

Wolf Conservation & Management

Summer 2014 Field Season Update



Washington Department of
FISH and WILDLIFE

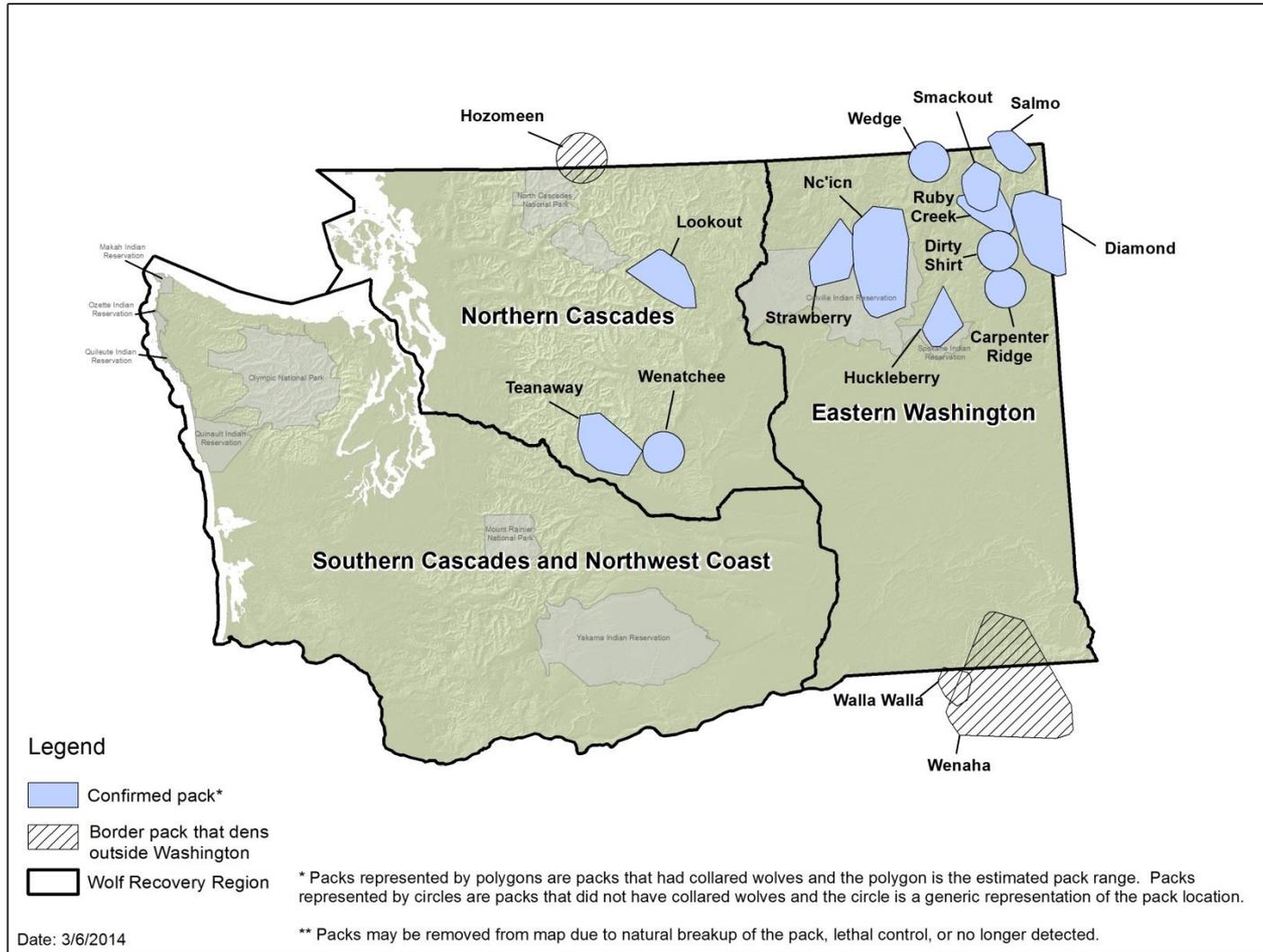
Nate Pamplin | Assistant Director, Wildlife Program

Outline

1. Wolf population status
2. Legal status
3. Protocols for managing wolf-livestock conflict
4. 2014 summary of wolf-livestock conflict
 - Statewide
 - Huckleberry Pack
 - Ruby female
 - Profanity Peak Pack
5. Public Response
6. Improvements

Wolf Status

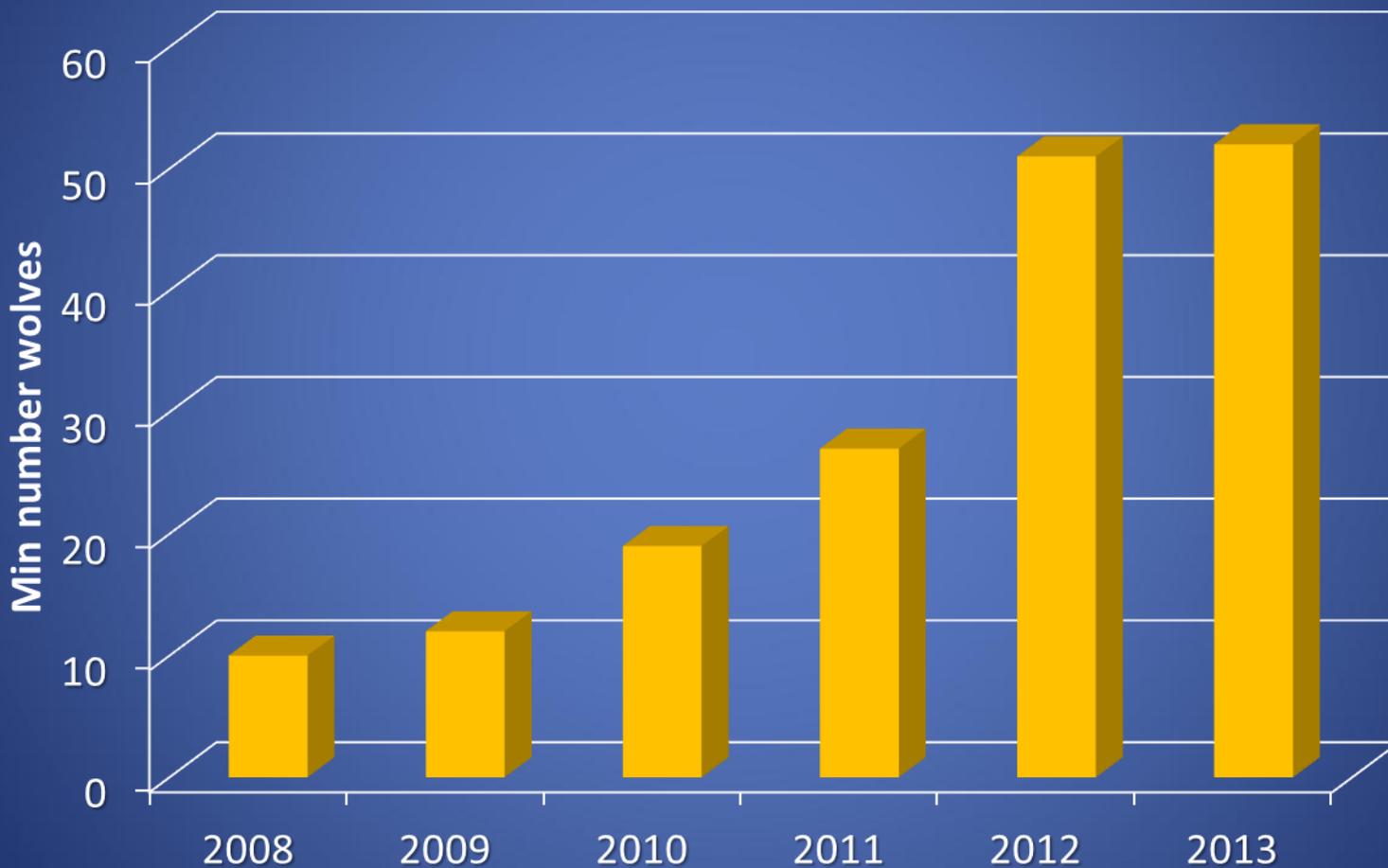
Washington Wolf Packs – Dec 2013



Pack Status Summary

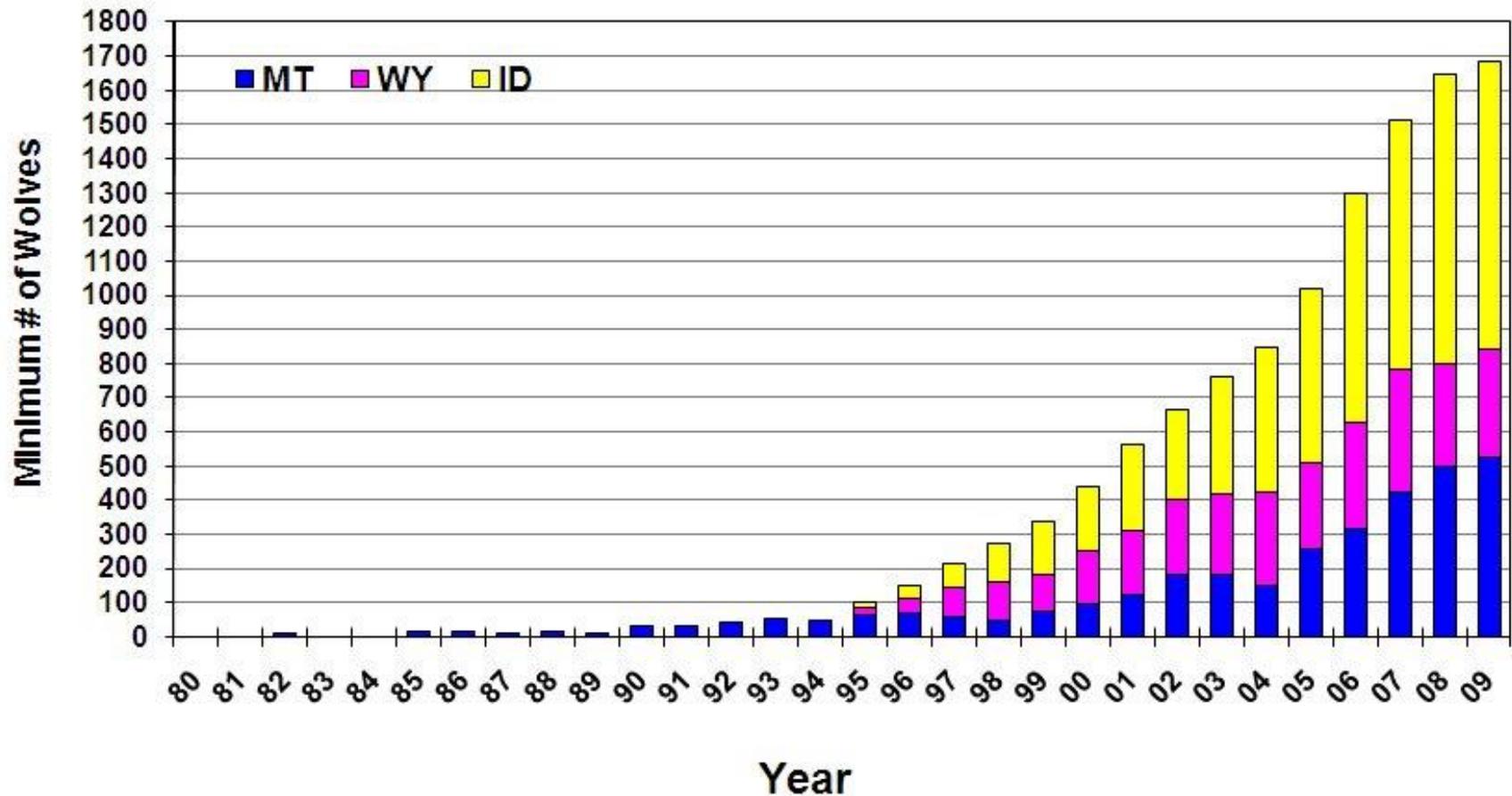
Recovery Region	Pack	Pack Status	Successful Breeding Pairs	Min Count	Captures	Collared 12/31/13
Eastern Washington	Carpenter Ridge	Confirmed	No	2	0	0
	Dirty Shirt	Confirmed	No	2	0	0
	Diamond	Confirmed	Yes	9	2	1
	Huckleberry	Confirmed	Yes	6	2	1
	Nc'icn	Confirmed	No	5	0	1
	Ruby Creek	Confirmed	No	2	1	1
	Salmo	Confirmed	Yes	4	0	1
	Smackout	Confirmed	No	2	3	1
	Strawberry	Confirmed	No	3	1	2
	Wedge	Confirmed	No	2	0	0
	Misc/Loners				1	
Northern Cascades	Lookout	Confirmed	Yes	5	0	0
	Wenatchee	Confirmed	No	2	0	0
	Teaway	Confirmed	Yes	6	3	2
	Misc/Loners				1	
S Cascades & NW Coast	None	None	None	0	0	0
	Statewide	13	5	52	12	11

