 1983          | 12%                                                | 6%                                   | 5                                          | 126                                                  | 4%                                                |
|            |                 | 1987          | -                                                  | 14%                                  | 15                                         | 97                                                   | 16%                                               |
|            |                 | 1996          | 15%                                                | 11%                                  | 8                                          | 196                                                  | 4%                                                |
|            |                 | 2012          | 11%                                                | 8%                                   | 8                                          | 135                                                  | 6%                                                |
| Unit<br>1D |                 | 1983          | 15%                                                | 3%                                   | 1                                          | 170                                                  | 1%                                                |
| שני        | Klukwan         | 1987          | -                                                  | 12%                                  | 13                                         | 238                                                  | 5%                                                |
|            |                 | 1996          | 29%                                                | 23%                                  | 16                                         | 608                                                  | 3%                                                |
|            |                 | 2014          | 4%                                                 | 4%                                   | 5                                          | 452                                                  | 1%                                                |
|            | Skagway         | 1987          | -                                                  | 6%                                   | 3                                          | 48                                                   | 7%                                                |
|            | Average         |               | 14%                                                | 10%                                  | 8                                          | 230                                                  | 4%                                                |
|            |                 |               |                                                    |                                      | _                                          |                                                      |                                                   |
|            |                 | 1985          | 44%                                                | 39%                                  | 27                                         | 218                                                  | 12%                                               |
|            | Kake            | 1987          | -                                                  | 42%                                  | 39                                         | 163                                                  | 24%                                               |
|            |                 | 1996          | 52%                                                | 49%                                  | 50                                         | 179                                                  | 28%                                               |
|            |                 | 2022          | 44%                                                | 28%                                  | 13                                         | 173                                                  | 8%                                                |
| Unit 3     | Petersburg      | 1987          | -                                                  | 39%                                  | 44                                         | 198                                                  | 22%                                               |
|            | 2 2 2 2 2 3 3 3 | 2000          | 34%                                                | 19%                                  | 14                                         | 161                                                  | 8%                                                |
|            | Wrangell        | 1987          | -                                                  | 28%                                  | 20                                         | 155                                                  | 13%                                               |
|            |                 | 2000          | 38%                                                | 24%                                  | 28                                         | 168                                                  | 17%                                               |
|            | Average         |               | 42%                                                | 34%                                  | 29                                         | 177                                                  | 17%                                               |
|            |                 |               |                                                    |                                      |                                            |                                                      |                                                   |
|            |                 | 1984          | 63%                                                | 60%                                  | 58                                         | 216                                                  | 27%                                               |
| Unit 4     | Angoon          | 1987          | -                                                  | 75%                                  | 73                                         | 244                                                  | 30%                                               |
|            |                 | 1996          | 50%                                                | 50%                                  | 51                                         | 224                                                  | 23%                                               |

| Unit   | Community                     | Study<br>Year | Households<br>Attempting<br>to Harvest<br>Deer (%) | Households<br>Harvesting<br>Deer (%) | Deer<br>Harvest<br>per<br>Person<br>(lbs.) | Total<br>Subsistence<br>Harvest per<br>person (lbs.) | Percent<br>of Total<br>Harvest<br>that is<br>Deer |
|--------|-------------------------------|---------------|----------------------------------------------------|--------------------------------------|--------------------------------------------|------------------------------------------------------|---------------------------------------------------|
|        |                               | 2012          | 49%                                                | 45%                                  | 51                                         | 183                                                  | 28%                                               |
|        | Elfin Cove                    | 1987          | 1                                                  | 63%                                  | 72                                         | 263                                                  | 28%                                               |
|        | Game Creek                    | 1996          | 50%                                                | 33%                                  | 41                                         | 187                                                  | 22%                                               |
|        |                               | 1985          | 59%                                                | 52%                                  | 52                                         | 210                                                  | 25%                                               |
|        |                               | 1987          | 1                                                  | 65%                                  | 90                                         | 385                                                  | 23%                                               |
|        | Hoonah                        | 1996          | 60%                                                | 56%                                  | 74                                         | 372                                                  | 20%                                               |
|        |                               | 2012          | 59%                                                | 47%                                  | 51                                         | 343                                                  | 15%                                               |
|        |                               | 2016          | 63%                                                | 55%                                  | 33                                         | 237                                                  | 14%                                               |
|        | Pelican                       | 1987          | -                                                  | 63%                                  | 105                                        | 355                                                  | 30%                                               |
|        | Port<br>Alexander             | 1987          | -                                                  | 66%                                  | 108                                        | 312                                                  | 35%                                               |
|        |                               | 1987          | -                                                  | 38%                                  | 38                                         | 145                                                  | 26%                                               |
|        | Sitka                         | 1996          | 43%                                                | 35%                                  | 44                                         | 205                                                  | 22%                                               |
|        |                               | 2013          | 37%                                                | 26%                                  | 25                                         | 175                                                  | 15%                                               |
|        | Tenakee                       | 1984          | 50%                                                | 50%                                  | 65                                         | 250                                                  | 26%                                               |
|        | Springs                       | 1987          | -                                                  | 55%                                  | 135                                        | 330                                                  | 41%                                               |
|        | Whitestone<br>Logging<br>Camp | 1996          | 71%                                                | 71%                                  | 57                                         | 178                                                  | 32%                                               |
|        | Average                       |               | 55%                                                | 53%                                  | 64                                         | 253                                                  | 25%                                               |
|        |                               |               |                                                    |                                      |                                            |                                                      |                                                   |
|        |                               | 1984          | 6%                                                 | 6%                                   | 3                                          | 369                                                  | 1%                                                |
|        | Yakutat                       | 1987          | -                                                  | 0%                                   | 0                                          | 398                                                  | 0%                                                |
| Unit 5 | ı anulal                      | 2000          | 9%                                                 | 5%                                   | 3                                          | 386                                                  | 1%                                                |
|        |                               | 2015          | 35%                                                | 9%                                   | 2                                          | 262                                                  | 1%                                                |
|        | Average                       |               | 17%                                                | 5%                                   | 2                                          | 354                                                  | 1%                                                |
|        |                               |               |                                                    |                                      |                                            |                                                      |                                                   |
|        | Overall<br>Average            |               | 48%                                                | 39%                                  | 42                                         | 252                                                  | 18%                                               |

**Table 8**. Subsistence Use and Sharing of Deer in Rural Communities located in Wildlife Management Units 1-5 from 1983 - 2022 (ADF&G CSIS 2025).

| Unit   | Community    | Study<br>Year | Households<br>Using Deer<br>(%) | Households<br>Giving Deer<br>(%) | Households<br>Receiving<br>Deer (%) |
|--------|--------------|---------------|---------------------------------|----------------------------------|-------------------------------------|
|        | Coffman Cove | 1987          | 73%                             | 22%                              | 27%                                 |
|        | Comman Cove  | 1998          | 70%                             | 24%                              | 18%                                 |
| Unit 2 |              | 1987          | 80%                             | 25%                              | 42%                                 |
|        | Craig        | 1997          | 76%                             | 24%                              | 37%                                 |
|        |              | 1999          | 76%                             | 21%                              | 42%                                 |

| Unit     | Community         | Study<br>Year | Households<br>Using Deer<br>(%) | Households<br>Giving Deer<br>(%) | Households<br>Receiving<br>Deer (%) |
|----------|-------------------|---------------|---------------------------------|----------------------------------|-------------------------------------|
|          | Edna Day          | 1987          | 95%                             | 45%                              | 60%                                 |
|          | Edna Bay          | 1998          | 92%                             | 8%                               | 42%                                 |
|          | Hollis            | 1987          | 67%                             | 16%                              | 32%                                 |
|          | HOIIIS            | 1998          | 56%                             | 11%                              | 26%                                 |
|          |                   | 1987          | 76%                             | 27%                              | 55%                                 |
|          | Hydaburg          | 1997          | 69%                             | 27%                              | 49%                                 |
|          |                   | 2012          | 87%                             | 54%                              | 54%                                 |
|          | Vaccan            | 1987          | 86%                             | 21%                              | 64%                                 |
|          | Kasaan            | 1998          | 86%                             | 43%                              | 29%                                 |
|          | May est           | 1987          | 74%                             | 21%                              | 38%                                 |
|          | Klawock           | 1997          | 72%                             | 25%                              | 36%                                 |
|          | Naukati Bay       | 1998          | 68%                             | 18%                              | 26%                                 |
|          | Doint Balsar      | 1987          | 95%                             | 37%                              | 53%                                 |
|          | Point Baker       | 1996          | 94%                             | 25%                              | 56%                                 |
|          | Don't Doods ation | 1987          | 84%                             | 16%                              | 64%                                 |
|          | Port Protection   | 1996          | 92%                             | 36%                              | 64%                                 |
|          | The same Devi     | 1987          | 75%                             | 28%                              | 37%                                 |
|          | Thorne Bay        | 1998          | 54%                             | 4%                               | 16%                                 |
|          |                   | 1987          | 78%                             | 6%                               | 28%                                 |
|          | Whale Pass        | 1998          | 67%                             | 27%                              | 40%                                 |
|          |                   | 2012          | 76%                             | 19%                              | 19%                                 |
|          | Average           |               | 78%                             | 24%                              | 41%                                 |
|          |                   |               |                                 |                                  |                                     |
|          | Ketchikan         | 1999          | 45%                             | 8%                               | 36%                                 |
|          | Retchikan         | 2005          | 34%                             | 9%                               | 24%                                 |
|          | Covmon            | 1987          | 58%                             | 11%                              | 42%                                 |
| Unit 1A  | Saxman            | 1999          | 63%                             | 27%                              | 47%                                 |
|          | Metlakatla        | 1987          | 69%                             | 12%                              | 60%                                 |
|          | Hyder             | 1987          | 12%                             | 0%                               | 12%                                 |
|          | Average           |               | 47%                             | 11%                              | 37%                                 |
|          |                   |               |                                 |                                  |                                     |
| Unit 1C  | Gustavus          | 1987          | 70%                             | 27%                              | 32%                                 |
|          |                   |               |                                 |                                  |                                     |
|          |                   | 1983          | 18%                             | 3%                               | 13%                                 |
|          | Haines            | 1987          | 43%                             | 13%                              | 34%                                 |
| Unit 1D  | Tallies           | 1996          | 48%                             | 10%                              | 43%                                 |
| טוווג וט |                   | 2012          | 29%                             | 8%                               | 24%                                 |
|          | Klukwan           | 1983          | 12%                             | 0%                               | 9%                                  |
|          | Tantwan           | 1987          | 48%                             | 12%                              | 38%                                 |

