# 2022 Annual Wolf Report – Briefing FWC April 7, 2023

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# **Listing Status**

Federally Delisted January 2021 - Relisted February 10, 2022

State Listed – Endangered where WDFW has jurisdiction

Wolf Conservation and Management Plan: 2011

- 3 recovery areas
- Delisting requirements



#### State and tribal management



# **Recovery Objectives**

Pack: Two or more wolves traveling together in the winter.

**Successful Breeding Pair (SBP):** An adult male and an adult female with at least two pups surviving to December 31<sup>st</sup> in a given year.

#### **Delisting Objectives in the Plan**

15 SBP's for 3 consecutive years with:
4 SBP's in Eastern WA Recovery Area
4 SBP's in North Cascades Recovery Area
4 SBP's in Southern Cascades and NW Coast
3 SBP's anywhere in the state

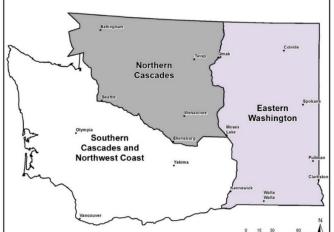
or

18 SBP's for 1 year with

4 SBP's in Eastern WA Recovery Area

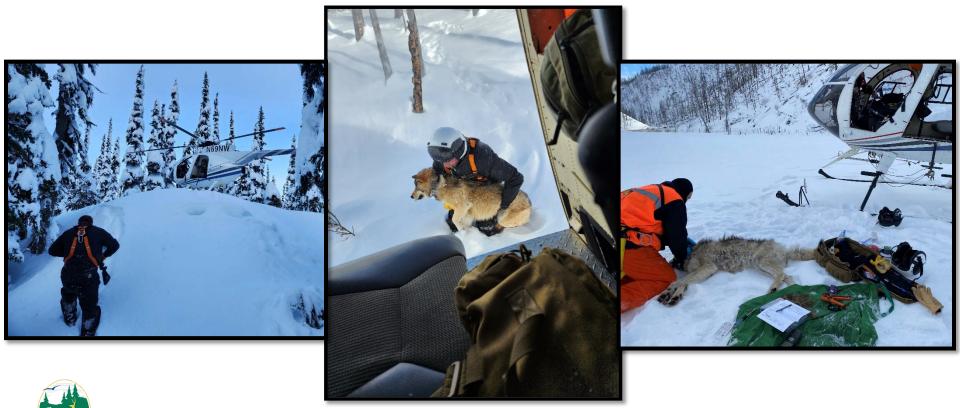
- 4 SBP's in North Cascades Recovery Area
- 4 SBP's in Southern Cascades and NW Coast
- 6 SBP's anywhere in the state





## Capture and Monitoring - 2022 Calendar Year

- Captured 29 wolves From 20 different packs
- Monitored 53 wolves from 27 packs in 2022
- Currently monitoring 37 collared wolves (17% of minimum number of known wolves) from 16 packs (43% of known packs) in Washington