Trend in Minimum Number of Wolves

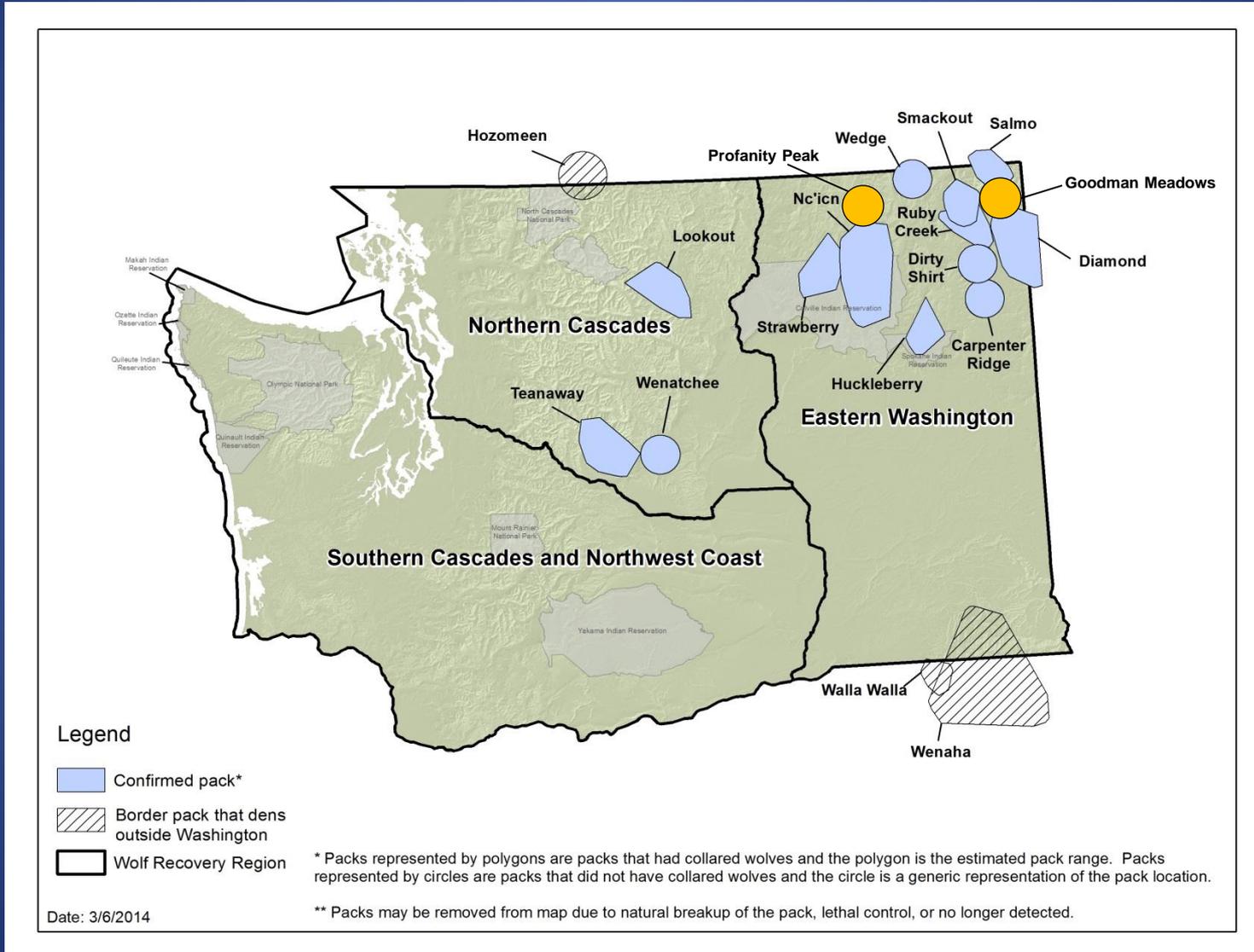


Wolf Population Growth In NRM DPS

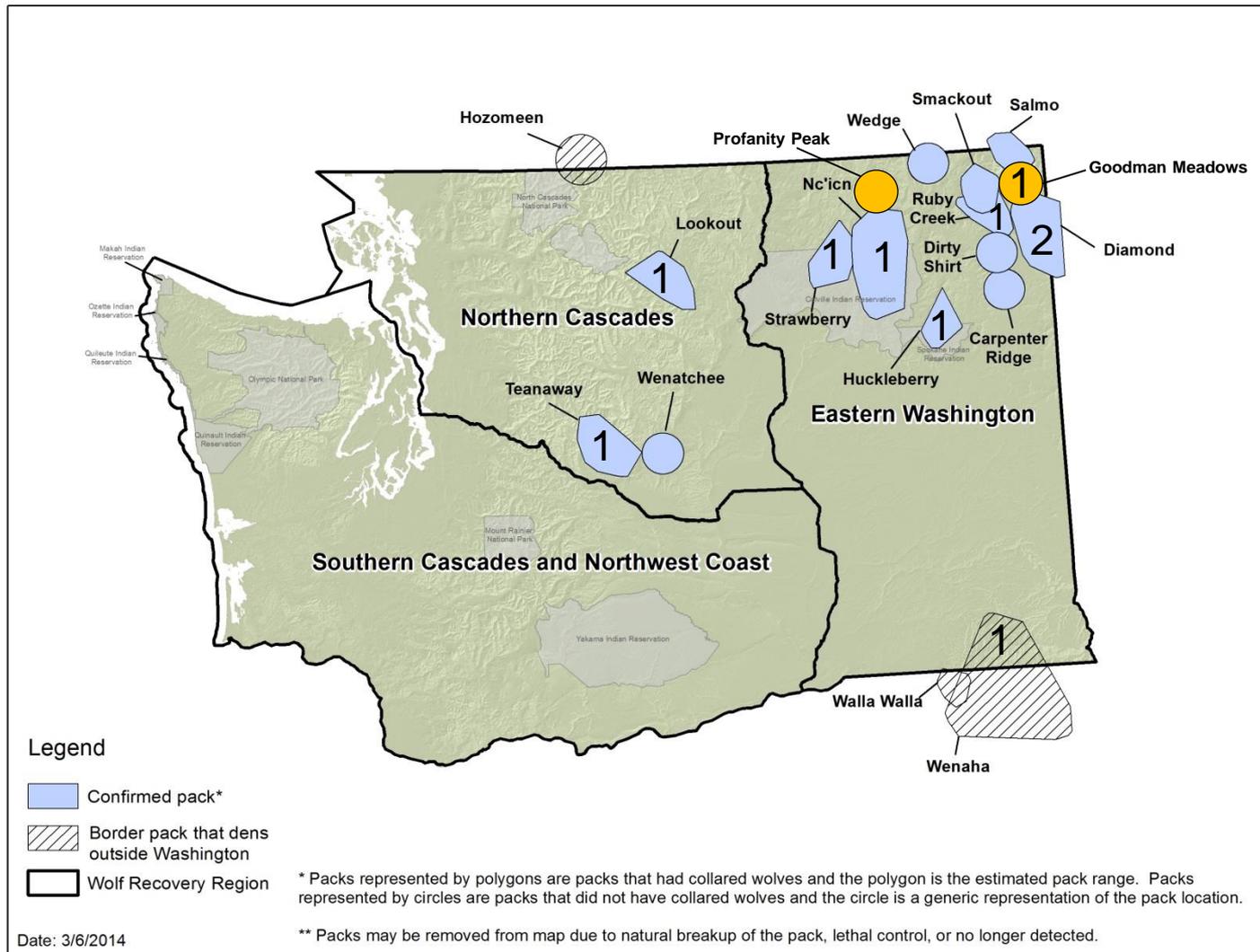
Figure 6. Northern Rocky Mountain Wolf Population Trends in Montana, Idaho and Wyoming: 1980-2009



Washington Wolf Packs – Dec 2013



Eight Packs with Active Radio-Collars



Pack Status Summary

Recovery Region	Pack	Summer Activity	Captures	Active collars
Eastern Washington	Carpenter Ridge	Trapped	0	0
	Dirty Shirt	Trapped	0	0
	Diamond	Monitored	-	2
	Goodman Meadows	Trapped	1	1
	Huckleberry	Trapped	-	1
	Nc'icn	(CCT)	-	1
	Profanity Peak	Trapped	0	0
	Ruby Creek	Monitored	-	1
	Salmo	Trapped	0	0
	Smackout	Trapped	0	0
	Strawberry	(CCT)	-	1
	Wedge	Monitored	-	0
	Northern Cascades	Lookout	Trapped	1
Wenatchee		Monitored	-	0
Teaway		Monitored	-	1
S Cascades & NW Coast	None	None	0	0
	Statewide		2	9

Legal Status

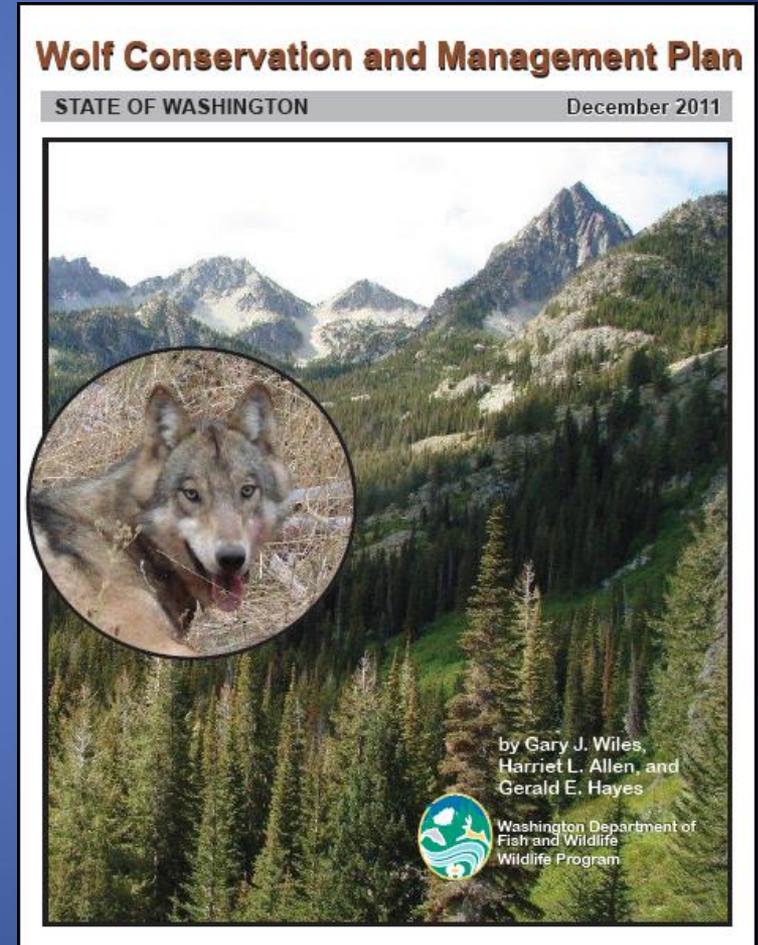


Northern Rocky Mountain Distinct Population Segment (NRM DPS)

Wolf-Livestock Conflict Protocols

Wolf Conservation and Management Plan

- 17 citizen member Wolf Working Group
- Environmental Impact Statement
- 23 public meetings
- 65,000 comments
- Scientific peer review
- Blind peer review
- F&W Commission adopted in December 2011



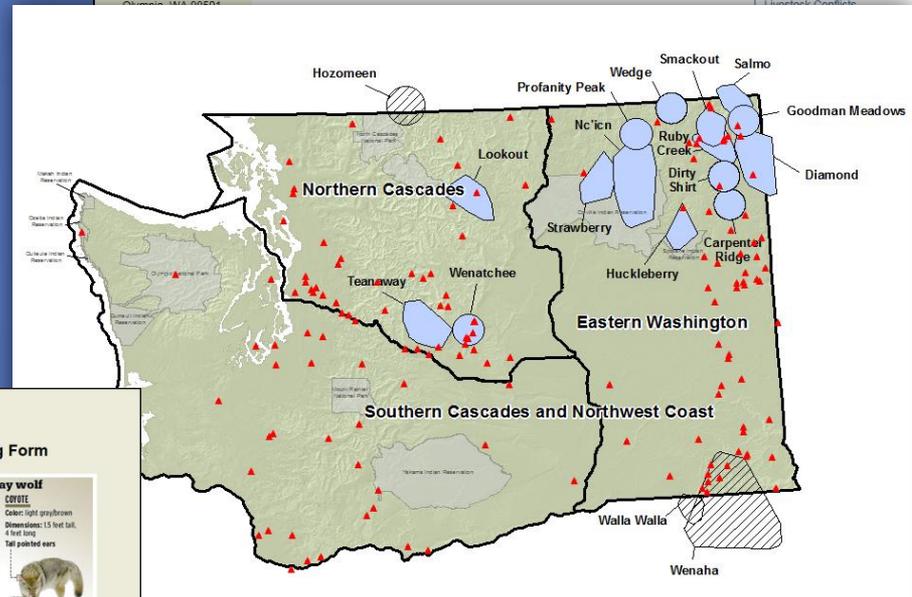
Wolf Plan Goals

- Restore self-sustaining wolf populations
- **Manage Wolf-Livestock Conflicts**
- Maintain Healthy Prey Base
- Develop Public Understanding and Promote Coexistence