| Unit   | Community                  | Study<br>Year | Households<br>Using Deer<br>(%) | Households<br>Giving Deer<br>(%) | Households<br>Receiving<br>Deer (%) |
|--------|----------------------------|---------------|---------------------------------|----------------------------------|-------------------------------------|
|        |                            | 1996          | 77%                             | 29%                              | 64%                                 |
|        |                            | 2014          | 25%                             | 17%                              | 21%                                 |
|        | Skagway                    | 1987          | 29%                             | 3%                               | 25%                                 |
|        | Average                    |               | 37%                             | 11%                              | 30%                                 |
|        |                            |               |                                 |                                  |                                     |
|        |                            | 1985          | 70%                             | 21%                              | 39%                                 |
|        | Vaka                       | 1987          | 78%                             | 22%                              | 57%                                 |
|        | Kake                       | 1996          | 79%                             | 23%                              | 37%                                 |
|        |                            | 2022          | 77%                             | 41%                              | 64%                                 |
| Unit 3 | Detembring                 | 1987          | 70%                             | 30%                              | 40%                                 |
|        | Petersburg                 | 2000          | 40%                             | 8%                               | 22%                                 |
|        | 14/mm - 11                 | 1987          | 63%                             | 13%                              | 46%                                 |
|        | Wrangell                   | 2000          | 48%                             | 18%                              | 29%                                 |
|        | Average                    |               | 66%                             | 22%                              | 42%                                 |
|        |                            |               |                                 |                                  |                                     |
|        | Angoon                     | 1984          | 89%                             | 50%                              | 45%                                 |
|        |                            | 1987          | 100%                            | 40%                              | 46%                                 |
|        |                            | 1996          | 74%                             | 26%                              | 49%                                 |
|        |                            | 2012          | 84%                             | 38%                              | 51%                                 |
|        | Elfin Cove                 | 1987          | 92%                             | 46%                              | 69%                                 |
|        | Game Creek                 | 1996          | 100%                            | 33%                              | 100%                                |
|        |                            | 1985          | 86%                             | 38%                              | 53%                                 |
|        |                            | 1987          | 94%                             | 46%                              | 48%                                 |
|        | Hoonah                     | 1996          | 74%                             | 39%                              | 31%                                 |
|        |                            | 2012          | 77%                             | 40%                              | 45%                                 |
| Unit 4 |                            | 2016          | 94%                             | 48%                              | 55%                                 |
|        | Pelican                    | 1987          | 90%                             | 44%                              | 59%                                 |
|        | Port Alexander             | 1987          | 94%                             | 60%                              | 64%                                 |
|        |                            | 1987          | 38%                             | -                                | -                                   |
|        | Sitka                      | 1996          | 62%                             | 22%                              | 31%                                 |
|        |                            | 2013          | 56%                             | 21%                              | 36%                                 |
|        | Tenakee                    | 1984          | 83%                             | 42%                              | 58%                                 |
|        | Springs                    | 1987          | 87%                             | 39%                              | 45%                                 |
|        | Whitestone<br>Logging Camp | 1996          | 83%                             | 4%                               | 12%                                 |
|        | Average                    |               | 82%                             | 38%                              | 50%                                 |
|        |                            |               |                                 |                                  |                                     |
| Unit 5 | Yakutat                    | 1984          | 20%                             | 8%                               | 16%                                 |
| Jint 3 | ranutat                    | 1987          | 0%                              | -                                | -                                   |

| Unit | Community          | Study<br>Year | Households<br>Using Deer<br>(%) | Households<br>Giving Deer<br>(%) | Households<br>Receiving<br>Deer (%) |
|------|--------------------|---------------|---------------------------------|----------------------------------|-------------------------------------|
|      |                    | 2000          | 23%                             | 7%                               | 21%                                 |
|      |                    | 2015          | 45%                             | 14%                              | 37%                                 |
|      | Average            |               | 22%                             | 10%                              | 25%                                 |
|      |                    |               |                                 |                                  |                                     |
|      | Overall<br>Average |               | 67%                             | 24%                              | 41%                                 |

Unit 2:

# Characteristics of Unit 2 Communities

POWI composes the vast majority of Unit 2. People have made their living on POWI harvesting a variety of fish, wildlife, and plant resources for generations (Goldschmidt and Haas 1998; Gillispie 2018). Archaeological evidence indicates that POWI 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 POWI (Sill 2017). Strong evidence exists to suggest that people living in the Southeast region relied heavily on marine resources like fish, shellfish, and marine mammals during the Early Holocene period, with many archaeological sites from this period located near tidewaters (Gillispie 2018). Around 5,200 years ago, archaeological evidence of larger and more permanent settlements appears (Gillispie 2018). Bones and shells excavated from middens (refuse disposal areas) at these sites show that deer, bears, harbor seals, sea otters, whale, four species of salmon, fourteen marine fish species, and at least twenty-one species of shellfish were important to local diets and economies in the region (Gillispie 2018).

In the historical period, POWI 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 POWI from Haida Gwaii in what is now British Columbia (Grant and Sill 2017). Some sources state that Haida territory came to include POWI south of the Klawock River across to Thorne Bay, part of Heceta Island, and all of Noyes, Lulu, San Fernando, Suemez, and Dall islands, while others consider Haida territory to begin further south on POWI (Moss 2008).

There are currently eleven communities on POWI, with an additional community, Edna Bay, located on nearby Kosciusko Island. POWI is only accessible by plane or boat. Many of the larger and/or older communities on POWI today such as Craig, Klawock, Kasaan, and Hydaburg are located on or near former Tlingit and Haida villages or camps (Goldschmidt and Haas 1998). Several of the newer and/or smaller communities on POWI 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 U.S. through State land selection programs in the mid-to-late 1900s (ADCCED 2025; see also **Table 6**).

Most POWI communities have been heavily involved in the commercial fishing, fish processing, and/or timber industries since the late 1800s or early 1900s (ADCCED 2025). Many POWI residents continue to combine work in these industries with extensive subsistence harvesting for their livelihoods (ADCCED 2025; see also **Tables 7 & 8**). According to local ecological knowledge, hunter harvest data, and comprehensive subsistence surveys, deer continue to be a key component of POWI residents' subsistence harvests (SERAC 2025).

### Subsistence Harvest and Resource Use in Unit 2

As Tables 7 and 8 illustrate, deer has been the most significant terrestrial source of meat for POWI residents for the past several decades for which data has been collected (see also Brinkman et al. 2009; OSM 2023a, 2023b). Since the 1980s, deer has consistently ranked as one of the top resources in terms of bulk contribution to local subsistence harvests on POWI, at times trailing only salmon, non-salmon fish, and/or marine invertebrates (ADF&G CSIS 2025). A study by Brinkman and colleagues (2009) suggests that previous intensive logging on POWI increased access to and availability of deer through forest habitat change and the construction of logging roads. They note that these changes may have led POWI residents to focus even more of their subsistence efforts on deer during the roughly 40-year logging period (Brinkman et al. 2009). However, now that many of these previously logged areas have entered the stem-exclusion phase of forest regrowth and some logging roads have been closed or are in poor condition, the POWI landscape may not be as conducive to deer populations or efficient hunting opportunities as it was previously (Brinkman et al. 2009). Further, as Hasbrouck (2023) explains, hunting pressure and harvest is not spread evenly across the POWI landscape. From 2016-2020, "fifty percent of deer were harvested on twenty percent of the land in Unit 2," as most people tended to harvest large land mammals close to roads, rivers, and/or their communities (Hasbrouck 2023: 12). The Wildlife Analysis Areas (WAAs 1315, 1318, 1319, 1420, and 1422) receiving the greatest harvest pressure at this time were those in and around Coffman Cove, Thorne Bay, Craig, and Klawock (Hasbrouck 2023). Today, POWI hunters may be feeling the combined effects of road closures and increasing stem-exclusion forest near their homes, while also continuing to adapt to the loss of jobs in the timber and commercial fishing industries. An ageing population of local users may further contribute to the difficulties of harvesting sufficient deer in this landscape.

Still, deer are 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 POWI households, particularly lower income households (Brinkman et al. 2009). A correlation has previously been shown between rising poverty levels and increasing deer harvest rates in POWI communities (Mazza 2003). This correlation suggests that successful deer hunting is particularly important for lower-income POWI households, and many other lower-income households throughout the Southeast Region. It is also important to note that communities in Unit 2 have consistently exhibited some of the lowest average median household incomes and highest average poverty rates in Southeast Alaska across the past three census analysis periods (see **Tables 6 & 13**). The most recent comprehensive subsistence surveys conducted on POWI took place in Whale Pass and Hydaburg in 2012. The results of these surveys are discussed in detail

below. Summary results for comprehensive subsistence surveys conducted in other POWI communities in the 1980s and 1990s can be found in **Tables 7** and **8**.

### Whale Pass

The most recent comprehensive subsistence surveys conducted on POWI took place in Whale Pass (Sill 2017) and Hydaburg (Grant and Sill 2017) during the 2012 harvest season. Deer were one of the most harvested and utilized subsistence resources in each community, composing an estimated 91% of the large land mammal harvest in Whale Pass (Sill 2017), and 100% of the large land mammal harvest in Hydaburg at this time (Grant and Sill 2017). In Whale Pass, 25% of responding households stated that they used roughly the same amount of large land mammals in 2012 as they had in previous years, while 60% noted using less, and 15% noted 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). Surveyed 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 stated that they did not get 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% 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 were considered to have generally high or marginal levels of food security in 2012, Sill (2017: 292) found that 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. 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 POWI deer population (Sill 2017). This suggests that the apparent decline of the Unit 2 deer population noted in the harvest history section as beginning around 2015, was evident to local users earlier than what might be inferred from harvest data only.

### Hydaburg

In Hydaburg, Grant and Sill (2017) noted that 53% of responding households stated that they used roughly the same amount of large land mammals in 2012 as they had in previous years, while 30% noted using less, and 11% noted using more. The most frequently cited reason (29%) for using less large land mammals in Hydaburg was less sharing (Grant and Sill 2017). Hydaburg households that stated that they used 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 stated that they did not get 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 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).

Still, 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 POWI (Grant and Sill 2017), before the most recent harvest restrictions were put in place for NFQUs in 2018 (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 POWI include a number of interrelated factors, such as: increasing competition with non-local hunters, high populations of predators like wolves and bears, declining road access, and changing forest habitat and reductions in the number of deer on the landscape and/or changes in the location of deer on the landscape (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 it 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 changing weather patterns 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 a previous wildlife closure review (WCR22-01), Southeast Council member Douville, from POWI, 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.

Member Douville and other POWI residents voiced similar concerns about Unit 2 deer habitat, the declining deer population, the impact of wolves on this population, and Unit 2 residents' difficulties harvesting enough deer to meet their needs during the Southeast Council's March 2025 meeting

(SERAC 2025). These local observations about the effects of forest successional changes largely match the findings of Brinkman and colleagues' (2009) study of the long-term impacts of industrial logging on deer habitat and harvest opportunities on POWI. As Brinkman and colleagues (2009: 36) explained:

Harvest opportunities in previously logged areas [of POWI] have declined, and hunters identify second-growth forests as one of the least popular habitats for hunting. Given the current state of the logging industry in Alaska, it is unlikely that the logging of the remaining old-growth forests or the intensive management of second-growth forests will cause hunter opportunities to rebound to historic levels. Instead, hunter opportunities may continue to decline for at least another human generation, even if the long-term impacts of logging activity and deer harvest on deer numbers are minimal. Adapting hunting strategies to focus on naturally open habitats such as alpine or muskeg that are less influenced by external market forces may require considerably more hunting effort but provide the best option for sustaining deer hunting as a local tradition over the long run. We speculate that managing deer habitat in accessible areas may be more important than managing the overall health of deer populations on a regional scale. We further suggest that the level of access to preferred hunting habitat may be just as important as deer densities in determining hunter efficiency.

Such studies and local observations point to the importance of the wildlife habitat improvement work that has begun on POWI under the partnership of ADF&G, USFS, the Mule Deer Foundation, University of Alaska Fairbanks, and the US Natural Resources Conservation Service – particularly habitat improvements that will promote increased understory vegetation in logged forests in both the short and long term (see Gregovich et al. 2024). As Mazza (2003: 16) explains, without such work, "regardless of differences in short-term interpretation of deer supply [on POWI], there is agreement that in the long term, deer populations will decline as old-growth winter habitat is lost and second-growth forests are not able to provide a substitute."

