

**Periodic Status Review for the  
Gray Wolf  
Briefing and Public Hearing  
March 16, 2024**

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# Wolf status review rule making process

Release of Draft PSR, 90-day public comment period - **May 18 – Aug. 16, 2023**

Release of Final PSR, CR-102, and SEPA determination - **Feb. 7, 2024**

Public comment period on CR-102 and SEPA determination - **Feb. 7 – May 6, 2024\***

Briefing and public hearing on CR-102 (rule making proposal) - **March 15, 2024**

Commission decision on CR-102 (rule making proposal) - **June 21 or 22, 2024**

\*30-day comment period is typical for this step; we're allowing 90 days



**WDFW released the first-ever status review for wolves in Washington.**

**The wolf's state status has not been reviewed since their original listing in 1980.**

**Based on this review, WDFW is proposing to reclassify wolves from endangered to sensitive status.**

1980



No known wolf packs



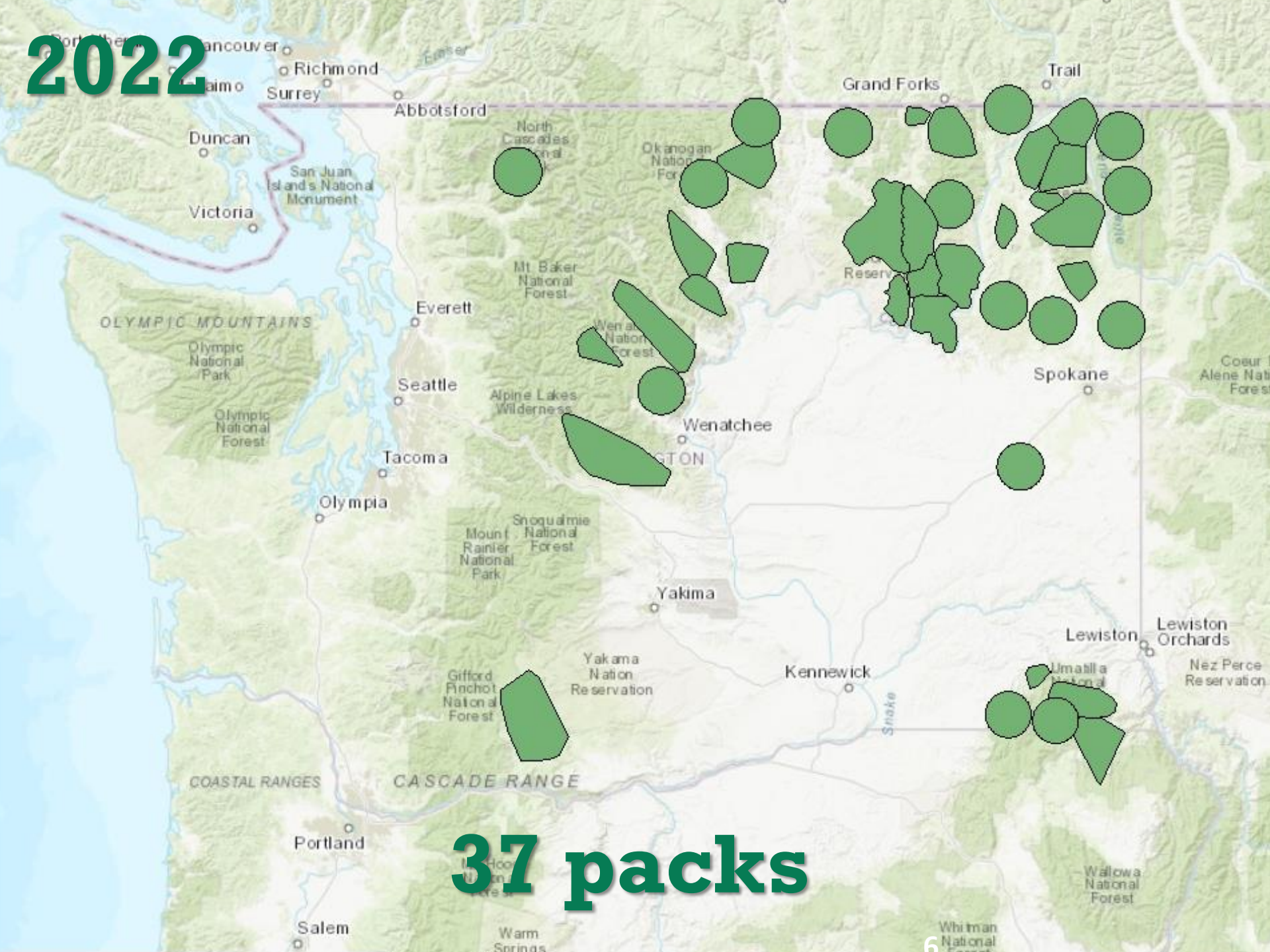
2011



5 packs



2022



37 packs



Eastern WA: 3 packs → 27, 2 SBP → 20

Fed. listed area:  
2 packs → 10  
1 SBP → 6

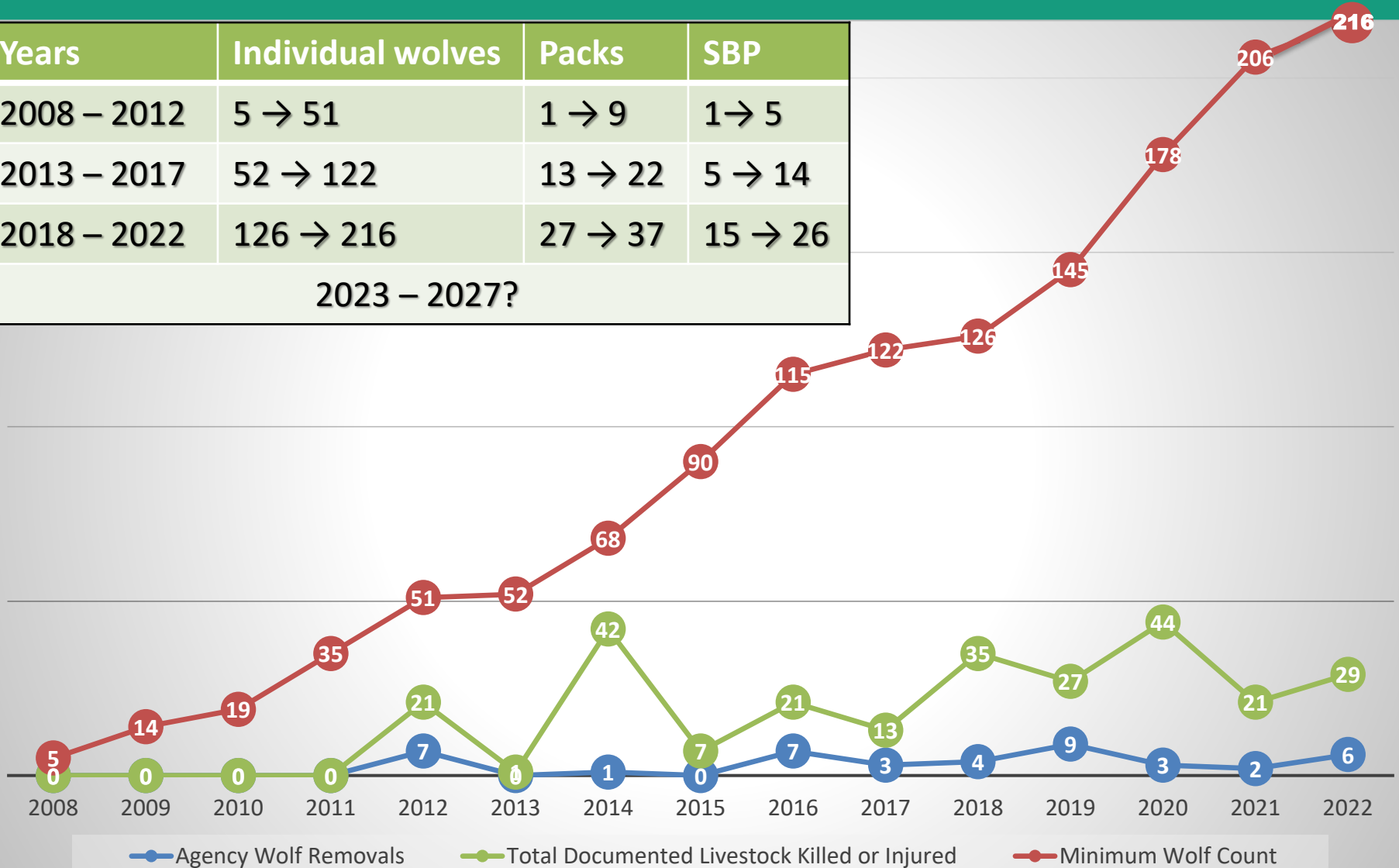
- 2022 Breeding Pairs
- 2022 Nonbreeding Packs
- Single Wolf Territories
- Tribal Lands
- National Parks and Recreation Areas
- Wolf Recovery Regions