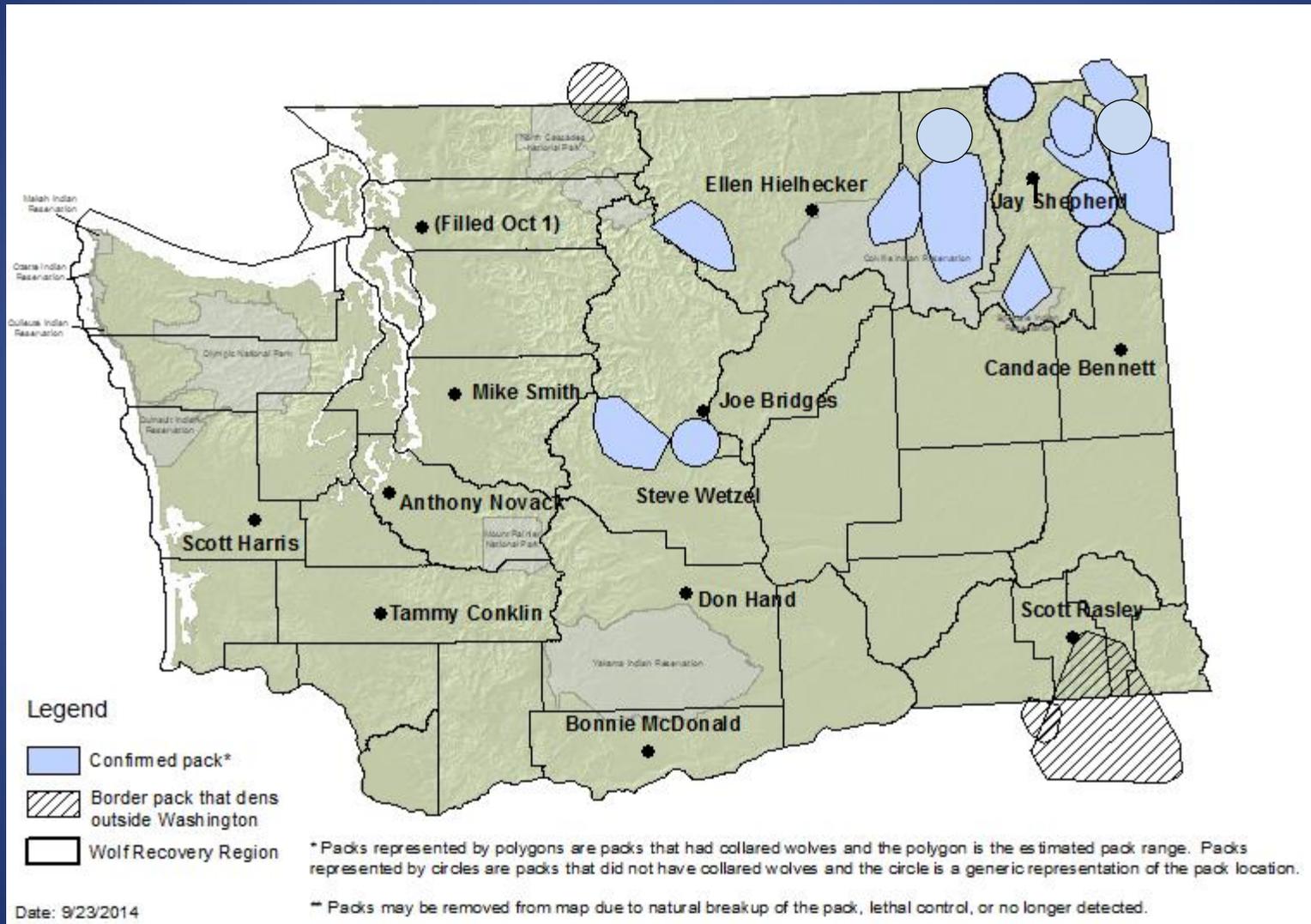


Contact WDFW

- 1-877-933-9847
- 911
- Online
- Pamphlets
- Outreach printed materials



Wildlife Conflict Staff Rollout



Wolf Advisory Group

- Mission: Allow a diverse group of stakeholders to advise WDFW in implementation of the Wolf Conservation and Management Plan
- Appointed by Director
- Directive:
 - Advise implementation of wolf plan policy
 - Review board for compensation

• Quad-County Commissioners
• Farm Bureau
• Washington State Cattlemen's Association
• Cattle Producers of Washington
• Conservation Northwest
• Humane Society of United States
• Wolf Haven International
• Sierra Club
• Hunter's Heritage

Checklist of non-lethal tools

Required

1. Remove livestock carcasses
2. Remove sick/injured livestock
3. Secure boneyards where applicable
4. Calf/lamb away from wolves
5. Haze wolves if encountered



Washington Department of Fish and Wildlife Staff Guidelines: LIVESTOCK-WOLF MITIGATION MEASURES

This checklist contains examples of proactive measures that are recommended for use by livestock operators to help avoid or reduce conflicts between livestock and wolves when practical and applicable. Identified within the checklist are measures that can be implemented to meet the requirements to enact non-lethal measures provided by state law (chapter 77) and WDFW regulations (WAC 232-36). The measures identified as essential are the minimum baseline measures that should be implemented if feasible prior to consideration for compensation or lethal management options. Identification of such measures through this checklist does not guarantee either compensation claims or that requests for lethal control measures will be granted. Effective implementation at the time of the conflict must be verified by WDFW.

SANITATION		Compensation or Control Actions
<input type="checkbox"/>	Remove or manage livestock carcasses from lambing or calving areas and from cooperators' lands when they are discovered (includes burying, burning, or composting consistent with state law and county or city ordinances).	Essential action
<input type="checkbox"/>	Install predator-proof fencing around a bone yard.	Essential action where applicable
<input type="checkbox"/>	In areas where available, contact WDFW when livestock carcasses are discovered so that they can be removed or protected from wolves.	Essential action where applicable
Rationale:		
SICK AND INJURED LIVESTOCK		Compensation or Control Actions
<input type="checkbox"/>	Remove or treat non-ambulatory (sick or injured) livestock from unsafe pastures in areas where wolves are present (when feasible).	Essential action
Rationale:		

Depredation Prevention Cooperative Agreement

1. Implement preventative measures

- Sanitation
- Hazing
- Fencing
- Repellents
- Operational



2. Proactive Measures Cost Share options

- Fencing (50% max \$10,000)
- Sanitation (up to 100% max \$5,000)
- Guard animals (up to 50% max \$5,000)
- Range rider (up to 50% max \$10,000)
- Other



Projects to Minimize Conflict

- One new carcass disposal composting site with 4 bins



Sherman Creek Wildlife Area

Projects to Minimize Conflict

WSU Wolf-livestock research

1. Modeling livestock depredations by wolves in the northern Rocky Mountains
2. Wolf kill rates during the grazing season in Washington State
3. Livestock mortality rates in wolf occupied areas of Washington
4. Assessing preventative tools for reducing wolf/livestock conflicts in Washington



UW Wolf-livestock research

5. Developing a wolf economy for Washington

Projects to Minimize Conflict

Western Wildlife Outreach Project

- Assist Washington livestock producers with including wolf-livestock conflict avoidance practices in their livestock operations
- Inform Washington residents of the current status of Washington's wolves and their behavior, biology and ecological roles, as well as safety messages for living and recreating in wolf country
- Provide Washington hunters information on identifying wolves versus coyotes or domestic dogs, and provide hunters with science-based information on the interaction between wolves and ungulate populations across the West

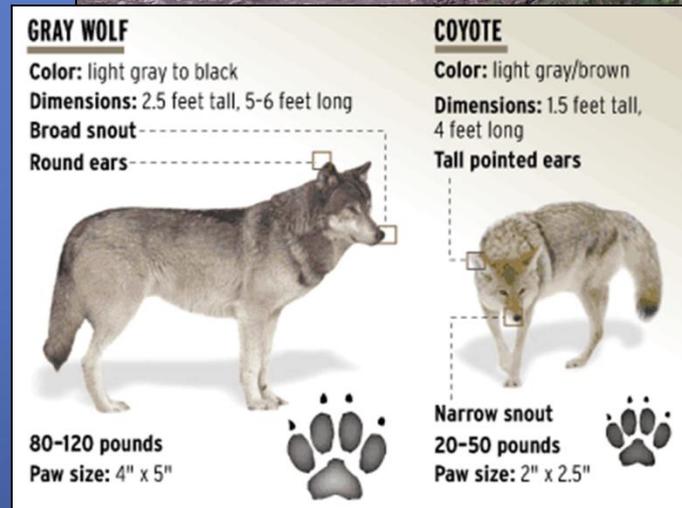
Targeted Outreach

Meetings (n>50)

- Public, Conservation Districts, Non-government interest groups, Wolf Advisory Group, Fish and Wildlife Commission
- Trainings: depredation and range rider

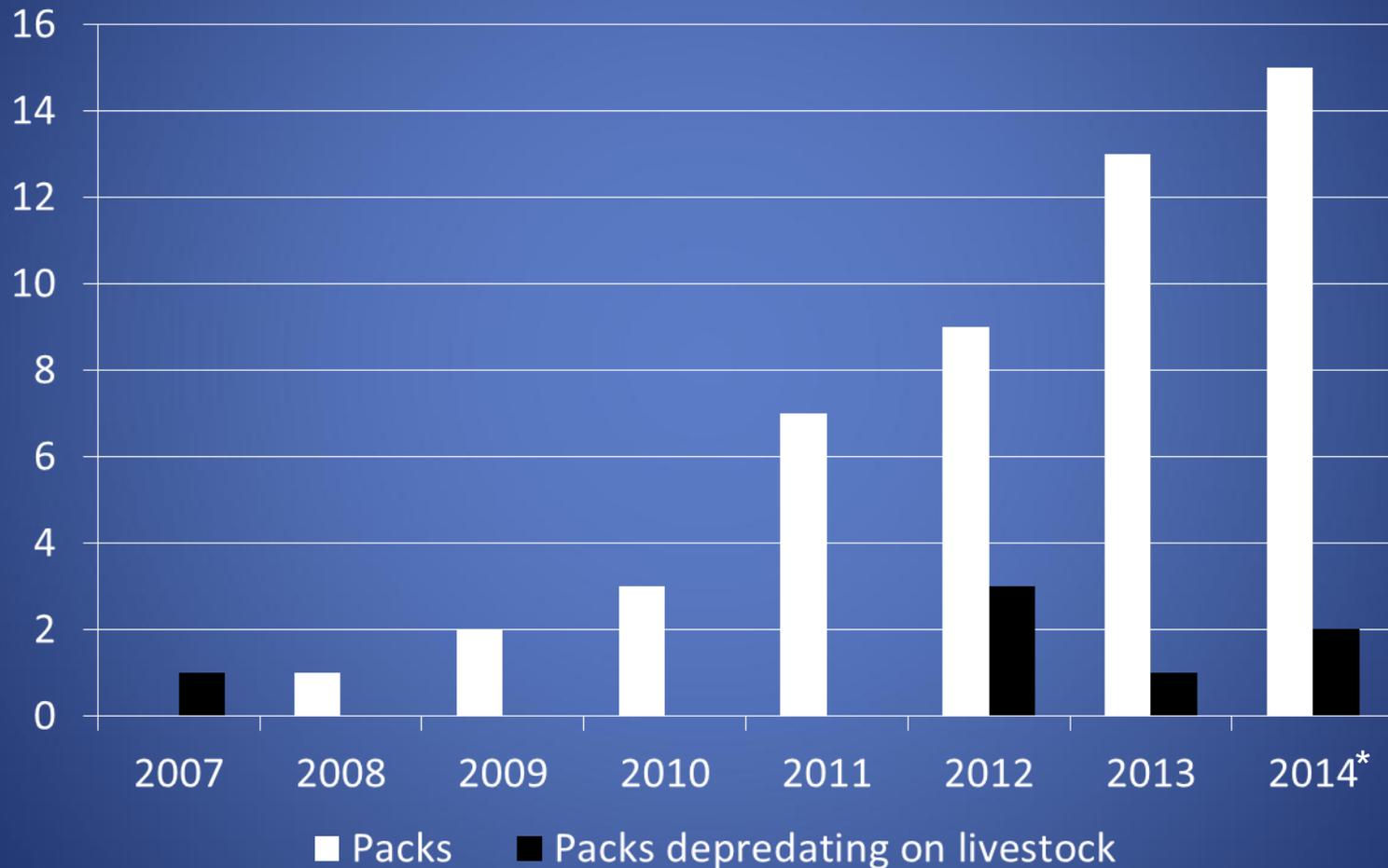
WDFW News releases and other printed materials