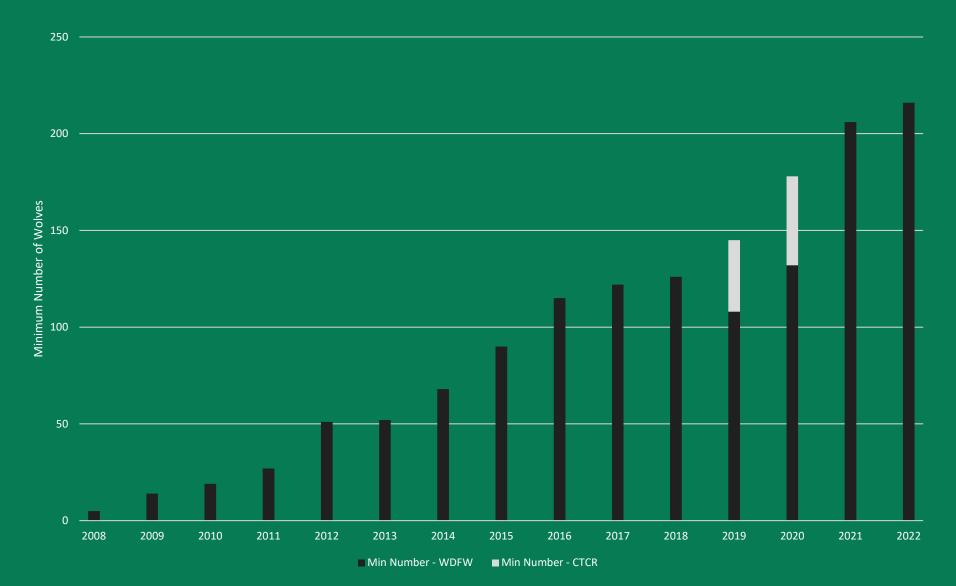


## **Wolf Population Status**

Recovery Region	Successful Breeding Pairs	Minimum Count	Number of Packs
Eastern – WDFW Co- managed	20	159	27
North Cascades	6	55	9
South Cascades / Northwest Coast	0	2	1
Total	26	216	37