# Wolf population growth, 2008 - 2022

Years	Individual wolves	Packs	SBP
2008 – 2012	5 → 51	1 → 9	1 → 5
2013 – 2017	52 → 122	13 → 22	5 → 14
2018 – 2022	126 → 216	27 → 37	15 → 26
2023 – 2027?			





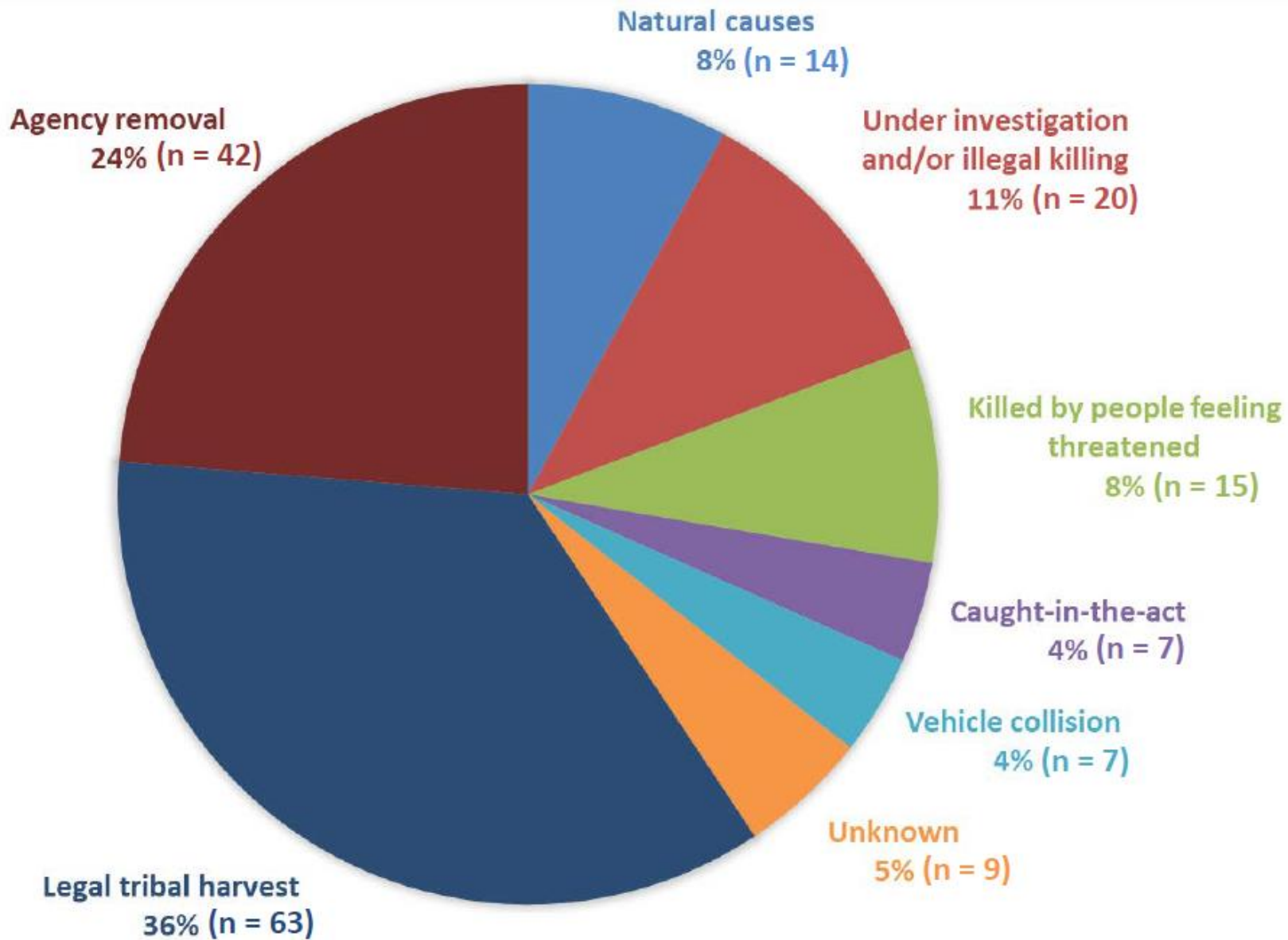


Figure 7. Causes of documented wolf mortality in Washington, 2008-2022. The extent of undocumented mortality is not known or represented.

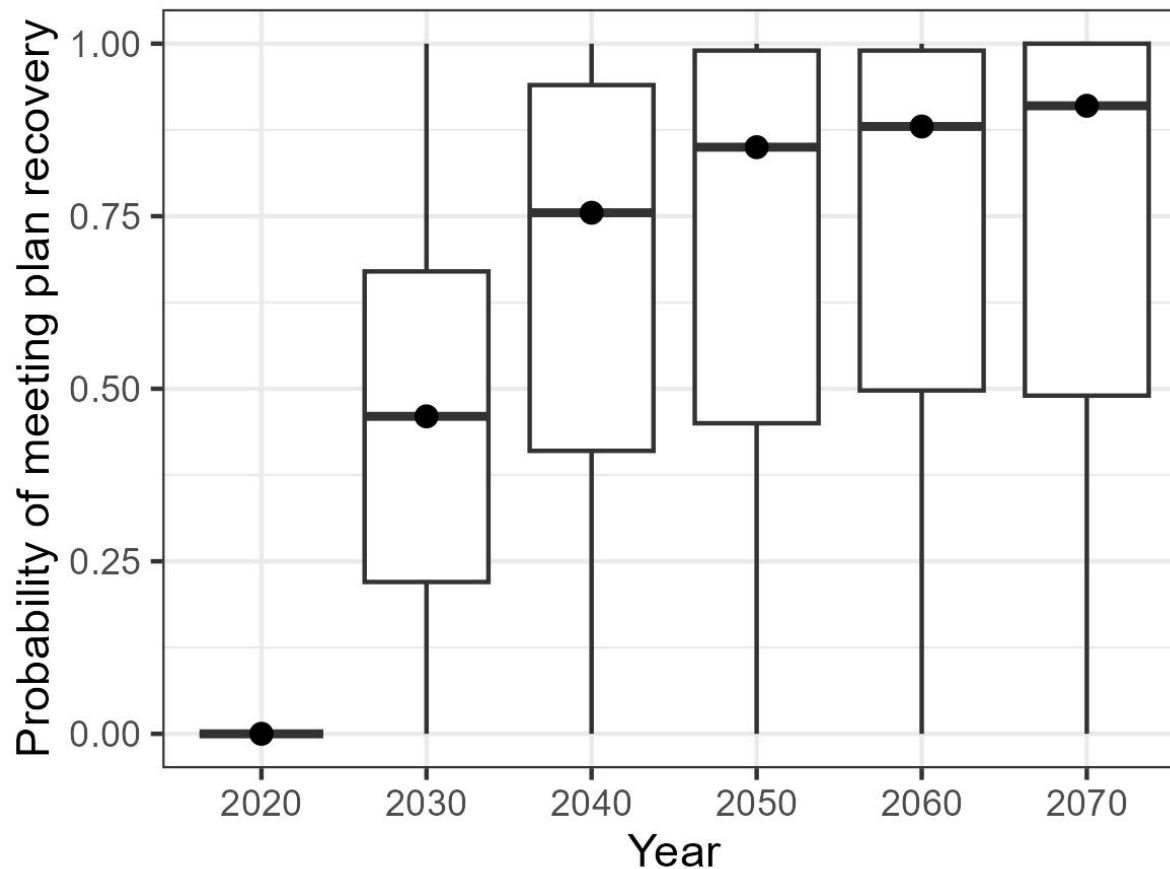


“The expectation is that over time, as wolves recolonize Washington, WDFW will be able to collect data from within the state to determine whether the model assumptions are appropriate. If future data reveal that the population dynamics of wolves in Washington are significantly different from those used in the model, these conclusions will need to be reevaluated. Incorporating wolf demographic data specific to Washington will allow WDFW to update **predictions of population persistence** during wolf recovery phases and to revise the recovery objectives, if needed” (Wolf Plan, pg. 67-68).