- Brochures, hunting regulations pamphlet, magnet



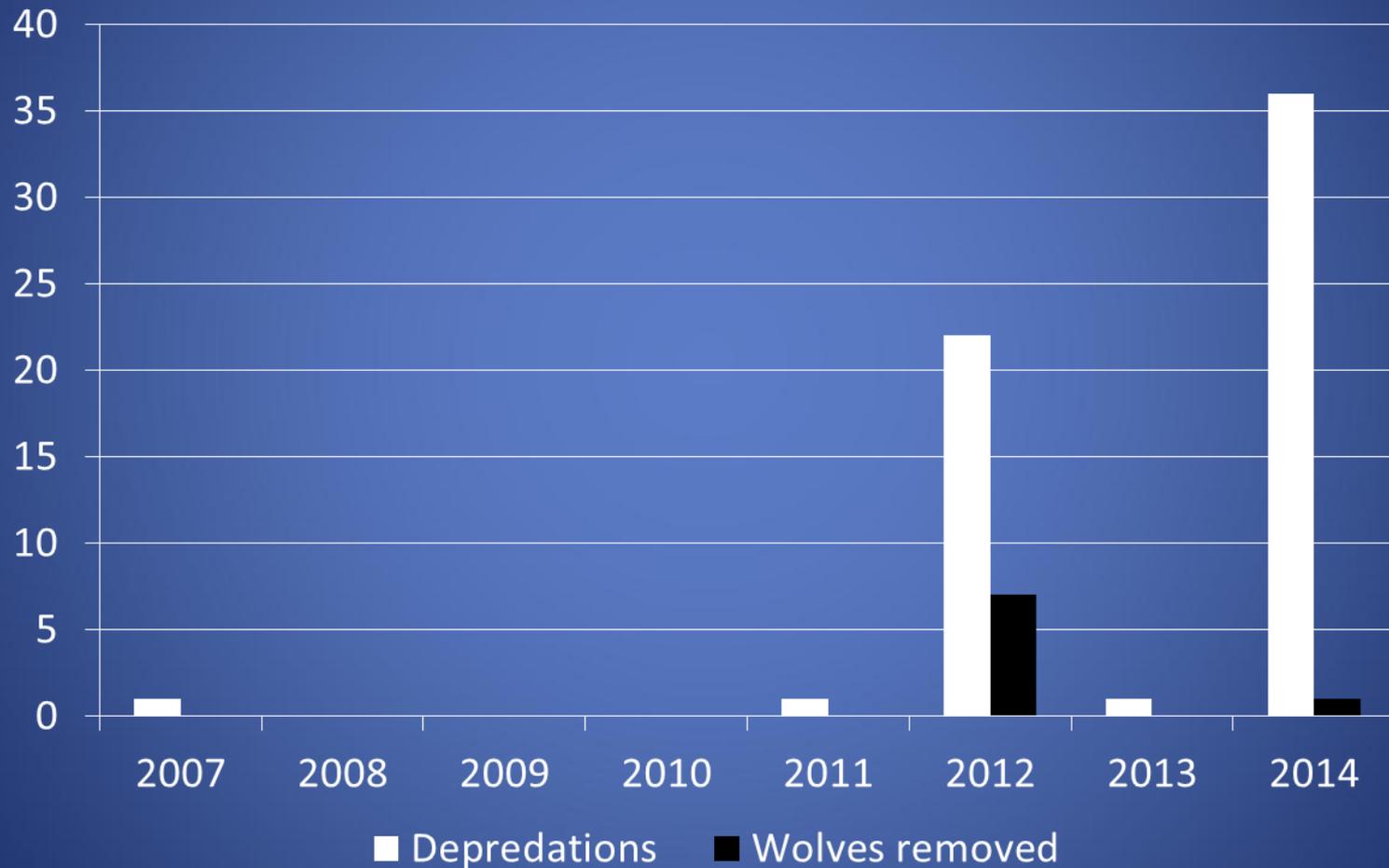
Wolf-Livestock Conflict Summary

Packs Depredating on Livestock



* Preliminary estimate based on information on Sept 20, 2014

Wolf Depredations in Washington



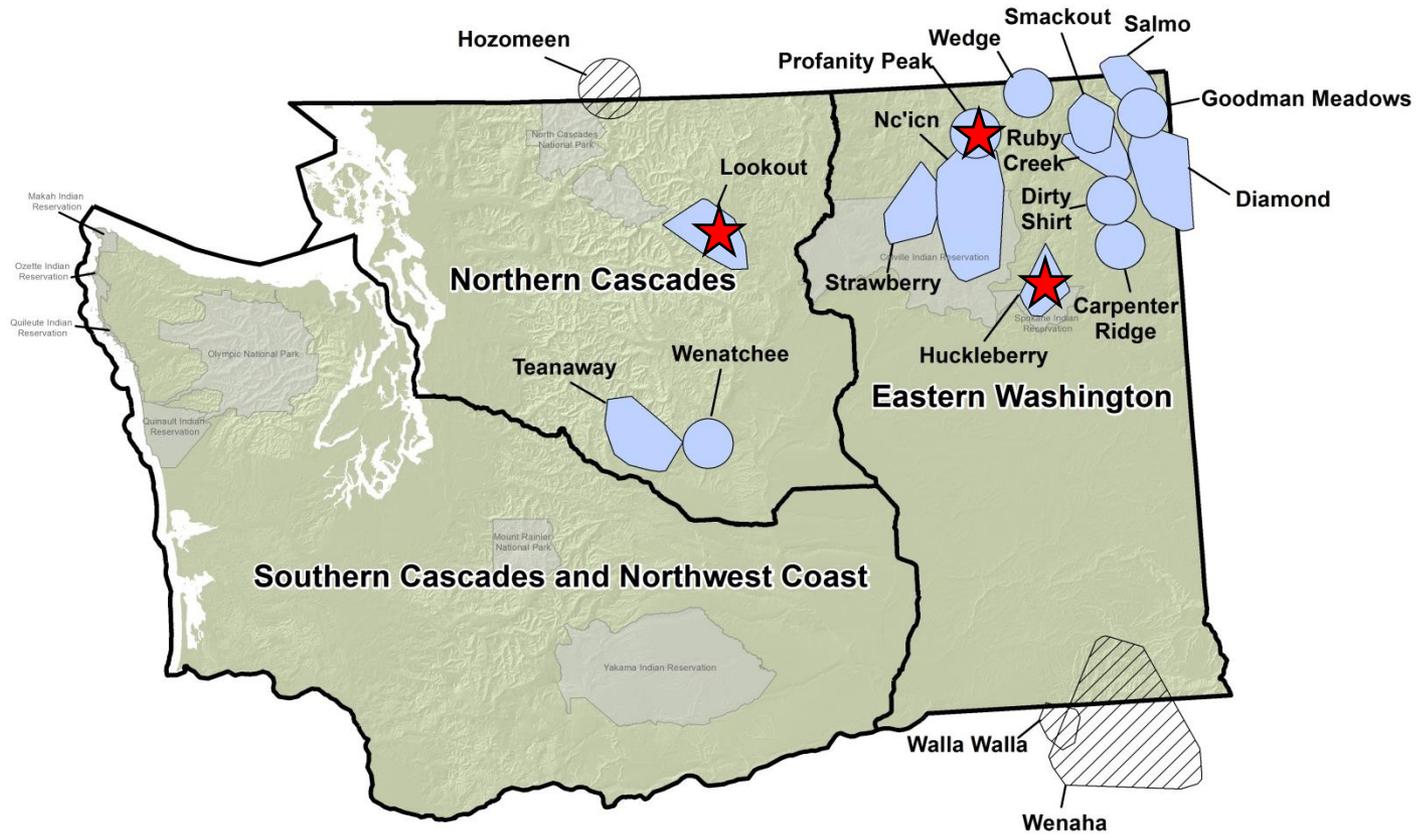
2014 Wolf-Livestock Depredations

Confirmed depredations

- 33 depredations on sheep
- 2 depredations on cattle
- 1 dog



2014 Packs with Livestock Depredations



Legend

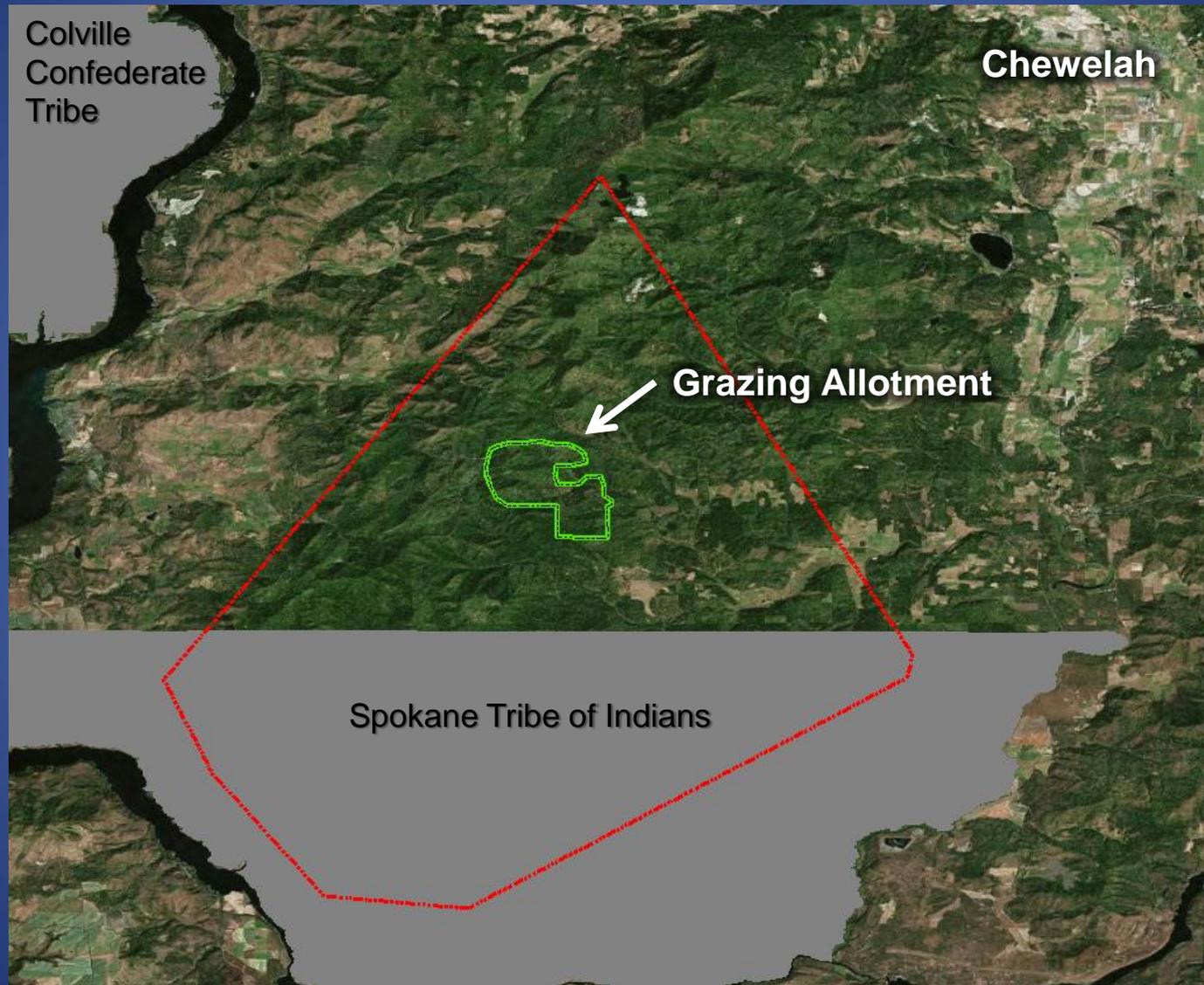
- Confirmed pack*
- Border pack that dens outside Washington
- Wolf Recovery Region

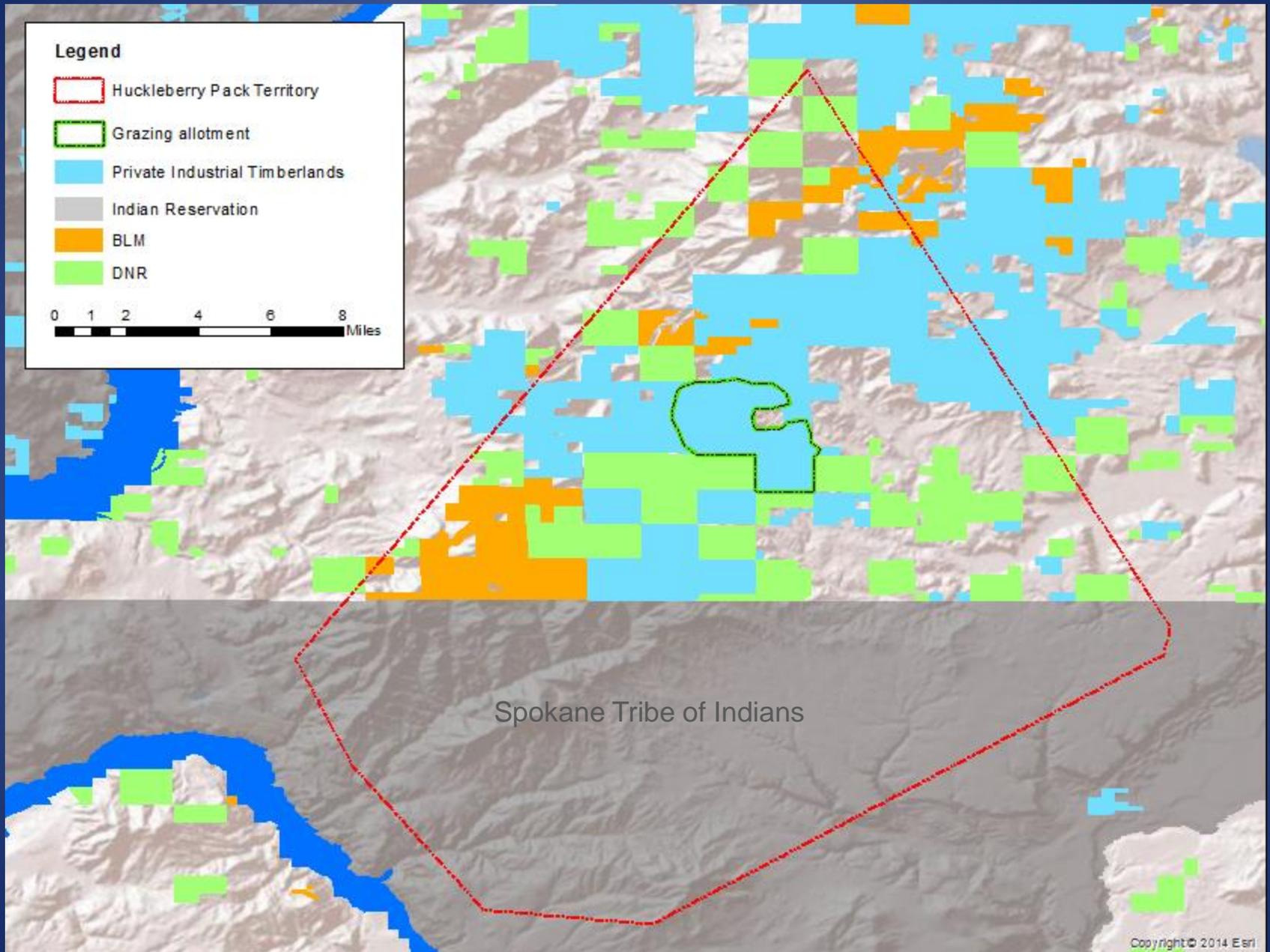
* Packs represented by polygons are packs that had collared wolves and the polygon is the estimated pack range. Packs represented by circles are packs that did not have collared wolves and the circle is a generic representation of the pack location.