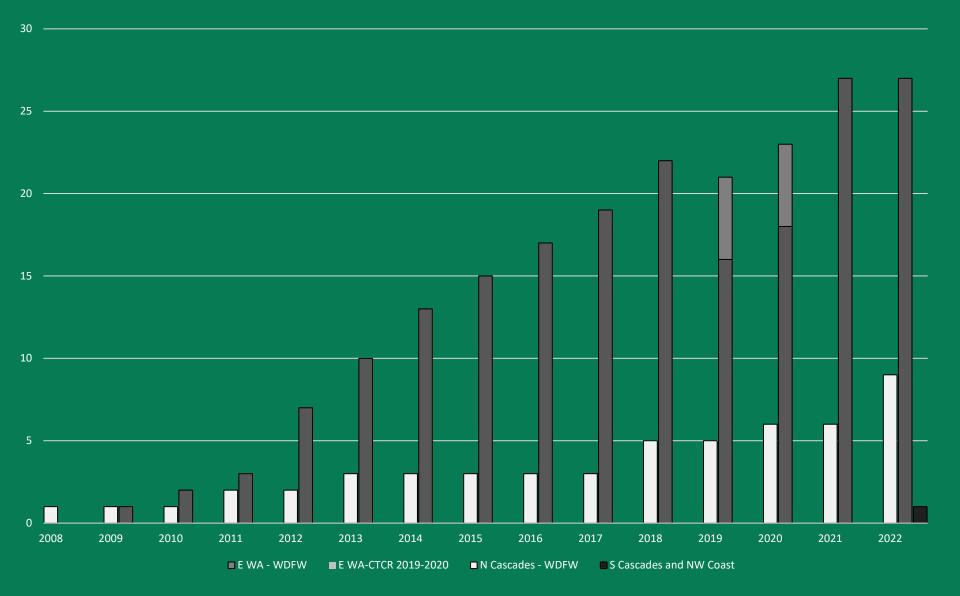


### Trend in Minimum Number of Wolves

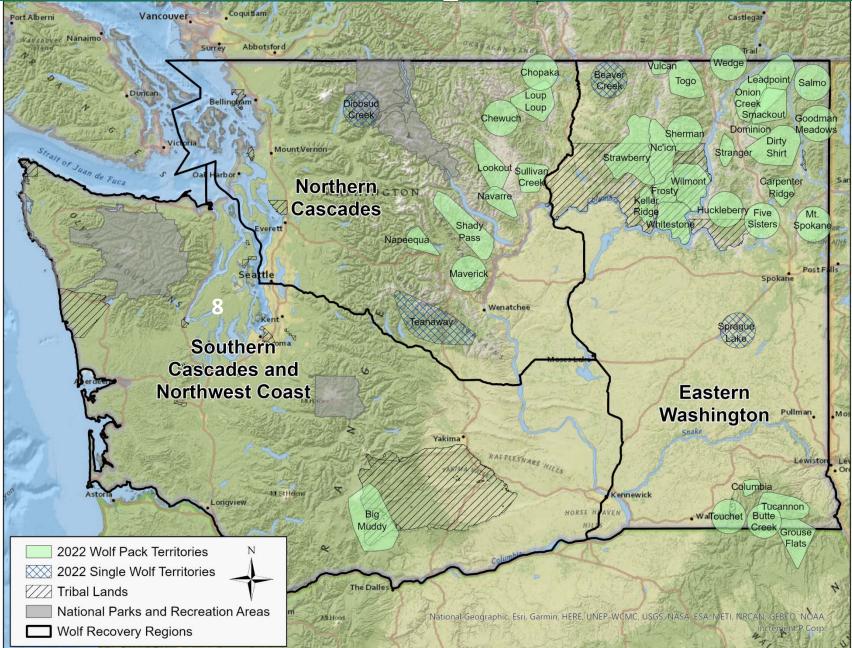


6

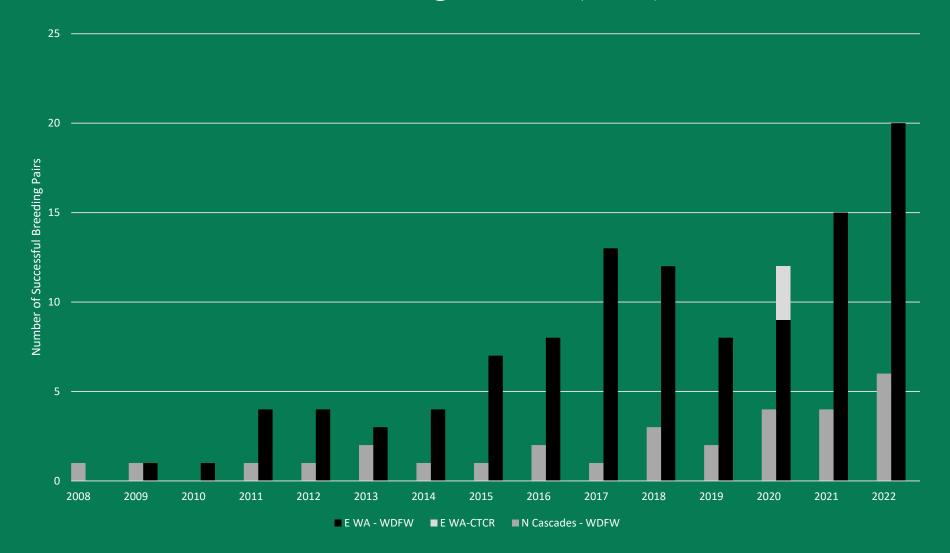
### Trend in Minimum Number of Packs



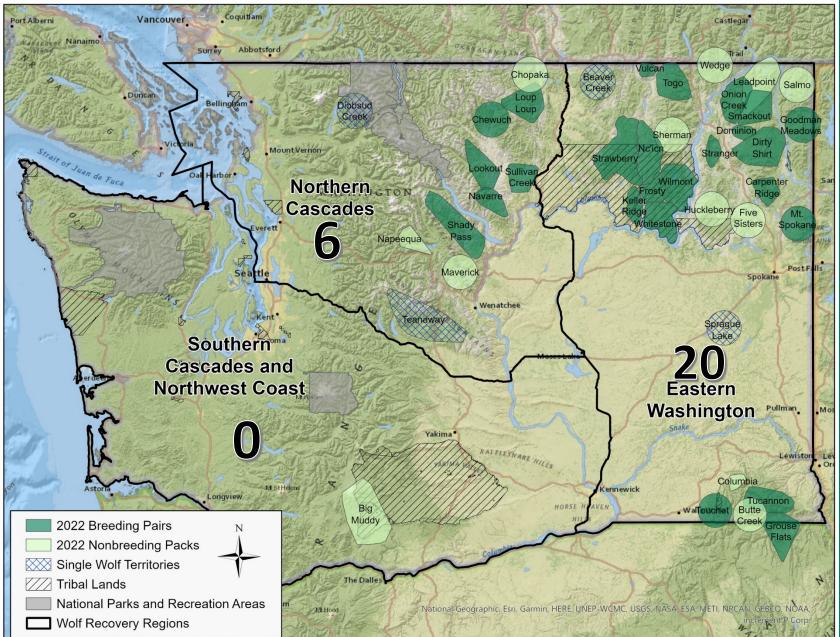
#### **2022 Packs and Single Wolf Territories**



