

SW Wolf SDM Workshop: Background & Purpose

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**Wolf SDM Project, SW Webinar
10 June 2011**

Today's agenda

- Review the motivation, purpose, and approach of the Wolf SDM project
- Review the results of the August 2010 workshop for the SW region
- Discuss the purpose and proposed agenda for the SW workshop next week





Motivations

In the past 5 years,

- FWS has been petitioned or sued to
 - List wolves in the Northeast
 - Delist wolves in the NRM
 - Reinstate the listing of wolves in the NRM
 - Delist wolves in the WGL
 - Delist wolves in MN
 - Delist wolves in WI
 - Reinstate the listing of wolves in the WGL
 - Develop a recovery plan for Mexican wolves
 - Develop a national lower-48 recovery plan
 - Develop a Colorado recovery plan and designate critical habitat
 - And others...



Frustrating?

- All of these petitions are proposed courses of *action*
- Behind each are implicit assumptions about
 - The long-term vision for wolves (objectives)
 - How wolves respond to regulations and management (models)
 - Which action best achieves the objectives (analysis)
- None of these objectives, models, or analyses are necessarily in agreement



Is there an alternative?

- Turn the process around
- Start by articulating objectives, then think through science and analysis, to arrive at a best course of action
- This is the structured framework we want to undertake

