

2023 Washington wolf packs

Estimated 48 packs

Estimated 260 wolves

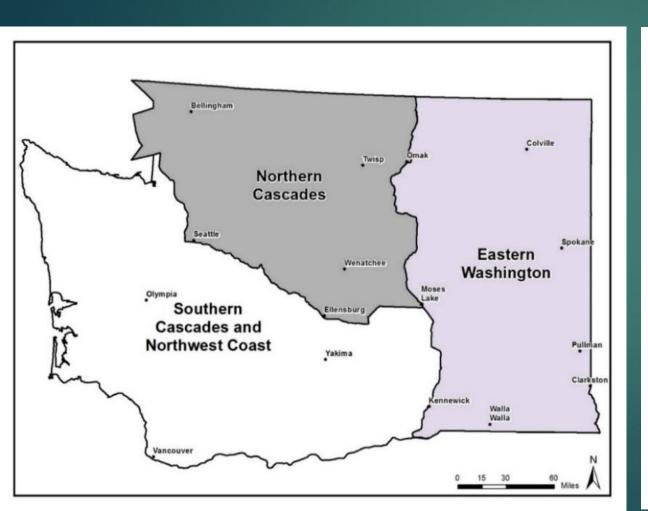
Continue to expand across Washington.

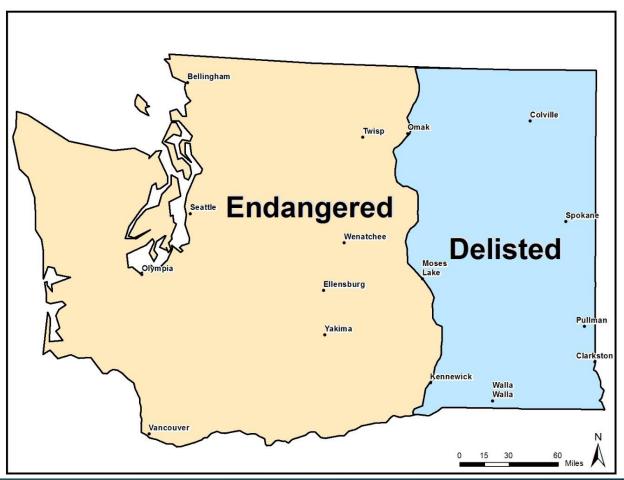
State and Tribal Biologist are continuously monitoring.

Wolves are now in all 3 recovery regions.

### Recovery Regions in WA

#### Wolf Status in WA





Continue to expand across the reservation.

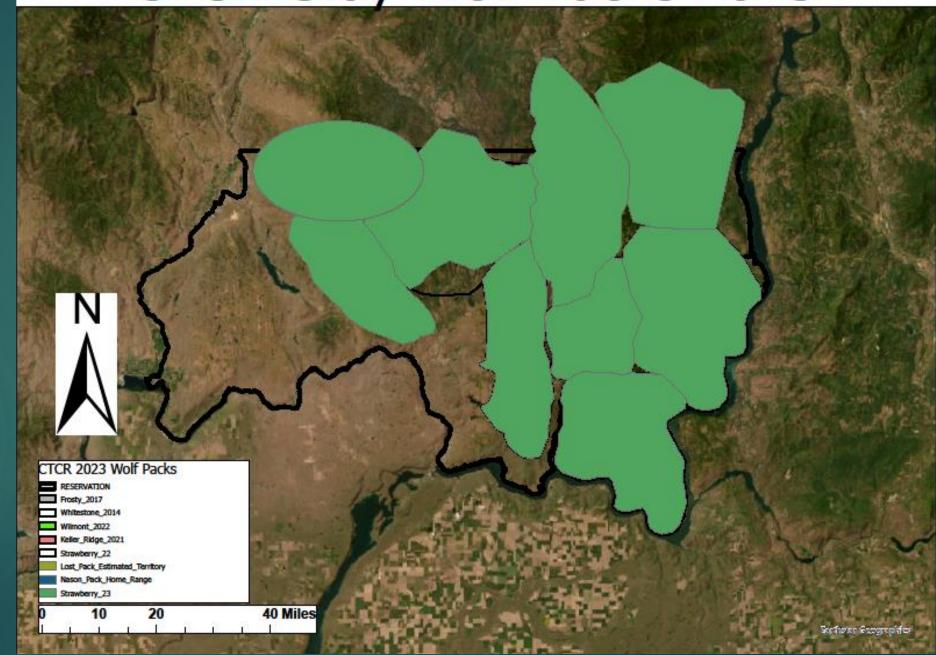
Believe we are near our carrying capacity for wolf numbers and pack territories for the reservation.