### Trend in Minimum Number of Successful Breeding Pairs (SBP)



#### 2022 SUCCESSFUL BREEDING PAIRS (SBP)

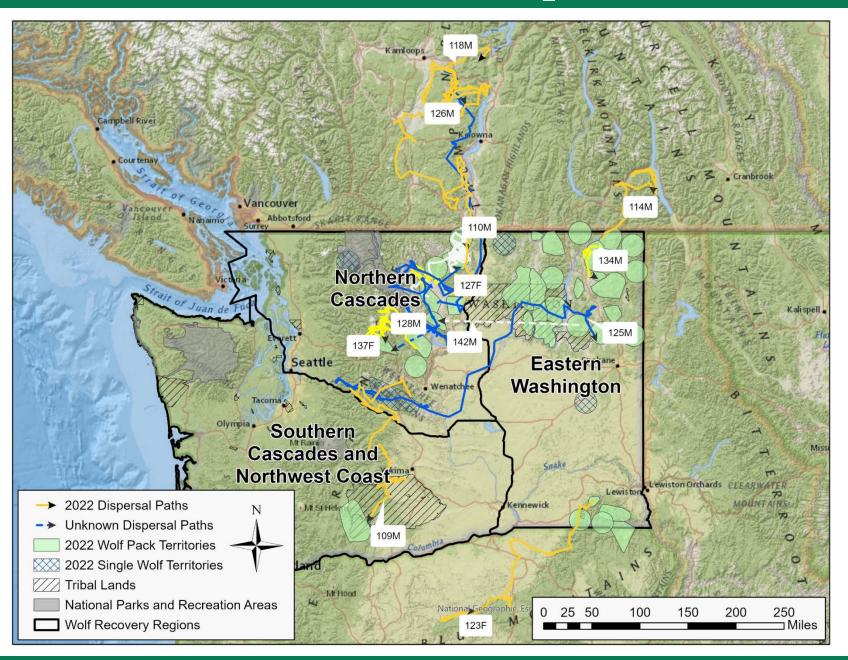


### 2022 Known Wolf Mortalities

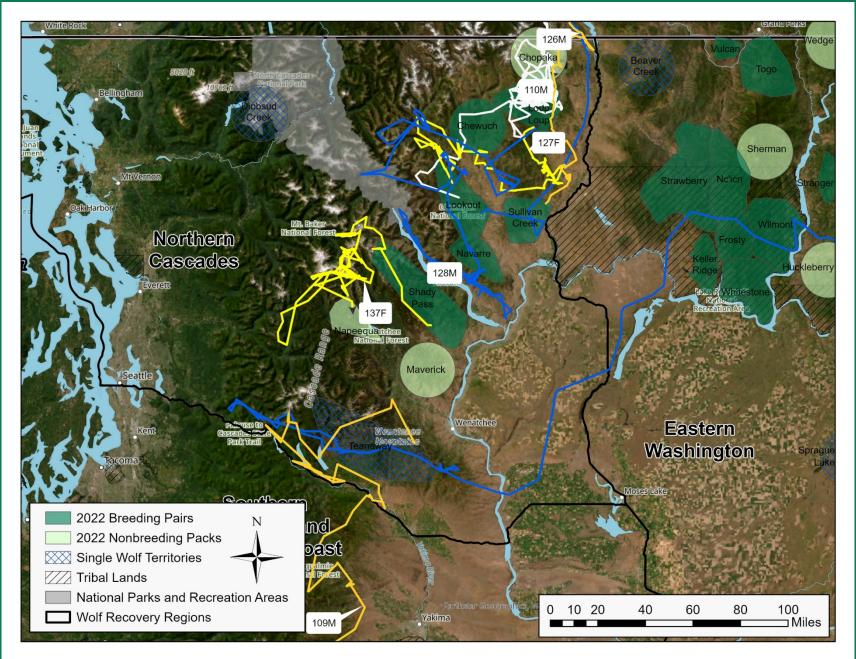
Cause	Legal Tribal Harvest	Agency Removal	Caught in the Act	Unlawful Take (under investigation)	Natural	Unknown	Total
# of Mortalities in 2022	11	6	3	9	7	1	37