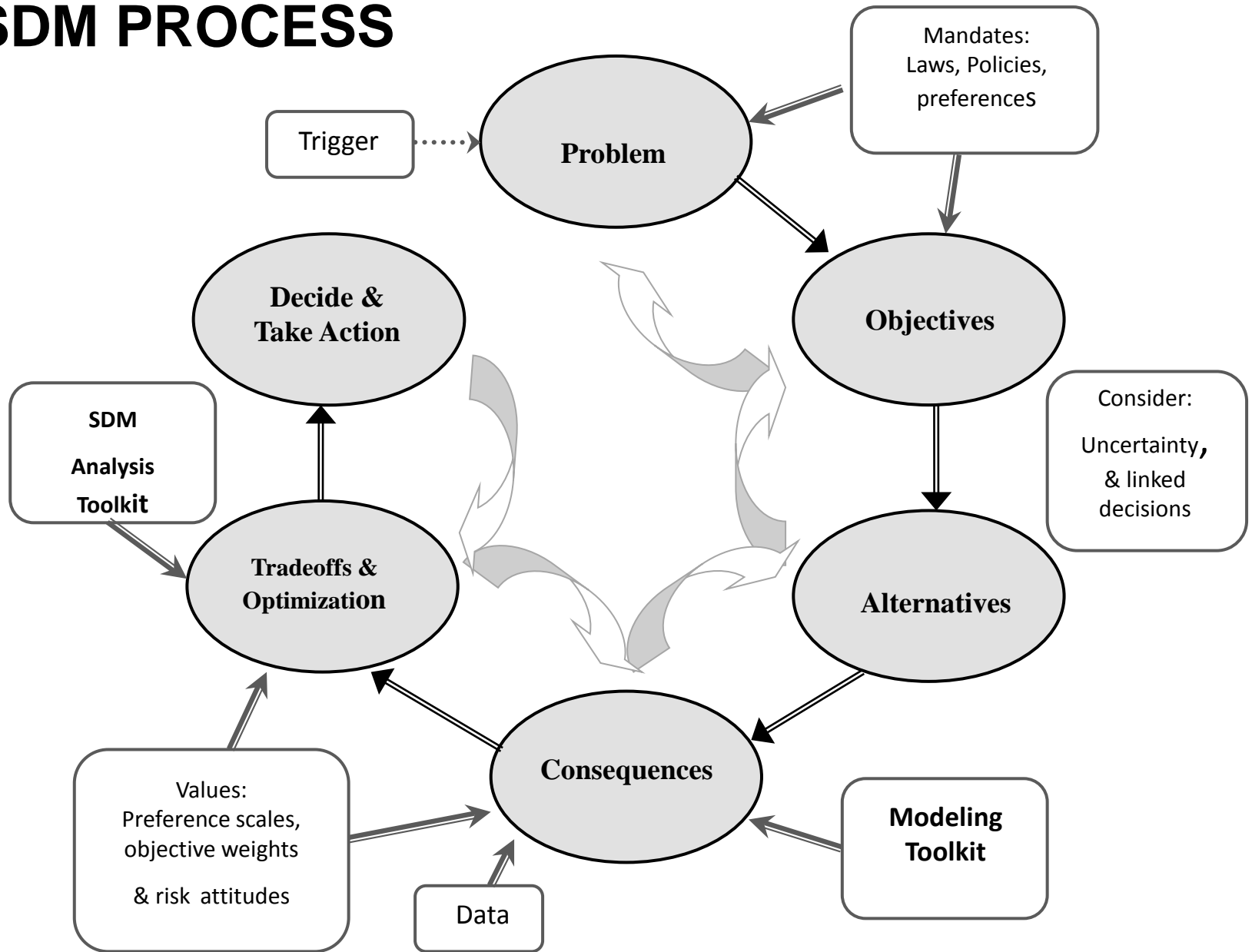


Two key elements of SDM

- Problem decomposition
 - Break the problem into components (separate policy from science).
 - Analyze relevant components.
 - Recompose the parts to make a decision.
- Focus on values
 - Determine objectives (values) first, and let them drive the analysis.
 - Contrast this with intuitive decision-making, which usually jumps straight to alternatives.



SDM PROCESS



Past SDM Efforts

- The Service conducted an exploratory, internal SDM process from 2008 to 2010 to identify possible wolf units for listing consideration
- Involvement of state and tribal partners, as co-managers of the resource, is important to the Service
 - In August 2010, started over, with the States
- Some of the material from that internal project carried through
 - A rough framework for the question
 - The taxonomic review that was commissioned



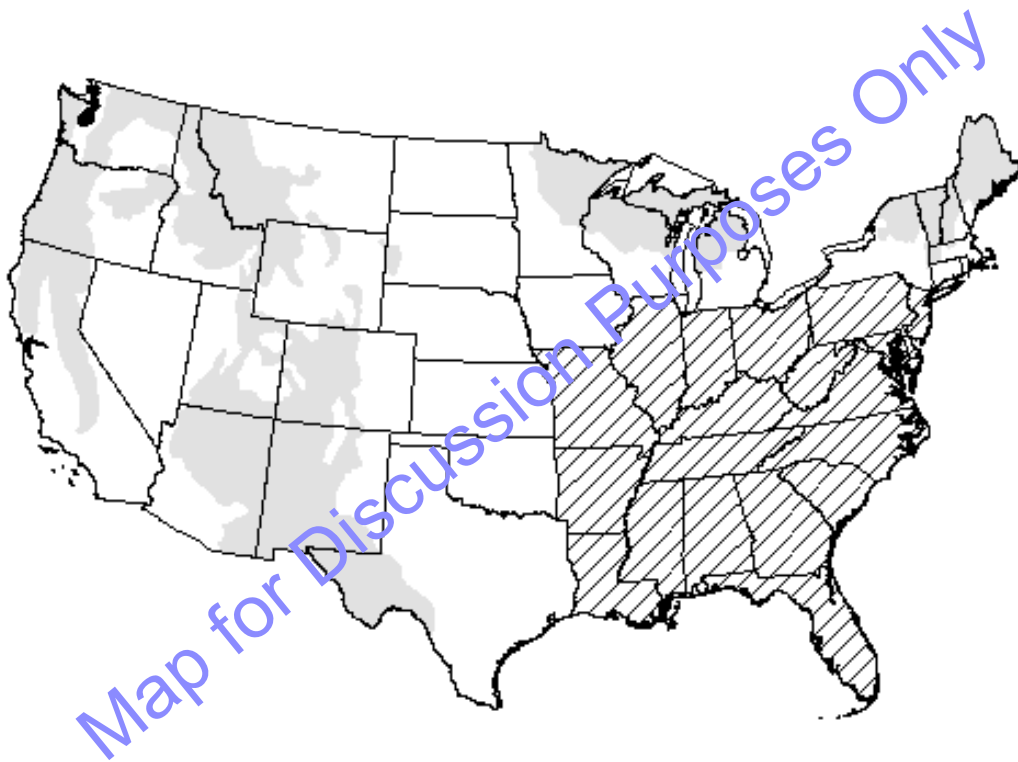
August 2010 SDM Workshop

What we want to attempt

- Suppose the ESA had just been enacted and we were evaluating wolves under the Act for the first time
 - Today's biological status
 - Today's understanding of the law
- How would we proceed?