All habitats that are preferred by wolves have been claimed by a pack.

Total of 9 packs.

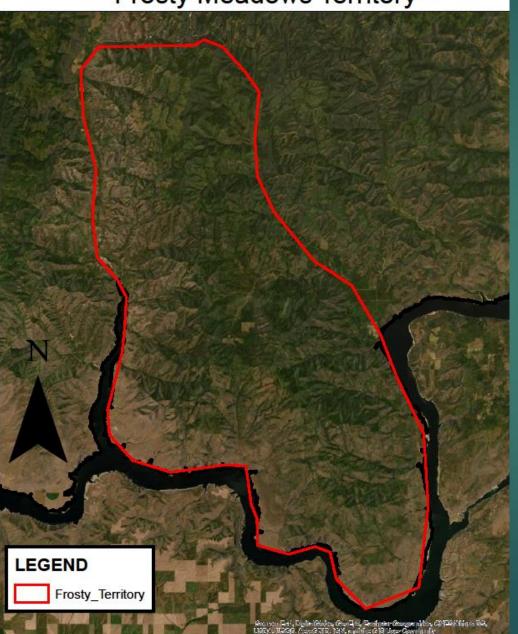
After pups were born in 2023, we estimated 70 total.

CTCR Gray Wolf Packs 2023



### Territories are always changing

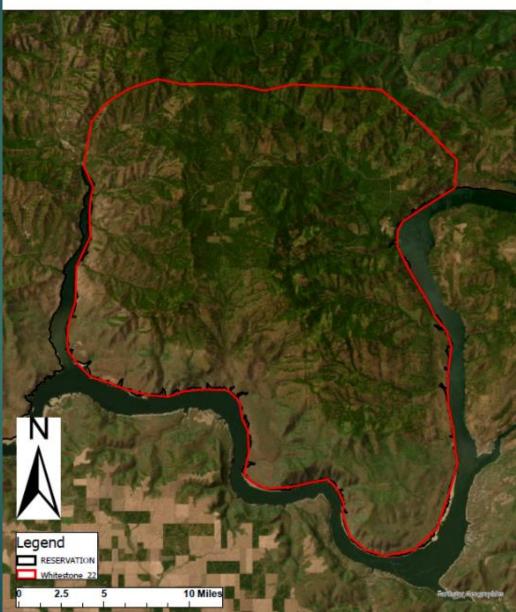
Frosty Meadows Territory



We have observed pack territories being split in two.

Territory boundaries are continuously changing.

#### Whitestone Territory



## CTCR wolf pack history

- 2008 was the first confirmed/captured wolf on the reservation.
- Estimated growth of 23% per year.
- ▶ Nc'icn
- Strawberry
- Whitestone
- Frosty
- Nason
- Keller Butte
- Wilmont
- Dollar MT
- Suspected new (Hayden)