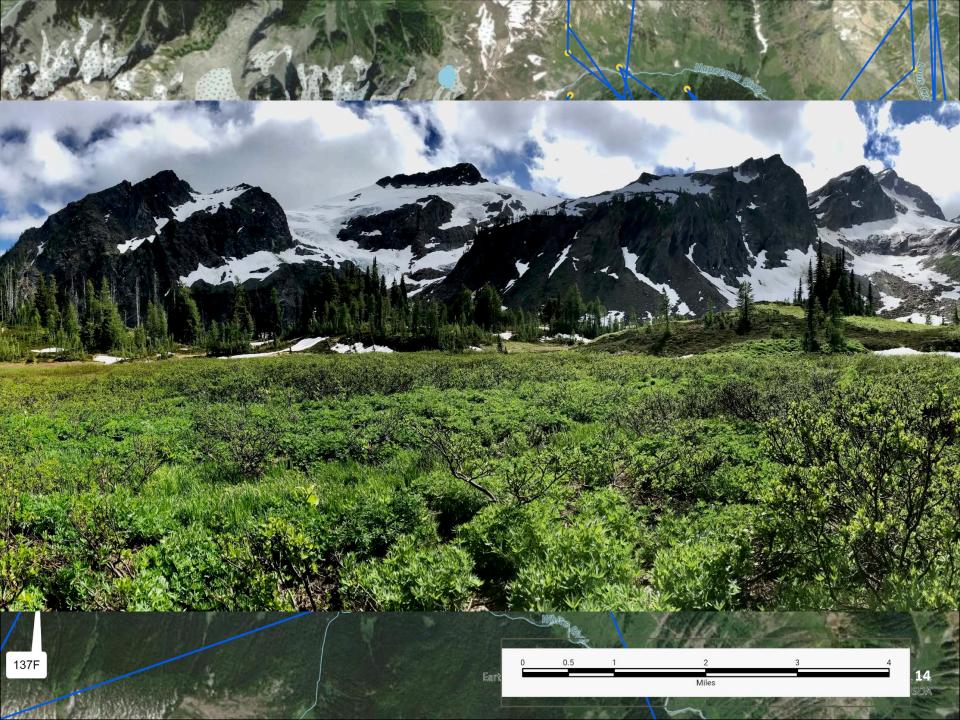


#### 2022 Known Wolf Dispersals



#### **Wolf Dispersal**



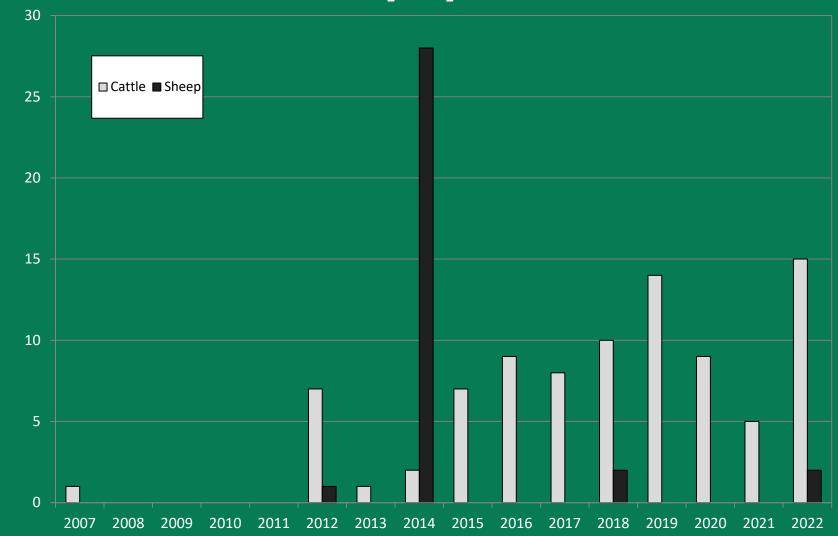




### **Wolf – Livestock Interactions**

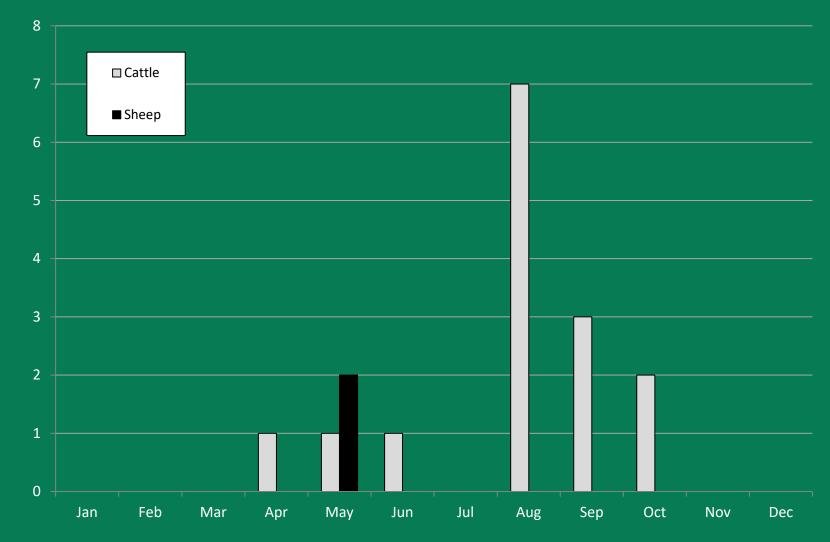
YEAR	Minimum Count	# of Packs	# of SBP	Annual Growth Rate	Known Mortality	Depredating Packs (%)
2008	5	1	1		0	0%
2009	14	2	2		0	0%
2010	19	3	1	36%	2	0%
2011	35	7	5	84%	0	0%
2012	51	9	5	46%	9	33%
2013	52	13	5	2%	5	8%
2014	68	16	5	31%	10	13%
2015	90	18	8	32%	7	22%
2016	115	20	10	28%	14	20%
2017	122	22	14	6%	14	23%
2018	126	27	15	3%	12	19%
2019	145*	26	10*	14%	21	14%
2020	178*	29	16*	24%	16	24%
2021	206	33	19	16%	30	18%
2022	216	37	26	5%	37	19%
Ave				23%		<b>14%</b> 16

### Confirmed Wolf – Caused Livestock Mortality by Year



**Number of Confirmed Losses** 

### 2022 Confirmed Wolf – Caused Livestock by Month



Num. Confirmed Losses

### Wolf Management Expenditures (Jan 1, 2022 – Dec 31, 2022)

Allocation	Use	Cost
Damage Prevention Cooperative Agreements – Livestock (DPCAL's)	26 Livestock Producers	\$56,788
Contracted Range Riders	16 Range Riders	\$231,708
Livestock Losses (Indirect and Direct)	4 Livestock Producers	\$14,427
Lethal Removal Operations	Reducing Depredations on Livestock	\$119,541
Wolf Management	Management and Research Activities	\$1,210,105
Total		\$1,632,569



## **Ongoing Research in Washington**

#### M. DeVivo & B. Kertson - WDFW - Predator/Prey Project

T. Ganz (UW) - Ungulate – Predator Dynamics in Northern WA