- Petracca et al. developed a model to estimate current and project future population dynamics of wolves in Washington
- This model is the first effort of its kind developed using data from Washington's wolf population rather than data from wolves in other states, as was done for the 2011 Wolf Plan
- They used data from 74 collared wolves and yearly pup and pack counts to parameterize the model
- Projected statewide dynamics over 50 years





- Median probability of recovery (4 breeding pairs in each recovery region, with 3 additional breeding pairs anywhere in the state) across all years (2021-2070) was 0.64
- Probability of recovery increased over time, from 0% in 2020 to 91% in 2070
- Model projections show mean pop. growth of 1.29 during initial recolonization from 2009-2020 decreasing to 1.02 in the projection period (2021-2070)





Table 3. Objectives for downlisting and delisting wolves in Washington by **number**, **duration of occupancy**, and **geographic distribution** of successful breeding pairs (Wiles et al. 2011). As of 2022, all plan recovery objectives have been met with the exception of a minimum of four breeding pairs in the Southern Cascades and Northwest Coast recovery region.

Successful breeding pair number and duration objectives	2011 WOLF PLAN DOWNLISTING AND DELISTING OBJECTIVES								
	Eastern Washington		Northern Cascades		Southern Cascades and Northwest Coast		Anywhere in state		Duration of occupancy
	Objective	As of 2022	Objective	As of 2022	Objective	As of 2022	Objective	As of 2022	
Threatened (6 pairs/ 3 years)	2	20	2	6	2	0	N/A	N/A	Objective met
Sensitive (12 pairs/ 3 years)	4		4		4		N/A	N/A	Objective met
Delist (15 pairs/ 3 years)	4		4		4		3	Objective met	Objective met
Delist (18 pairs)	4		4		4		6	Objective met	Objective met

# Wolf Plan objectives

- “Recovery is...likely to happen more quickly through the reoccupation of eastern Washington than waiting for wolves to reach far western Washington” (Wolf Plan, pg. 60)
- Did not predict exceeding the recovery objective in eastern Washington by 5x prior to meeting geographic distribution objectives
- Wolf Plan’s recovery objectives were established to address the status of the wolf population across a “significant portion of their range”
- “That portion of a species' range likely to be essential to the long term survival of the population in Washington” (WAC 220-610-110)
- Wolf Plan down/delisting criteria set to describe the population’s status based on occupancy by successful breeding pairs (SBP) across three recovery areas (SBP needed per recovery region identified to describe the status of wolves given a statewide distribution)
- Area in Washington currently occupied by wolves has greatly exceeded those minimum SBP numbers



# Wolf Plan objectives

- Model projections indicate Washington's wolf population currently occupies an area essential to their long-term survival
- Not in danger of extinction or becoming endangered with their current distribution and population trend
- Packs and SBPs in the areas they *currently* occupy represent a significant portion of the range to the extent that they are no longer seriously threatened with extinction or likely to be threatened with extinction in the foreseeable future in Washington

# Wolf Plan predictions

Table 4. Range of numbers of packs, lone wolves, and total number of wolves that might correspond to numbers of successful breeding pairs at different recovery stages in Washington.