** Packs may be removed from map due to natural breakup of the pack, lethal control, or no longer detected.

Date: 9/23/2014

Huckleberry Case Study















Checklist Non-lethal Tools

Sanitation

- ✓ **Remove livestock carcasses from lambing or calving areas**
- Predator-proof fencing around a bone yard
- Contact WDFW when livestock carcasses are discovered so that they can be removed

Sick & injured livestock

- ✓ **Remove sick and injured livestock**

Calving & lambing areas

- ✓ **Traditional calving or lambing areas are away from areas occupied by wolves**
- Use protective fencing or fladry around calving or lambing areas
- Lambing sheds

Turnout

- Other techniques for managing risks of wolves being attracted to young calves
- Turnout of calves onto forested/upland grazing allotments until calving is finished
- Turnout of calves onto forested/upland grazing pastures or allotments once calves are larger
- ✓ **Delay the turnout of livestock onto forested/upland grazing pastures or allotments until June 10th when wild ungulates are born**

Checklist Non-lethal Tools

Range Riders and shepherds

- ✓ **Use herders with dogs at night to protect sheep**
- Use guarding animals (dogs, llamas, donkeys, etc.) to alert herders and protect livestock
- Manage grazing livestock near the core areas (dens, rendezvous sites) of wolf territories to minimize wolf-livestock interactions
- Use Range Riders to Increase the frequency of human presence
- Increase the frequency of human presence

Hazing

- Install light and noise scare devices
- Haze wolves with non-lethal munitions
- Coordinate with WDFW to expand hazing once a depredation event occurs

Fencing

- Use predator-resistant fencing as a permanent barrier
- Use predator-resistant fencing as a temporary barrier for sheep and goats
- Use fladry/turbofladry as a temporary barrier
- Use bio-fencing in coordination with WDFW study

Chronology of Events

Date	Preventative measures	Depredation Events	Lethal	Comments
June	<ul style="list-style-type: none"> • 1 herder • 4 guard dogs • Remove sick/injured/dead sheep 	4 dead sheep; cause of death unknown	None	Prior to notifying WDFW

Chronology of Events

Date	Preventative measures	Depredation Events	Lethal	Comments
June	<ul style="list-style-type: none"> 1 herder 4 guard dogs 	4 dead sheep; cause of death unknown	None	Prior to notifying WDFW
Aug 10	<ul style="list-style-type: none"> Remove sick/injured/dead sheep 	5 dead sheep, reported as cougar depredation	None	WDFW Deploys hound hunter to remove cougar

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Aug 10		5 dead sheep, reported as cougar depredation	None	WDFW Deploys hound hunter to remove cougar
Aug 11		CONFIRMED DEPREDTION #1; 12 dead sheep	None	

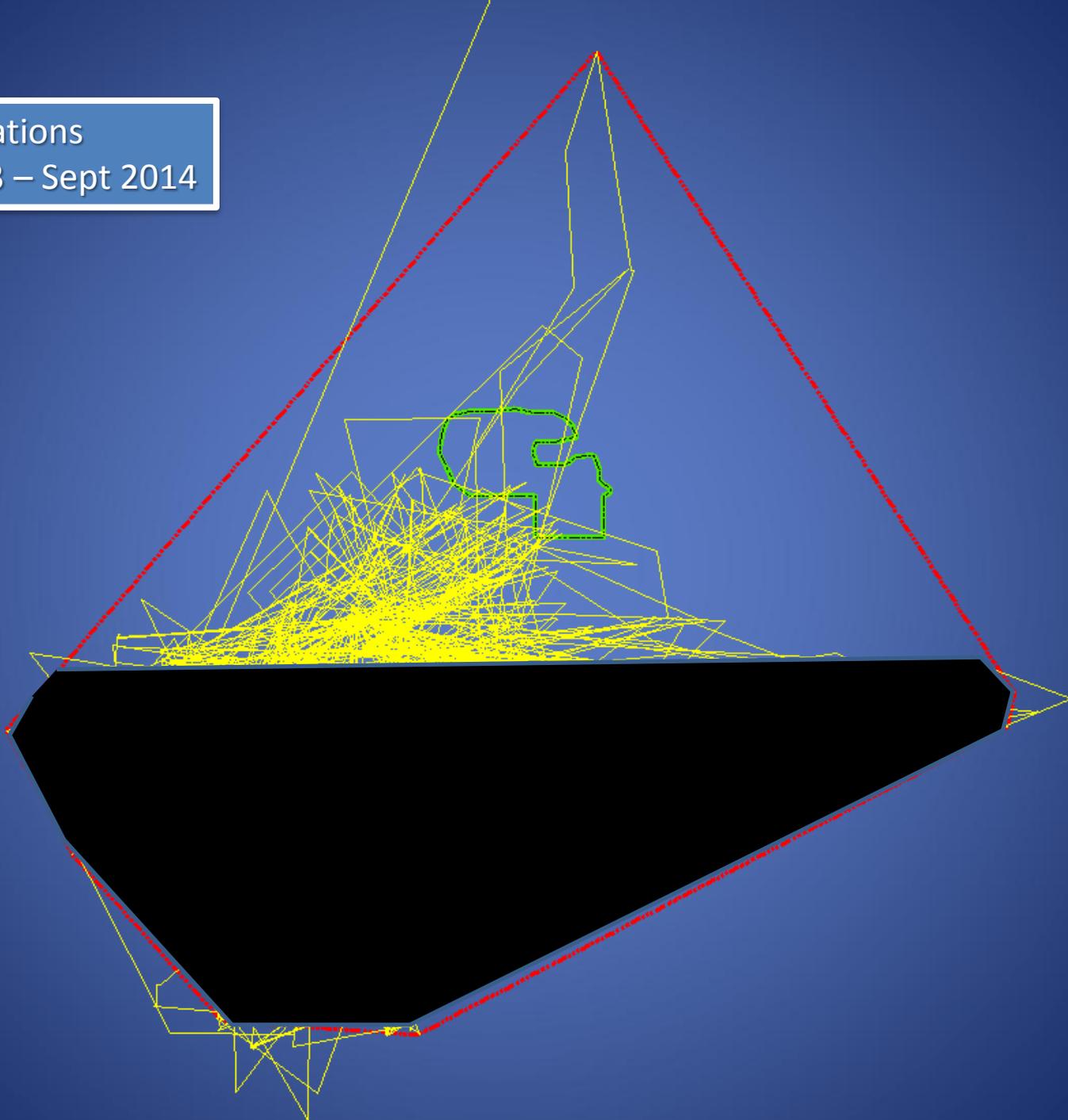
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Aug 11		CONFIRMED DEPREDATION #1; 12 dead sheep	None	
Aug 12		CONFIRMED DEPREDATION #2; 2 dead sheep	None	





Wolf locations
Feb 2013 – Sept 2014



Chronology of Events

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June	<ul style="list-style-type: none"> 1 herder 4 guard dogs 	4 dead sheep; cause of death unknown	None	Prior to notifying WDFW
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Aug 12		CONFIRMED DEPREDATION #2; 2 dead sheep	None	
Aug 14-21		<ul style="list-style-type: none"> 3-4 WDFW staff Night patrols Spot lights 1-2 range riders Sharing location data 	CONFIRMED DEPREDATION #3 1 dead sheep	Aug 20 - 2 wolves in vicinity of sheep
	CONFIRMED DEPREDATION #4 1 dead sheep			

Additional non-lethal Tools

Sanitation

- ✓ Remove livestock carcasses from lambing or calving areas
- Predator-proof fencing around a bone yard
- ✓ **Contact WDFW when livestock carcasses are discovered so that they can be removed**

Sick & injured livestock

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Additional Non-lethal Tools

Range Riders and shepherds

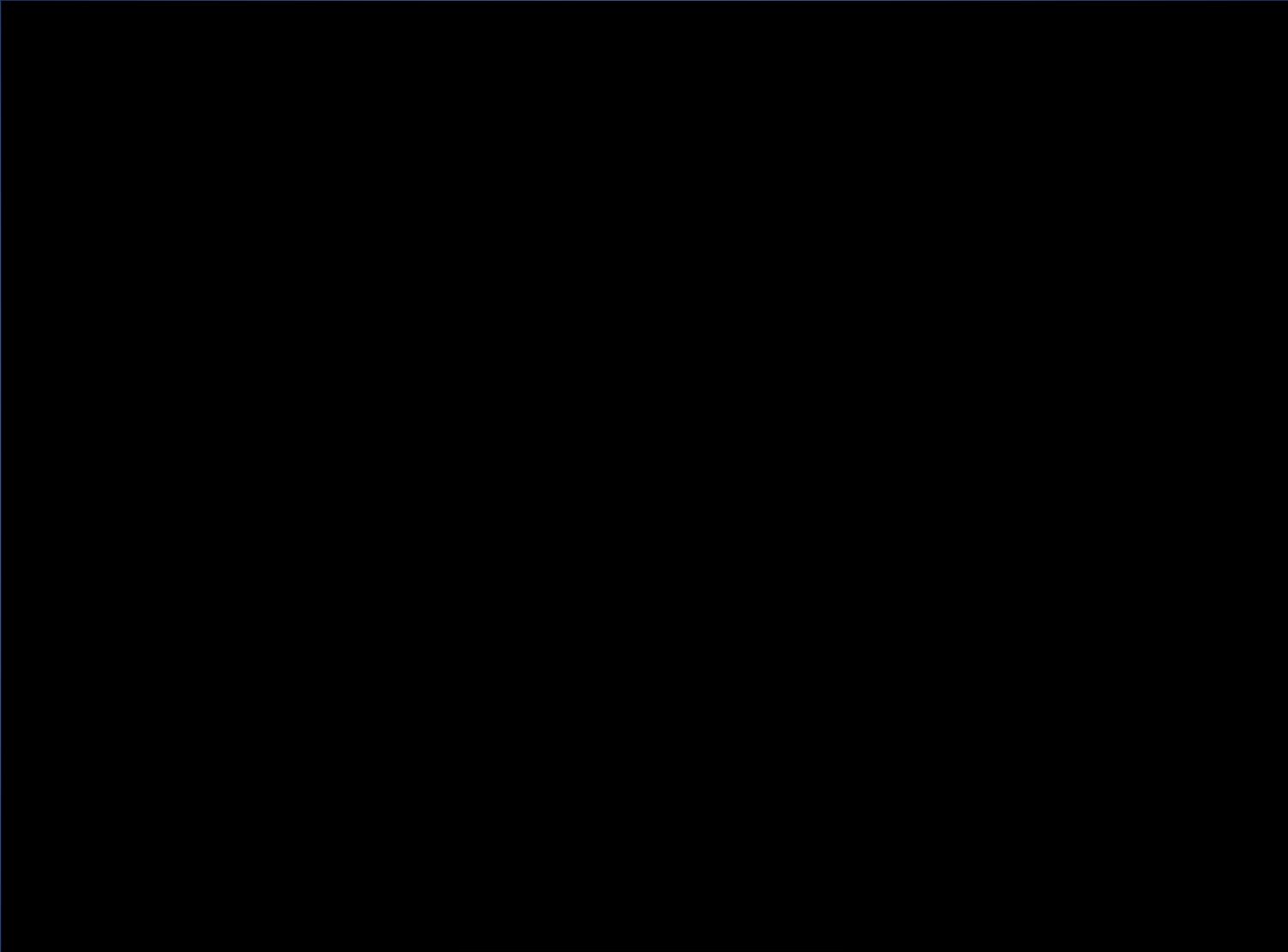
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- ✓ **Use Range Riders to Increase the frequency of human presence**
- ✓ **Increase the frequency of human presence**

Hazing

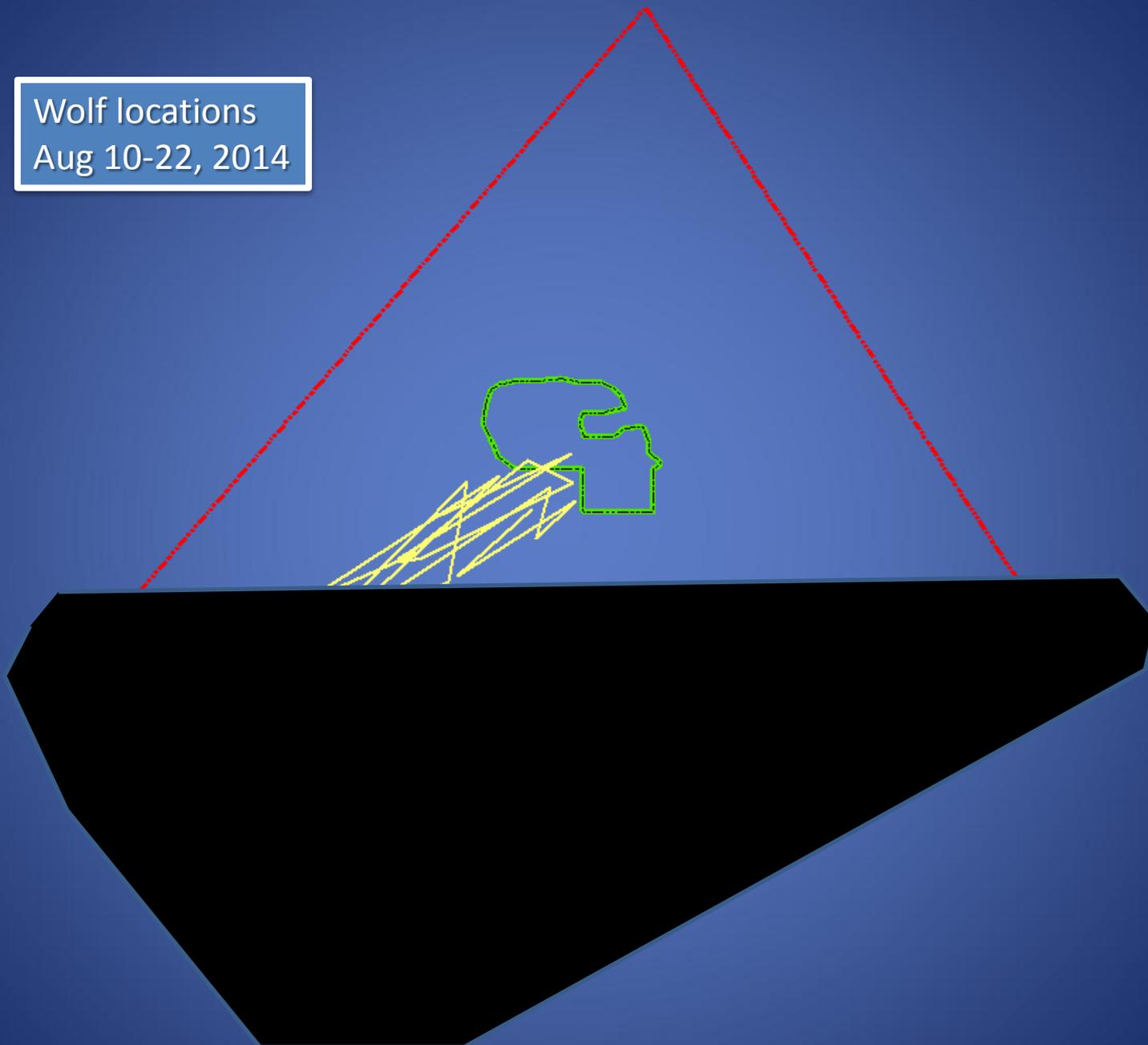
- ✓ **Install light and noise scare devices**
- Haze wolves with non-lethal munitions
- ✓ **Coordinate with WDFW to expand hazing once a depredation event occurs**