Some Questions



- Where can wolves exist?
- Where *should* wolves exist? What does the ESA require? What does the public want? What can the public tolerate?
- Which areas have sustainable populations at the current time?
- Which populations need active recovery and which simply need continued protection?

Broad Framework

- Identify geographic units for assessment (FOCUS of workshop)
 - What taxonomic or sub-taxonomic units (sp, ssp, or DPS) make sense in terms of assessing wolf status as it pertains to ESA requirements, public interests, our capability for conservation, and other objectives?

- Status assessments
 - What is the current status of wolves in those units, and how should each be classified under the ESA?

- Listing/reclassification/delisting decisions
 - Promulgate one or more rulemakings to implement this understanding.

- Recovery planning
 - Proceed with recovery planning for any listed entities.



Purpose

- Identify a set of geographic units that reflect the taxonomy and population biology of wolves, and which
 - Conform to the ESA
 - Promote an comprehensive vision for wolf recovery in the lower 48, as it relates to North America
 - Allow delisting to proceed with the same units as listing
 - Capture other relevant objectives
 - Have the support of stakeholders, particularly those with a cooperative management role



Premise

- Decisions about wolves under the ESA are contentious...
 - In part because there are many stakeholders with competing objectives.
- By recognizing this as a multiple-objective decision and following a structured process...
 - We hope to engender positive dialogue and craft a solution that serves the needs of stakeholders within the legal constraints of the ESA.