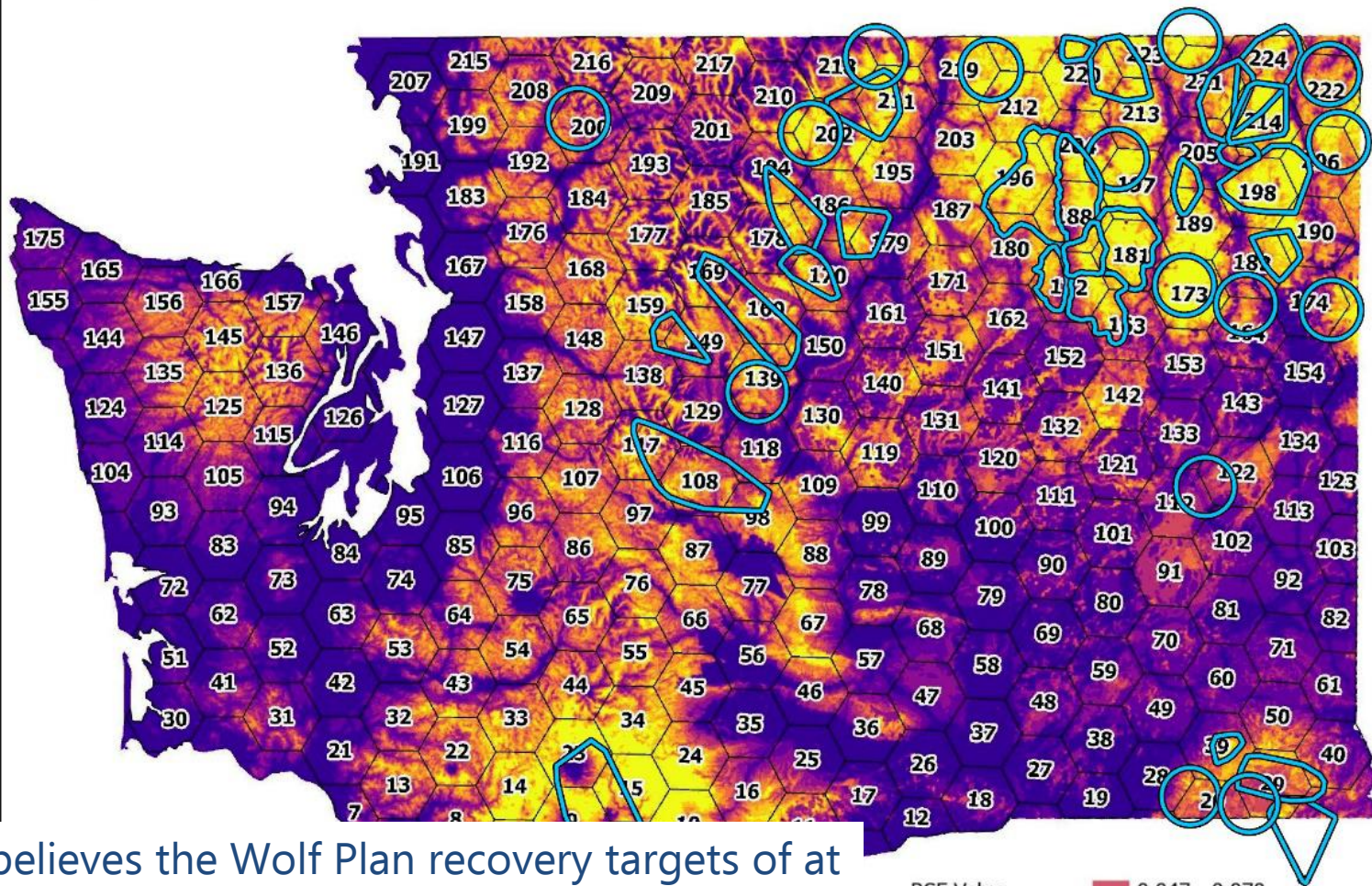
	Endangered to threatened	Threatened to sensitive	Sensitive to delisted	
No. of successful breeding pairs	6	12	15	<b>26</b>
Estimated equivalent no. of packs	7-17	14-33	17-42	
Estimated no. of wolves in all packs combined	36-124	71-241	87-307	
Estimated no. of lone wolves	4-22	8-43	10-54	
Total estimated no. of wolves present	40-146	79-284	97-361	
Total estimated no. of wolves present, using 14 wolves per successful breeding pair <sup>e</sup>	84	168	210	

Wolf Plan, pg. 65






# Geographic distribution



WDFW believes the Wolf Plan recovery targets of at least four SBP in each recovery region for **delisting** are still appropriate, attainable through natural recolonization, and ensure adequate distribution of reproducing wolves throughout the state

A photograph of a snowy forest path. The path is covered in snow and has several sets of wolf tracks leading away from the viewer into the distance. The trees are mostly bare, suggesting a winter or late autumn setting. The sky is blue with some clouds.