# Unit 1A:

# Characteristics of Unit 1A Communities

Unit 1A contains the rural communities of Ketchikan, Saxman, Metlakatla, and Hyder (see **Figure 9**). These communities are only accessible by plane or boat, and they range from approximately 45 to 109 miles in linear distance from Unit 2 (**Table 5**). As rural communities within Unit 1A, Saxman, Metlakatla, and Hyder have had a customary and traditional use determination for deer in Unit 2 since 1992. Ketchikan recently gained a customary and traditional use determination for deer in Unit 2 with its rural status change in 2025. Ketchikan, Saxman, and Metlakatla are located within the ancestral territory of the Tlingit, where people have been living for over 10,000 years (Erlandson et al. 1992; Thornton et al. 2010; Lindo et al. 2017; Gillispie 2018). Hyder is a small, former mining community located along the US/Canada border, in the ancestral territory of the Tsimshian [Ts'msyen] (ADCCED 2025).

Tlingit oral histories state that the people originated from a large river in the region and have occupied Southeast Alaska since time immemorial, with some scholars and Tlingit leaders suggesting that they

initially migrated from Tsimshian [Ts'msyen] territory in British Columbia (Price 1990; Schurr et al. 2012; Crone and Mehrkens 2013). Pictograph, fish trap, and fish weir sites dating to both the prehistoric and historic periods show that Tlingit, Haida, and Tsimshian communities extensively occupied and used what is now the Ketchikan-Misty Fjords Ranger District of the Tongass National Forest (Smith 2011; Stanford 2011). Archaeological evidence suggests that early residents of the area relied on a wide array of natural resources for subsistence (Moss 2008; Gillispie 2018). Ethnohistoric data indicates that Tlingit communities harvested fish (particularly salmon), deer, bears, goats, seals, sea otters, porpoises, berries, roots, tubers, bark, bird eggs, seaweed, and shellfish in the early 1700s (Grinev 2005).

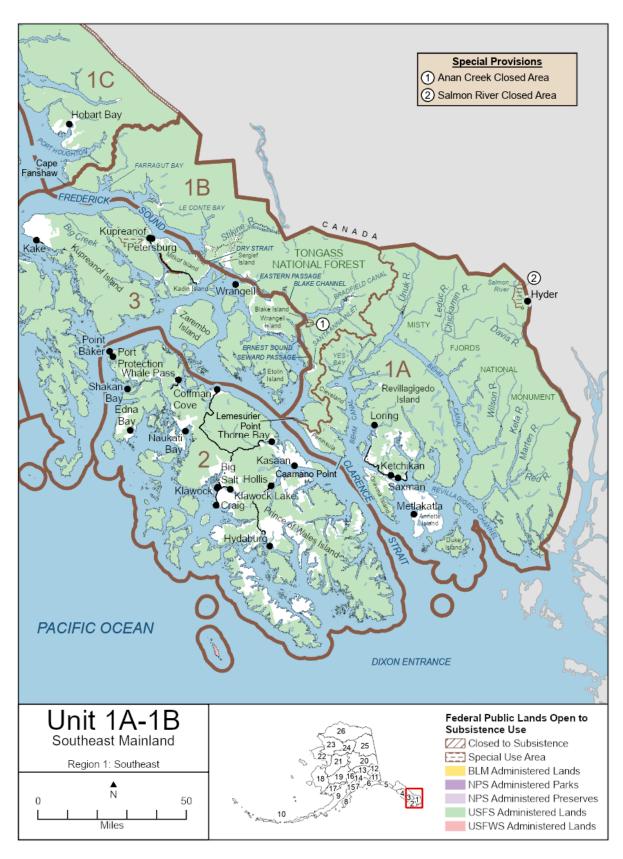


Figure 9. Map of communities in Unit 1A in relation to those in Units 2 and 3.

# Ketchikan Gateway Borough

Russian exploration of Southeast Alaska began in the mid-1700s, at which point Tongass and Sanya (Cape Fox) Tlingit lived in the Ketchikan Area (Price 1990; ADF&G 1992). Tlingit and Haida communities traded extensively with Russian, American, and British traders through the period of the Alaska Purchase by the U.S. in 1867 (Price 1990). Gorsuch and colleagues (1994) report that throughout this time, Tlingit and Haida communities also maintained active salmon, Eulachon, and halibut fisheries in the area.

The place that became Ketchikan City was originally founded in 1886 as a mining and fishing community (Tromble and Boucher 1997). The townsite was established on the southern end of Revillagigedo Island, along the Inside Passage that links the Gulf of Alaska to the Puget Sound. It was named after Ketchikan Creek, which runs through the center of Ketchikan and empties into the Tongass Narrows. Due to the historical importance of Ketchikan as a shipping port, the legacy of the fishing industry, and the typically rugged and steep terrain of the region, most of the built area of Ketchikan still exists in a long, narrow strip along the waterfront.

Gorsuch and colleagues (1994: 47) note that, like other Southeast Alaska townsites, Ketchikan is "located in or near the site of Native settlements," however, "the towns that grew up at these locations were essentially white towns." Still, Sanya Tlingit occupied Yes Bay and Cape Fox, and Tongass Tlingit seasonally occupied both sides of the mouth of Ketchikan Creek, using the area as a summer fish camp to harvest pink salmon at the time of the Alaska Purchase in 1867 (Gorsuch et al. 1994). Native residents continued to rely on these tidelands, replacing smokehouses with frame houses and cabins in the early 1900s (Gorsuch et al. 1994).

When mineral prices dropped, Ketchikan's economic focus shifted more to commercial fishing and fish processing businesses that were built at the mouth of Ketchikan Creek. The city of Ketchikan grew rapidly as the commercial fishing industry developed — increasing from 40 residents at its founding in 1886 to 460 residents by 1900 (Price 1990; ADF&G 1992; Tromble and Boucher 1997). A Native school and mission were constructed on Native land in the Ketchikan Area in the 1890s, and the growing economy attracted many Tsimshian people and a smaller number of Tlingit and Haida people to settle in the area. As the Native population grew, Native settlements south of the town's commercial center expanded, becoming known as "Indian Town" (Gorsuch et al. 1994).

In the late 1880s, Tsimshian peoples migrated with Anglican missionary William Duncan to Annette Island, forming what is now known as Metlakatla on what had previously been Sanya Tlingit lands (Gorsuch et al. 1994, Thornton et al. 2010). In the late 1890s, Saxman was formed through the Presbyterian Church and Territorial school authorities as a new Native Alaskan community located a few miles southeast of Ketchikan (Gorsuch et al. 1994). Saxman was initially settled by Sanya Tlingit and was officially incorporated in 1929. The Presbyterian church at Saxman later relocated to Ketchikan because "much of Saxman's early population moved there" (Gorsuch et al. 1994: 52).

Commercial fishing remained the primary economic driver in the Ketchikan Area throughout the first half of the twentieth century (Price 1990; Gorsuch et al. 1994). However, salmon and herring harvests

throughout the southeast region declined notably after the 1930s, due to overfishing (Thornton et al. 2010; Heard 2012). These declines prompted many Native peoples living in smaller communities to pursue economic opportunities in larger "white towns" such as Juneau, Douglas, Ketchikan, Wrangell, Petersburg, or the continental United States.

In 1947, the Tongass Timber Act facilitated logging and road construction in the region and led to the opening of the Ketchikan Pulp Company (KPC) mill soon after in 1954 (ADF&G 1992; Dombrowski 2002; Beier et al. 2009). Logging became the main industry in Ketchikan following the establishment of the mill (Dombrowski 2002, Beier et al. 2009; Thornton et al. 2010; Heard 2012). The salmon decline and the opening of the KPC Mill prompted many Tlingit and Haida people, mostly from POWI, to relocate to Ketchikan (Gorsuch et al. 1994). This influx of new residents led to a reactivation of the Ketchikan Indian Corporation, which was initially created in 1940, but had been inactive for several years prior to the opening of the pulp mill (Gorsuch et al. 1994).

The 1970s were also marked by extensive commercial harvesting and subsequent salmon and herring declines (Dombrowski 2002; Beier et al. 2009; Thornton et al. 2010; Heard 2012). Additionally, the combination of conservation concerns, the expenses of logging in a relatively remote location, and a drop in global pulp prices gradually slowed logging activity throughout the 1970s and 1980s. During the development of ANILCA in the late 1970s, residents of Ketchikan and Prince of Wales expressed extreme concern that the creation of wilderness areas and other Federal land designations would ultimately result in the loss of timber jobs (Committee on Interior and Insular Affairs 1977).

The 1990 Tongass Timber Reform Act suspended the contracts of the two main logging companies in the region, further slowing logging activity (Dombrowski 2002). The Ketchikan Pulp Mill closed in 1997, resulting in significant economic impacts for many Ketchikan residents and a decline in the city's population (Fall et al. 2013, Lynch 2019). The cruise tourism industry began growing in Ketchikan in the early 1980s and is now one of the key industries in the area (Ketchikan Gateway Borough 2010). However, many of the jobs available in the tourism industry are lower paying, seasonal positions that have not fully made up for losses in income and employment previously available through timber and fishing industries (SERAC 2023).

Today, the Ketchikan Gateway Borough accounts for about 90% of the overall human population (~13,420 people) of Unit 1A (**Table 5**). Public testimony has long documented that the harvest of fish and wildlife is for many Borough residents a key aspect of their cultural identity (FSB 2006; SERAC 2019a, 2022b, 2023; OSM 2023a, 2023b, 2024). For many Borough residents, harvest of fish and wildlife is also an important supplement to wage-earning jobs, particularly in light of recent declines in the commercial economy of the area (FSB 2006, SERAC 2022a).

# Subsistence Harvests and Resource Use in Unit 1A

Information compiled from harvest survey data and public testimonies indicate that Ketchikan Gateway Borough residents harvest and use a variety of fish, wildlife, and plant resources. These resources are summarized in **Table 9** below. Places currently or historically used by Borough residents to harvest these resources include the Unuk River, Stikine River, Bostwick Inlet and other areas on Gravina

Island, Yes Bay, POWI, Ward Cove, Boca de Quadra Bay, coastal and road-accessible areas of Revillagigedo Island, and the marine waters near Ketchikan (USDA 2004; FSB 2006; SERAC 2019a, 2019b, 2020, 2021a, 2022b). During discussions on the proposed South Revilla timber sale, it was noted that residents of Ketchikan, Saxman, and Metlakatla rely heavily on Wildlife Analysis Areas 405, 406, and 407 for deer hunting within Unit 1A (SERAC 2020).

**Table 9**. Summary of Documented Fisheries, Wildlife, and Plant Resources Harvested and Used by Ketchikan Gateway Borough Residents (Garza et al. 2006; SERAC 2019a).

|     | Fisheries Resources    | Wildlife Resources  | Plant Resources |
|-----|------------------------|---------------------|-----------------|
| 1.  | Salmon                 | Deer                | Beach Asparagus |
| 2.  | Halibut                | Moose               | Black Seaweed   |
| 3.  | Hooligan (Eulachon)    | Caribou             | Blueberries     |
| 4.  | Red Snapper            | Black Bear          | Salmonberries   |
| 5.  | Other Rockfish         | Mountain Goat       | Huckleberries   |
| 6.  | Lingcod                | Elk                 | Elderberries    |
| 7.  | Trout                  | Birds and Bird Eggs | Goose Tongue    |
| 8.  | Dolly Varden           |                     | Hudson Bay Tea  |
| 9.  | Marine Mammals         |                     |                 |
| 10. | Butter Clams           |                     |                 |
| 11. | Dungeness Crab         |                     |                 |
| 12. | Shrimp                 |                     |                 |
| 13. | Abalone                |                     |                 |
| 14. | Sea Cucumber           | ·                   |                 |
| 15. | Herring & Herring Eggs |                     |                 |

The most recent comprehensive subsistence survey conducted in Ketchikan estimated that Ketchikan residents harvested an average of 91 pounds of food per person during the 2005 study year (Garza et al. 2006). This figure was substantially higher than ADF&G's estimate of 33 pounds of wild foods harvested per Ketchikan resident in 2000 (Garza et al. 2006), but lower than that estimated for many other nearby communities like Saxman, Hyder, and communities on POWI (**Table 7**). It should be noted, however, that prior to the 2025 Board decision, Ketchikan had been located in a Federal Nonrural Area and a State Non-subsistence Use Area for over thirty years. As a result, Ketchikan residents have generally not had the same hunting and fishing opportunities as other nearby communities in Southeast Alaska.