**L. Satterfield (UW)** - Interactions between Wolves and Cougars in Eastern Washington State

**L. Prugh (UW)** – Linking seasonal snow processes to wildlife population dynamics

**<u>S. Bassing (UW)</u>** - Spatial and temporal patterns of predator-prey interactions in a large mammal community in eastern Washington

T. Roussin (UW) – Methods for Long-term Monitoring of Wolves

**<u>B. Sullender (UW)</u>** - Linking seasonal snow processes to wildlife population dynamics

**<u>S. Gilbert (UI)</u>** – Wildlife and Humans in Shared Landscapes

**<u>R. Nickerson (USU)</u>** - Researching the effectiveness of Range Riding to prevent depredations on livestock

**<u>B. Nickerson (Swinomish Indian Tribal Community)</u>** - Life on the Edge: Large Mammal Populations on a Wolf Recolonization Frontier

<u>S. Wasser (UW)</u> - Monitoring Impacts of Wolf Recovery on Medium to Large Carnivores and Their Prey in Washington State

<u>WA Dept of Transportation</u> - Coast to Cascades Habitat Connectivity Analysis for a Reestablishing Gray Wolf Population

**L. Petracca (UW)** - Assessing effects of management strategies and system uncertainty on population dynamics of the gray wolf (Canis lupus) in Washington State, USA.

**L. Petracca (UW)** - Merging integrated population models and individual-based models to project population dynamics of recolonizing species.





Department of Fish and Wildlife