# Factors affecting continued existence

- **Immigration** - Unknown how efforts to reduce wolf populations in neighboring states may affect immigration and dispersal of wolves from other states
- Petracca et al. (2023) modeled scenarios including reducing immigration of wolves into Washington by 50% and 100%
- Under the 50% immigration scenario, 69% probability that the population would still meet recovery criteria projected over the next 50 years
- Under the scenario of no immigration, the probability was 27%
- Total cessation of all wolf immigration is highly unlikely given the connectivity of Washington's wolves to a much larger population in Canada and the NRM
- Both scenarios showed a geometric mean of population growth  $\geq 1$ , indicating long-term population stability or growth
- **Wolf poaching/illegal killing** - A significant increase in poaching adding to overall wolf mortality in the state could be unsustainable in the future depending on the extent



# Definitions in WAC 220-610-110

- "Endangered" means any wildlife species native to the state of Washington that is **seriously threatened with extinction** throughout all or a significant portion of its range within the state.
- "Threatened" means any wildlife species native to the state of Washington that is **likely to become an endangered species within the foreseeable future** throughout a significant portion of its range within the state without cooperative management or removal of threats.
- "Sensitive" means any wildlife species native to the state of Washington that is **vulnerable or declining and is likely to become endangered or threatened** in a significant portion of its range within the state without cooperative management or removal of threats.







# Under sensitive status...

- Wolves remain protected (RCW 77.15.130)
- Wolves managed for recovery (i.e., increasing population/range expansion)
- Goal of minimizing both livestock losses and wolf removals and commitment to proactive nonlethal conflict mitigation strategies
  - Proactive nonlethal deterrents required in development of conflict mitigation guidelines regardless of listing status (RCW 77.12.395)
- Process of considering/authorizing lethal removal to mitigate livestock depredation
- Law enforcement investigations/investment in illegally killed wolves
- No WDFW-authorized hunting (tribal hunting rights not affected)
- Continue to follow Wolf Plan goals for delisting
- Priority Habitat and Species List – no change
  - (All sensitive, threatened, endangered, and candidates are PHS species and reflected in recommendations for GMA and CAO)





# Public comment themes (Draft PSR)

Themes from commenters who disagreed (believed wolves should maintain Endangered status):

- Washington's wolf population is fragile and recovery is in its infancy
- Wolves are not recovered by state standards
- WDFW is not following the Wolf Plan
- Wolves are not present in a significant portion of their range
- Wolf management in neighboring states and provinces jeopardizes wolves in Washington
- The PSR relies too much on the population model (Pettracca et al. 2024) and/or the population model is flawed/has too much uncertainty
- Reclassifying wolves is counter to public opinion
- Reclassifying wolves will result in increased wolf poaching
- Reclassifying wolves would bring Washington closer to delisting wolves and opening wolf trophy hunting and trapping seasons



# Public comment themes (Draft PSR)

Themes from commenters who disagreed (believed wolves should be delisted):

- The data and analysis in the PSR support delisting
- Wolves are neither vulnerable nor declining in Washington nor are they likely to become endangered or threatened in a significant portion of their range
- Wolves should be delisted and managed as protected wildlife
- The recovery of the species in eastern Washington occurred without the protections of the federal Endangered Species Act
- Even with tribal hunting, lethal removal, poaching, and natural mortality the wolf population continues to grow
- There is no data or analysis that indicates vulnerability

# Public comment themes (Draft PSR)

Themes from commenters who agreed:

- Washington wolves have demonstrated 14 consecutive years of growth – wolves are not in decline
- The wolf population continues to grow and expand geographically
- Two recovery regions alone have exceeded the recovery objective for total number of wolf breeding pairs in the state
- The Eastern recovery region has exceeded the recovery objective by 5 times
- Wolf populations remain stable in all states where lethal control or harvest is implemented
- Wolves have shown remarkable recovery in a short period of time
- Current wolf biological status fits the Sensitive definition in WAC 220-610-110
- If wolves are endangered when there are zero packs as when listed, or 5 packs in 2011, and still when they are well established in two of the three recovery zones with a total of 37 packs, 26 breeding pairs, and a growing population trend, the term “endangered” is meaningless
- It is important to recognize the progress that has been made toward full recovery
- Reclassifying wolves to Sensitive does not put the wolf population at risk of decline and does not bring them closer to an eventual hunt or other management practices that increase deliberate human-caused mortality