In the 2005 Ketchikan survey, investigators noted that Ketchikan households used an average of approximately nine different wild resources (Garza et al. 2006). Fish made up the largest percentage of Ketchikan's harvest in 2005, accounting for about 67% of all wild foods harvested in pounds edible weight. Salmon was the primary fish species harvested, followed by halibut. Large land mammals composed about 15% of Ketchikan residents average per person harvests in 2005, with deer accounting for the vast majority of this large land mammal harvest (Garza et al. 2006). The remainder of Ketchikan's subsistence harvest consisted of approximately 10% marine invertebrates (primarily Dungeness crab and shrimp), 7% vegetation (berries, beach asparagus, and seaweeds), 1% marine mammals, and less than 1% birds and eggs (Garza et al. 2006).

Another way to quantitatively assess the significance of different resources to a community is to consider the percentage of households using and harvesting the resource, as well as the degree to which

that resource is shared within and between communities (OSM 2025d). In Ketchikan, about 34% of households were estimated to use deer, while 21% of households attempted to harvest deer, 14% successfully harvested deer, 9% gave deer to others, and 24% received deer from others during the 2005 study year (**Tables 7 & 8**).

## Saxman

In contrast, Saxman residents were estimated to harvest an average of 155 pounds of wild resources per person in comprehensive subsistence studies conducted in 1987 and 1999 (ADF&G CSIS 2025; **Table 7**). Like Ketchikan, salmon accounted for the largest percentage of this harvest, followed by non-salmon fish (primarily halibut), or large land mammals (primarily deer). About 63% of Saxman households used deer, while 36% of households attempted to harvest deer, 23% successfully harvested deer, 27% gave deer to others, and 47% received deer from others during the 1999 study year (**Tables 7** & **8**).

# <u>Hyder</u>

Unfortunately, comprehensive subsistence surveys have only been conducted once for both Hyder and Metlakatla, in 1987 (ADF&G CSIS 2025). At this time, Hyder residents were estimated to harvest an average of 345 pounds of wild resources per person, with salmon, non-salmon fish, and marine invertebrates combining to account for about 85% of this per person harvest in pounds edible weight (ADF&G CSIS 2025). Large land mammals (black bear, moose, and goat) accounted for about 9% of the average per person harvest in Hyder (ADF&G CSIS 2025). However, surveyed Hyder residents did not report harvesting any deer as part of this large land mammal harvest (ADF&G CSIS 2025).

### Metlakatla

Residents of Metlakatla were estimated to harvest an average of 70 pounds of wild resources per person in 1987, with salmon, non-salmon fish, and marine invertebrates combining to account for about 75% of this per person harvest in pounds edible weight (ADF&G CSIS 2025). Large land mammals (primarily deer) accounted for about 15% of the average per person harvest in Metlakatla at this time (ADF&G CSIS 2025). Approximately 69% of Metlakatla households used deer, while 16% of households successfully harvested deer, 12% gave deer to others, and 60% received deer from others during their only comprehensive survey year (**Tables 7 & 8**).

### Unit 1A

On average, Unit 1A households have been estimated to use, harvest, and share deer at lower rates than those estimated for households in Units 2 and 3 (**Tables 7 & 8**). However, communities in Unit 1A have also been surveyed somewhat less than their neighbors in Units 2 and 3. Residents of Saxman<sup>5</sup> and Metlakatla have harvested deer in Unit 2 in most of the years for which data is available (1997-

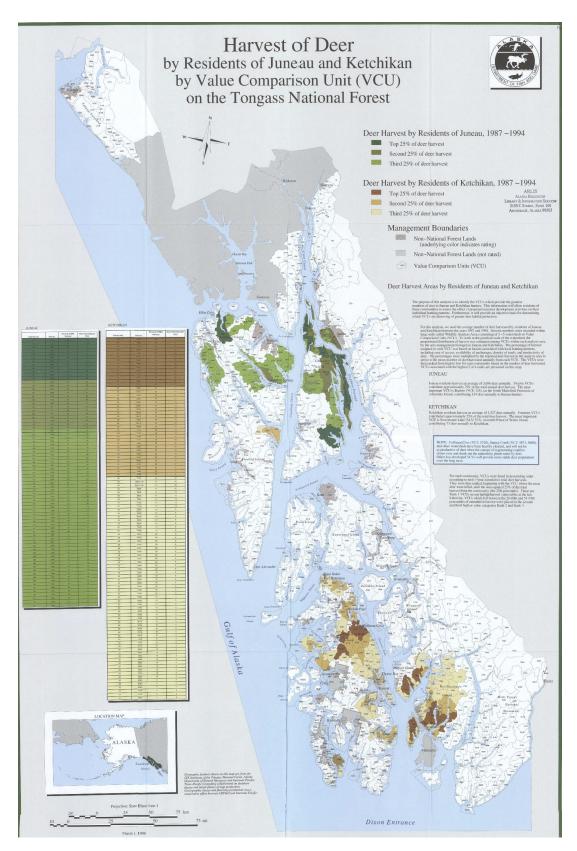
<sup>&</sup>lt;sup>5</sup> It is likely that Saxman residents are somewhat underrepresented in Unit 2 deer harvest reports and estimates due to a tendency for some Saxman hunters to self-report the larger, surrounding area of Ketchikan as their community of residence (Schumacher 2024, pers. comm.).

2024). Yet, due to issues of community size and proximity, Ketchikan residents have typically accounted for the second greatest number of deer hunters and deer harvests taken from Unit 2 each year from 1997-2024, outside of Unit 2 residents themselves (**Table 6**). Public testimony at Southeast Council and Board meetings also indicates that Ketchikan residents have historically harvested much of their deer from Unit 2 (POWI) (FSB 2006; SERAC 2019a). However, as noted in the harvest history section, Ketchikan residents have reported hunting less in Unit 2 since about 2018, when the two buck harvest limit restriction went into effect for NFQUs. This situation may change now that Ketchikan residents are rural, FQSUs with higher harvest limits and a longer deer hunting season in Unit 2.

Still, it is important to note that deer harvests have been increasing in Unit 1A in recent years, as deer populations here appear to be healthy and increasing (Dorendorf 2023; ADF&G 2025), and road construction on Gravina and Revillagigedo Islands has increased hunter accessibility in these areas (FSB 2025a). **Figure 10** shows primary deer hunting locations on the Tongass National Forest for NFQUs from Juneau and Ketchikan from 1987 – 1994. Much of Ketchikan residents' deer hunting efforts in Unit 1A at the time were focused on the most road accessible portions of Revillagigedo, as well as Gravina Island and nearby portions of Cleveland Peninsula (ADF&G 1998). It is likely that many of these areas are still key hunting locations for Ketchikan residents. As ADF&G (2025) noted in their comments on WSA25-02, Unit 1A experienced the highest deer harvest ever recorded in 2024 (1,085 deer), with a relatively low average number of hunting days per deer (3.1 days per deer). According to the most recently published deer management reports and plans for Unit 1A, annual hunter participation and deer harvest generally increased in the unit from 2011 to 2020 (**Table 10**), with much of the hunting pressure taking place on Gravina and Revillagigedo Islands (Dorendorf 2020, 2023). Significantly, harvest on Revillagigedo Island doubled between 2016 and 2020.

**Table 10**. Total Hunters, Hunter Days, and Harvests in Unit 1A from 2011-2020 (data from Dorendorf 2020, 2023).

| Year               | Total<br>Hunters | Total Hunter<br>Days | Total<br>Harvests | Average<br>Deer<br>per Hunter | Average Days<br>per Deer |
|--------------------|------------------|----------------------|-------------------|-------------------------------|--------------------------|
| 2011               | 359              | 1,156                | 186               | 0.5                           | 6.2                      |
| 2012               | 517              | 1,883                | 228               | 0.4                           | 8.3                      |
| 2013               | 568              | 2,297                | 263               | 0.5                           | 8.8                      |
| 2014               | 584              | 1,972                | 297               | 0.5                           | 6.7                      |
| 2015               | 625              | 2,284                | 387               | 0.6                           | 5.9                      |
| Average            | 531              | 1918                 | 272               | 0.5                           | 7.2                      |
|                    |                  |                      |                   |                               |                          |
| 2016               | 673              | 2301                 | 419               | 0.6                           | 5.5                      |
| 2017               | 774              | 2726                 | 570               | 0.7                           | 4.8                      |
| 2018               | 851              | 2852                 | 647               | 0.8                           | 4.4                      |
| 2019               | 904              | 3122                 | 850               | 0.9                           | 3.7                      |
| 2020               | 995              | 3633                 | 855               | 0.9                           | 4.2                      |
| Average            | 839              | 2927                 | 668               | 0.8                           | 4.5                      |
|                    |                  |                      |                   |                               |                          |
| Overall<br>Average | 685              | 2423                 | 470               | 0.6                           | 5.9                      |



**Figure 10**. Harvest of Deer by Juneau and Ketchikan Residents on the Tongass National Forest 1987-1994 (ADF&G 1998).

#### Unit 3:

### Characteristics of Unit 3 Communities

Unit 3 contains the rural communities of Kake, Petersburg, and Wrangell (see **Figure 11**). Like many other communities in Southeast Alaska, these communities are only accessible by boat or plane. Kake, Petersburg, and Wrangell had a combined population of about 5,612 people in 2024 (ADLWD 2025; US Census 2025; **Table 5**). These communities have had a customary and traditional use determination for deer in Unit 2 since 1992, and they range from approximately 51 to 93 miles in lineal distance from Unit 2 (**Table 5**). All three communities are located in the ancestral territory of the Tlingit, where people have made a living harvesting a variety of fish, wildlife, and plant resources for generations (Smythe 1988, Cohen 1989; Firman and Bosworth 1990; Turek et al. 2006; Paige et al. 2009).

#### Kake

The Kake Tlingit are composed of at least eight clans, belonging to two moieties (Firman and Bosworth 1990). Each clan owned "geographic areas, which included specific winter and summer camps, salmon streams, deer hunting areas, berry patches, and bays for seal hunting and other marine resource harvesting" (Firman and Bosworth 1990: 20). These groups occupied several village sites on Kuiu Island, northern Kupreanof Island, and Admiralty Island throughout the 1700s and 1800s (Firman and Bosworth 1990). Residents traveled seasonally to fish camps from June to October, before returning to their village at Kake (Firman and Bosworth 1990; Turek et al. 2006). Deer were and are still one of the main resources harvested in the area during the fall (Firman and Bosworth 1990; ADF&G CSIS 2025).