Fencing

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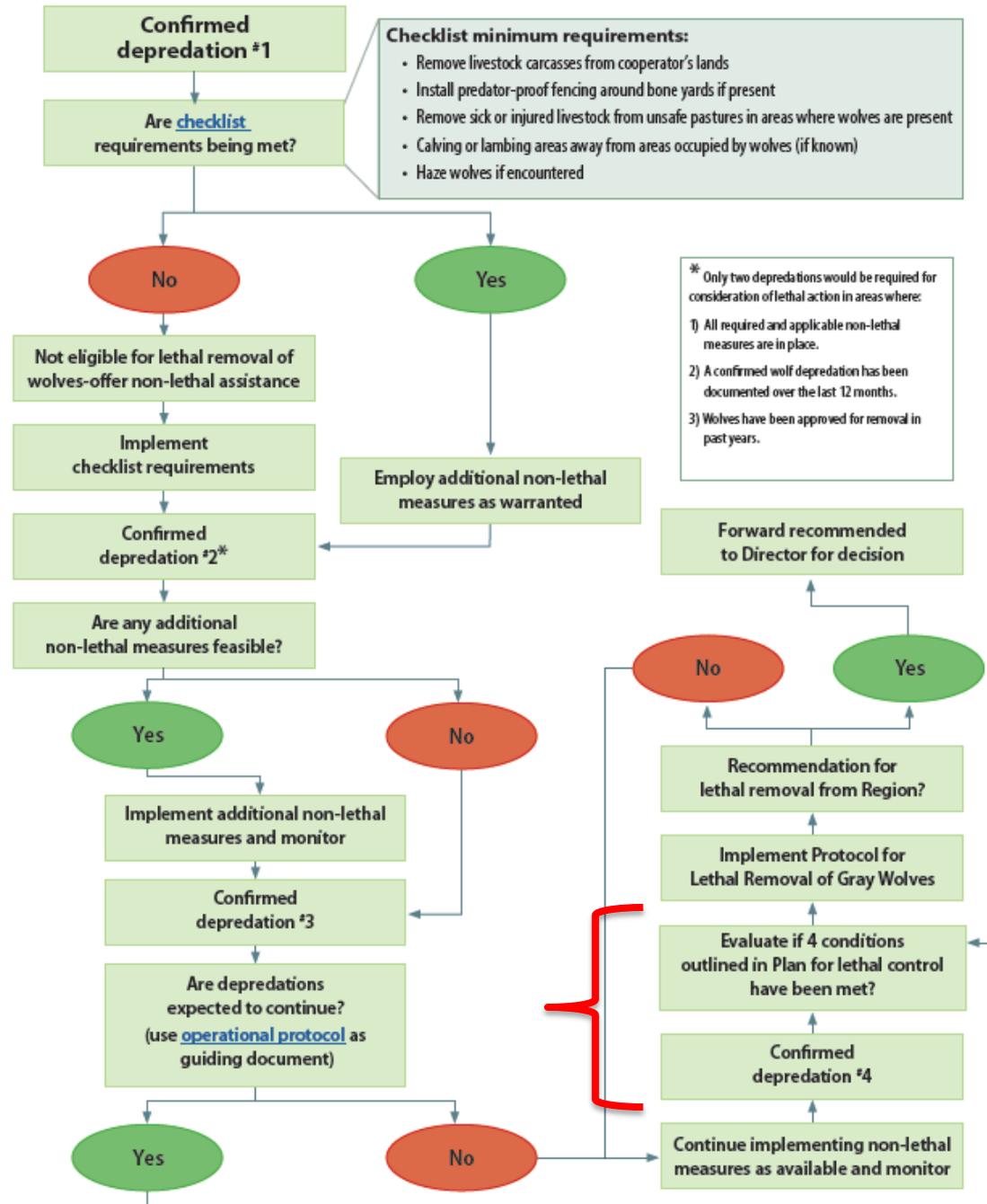


Wolf locations
Aug 10-22, 2014



Flowchart for consideration of lethal control

Wolf Conflict Management Flowchart



Chronology of Events

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Aug 10	<ul style="list-style-type: none"> Remove sick/injured/dead sheep 	5 dead sheep, reported as cougar depredation	None	WDFW Deploys hound hunter to remove cougar
Aug 11		CONFIRMED DEPREDATION #1; 12 dead sheep	None	
Aug 12		CONFIRMED DEPREDATION #2; 2 dead sheep	None	
Aug 14-21		<ul style="list-style-type: none"> 3-4 WDFW staff Night patrols Spot lights 1-2 range riders Sharing location data 	CONFIRMED DEPREDATION #3 1 dead sheep	Aug 20 - 2 wolves in vicinity of sheep
	CONFIRMED DEPREDATION #4 1 dead sheep			
Aug 22	CONFIRMED DEPREDATION #5 1 dead sheep		Director authorizes removal of up to 4 wolves	

Chronology of Events

Date	Preventative measures	Depredation Events	Lethal	Comments
Aug 23	<ul style="list-style-type: none"> • 1 herder • 4 guard dogs • Remove sick/injured/dead sheep • 3-4 WDFW staff • Night patrols • Spot lights • 1-2 range riders • Sharing location data 	CONFIRMED DEPREDATION #6 5 dead and 4 injured sheep	1	WAG update

Chronology of Events

Date	Preventative measures	Depredation Events	Lethal	Comments
Aug 23	<ul style="list-style-type: none"> • 1 herder • 4 guard dogs • Remove sick/injured/dead sheep • 3-4 WDFW staff • Night patrols • Spot lights • 1-2 range riders • Sharing location data 	CONFIRMED DEPREDATION #6 5 dead and 4 injured sheep	1	WAG update
Aug 24			None	
Aug 25			None	WAG update New Release
Aug 26		CONFIRMED DEPREDATION #7 1 dead sheep	None	Helicopter effort done Trapping initiated

Chronology of Events

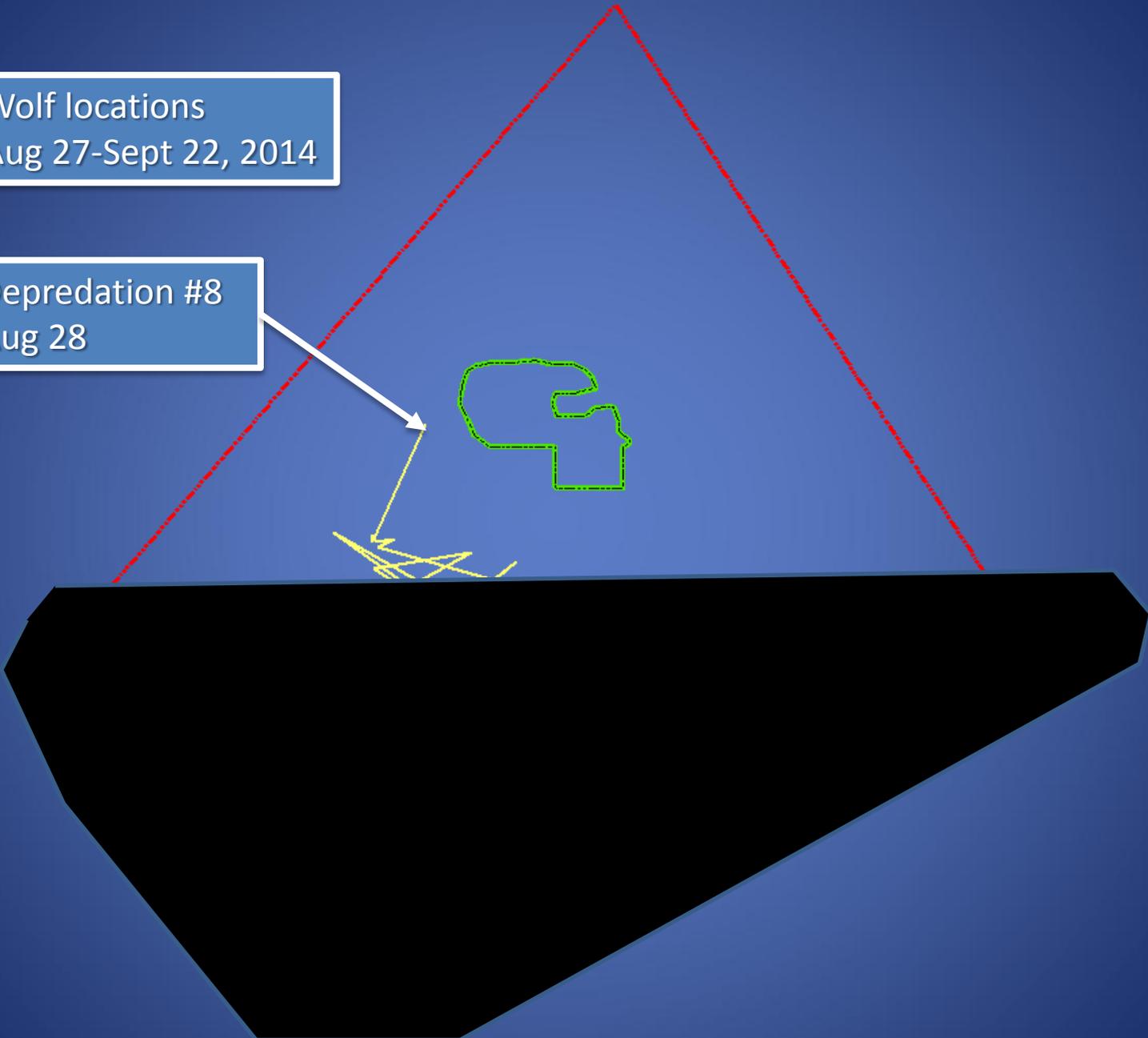
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Aug 24			None		
Aug 25			None	WAG update New Release	
Aug 26			CONFIRMED DEPREDATION #7 1 dead sheep	None	Helicopter effort done Trapping initiated
Aug 27				None	WAG update
Aug 28			CONFIRMED DEPREDATION #8 1 dead + 1 injured sheep	None	WAG update
Aug 29-31			Aug 29 CONFIRMED DEPREDATION #9 4 injured sheep	None	Aug 29-Trapping done

Chronology of Events

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Aug 26			CONFIRMED DEPREDATION #7 1 dead sheep	None	Helicopter effort done Trapping initiated
Aug 27				None	WAG update
Aug 28			CONFIRMED DEPREDATION #8 1 dead + 1 injured sheep	None	WAG update
Aug 29-31			Aug 29 CONFIRMED DEPREDATION #9 4 injured sheep	None	Aug 29-Trapping done
Sept 2				None	Sheep moved to fall/interim grazing site WAG update