2008

New packs with time

2023

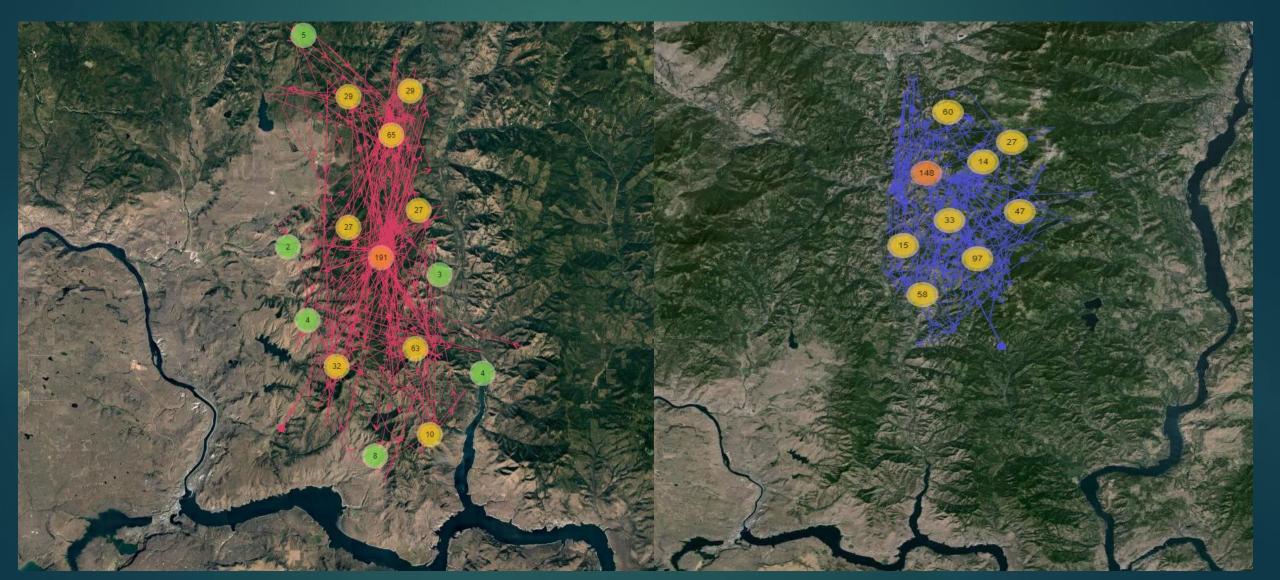
## Monitoring Methods

- ▶ GPS Collars
- Trail cameras
- ► Track Surveys
- ► Howling Surveys
- Den Surveys
- Scat analysis
- Aerial Surveys

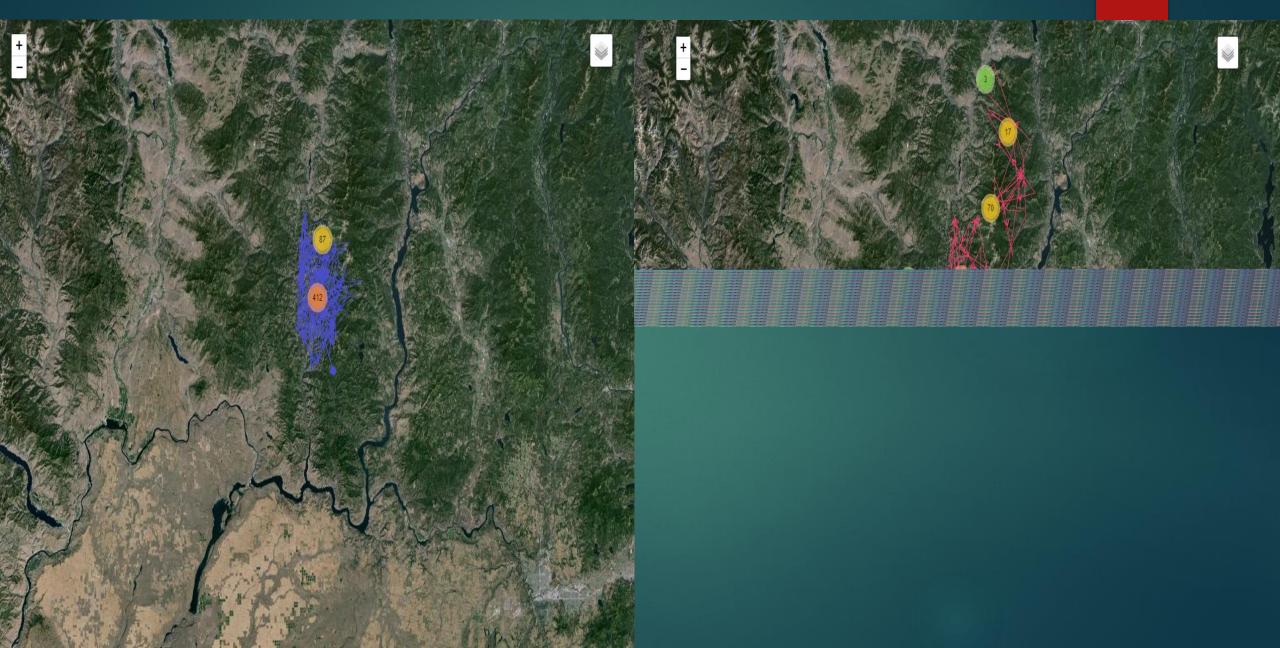
# GPS Collar Data: Traditional Territory