Although Kake is located in Unit 3, Kake hunters also have a substantial history of harvesting deer from places in Units 4 and 1B. More specifically, Kake hunters have long harvested deer on Kuiu Island, Kupreanof Island, Southern Admiralty Island near Gambier and Pybus Bays, and on the mainland in the vicinity of Sumdum (Firman and Bosworth 1990). Beginning in the 1950s, commercial fishing and the acquisition of larger fishing boats also facilitated greater access to Southern Admiralty Island and Baranof Island for deer hunting (Firman and Bosworth 1990). However, by the early 1960s. the fish canneries at Kake had gone out of business, and intensive clearcut logging had begun on both USFS and privately-owned lands in the area (Firman and Bosworth 1990; Turek et al. 2006). Deer hunting locations on Southern Admiralty Island became particularly important for Kake hunters in the 1970s and 1980s, when deer populations closer to home in Unit 3 went into significant decline following several severe winters. The effects of these severe winters may have been compounded by logging related habitat loss and additional hunters who moved to the area to work in the logging industry (Smythe 1988; Firman and Bosworth 1990).

# Petersburg

Similarly, archaeological evidence indicates that the Petersburg area was occupied for thousands of years prior to European contact (Smythe 1988). Kake Tlingit peoples seasonally occupied several summer fish camps around the area now known as Petersburg in the late 1800s, at which time the site

was more permanently settled by Norwegian immigrant Peter Buschmann, who built a salmon cannery, sawmill, and dock at the townsite (Ream and Merriam 2017). The town of Petersburg developed around the salmon cannery, as commercial fishing and processing of salmon, herring, and halibut supported initial economic development and population growth (Smythe 1988; Ream and Merriam 2017). Alaskans, immigrants from the Pacific Northwest, Scandinavia, China, Japan, and eventually the Philippines all traveled to Petersburg for work (Smythe 1988; Ream and Merriam 2017). The town was incorporated by 1910, and it continued to grow throughout the first half of the 20<sup>th</sup> century (Smythe 1988). Similar to Kake, the town became a base for large-scale logging operations in the 1960s and 1970s, as the regional timber industry grew (Smythe 1988). The logging industry declined in Petersburg and throughout Southeast Alaska in the 1990s, but commercial fishing and seafood processing remain important industries today (ADF&G 2002; Ream and Merriam 2017).

Subsistence harvests also remain an important component of many Petersburg residents' livelihoods (Firman and Bosworth 1990; Turek et al. 2006; Ream and Merriam 2017). As Smythe (1988: 36) notes, "From the time that Petersburg was first settled, deer has been a primary food resource for the community, particularly during the fall and winter. Deer was the principal source of red meat for many years, for moose were infrequent in the area until the 1950s." Before roads were built around the community, residents used row boats and skiffs to hunt along the shoreline near Petersburg (Smythe 1988). The east side of Mitkof Island, the north shore of Kupreanof Island, and Woewodski Island were hunted extensively (Smythe 1988).

As in Kake, Petersburg residents' deer hunting ranges expanded as motorboats and commercial fishing boats became more prevalent (Smythe 1988). Accordingly, hunting areas on Admiralty Island (Pybus Bay, Gambier Bay, and Seymour Canal) and Baranof Island (Chatham and Peril Straits) have been used on a more occasional basis since the early 1900s (Smythe 1988). These hunting areas also became more significant for Petersburg residents during the severe deer population declines witnessed on Mitkof and Kupreanof Islands in the 1970s (Smythe 1988). The combination of variables leading to deer population declines and reduced hunting efforts in and around Petersburg in the 1970s presents many similarities to the issues being experienced on POWI more recently:

Older residents reported that deer were always plentiful on Mitkof and Kupreanof Islands until the population crash in the early 1970s...According to local experts, the population of deer was high until after statehood, when different hunting regulations were put into effect which raised the limit and opened the season on does. Significant logging was initiated on Mitkof Island at the same time, which put additional hunting pressure on the deer. First, an increase in the local [human] population was occurring. Second, the construction of logging roads on the southern portion of the island opened prime hunting areas where, previously, not many people went. Fearing that the deer population could not sustain itself under the new harvest regulations and increased hunting pressure, local hunters started to advocate for a reduced limit and elimination of the doe hunt in 1965. As late as 1971, it was reported widely that deer could still be seen "everywhere along the Narrows," and swimming across. But by 1973, the deer population on Mitkof and Kupreanof had crashed, and deer were no longer seen on either island. Unlike in

previous years of scarcity, the deer population did not rebound despite the mild winters and subsequent decline in the wolf population throughout the intervening years.

The deer population decline resulted in a closure on Mitkof, Kupreanof, Woewodski, and Butterworth Islands that remained in effect during the study period [1986-1987]. The closure has greatly changed the hunting areas of Petersburg residents, who now utilize more distant areas on Admiralty Island or Prince of Wales Island. It also increased hunting pressure on the mainland and encouraged a shift to moose as an alternate resource. Older respondents reported that the continued area closures have increased the cost of hunting deer, which is causing their participation to decline (Smythe 1988: 37).

# Wrangell

The community of Wrangell is located within the ancestral territory of the Stikine Tlingit (*Shtax'héen Kwáan*), whose extensive territory included the entire island of Wrangell, the eastern side of Kupreanof Island, Mitkof Island, portions of Prince of Wales Island, Etolin Island, Zarembo Island, the mainland coast from Cape Fanshaw to Cleveland Peninsula, and up the Stikine River as far as Telegraph Creek (Cohen 1989; Paige et al. 2009). By 1800, the Stikine Tlingit had established the main settlement of Kotzlitzna, located approximately 13 miles south of present-day Wrangell (Smythe 1988 Cohen 1989; Paige et al. 2009; Ream and Merriam 2017). The settlement's position at the mouth of the Stikine River allowed them to monopolize trade between interior Athabascans and Russian and Euro-American merchants (Paige et al. 2009).

The Russian American Company began trading near Wrangell as early as 1811 (Cohen 1989; Ream and Merriam 2017). By 1833, the Russians established Redoubt (fort) St. Dionysius garrison at Wrangell, which attracted people from Kotzlitzna and surrounding areas (Paige et al. 2009; Ream and Merriam 2017). The garrison was transferred to the Hudson Bay Company in 1840 and renamed Fort Stikine (Paige et al. 2009; Ream and Merriam 2017). The fort was later re-established by the US military as Fort Wrangell in 1868 (Paige et al. 2009; Ream and Merriam 2017). As commercial fishing, canning, timber harvesting, and gold mining actives boomed, Stikine Tlingit and Euro-American gold prospectors, fur trappers, fisherman and fish processers, loggers, and traders relocated to Wrangell (Paige et al. 2009; Ream and Merriam 2017).

The city of Wrangell was incorporated in 1903 (Paige et al. 2009; Ream and Merriam 2017). The population grew throughout much of the twentieth century as industries expanded and schools were built (Paige et al. 2009). The Alaska Pulp Company became Wrangell's largest employer until it closed in 1994 (Ream and Merriam 2017). The sawmill reopened at a smaller scale in 1998, only to close permanently in 2008 (Ream and Merriam 2017). By 2002, the timber industry in Wrangell had severely declined, and most wages came from commercial fishing and government jobs (ADF&G 2002). More recently, tourism, seafood processing, and marine services have become larger industries in the area (Ream and Merriam 2017). However, subsistence harvests also remain an important component of many Wrangell residents' livelihoods (Cohen 1989; Paige et al. 2009; Ream and Merriam 2017).

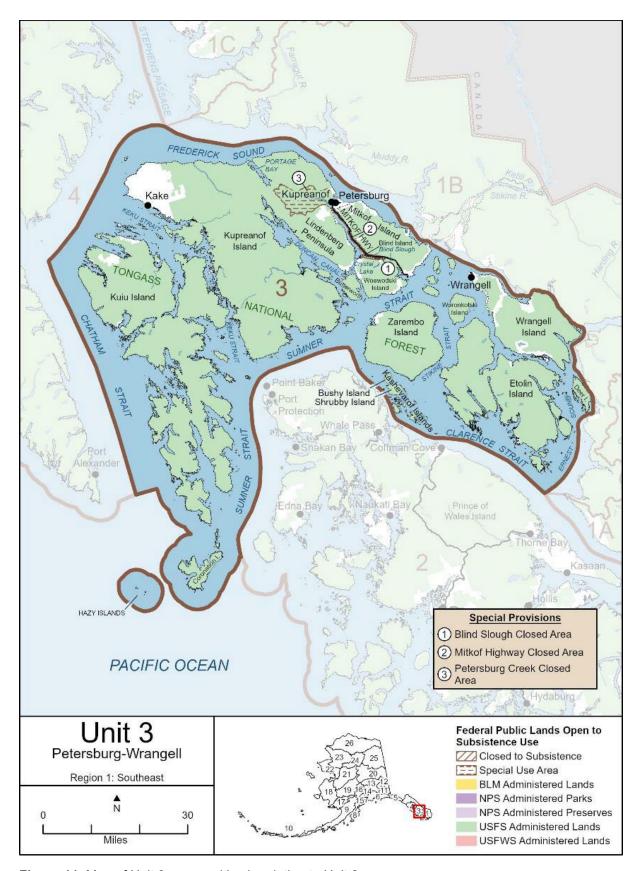


Figure 11. Map of Unit 3 communities in relation to Unit 2.

### Subsistence Harvests and Resource Use in Unit 3

On average, residents of Unit 3 have collectively accounted for the fourth most hunters and deer harvests in Unit 2 each year between 1997 and 2024, trailing residents of Unit 2, Unit 1A, and non-Alaskan residents (**Table 6**). The most recent comprehensive subsistence survey conducted in Kake estimated that residents harvested an average of 173 pounds of wild resources per person during the 2022 study year (ADF&G CSIS 2025). Non-salmon fish accounted for the greatest portion of this harvest in pounds edible weight (~45%), followed by salmon (~21%), herring roe (~15%), vegetation (~10%), and deer (~8%) (ADF&G CSIS 2025). About 77% of Kake households used deer, while 44% of households attempted to harvest deer, 28% successfully harvested deer, 41% gave deer to others, and 64% received deer from others during their most recent comprehensive subsistence survey (**Tables 7** & **8**).

In 2000, Petersburg residents were estimated to harvest an average of 161 pounds of wild resources per person, with salmon accounting for the greatest percentage of this harvest in pounds edible weight (~37%), followed by non-salmon fish (~26%), marine invertebrates (~23%), and deer (8.5%). About 40% of Petersburg households used deer, while 34% of households attempted to harvest deer, 19% successfully harvested deer, 8% gave deer to others, and 22% received deer from others during their most recent survey year (**Tables 7 & 8**).

Similarly, residents of Wrangell were estimated to harvest an average of 168 pounds of wild resources per person, with marine invertebrates accounting for the greatest percentage of this harvest in pounds edible weight (~36%), followed by non-salmon fish (~20%), deer (~17%), and salmon (~15%) in 2000 (ADF&G CSIS 2025). Approximately 48% of Wrangell households used deer, while 38% of households attempted to harvest deer, 24% successfully harvested deer, 18% gave deer to others, and 29% received deer from others during their most recent survey (**Tables 7 & 8**).

Overall, the rates at which Unit 3 households have been estimated to use, harvest, and share deer have been higher than the rates estimated for households in Unit 1A, but lower than those estimated for households in Unit 2 (**Tables 7 & 8**). Given the recent Federal and State harvest limits for deer in Unit 3 (1 or 2 bucks depending on the area and method), it is likely that high deer harvesting households must travel outside of Unit 3 to legally harvest sufficient deer to meet their needs. Given issues of proximity and the deer hunting patterns that have developed over time here, it is likely that residents of Unit 3 preferentially travel to Unit 4 and Unit 1B to harvest additional deer (Smythe 1988; Firman and Bosworth 1990). Unit 2 also appears to be used by residents of Unit 3 for this purpose, but probably to a lesser degree (**Table 6**).