Wolf locations
Aug 27-Sept 22, 2014

Depredation #8
Aug 28



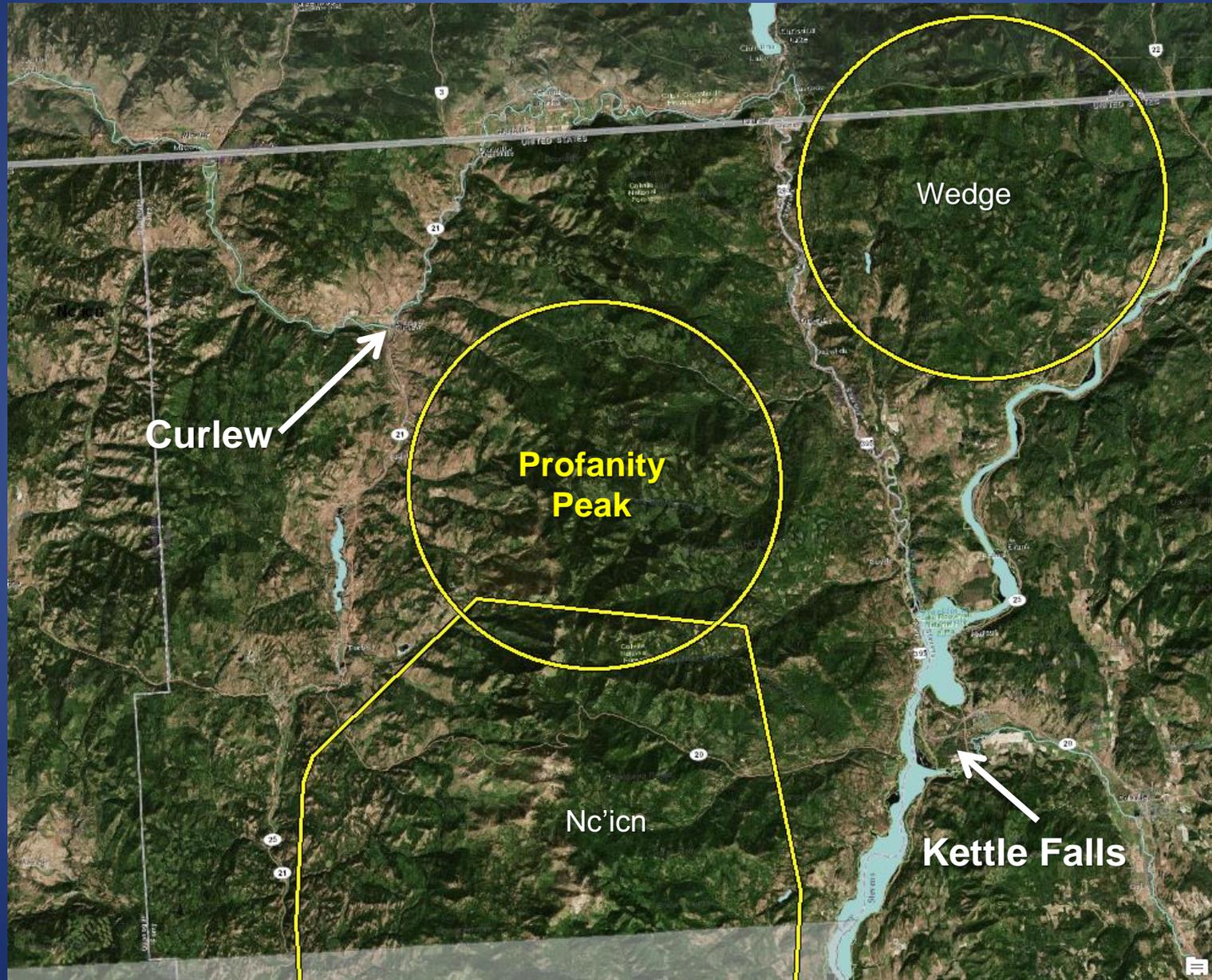
Huckleberry Case Study

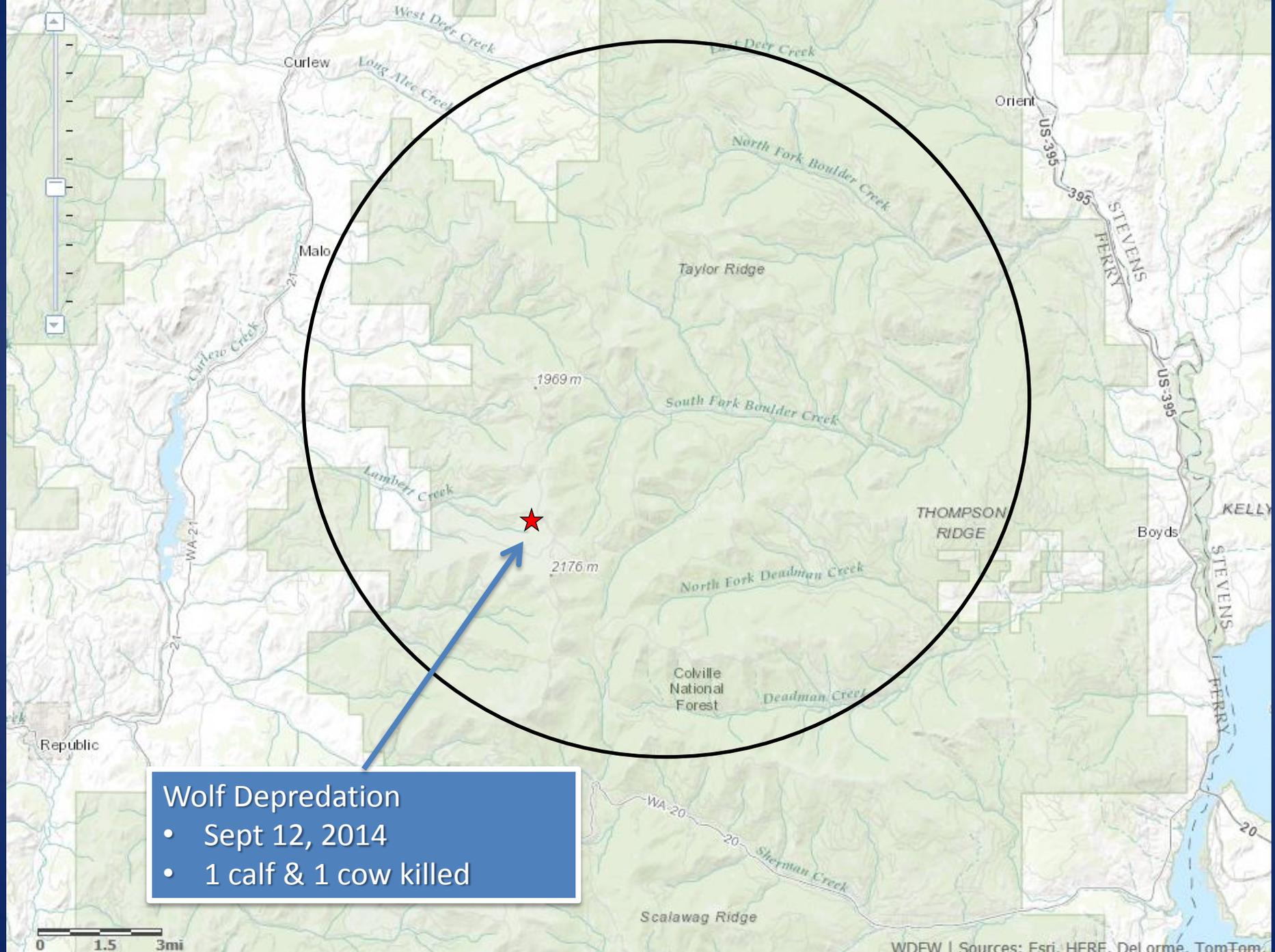
Huckleberry Case Preliminary Cost Estimate	
Action	Cost
Non-lethal Activity	
WDFW Staff	\$18,590
Range Riders	\$2,500
Expenses	\$5,460
Total Non-lethal	\$26,550
Lethal Activity	
WDFW Staff	\$4,000
WDFW Expenses	\$2,080
Contractor Staff	\$5,205
Misc. Equipment	\$325
Travel	\$628
Pilot	\$1,451
Helicopter	\$8,520
Expenses	\$65
Overhead	\$4,397
Total Lethal	\$26,671
Total	\$53,221

Huckleberry Pack: Next Steps

- Outreach to other producers in area
- Coordination with STOI for data sharing
- Monitor pack movements
- Attempt to collar more pack members
- Prepare preventative measures for next grazing season
- Continue dialogue with producer re: compensation for 2014 losses