**Comment on the rule proposal and SEPA  
determination by submitting written  
comments**

at **[publicinput.com/sepa\\_graywolf](https://publicinput.com/sepa_graywolf)**

**OR**

**emailing comments**

to **[graywolf2024@PublicInput.com](mailto:graywolf2024@PublicInput.com)**

**OR**

**by leaving a comment via voicemail  
message by calling 855-925-2801 and  
entering project code 6505. WDFW will  
accept comments until 11:59 p.m. on May  
6, 2023.**





**For general information on wolves in  
Washington:**

**[wdfw.wa.gov/wolves](http://wdfw.wa.gov/wolves)**

**If you are interested in receiving  
e-mail notifications of wolf activity  
updates, you can sign up here:**

**[wdfw.wa.gov/about/lists](http://wdfw.wa.gov/about/lists)**



# Questions and discussion



Only the mountain has lived long enough  
to listen objectively to the howl of a wolf.  
—Aldo Leopold, 1949



# References

- [Annual wolf reports 2011 – 2022](#)
- [Wolf Conservation and Management Plan \(2011\)](#)
- [Periodic Status Review for the Gray Wolf \(2024\)](#)
- Petracca, L. S., B. Gardner, B. T. Maletzke, and S. J. Converse. 2024. Merging integrated population models and individual-based models to project population dynamics of recolonizing species. *Biological Conservation* 289:110340. Available at: <https://doi.org/10.1016/j.biocon.2023.110340>
- Petracca L.S., B. Gardner, B.T. Maletzke, and S.J. Converse. 2023. Forecasting dynamics of a recolonizing wolf population under different management strategies. *bioRxiv* doi: 10.1101/2023.03.23.534018. Available at: <https://www.biorxiv.org/content/10.1101/2023.03.23.534018v1>





Conservation/management action (source)	Endangered	Threatened	Sensitive
<b>Criminal enforcement penalty for illegal take (<a href="#">RCW 77.15.120</a>, <a href="#">RCW 77.15.130</a>)</b>	<a href="#">RCW 77.15.120</a> protects endangered species from hunting, possession, malicious harassment, and killing; penalties for illegally killing a state endangered species range up to \$5,000 and/or one year in jail.	<a href="#">RCW 77.15.130(1)(c)</a> prohibits the hunting, possession or malicious harassment of threatened or sensitive wildlife unless authorized by rule of the commission, a WDFW permit, or a federal permit; the maximum penalty for violations is 90 days in jail and/or a \$1,000 fine.	
<b>WDFW permits for lethal control by livestock owners (including family members and authorized employees) of wolves to resolve repeated wolf-livestock conflicts (<a href="#">2011 Wolf Plan</a>)</b>	Typically not issued, except WDFW may consider issuing a permit to a livestock owner (including family members and authorized employees) to conduct lethal control if WDFW does not have the resources to address control.	May be issued to livestock owners (including family members and authorized employees) with an issued permit on private lands and public grazing allotments they own or lease.	
<b>WDFW authorization for livestock owners and grazing allotment holders (and their agents) to use non-lethal injurious harassment (<a href="#">2011 Wolf Plan</a>)</b>	May grant authorization to strike wolves with non-lethal projectiles if WDFW required training is completed. Under the endangered classification, an authorization would be reconsidered if used inappropriately or a mortality occurs.	Allowed with a permit and training from WDFW.	
<b>Title 222 WAC (Forest Practices Board): Critical habitats (state) of threatened and endangered species (<a href="#">WAC 222-16-080</a>)</b>	Harvesting, road construction, or site preparation within 1 mile of a known active den site, documented by the department of fish and wildlife, between the dates of March 15 and July 30 or 0.25 mile from the den site at other times of the year.	Does not apply	