### Criterion 3: Availability of Alternative Resources

Criterion 3 of ANILCA §804 analyses requires a comparison of the availability of alternative resources among communities with customary and traditional use determinations for the resource being proposed for restriction. In the section of this analysis on Criteria 1 and 2: Local Residency and Customary and Direct Dependence upon the Population as the Mainstay of Livelihood, **Table 7** shows the estimated average amount of total wild resources harvested per person in each community for the years in which they were surveyed. This provides one measure of communities' overall reliance on subsistence foods,

in contrast to store-bought food. In situations of food and resource shortages, some communities have better access to alternative subsistence resources and store-bought foods, and this is an important consideration in the §804 subsistence user prioritization process.

### Subsistence Resources

### Wildlife Species

All rural residents of Units 1 through 5 currently have a customary and traditional use determination for deer in Units 1 through 5. This means that rural residents of Southeast Alaska could theoretically choose to hunt deer under Federal subsistence regulations wherever they apply in Southeast Alaska. However, in practice, issues of time and money limit most residents to hunting deer in reasonably close proximity to their homes (Wheeler and Thornton 2005). **Table 11** provides a description of the current deer hunting opportunities for FQSUs hunting under Federal subsistence regulations in Units 1 through 5. This table is provided as a point of comparison for understanding rural residents' ability to meet their subsistence needs for deer in their home units, as well as likely potential sources of additional deer and alternative wildlife resources. The harvest limits and associated regulations in **Table 11** also provide some indication of the recent status of deer populations therein.

**Table 11**. Deer hunting opportunities for FQSUs under Federal subsistence regulations and other wildlife species available in Units 1-5. All rural residents of Units 1-5 have a customary and traditional use determination for deer in Units 1-5. Hunting opportunities reflect wildlife that is consumed (not only used for furs/hides).

| Customary and<br>Traditional Use<br>Determination | Harvest Limits                                                              | Open Season               | Other Hunting<br>Opportunities<br>Available<br>in Unit                                      |  |
|---------------------------------------------------|-----------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------|--|
| All Rural<br>Residents of<br>Units 1, 2, 3, 4, 5  | <b>Unit 1A</b> - 4 antlered deer                                            | Aug.1-Dec.31              | Black Bear; Brown<br>Bear; Goat; Moose;<br>Hare; Grouse;<br>Ptarmigan; Beaver<br>(Trapping) |  |
|                                                   | <b>Unit 1B</b> - 2 antlered deer                                            | Aug.1-Dec.31              | Black Bear; Brown Bear; Goat; Moose; Hare; Grouse; Ptarmigan; Beaver (Trapping)             |  |
|                                                   | Unit 1C - 4 deer; however female deer may be taken only from Sept.15-Dec.31 | Aug.1-Dec.31              | Black Bear; Brown<br>Bear; Goat; Moose;<br>Hare; Grouse;<br>Ptarmigan; Beaver<br>(Trapping) |  |
|                                                   | Unit 1D                                                                     | No Federal Open<br>Season | Black Bear; Brown<br>Bear; Goat; Hare;<br>Grouse;<br>Ptarmigan; Beaver<br>(Trapping)        |  |

| Customary and<br>Traditional Use<br>Determination | Harvest Limits                                                                                                                                                                           | Open Season                                             | Other Hunting<br>Opportunities<br>Available<br>in Unit                                                    |  |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--|
|                                                   | Unit 2 - 5 deer; however, no<br>more than 1 may be a female<br>deer. Female deer may be<br>taken only during the period<br>Oct.15-Jan.31                                                 | Jul.24-Jan.31                                           | Black Bear; Hare;<br>Grouse; Ptarmigan;<br>Beaver (Trapping)                                              |  |
|                                                   | Unit 3 - Mitkof, Woewodski,<br>Butterworth Islands, and that<br>portion of Kupreanof Island on<br>the Lindenburg Peninsula east<br>of the Portage Bay - Duncan<br>Canal Portage - 1 buck | Oct.1-Nov.7                                             | Black Bear; Elk;<br>Moose; Hare;<br>Grouse;<br>Ptarmigan; Beaver<br>(Trapping)                            |  |
|                                                   | <b>Unit 3, remainder</b> – 2 bucks                                                                                                                                                       | Aug. 1-Nov. 30.<br>Dec. 1-31, season to<br>be announced | Black Bear; Elk;<br>Moose; Hare;<br>Grouse;<br>Ptarmigan; Beaver<br>(Trapping)                            |  |
|                                                   | Unit 4 - 6 deer; however, fe-<br>male deer may be taken only<br>from Sept.15-Jan.31.                                                                                                     | Aug.1-Jan.31                                            | Brown Bear; Elk;<br>Goat; Hare; Grouse;<br>Ptarmigan; Beaver<br>(Trapping)                                |  |
|                                                   | <b>Unit 5A</b> - 1 buck                                                                                                                                                                  | Nov.1-Nov.30                                            | Black Bear; Brown<br>Bear; Goat; Moose <sup>6</sup> ;<br>Hare; Grouse;<br>Ptarmigan; Beaver<br>(Trapping) |  |
|                                                   | Unit 5B                                                                                                                                                                                  | No Federal Open<br>Season                               | Black Bear; Brown<br>Bear; Goat; Moose <sup>7</sup> ;<br>Hare; Grouse;<br>Ptarmigan; Beaver<br>(Trapping) |  |

Unit 4 has the highest deer harvest limit provided under Federal Subsistence Regulations, followed by Unit 2, Unit 1C, Unit 1A, and Unit 1B (**Table 11**). Units 3 and 5A currently have a deer harvest limit of only 1 buck per season, while there are no Federal open deer seasons in Units 1D and 5B (**Table 11**). Interestingly, Units 2 and 4 also have the fewest alternative wildlife species available to potentially offset a decline in deer harvest. In Unit 2, deer are the only large ungulate available. While black bear are also available in Unit 2, black bear harvest is a more seasonal activity that requires different hunting practices and equipment than deer, and may not be as accessible to many Unit 2 residents. Black bear meat palatability can also be more of an issue, depending on season and diet (i.e., berries vs. salmon). Similarly, beaver trapping requires different equipment and skills than deer hunting. Hare, ptarmigan, and grouse are also available in Unit 2, but the time and effort required to

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<sup>&</sup>lt;sup>6</sup> Only residents of Unit 5A have a customary and traditional use determination for moose in Unit 5A.

<sup>&</sup>lt;sup>7</sup> Only residents of Unit 5A have a customary and traditional use determination for moose in Unit 5B.

harvest and process enough of these small game to make up for the loss of deer may be untenable (see Hansen et al. 2013).

Unit 3 residents have a substantially lower deer harvest limit in their home unit. However, unlike Unit 2 residents, they can also harvest moose and elk in Unit 3, as well as black bear, hare, grouse, and ptarmigan. Unit 3 residents also have a history of traveling to southern Admiralty Island in Unit 4 and parts of the mainland in Unit 1B to harvest deer (Smythe 1988; Firman and Bosworth 1990). Unit 1A residents may harvest four bucks in their home unit, as well as goat, moose, black bear, hare, grouse, and ptarmigan. Residents of Unit 1A also have a history of traveling to Unit 2 to harvest deer.

As noted earlier in the analysis, rural residents of more distant communities in Units 1C, 1D, 4, and 5A have not exerted much deer hunting pressure in Unit 2 over the past several decades for which hunter harvest data has been collected. Gustavus residents may harvest up to 4 deer in Unit 1C and they can also harvest deer from nearby locations in Unit 4, where the harvest limit is 6 deer. According to the comprehensive subsistence surveys most recently conducted in communities within Unit 1D, residents focus most of their subsistence harvesting efforts on fisheries resources like salmon, smelt, and eulachon (ADF&G CSIS 2025). Deer are harvested and used by residents of Unit 1D, but to a lesser degree than many other communities in Southeast Alaska (**Tables 7 & 8**), as there is no Federal or State open season for deer in Unit 1D. Deer do not appear to be a primary subsistence resource for residents of Yakutat in Unit 5A (**Tables 7 & 8**). Moose are the primary large land mammal species targeted by Yakutat residents, accounting for the second largest percentage of total per capita harvest behind salmon in 2015 (Sill et al. 2017).

### Fisheries Species

All rural residents of the Southeast Alaska and Yakutat Fishery Management Areas have a customary and traditional use determination for all fisheries resources under the jurisdiction of the Federal Subsistence Management Program. Like the situation with deer, this means that all rural residents of Southeast Alaska could theoretically choose to harvest fisheries resources under Federal subsistence regulations wherever they apply in Southeast Alaska. However, in practice, most residents are likely limited by issues of time and money to fishing in reasonably close proximity to their homes (Wheeler and Thornton 2005).

There is a distinct steelhead fishery on POWI and Kosciusko islands with two different harvest seasons. The spring season of this fishery provides for a five steelhead per household harvest limit, which is larger than the two steelhead per household limit available through the more general Southeast area steelhead fishery. Though both steelhead fisheries are open to all rural residents of the Southeast Alaska and Yakutat Fishery Management Areas, the POWI and Kosciusko islands fishery is more likely to be used by residents of that area.

# Grocery Stores and Store-bought Foods

Ketchikan functions as a regional hub in the southern portion of Southeast Alaska, and Ketchikan residents generally have substantially greater access to more commercial goods and services than their

neighbors in Units 2 and 3 (OSM 2025c). Likewise, though Saxman residents generally exhibit lower median household incomes and higher poverty rates than some of their neighbors in the area (**Table 6**), they are located about three miles down the road from Ketchikan, and have comparatively better access to the commercial goods and services available in Ketchikan than residents of Units 2 and 3. Metlakatla residents also have easier access to Ketchikan than residents of Units 2 and 3. Due to issues of proximity, many residents of Units 1C, 1D, 4, and 5 likely use Juneau as their regional hub for access to key commercial goods and services. Likewise, residents of Unit 3 may also use Juneau as a regional hub as much or more than Ketchikan.

At the time of writing, there were eight grocery stores in Unit 1A, with most of these stores located in Ketchikan (Table 12). Two of the grocery stores in Unit 1A are national chains, four are regional chains, and two are small, independent stores. Additionally, numerous businesses and organizations in the Ketchikan Gateway Borough offer services related to food security, housing insecurity, mental health, youth development and support, addiction and recovery, senior services, home health and hospice, real estate, career development, and family and community support (OSM 2025c). There are fewer grocery stores available in Units 2 or 3, and store-bought food options are generally more limited and more expensive than they are in the Ketchikan Gateway Borough (OSM 2025c). As the Mayor of Craig explained in 2023, Unit 2 residents "pay twice as much in freight...our food prices are double. We can't go to Alaska Airlines, and it costs us almost twice as much to get off Prince of Wales to go you know to Ketchikan, and a lot of resources we just don't have over here" (OSM 2025c: 651). Households in Unit 2 have also exhibited some of the lowest average median incomes and highest poverty rates in the region over the past three census analysis periods (see Table 13). These economic factors suggest that Unit 2 residents have less access to store-bought foods and related alternative economic resources than their neighbors, particularly those residing in Unit 1A.