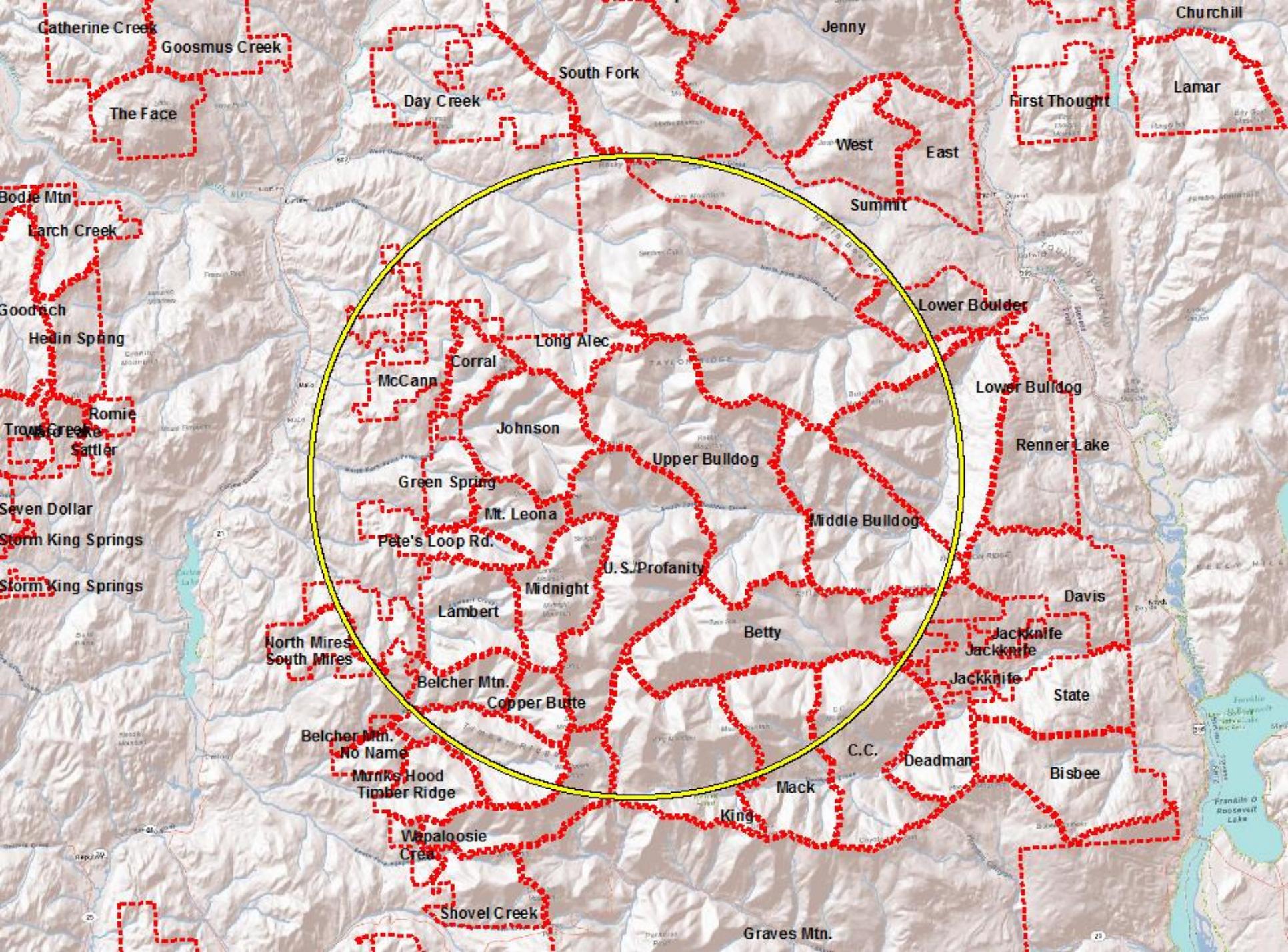
Profanity Peak Pack



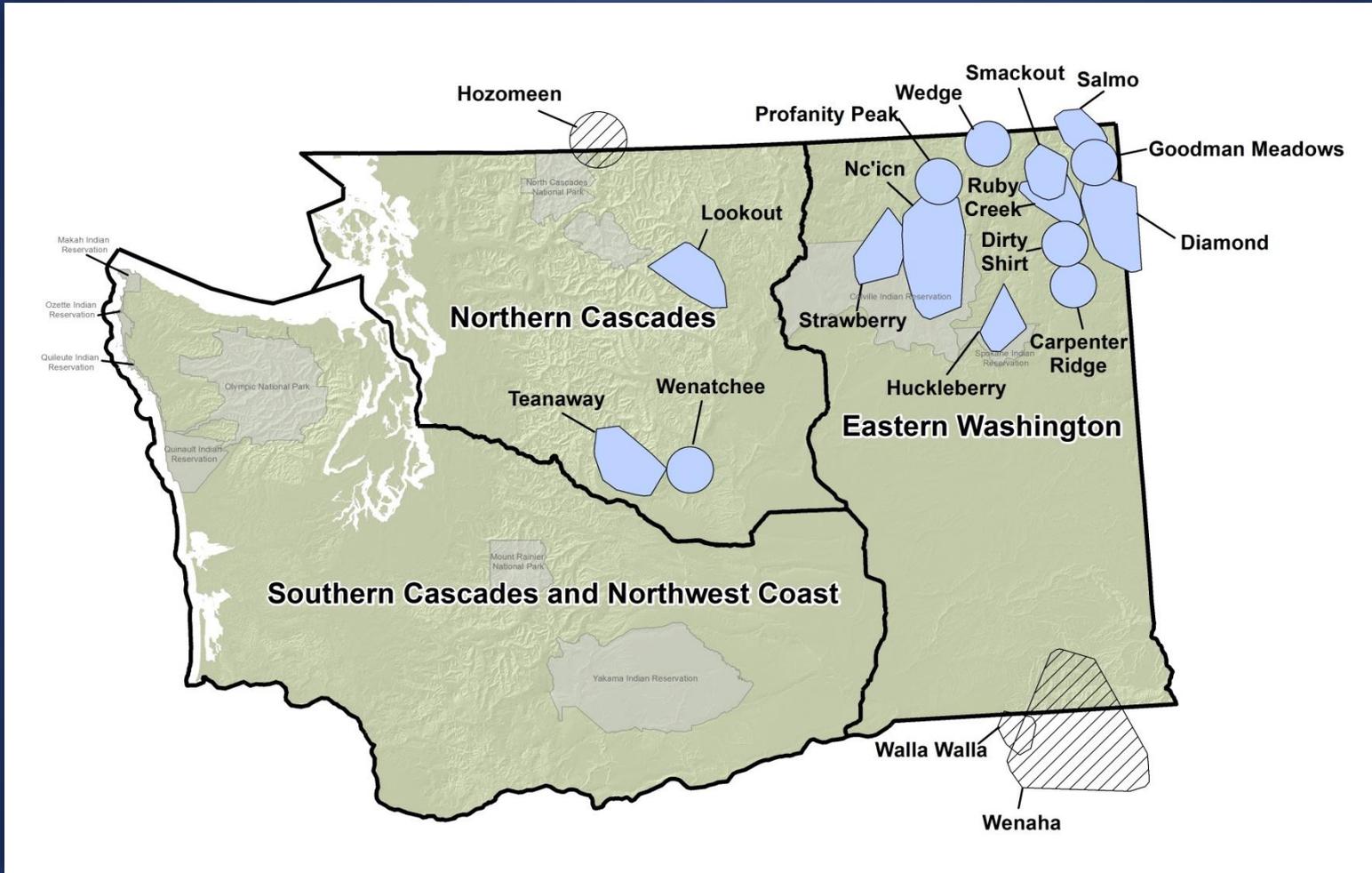


Wolf Depredation

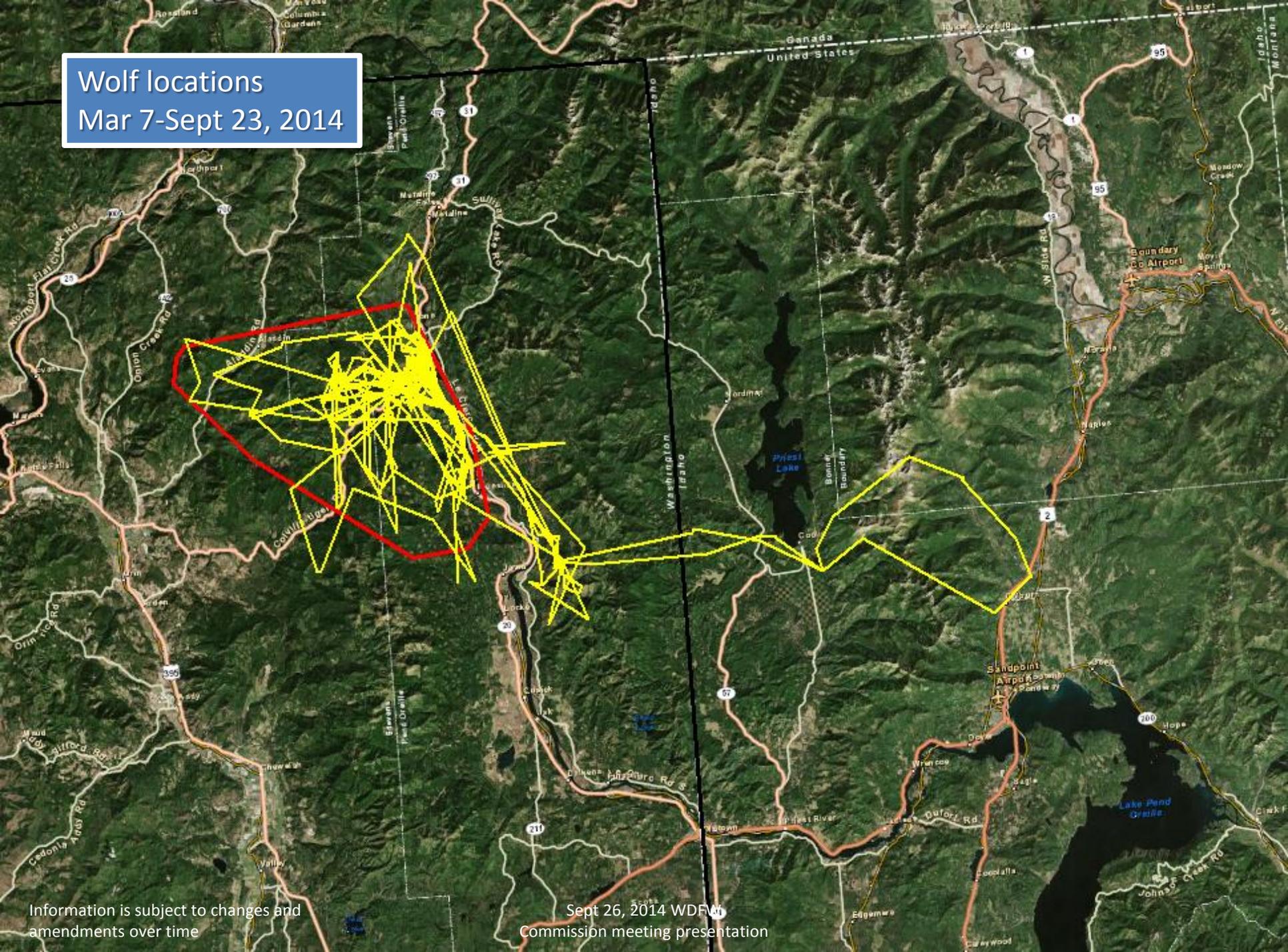
- Sept 12, 2014
- 1 calf & 1 cow killed



Ruby Creek Female



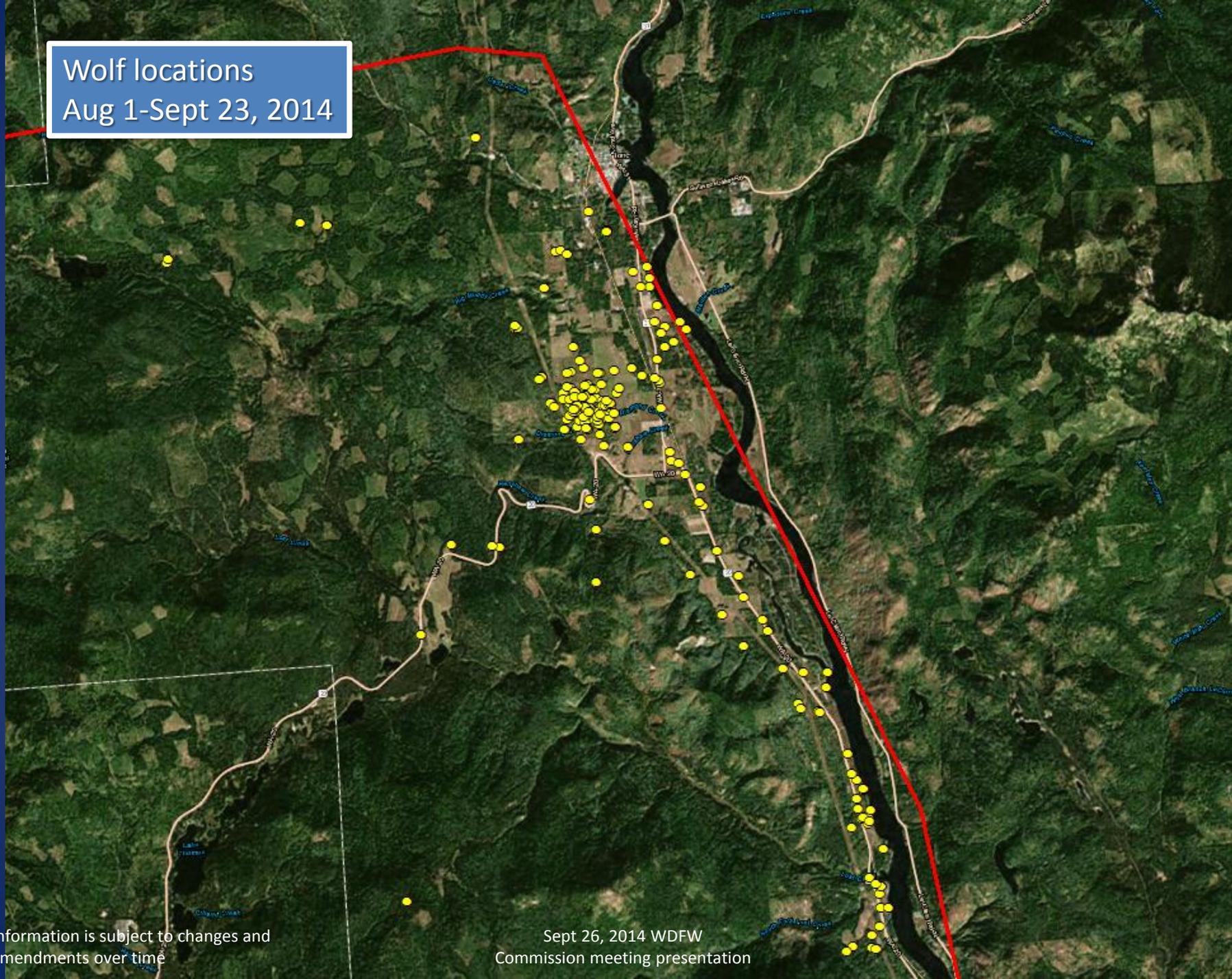
Wolf locations
Mar 7-Sept 23, 2014



Information is subject to changes and amendments over time

Sept 26, 2014 WDFW
Commission meeting presentation

Wolf locations
Aug 1-Sept 23, 2014



Information is subject to changes and amendments over time

Sept 26, 2014 WDFW
Commission meeting presentation

Ruby Female Behavior

- Acclimated to the area inhabited by people, pets, and livestock
- Frequently visits area where dogs reside
- Observed “playing” with female dog
- Observed around horses, calves, goats, and chickens
- Has not depredated or chased livestock
- Chased by livestock
- Frequently hazed by WDFW staff using rubber bullets, noise makers, etc. but continues to return to site

Cost Estimate: Ruby Creek Female

Ruby Female Preliminary Cost Estimate July 19 - September 23, 2014	
Description	Cost
WDFW Wildlife Staff (~202 hours)	\$6,312
WDFW Law Enforcement (~12 hours)	\$636
Equipment	\$1,375
Total	\$8,323*

*Total does not account for staff time addressing calls to WDFW

Conclusions

- Wolf population increasing
- Wolf Plan anticipated wolf-livestock conflict
- Stay the course with Wolf Plan
- Where can we improve?



Public Response

Wolf Advocates	Livestock interests
Use more non-lethal tools	Follow through with removal directive
Move livestock	Producer pushed off private property
Lack of transparency	Not sharing wolf location data
Impacts to recovery	Impacts to producer
Petition to Governor's Office	County Resolutions

Challenges

- ✓ Restore self-sustaining wolf populations
- ✓ Manage Wolf-Livestock Conflicts
- ✓ Maintain Healthy Prey Base
- ☐ Develop Public Understanding and Promote Coexistence

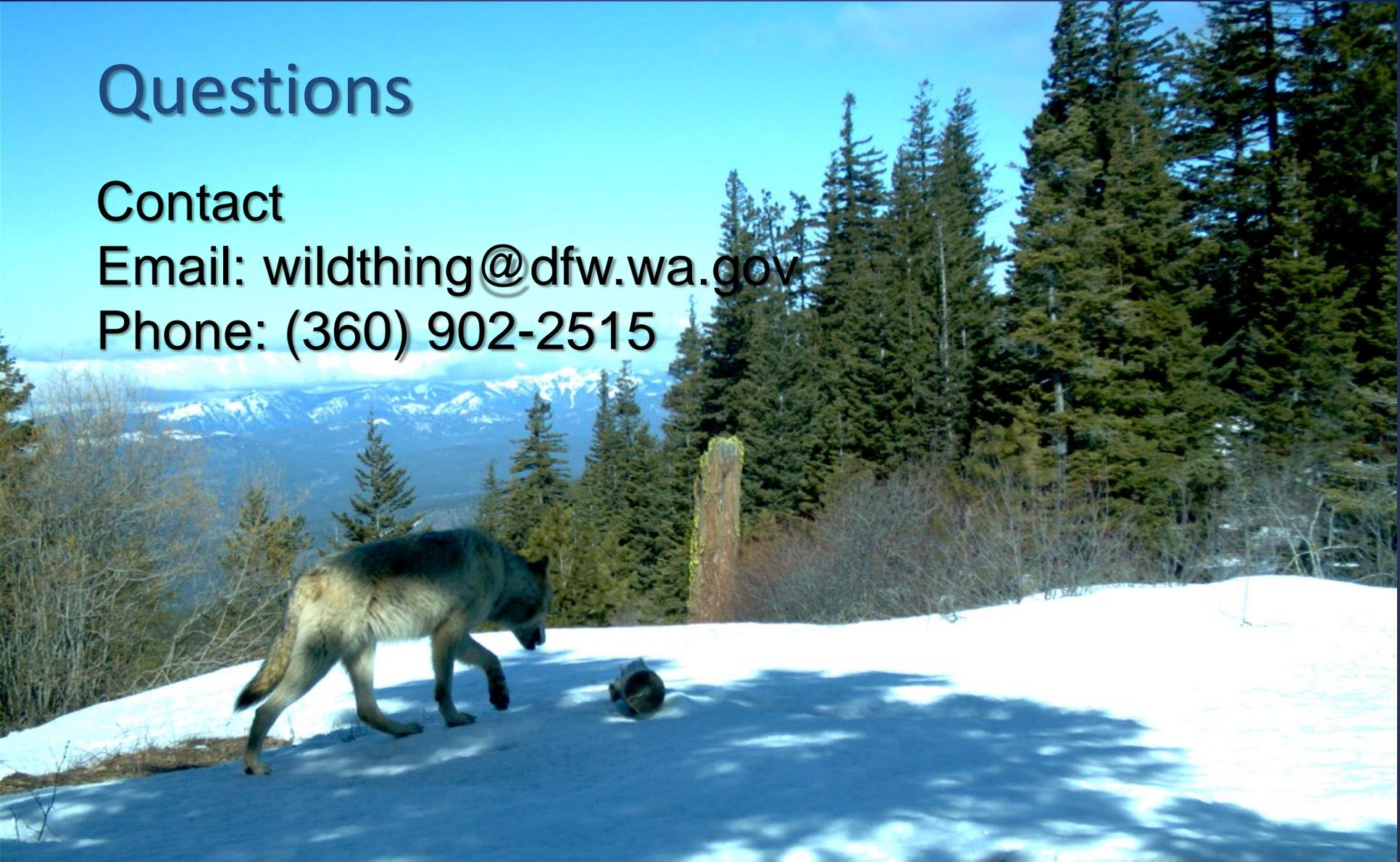


Questions

Contact

Email: wildthing@dfw.wa.gov

Phone: (360) 902-2515



Teaway Pack (Photo courtesy of Western Transportation Institute)