Clusters of points Den sites Kills

Rendezvous sites



# GPS Collar Data: Dispersal Behavior



Wolf pup survival Average litter is 5 Only 1 or 2 are surviving to the one year mark. Have documented more then one female per pack having pups, but only the main breeding female seems to receive help from the pack to keep her pups alive, the single female had lost all her pups. 2022/07/23 16:26:13 25°C 77°F Toguard-H85 **♪**×100%

2023/07/0106:38:36 8°C 46°F Toguard-H85

2022/07/29 18:20:33 25°C 77°F Toguard-H85

**針×100%** 

## Tribal Member harvest

					hrough 2023							ack								
		Minimum Observed Wolf and Harvest Numbers as of December 31st of Each Year  Susp New																		
	Nellan		Chamada		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				N		K - II D: -l		\\(\frac{1}{2} \cdot \\ \frac{1}{2} \cdot \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Dollow Min		Susp New			
	Nc'lcn		Strawberry		Whitestone		Frosty		Nason		Keller Ridge		Wilmont		Dollar Mtn		(Hayden)		Total	
Year	Minimum Observed	Harvest	Minimum Observed	Harvest	Minimum Observed	Harvest	Minimum Observed	Harvest	Minimum Observed		Minimum Observed		Minimum Observerd	t	Minimum Observerd		Minimum Observed	Harvest	Minimum Observed Wolves	Total Harvest
2010		No Legal Hunting Season		No Legal Huntin g Season		No Legal Hunting Season		No Legal Huntin g Seaso n		No Legal Huntin g Seaso n		No Legal Huntin g Seaso n		No Legal Huntin g Seaso n		No Legal Huntin g Season		No Legal Huntin g Season	,	NA
		No Legal Hunting		No Legal Huntin g		No Legal Hunting		No Legal Huntin g Seaso		No Legal Huntin g Seaso		No Legal Huntin g Seaso		No Legal Huntin g Seaso		No Legal Huntin g		No Legal Huntin g	'	
2011	1	Season	1	Season		Season		n		n		n		n		Season		Season	2	NA
2012	6		3																9	0
2013	5		3																8	0
2014	1		3		2														9	0
2014	5		4		2														11	0
2016	5		7	1	2														14	1
2017	7		8	1	5	1	6	1											26	3
2018	4	1	7		3		6	1	6	1									26	
2019	7	2	9		6	1	5		6										33	
2020	9	3	10		4	3	10		8										32	
2021	10	1	9	2	5	2	7		3	9	3								37	
2022	8	2	5	1	7	1	5		0	2	4	1	6						35	
2023	12	3	8	5	6	0	12	1	8	6	10	0	3	1	11	1	Unknown	3	70	
	5 pups		ukn pups		ukn pups		6 pups		3 pups		pups 2		ukn pups		5 pups		ukn pups			





## Ungulate Behavior

- ► Each species have changed their behaviors with the return of wolves.
- ▶ Elk have been more likely to congregate to lower elevations.
- Mule deer are more likely to be found in steep terrain.
- Moose are less visible, tend hide more.

## Management Approach

- ▶ A holistic approach focused on healthy, resilient ecosystems
  - Integrated resource management is an approach to reservation resource management that takes a whole system approach, viewing all resources (natural, social, cultural, and economic) as being interrelated in such a manner that management actions directed at one resource also affect others.
- Includes a balance between predator and prey species
  - Colville Wolf Management Plan-" The CCTFWD seeks to guide management and co-management of gray wolves and their primary prey (deer, elk and moose) on the North and South Half of the Colville Reservation, respectively. The primary goals for management of gray wolves and their ungulate prey are to: 1) outline strategies for maintaining viable wolf populations that persist through time, while 2) maintaining healthy ungulate populations capable of meeting the cultural and subsistence needs of Colville Tribal Members and their families. Understanding impacts of gray wolves on ungulates is important within the framework of the CCT given the subsistence culture of the Colville Tribal Members."

## Other Management Considerations

- Forest Management
  - ▶ Focused on forest health and resilience
  - Commercial treatments on 8,000-10,000 acres per year
  - Species composition, forest structure, and stocking management managed across the landscape through time and space
- Fire management
  - Active prescribed fire and fuels program with annual treated acres averaging
  - Extensive wildfire impacts over the recent decade