**Table 12**. Number and type of grocery stores in Units 1A, 2, and 3 (Page 2020; Miller 2023).

| Unit | Number of Grocery Stores | Notes                                                                              |  |
|------|--------------------------|------------------------------------------------------------------------------------|--|
| 1A   | 8                        | 2 National Chain Stores;<br>4 Regional Chain Stores;<br>2 Small Independent Stores |  |
| 2    | 5                        | 3 Regional Chain Stores;<br>2 Small Independent Stores                             |  |
| 3    | 4                        | 2 Regional Chain Stores;<br>2 Small Independent Stores                             |  |

**Table 13**. Five-year average median household income and average poverty rates for rural communities in wildlife management units 1-5, from 2009-2023 (US Census 2025).

| Unit    | Average<br>Median<br>Household<br>Income<br>2009-2013 <sup>8</sup> | Average<br>Poverty<br>Rate<br>2009-2013 | Average<br>Median<br>Household<br>Income<br>2014-2018 <sup>9</sup> | Average<br>Poverty<br>Rate<br>2014-2018 | Average<br>Median<br>Household<br>Income<br>2019-2023 | Average<br>Poverty<br>Rate<br>20019-2023 |
|---------|--------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------|------------------------------------------|
| Unit 1A | \$69,201                                                           | 16.9%                                   | \$68,466                                                           | 13.4%                                   | \$71,226                                              | 14.3%                                    |
| Unit 1C | \$68,562                                                           | 11.0%                                   | \$97,383                                                           | 1.7%                                    | \$64,167                                              | 10.7%                                    |
| Unit 1D | \$77,490                                                           | 5.6%                                    | \$76,689                                                           | 7.5%                                    | \$60,839                                              | 9.7%                                     |
| Unit 2  | \$56,581                                                           | 14.6%                                   | \$63,022                                                           | 18.3%                                   | \$63,343                                              | 23.7%                                    |
| Unit 3  | \$66,001                                                           | 16.7%                                   | \$73,736                                                           | 8.4%                                    | \$63,948                                              | 11.4%                                    |
| Unit 4  | \$78,956                                                           | 12.0%                                   | \$75,986                                                           | 8.3%                                    | \$59,932                                              | 8.0%                                     |
| Unit 5  | \$95,246                                                           | 5.9%                                    | \$80,138                                                           | 6.7%                                    | \$80,625                                              | 7.8%                                     |

## Alternative(s) Considered

Modify or rescind the current NFQU closure period: Shifting the current early season closure to NFQUs from Aug.1-Aug.15 to fifteen days in November may provide a greater benefit to local subsistence users. Historically, most of the harvest taken by both FQSUs and NFQUs occurs during the month of November, because the rut makes deer 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). However, based on reported harvest data, it does not appear that the current early season closure has substantially reduced overall competition or harvests by non-local users, though it may still be providing an important window for alpine hunting without non-local competition. Still, Ketchikan residents are no longer subject to this early season closure now that they reside in a rural status community with a customary and traditional use determination for deer in Unit 2.

Institute a limited closure period for a subset of FQSUs based on the §804 Analysis: It may be possible to conserve deer populations in Unit 2 and continue providing a meaningful subsistence priority for Unit 2 residents without completely closing to FQSUs residing outside Unit 2. A limited closure period mirroring that in place for NFQUs, in part or whole, could also potentially be adopted for FQSUs residing outside of Unit 2.

Reduce the harvest limit for NFQUs hunting in Unit 2: It may be possible to conserve deer populations in Unit 2 and continue providing a meaningful subsistence priority for Unit 2 residents without a complete closure to NFQUs. Reducing the harvest limit for NFQUs in Unit 2 to one buck may be a reasonable compromise based on the data presented in the analysis, which may prevent unnecessary restrictions on non-subsistence uses per ANILCA §815(3). Based on reported harvest data, it appears

<sup>&</sup>lt;sup>8</sup> Adjusted for inflation to 2023 dollars (US Bureau of Labor Statistics 2025)

<sup>&</sup>lt;sup>9</sup> Adjusted for inflation to 2023 dollars (US Bureau of Labor Statistics 2025)

that the harvest limit reduction implemented for NFQUs in 2018 has been a more effective mechanism for reducing competition and harvests by non-local users than the early season closure.

Reduce the harvest limit for FQSUs residing outside of Unit 2, based on the §804 Analysis: It may be possible to conserve deer populations in Unit 2 and continue providing a meaningful subsistence priority for Unit 2 residents without completely closing the hunting season to non-prioritized FQSUs. Reducing the harvest limit for non-prioritized FQSUs may be a reasonable compromise based on the data presented in the analysis.

Reduce the harvest limit for local FQSUs to 4 or 5 bucks only: Based on local user reports of consistently declining Unit 2 deer populations and habitat, reducing the harvest limit for local FQSUs to 4 or 5 bucks, with no doe harvest, may also be necessary to conserve the deer population and continue long-term subsistence uses of deer. However, this regulatory change is likely outside the scope of this proposal. Two Wildlife Proposals, WP26-06/-07, requesting the elimination of doe harvests in Unit 2 are currently under consideration and are considered in a separate analysis.

#### **Discussion and Effects**

The existing closure and harvest limit restriction on NFQUs in Unit 2 was implemented primarily due to the impacts of hunting pressure from Ketchikan residents. However, with the rural status change recently adopted for Ketchikan, Ketchikan residents will no longer be subject to these restrictions as FQSUs. In this situation, closing the Unit 2 deer hunting season to NFQUs and a subset of FQSUs would likely substantially reduce competition and increase harvest opportunities for Unit 2 residents. This action would also represent a substantial restriction in harvest opportunity for all users subject to the closure. The potential alternatives noted in the previous section would likely also provide benefits in terms of conservation and the continuation of subsistence among local users. These alternatives would result in less restrictions to NFQUs and non-prioritized FQSUs than what is being requested by the proponents, however, they may also prove less beneficial to Unit 2 deer populations and local subsistence users. Given the subsistence priority mandated by ANILCA, closures or restrictions to NFQUs should be implemented before closures or restrictions to FQSUs are implemented.

Overall, it is difficult to provide a comprehensive assessment of the possible impacts of regulatory changes on the Unit 2 deer population due to limited population information and lack of quantitative biological data. Currently, hunter self-reported harvest and effort information is the only quantitative index available for tracking the Unit 2 deer population. The limitations of population data currently available warrants a conservative approach. As Brinkman and colleagues (2009: 38) explain, there are "no population data available that are accurate and precise enough to assess population trends at the temporal and spatial scales required for comparisons with changes in forest habitat and harvest opportunities. Because the island's interior was mostly uninhabited and un-hunted before commercial logging, there is no [quantitative] information on pre-logging deer populations, although descriptive accounts suggest deer were abundant." The recent decline in the Unit 2 deer harvest corresponds with a decline in the number of hunters and an aging population of local residents. However, the legacy of logging associated habitat loss, recent reductions in the number of deer harvested per year by both

FQSUs and NFQUs, and the increasing time required to harvest by both user groups, suggests that the Unit 2 deer population likely has declined, the population is less accessible, and/or competition levels are impacting harvest success and efficiency. These harvest trends are also corroborated by traditional ecological knowledge and ongoing reports of a declining Unit 2 deer population from local users.

Undoubtedly, the carrying capacity for deer on POW has declined due to habitat loss from logging. Population models indicate declines in carrying capacity of 50 to 60% by the end of the logging rotation in 2054 with declines exceeding 60% following severe winters (Hicks 1999). USFWS (2015, 2016) predicted that habitat loss from past timber harvests in Unit 2 will result in 21-33% declines in the deer population over the next 30 years, with future timber harvest exacerbating these declines. Long-term implications of this habitat loss include loss of deer hunting opportunity and the inability to provide for subsistence needs (Hicks 1999).

Per ANILCA §815(3), restrictions on the taking of wildlife for non-subsistence uses on Federal public lands may not be authorized unless necessary for the conservation of healthy populations of wildlife or to continue subsistence uses of such populations. Per §100.4, Conservation of healthy populations of fish and wildlife is defined as the maintenance of fish and wildlife resources and their habitats in a condition that assures stable and continuing natural populations and species mix of plants and animals in relation to their ecosystem, including the recognition that local rural residents engaged in subsistence uses may be a natural part of that ecosystem; minimizes the likelihood of irreversible or long-term adverse effects upon such populations and species; ensures the maximum practicable diversity of options for the future; and recognizes that the policies and legal authorities of the managing agencies will determine the nature and degree of management programs affecting ecological relationships, population dynamics, and the manipulation of the components of the ecosystem. In the current context, actions may be needed to "minimize the likelihood of irreversible or long-term adverse effects" to the Unit 2 deer population, in alignment with ANILCA §815(3) and the definition provided above. Certainly, increasing deer harvest and hunting pressure, which is likely if no action is taken, is not recommended at this time of heightened conservation concern.

Increased harvests by Ketchikan residents hunting under Federal subsistence regulations may exacerbate conservation concerns for the POWI deer population and reduce harvest opportunities for local subsistence users. Many preferred hunting areas are no longer huntable, or no longer easily accessible, due to changes in the forest habitat. Habitat loss from commercial logging appears to be impacting Unit 2 deer populations and 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 (Wyllie de Echeverria and Thornton 2019).

Current Federal regulations allow for a 5 ½ -month hunting season, which may or may not be sufficient to meet local subsistence needs under current conditions. **Table 4** shows that the July/August hunting period has been one of the most important times for deer hunting in Unit 2, accounting for approximately 24% of the deer harvested by all users in recent years (Churchwell 2024, 2025). Significantly, the current early season closure to NFQUs was adopted primarily to limit Ketchikan residents' hunting efforts in Unit 2 during this period. Local FQSUs' ability to hunt deer in January

appears to be useful in times of necessity or opportunistic encounters, but it is not a preferred hunting period due to the typically poor condition of deer and the severity of January weather (**Table 4**). The January hunting period has accounted for less than 1% of the overall yearly deer harvest in Unit 2 since its inception in 2016 (**Table 4**).

In summary, while all available information (harvest indices, public testimony, TEK) indicate that the Unit 2 deer population is likely declining and a conservative approach is warranted, a complete closure to NFQUs and a subset of FQSUs may not be necessary for the conservation of a healthy Unit 2 deer population and the continuation of local subsistence uses at this time. However, increasing deer harvest and hunting pressure, which is likely if no action is taken, may result in jeopardizing the conservation of a healthy deer population and continuation of subsistence uses during this time of heightened conservation concern.

# **OSM PRELIMINARY CONCLUSION**

**Oppose** WP26-03 due to the existing closure and harvest limit restrictions for NFQUs already in codified regulations.

**Support** WP26-04 **with modification** to close only the northwestern portion of POWI from Jul.24-Aug.15 to non-prioritized FQSUs, and reduce the harvest limit of non-prioritized FQSUs to two bucks.

**Take No Action** on WP26-05 due to the actions taken on WP26-03 and WP26-04.

The draft regulations read:

# 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.

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 Jul. 24 - Aug. 15, except by federally qualified subsistence users residents of Unit 2 hunting under these regulations.

Federally qualified subsistence users who are residents of Units 1, 3, 4, and 5 may only harvest 2 male deer on Federal public lands in Unit 2.

Jul. 24 – Jan. 31

Non-federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

## **Justification**

Deer are the most significant terrestrial source of meat for residents of the thirteen communities that compose Unit 2 (including residents of Coffman Cove, Craig, Edna Bay, Hollis, Hydaburg, Kasaan, Klawock, Naukati Bay, Point Baker, Port Protection, Shakan Bay, Thorne Bay, and Whale Pass). Likewise, deer have consistently ranked as one of the top resources harvested, utilized, and shared by Unit 2 residents since harvest surveys began in the 1980s. Reduced access to deer can represent a substantial hardship for Unit 2 households with limited means to replace wild food harvests with expensive store-bought foods. Many Unit 2 residents were already reporting that they were not meeting their subsistence needs for deer before Ketchikan's rural status change (SERAC 2017a, 2024, 2025), and recent harvest data indicate it is taking FQSUs and NFQUs longer to harvest fewer deer in Unit 2. Unit 2 residents exhibit the greatest degree of customary and direct dependence on Unit 2 deer populations as a mainstay of livelihood. Likewise, Unit 2 residents reside in closest proximity to Unit 2 deer populations, and on average, do not possess the same level of access to alternative resources as NFQUs residing in urban areas and nearby FQSUs residing in Units 1A and 3. FQSUs residing in Units 1C, 1D, 4, and 5 have exhibited relatively limited deer hunting and harvest in Unit 2 since harvest reporting data began being collected. According to the criteria provided in ANILCA §804, Unit 2 residents should have priority access to Unit 2 deer in situations where it is deemed necessary to restrict other users' taking of this population due to substantial conservation concerns and/or the need to continue subsistence uses.

Given the subsistence priority mandated by ANILCA, closures or restrictions to NFQUs should be implemented before closures or restrictions to FQSUs may be implemented in these situations. However, Ketchikan's recent rural status change presents a unique circumstance in which to apply this consideration, as Ketchikan residents previously accounted for the majority of NFQUs hunting deer in Unit 2. The 2003 August closure (WP03-05) and 2018 harvest limit restrictions (WP18-01) implemented for NFQUs were primarily intended to limit Ketchikan residents' harvest of Unit 2 deer, and thereby help conserve the Unit 2 deer population and continue subsistence uses of that population. Because the current customary and traditional use determination for deer in Units 1-5 is written to be inclusive of all rural residents, Ketchikan residents are now able to harvest deer in Unit 2 under Federal subsistence regulations. As a result, any regulation intended to continue limiting Ketchikan residents' harvest of Unit 2 deer for the purposes of conservation and the continuation of subsistence uses, should restrict NFQUs first, before restricting a subset of FQSUs through the ANILCA §804 subsistence user prioritization process. However, NFQUs are already restricted in codified regulations.

The long-term trend of declining deer habitat, decreasing and/or less accessible deer populations, and high hunter competition in the most road-accessible portions of Unit 2 warrants adopting temporary special action WP26-04 with modification. Restricting NFQUs and non-prioritized FQSUs to the degree requested by the proponents of WP26-03/-04/-05 is not necessary, as most of the hunting pressure on Unit 2 is concentrated along roads and near communities in the area of the current early

season closure to NFQUs. The OSM modification represents a meaningful compromise intended to maintain a healthy Unit 2 deer population, while ensuring the continuation of subsistence uses by FQSUs residing in Unit 2, without completely closing or unnecessarily restricting non-local hunting opportunities. Under the OSM modification, NFQUs will still be able to harvest 2 bucks in Unit 2, following the early season closure in August. Non-prioritized FQSUs who reside in Units 1, 3, 4, and 5 (including residents of Ketchikan, Saxman, Metlakatla, Hyder, Kake, Petersburg, Wrangell, Gustavus, Haines, Klukwan, Skagway, Angoon, Elfin Cove, Game Creek, Hoonah, Pelican, Port Alexander, Sitka, Tenakee Springs, Whitestone Logging Camp, and Yakutat) will also be able to harvest 2 bucks, as well as hunt during the Federal-only January season. This January season will provide these non-prioritized FQSUs some priority over NFQUs.

The Board maintained the current early season closure and harvest restrictions for NFQUs hunting in Unit 2 in 2022 (WCR22-01), and OSM's recommendation on the current review of that closure (WCR26-01) is also to maintain these regulatory restrictions. However, the benefits of these restrictions, in terms of maintaining a healthy Unit 2 deer population and ensuring the continuation of local subsistence uses, will be functionally stymied as they primarily targeted Ketchikan residents, who are now rural, FQSUs. Ketchikan obtaining rural status (adoption of NDP25-01) FQSUs triggered the submission of these special action requests. Additionally, Ketchikan Indian Community (KIC), the proponent of NDP25-01, agreed that they would support necessary §804 restrictions if Ketchikan gained rural status, particularly for Unit 2 deer (OSM 2023b; SERAC 2024; FSB 2025b). Several Board members also suggested that an §804 subsistence user prioritization would be an appropriate and effective measure to deal with the potential negative impacts that Ketchikan's change in rural status could have on local subsistence resources and the continuation of subsistence uses, particularly Unit 2 deer (FSB 2025b).

Overall, data presented in this analysis suggests that finding deer in traditional hunting areas has become difficult due to logging related reductions in deer habitat and associated population declines, predation, high levels of competition in the most accessible hunting areas, generally wetter and less predictable weather, and declining road access. Deer habitat and deer populations on POWI will likely continue to be impacted by the legacy of logging for the next several decades. Adopting WP26-04 with OSM's modifications is necessary for the conservation of a healthy deer population and the continuation of subsistence uses for those most dependent on the resource.

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## WRITTEN PUBLIC COMMENTS

Andy Deering

Darlene Breitkreutz

Please see the Written Public Comments on Wildlife Proposals and Closure Reviews section of the meeting book or <a href="https://www.doi.gov/subsistence/wildlife/public comments">www.doi.gov/subsistence/wildlife/public comments</a> for full comments.

APPENDIX A.

Total Hunters, Hunter Days, and Harvests in Unit 2 by User Type from 1997 to 2024 (McCoy 2019a, Churchwell 2024, 2025).

| Year | FQSU<br>Hunters | FQSU<br>Days<br>Hunted | FQSU<br>Harvests | NFQU<br>Hunters | NFQU<br>Days<br>Hunted | NFQU<br>Harvests | Total<br>Hunters | Total<br>Days<br>Hunted | Total<br>Harvests |
|------|-----------------|------------------------|------------------|-----------------|------------------------|------------------|------------------|-------------------------|-------------------|
| 1997 | 958             | 6952                   | 1242             | 817             | 4034                   | 587              | 1775             | 10986                   | 1829              |
| 1998 | 1099            | 6485                   | 1462             | 840             | 3834                   | 844              | 1939             | 10319                   | 2306              |
| 1999 | 1176            | 9445                   | 1618             | 723             | 3262                   | 648              | 1899             | 12707                   | 2266              |
| Avg. | 1078            | 7627                   | 1441             | 793             | 3710                   | 693              | 1871             | 11337                   | 2134              |
|      |                 |                        |                  |                 |                        |                  |                  |                         |                   |
| 2000 | 850             | 6442                   | 1210             | 734             | 3751                   | 780              | 1584             | 10193                   | 1990              |
| 2001 | 1105            | 7762                   | 1689             | 921             | 4929                   | 1085             | 2026             | 12691                   | 2774              |
| 2002 | 1031            | 5983                   | 1231             | 926             | 5180                   | 821              | 1957             | 11163                   | 2052              |
| 2003 | 734             | 3388                   | 1017             | 817             | 5242                   | 729              | 1551             | 8630                    | 1746              |
| 2004 | 700             | 3595                   | 1123             | 794             | 3447                   | 885              | 1494             | 7042                    | 2008              |
| Avg. | 884             | 5434                   | 1254             | 838             | 4510                   | 860              | 1722             | 9944                    | 2114              |
|      |                 |                        |                  |                 |                        |                  |                  |                         |                   |
| 2005 | 994             | 5178                   | 1751             | 808             | 3733                   | 889              | 1807             | 8934                    | 2643              |
| 2006 | 1134            | 6047                   | 2160             | 852             | 3711                   | 939              | 2010             | 9809                    | 3104              |
| 2007 | 1084            | 6137                   | 1886             | 912             | 4262                   | 909              | 1996             | 10399                   | 2795              |
| 2008 | 1109            | 6028                   | 1981             | 997             | 4946                   | 1241             | 2106             | 10974                   | 3222              |
| 2009 | 1015            | 5955                   | 1897             | 1033            | 5279                   | 1208             | 2088             | 11467                   | 3146              |
| Avg. | 1067            | 5869                   | 1935             | 920             | 4386                   | 1037             | 2001             | 10317                   | 2982              |
|      |                 |                        |                  |                 |                        |                  |                  |                         |                   |
| 2010 | 1083            | 5772                   | 2059             | 1109            | 5723                   | 1306             | 2236             | 11641                   | 3427              |
| 2011 | 1138            | 6705                   | 2347             | 1074            | 6348                   | 1389             | 2221             | 13092                   | 3746              |
| 2012 | 1250            | 6683                   | 2189             | 1233            | 6192                   | 1506             | 2486             | 12910                   | 3695              |
| 2013 | 1239            | 5939                   | 2145             | 1228            | 6535                   | 1496             | 2490             | 12561                   | 3676              |
| 2014 | 1337            | 6934                   | 2327             | 1384            | 7001                   | 1600             | 2725             | 13948                   | 3930              |

| Year               | FQSU<br>Hunters | FQSU<br>Days<br>Hunted | FQSU<br>Harvests | NFQU<br>Hunters | NFQU<br>Days<br>Hunted | NFQU<br>Harvests | Total<br>Hunters | Total<br>Days<br>Hunted | Total<br>Harvests |
|--------------------|-----------------|------------------------|------------------|-----------------|------------------------|------------------|------------------|-------------------------|-------------------|
| Avg.               | 1209            | 6407                   | 2213             | 1206            | 6360                   | 1459             | 2432             | 12830                   | 3695              |
|                    |                 |                        |                  |                 |                        |                  |                  |                         |                   |
| 2015               | 1352            | 6213                   | 2442             | 1456            | 7890                   | 1796             | 2811             | 14112                   | 4244              |
| 2016               | 1307            | 6269                   | 2125             | 1360            | 7030                   | 1388             | 2687             | 13407                   | 3534              |
| 2017               | 1127            | 6705                   | 1512             | 1130            | 5915                   | 914              | 2260             | 12651                   | 2432              |
| 2018               | 1024            | 5470                   | 1467             | 861             | 4347                   | 624              | 1884             | 9816                    | 2091              |
| 2019               | 965             | 4702                   | 1269             | 781             | 4016                   | 694              | 1745             | 8718                    | 1964              |
| Avg.               | 1155            | 5872                   | 1763             | 1117            | 5840                   | 1083             | 2277             | 11741                   | 2853              |
|                    |                 |                        |                  |                 |                        |                  |                  |                         |                   |
| 2020               | 960             | 5782                   | 1307             | 716             | 3903                   | 526              | 1683             | 9765                    | 1846              |
| 2021               | 937             | 4901                   | 1231             | 777             | 4010                   | 593              | 1714             | 8911                    | 1824              |
| 2022               | 897             | 4389                   | 1149             | 735             | 3798                   | 544              | 1633             | 8187                    | 1692              |
| 2023               | 847             | 4423                   | 1049             | 752             | 3847                   | 554              | 1599             | 8270                    | 1603              |
| 2024               | 819             | 3918                   | 1130             | 820             | 4000                   | 678              | 1641             | 7929                    | 1810              |
| Avg.               | 892             | 4683                   | 1173             | 760             | 3912                   | 579              | 1654             | 8612                    | 1755              |
|                    |                 |                        |                  |                 |                        |                  |                  |                         |                   |
| Overall<br>Average | 1045            | 5864                   | 1643             | 950             | 4863                   | 970              | 2002             | 10758                   | 2621              |