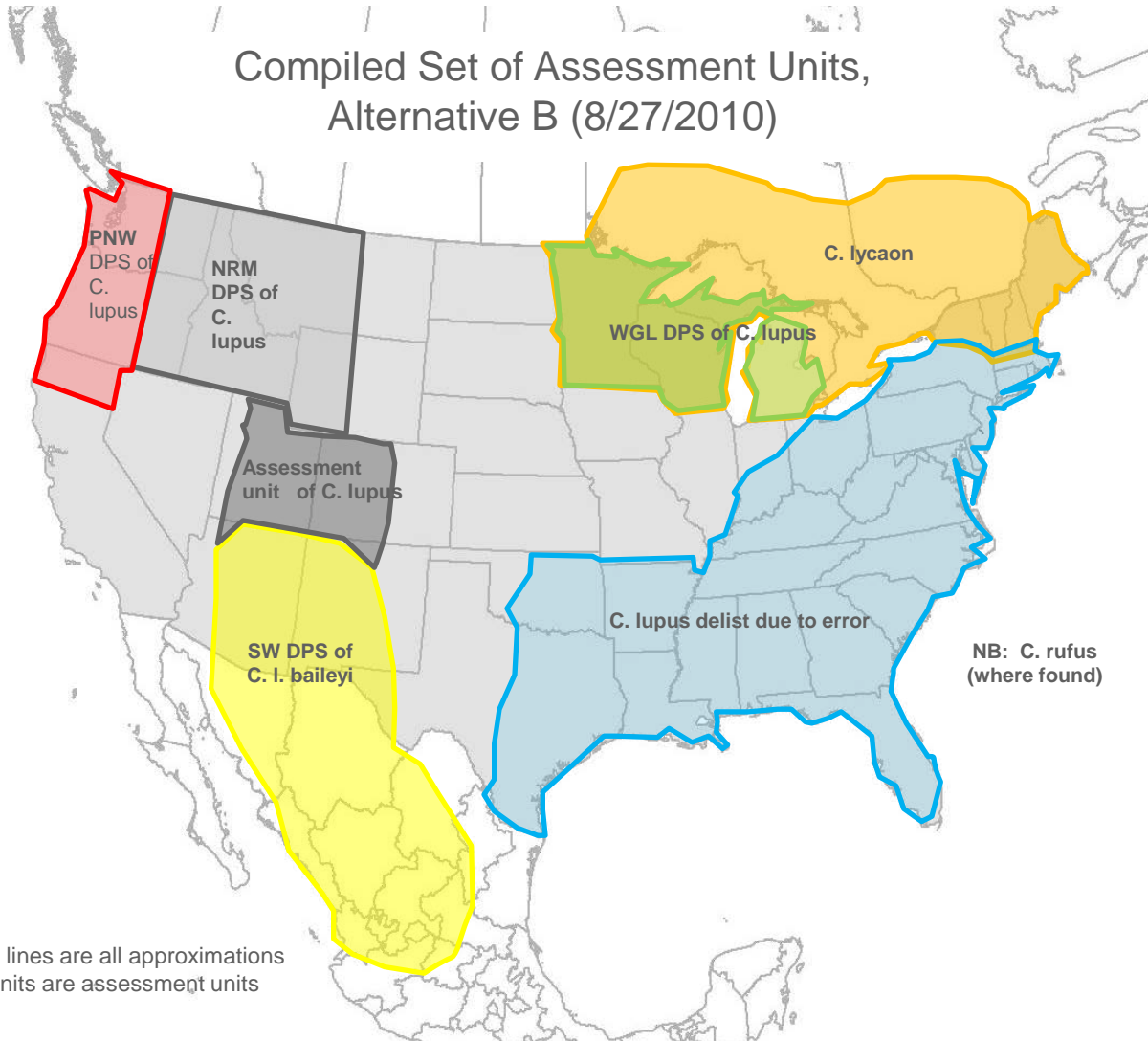


Workshop Outcomes

- Emerging National Vision
 - Four key components of wolf diversity: PNW, NRM, WGL (and related Lycaon), SW
 - Details within those regions still need work



Compiled Set of Assessment Units, Alternative B (8/27/2010)

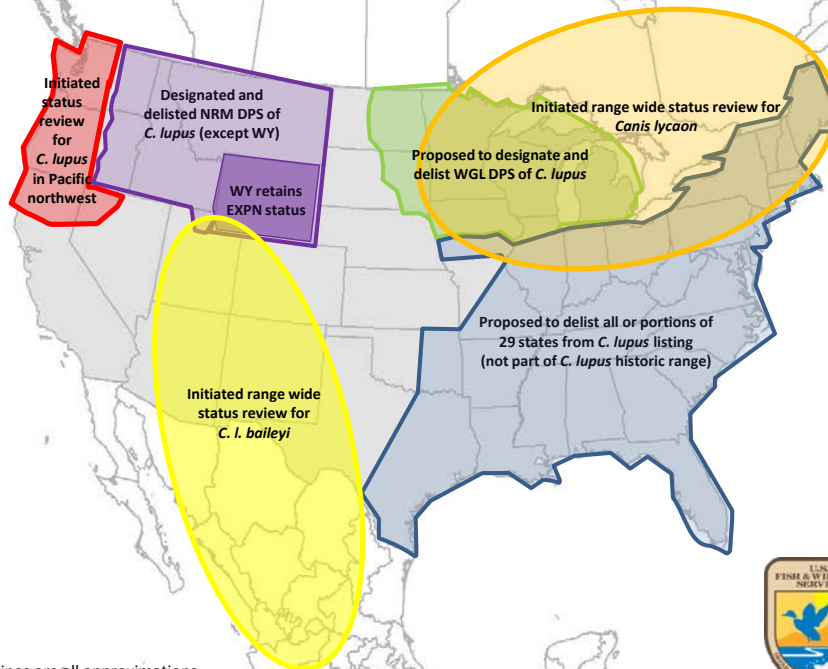


Note:

- (1) Map lines are all approximations
- (2) All units are assessment units



**U.S.F.W.S. actions taken on 5/5/2011
with respect to wolves in the
conterminous U.S. and Mexico**



Note: Map lines are all approximations



Southwest Analysis

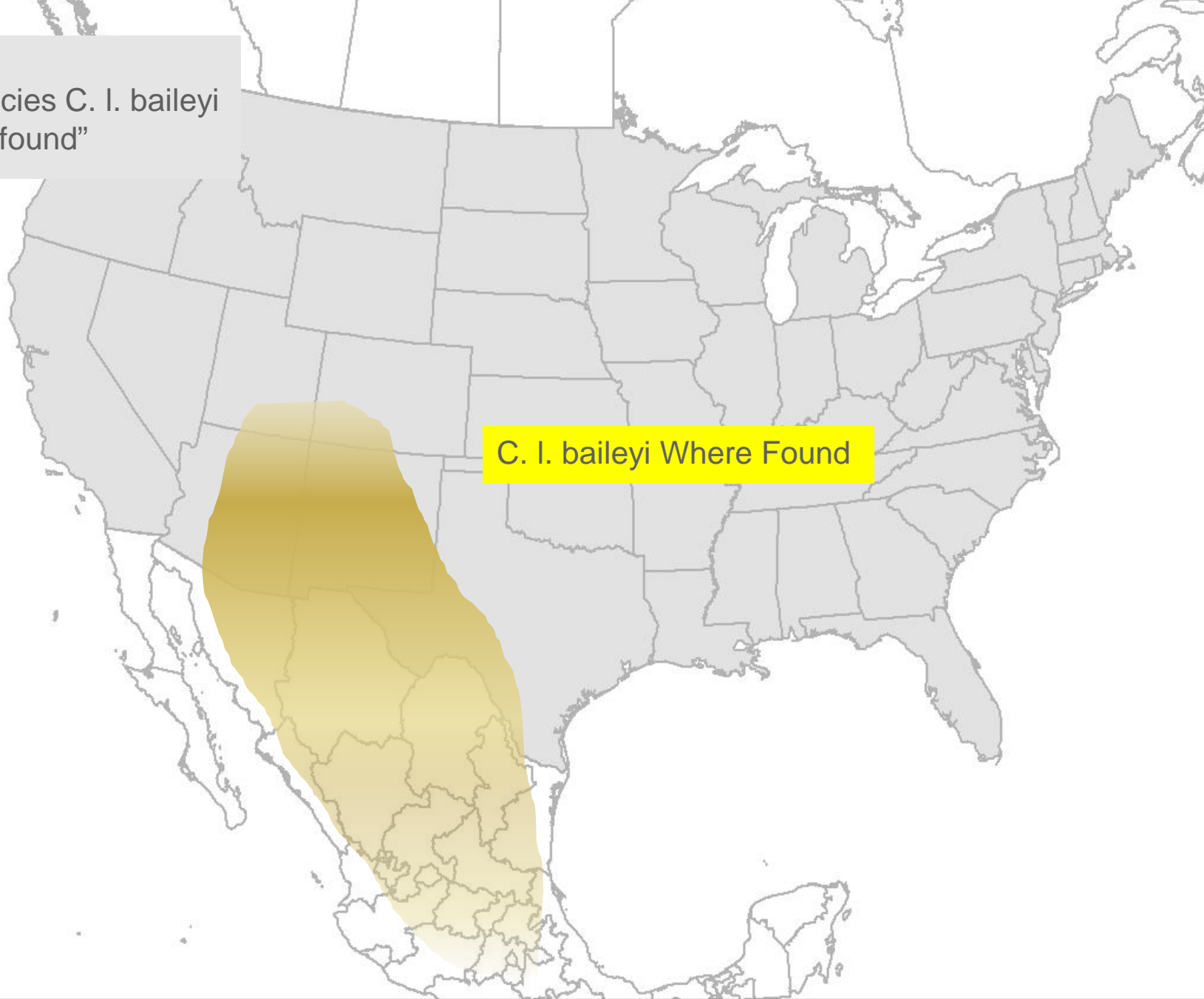
August 2010

Objectives

- Promote and sustain wolf recovery
 - *Maximize biological integrity within units*
 - *Maximize biological integrity across units*
- Maximize legal defensibility of the units, individually and collectively
- Promote State management of wolves
 - *Facilitate State management in the long-term (after delisting)*
 - *Facilitate State management in the short-term (prior to delisting)*
- Promote public values
 - *Minimize regulatory burden on landowners and producers induced by the ESA*
 - *Promote public acceptance through understandable units*
- Minimize State, Tribal, and Federal resources needed to achieve wolf recovery



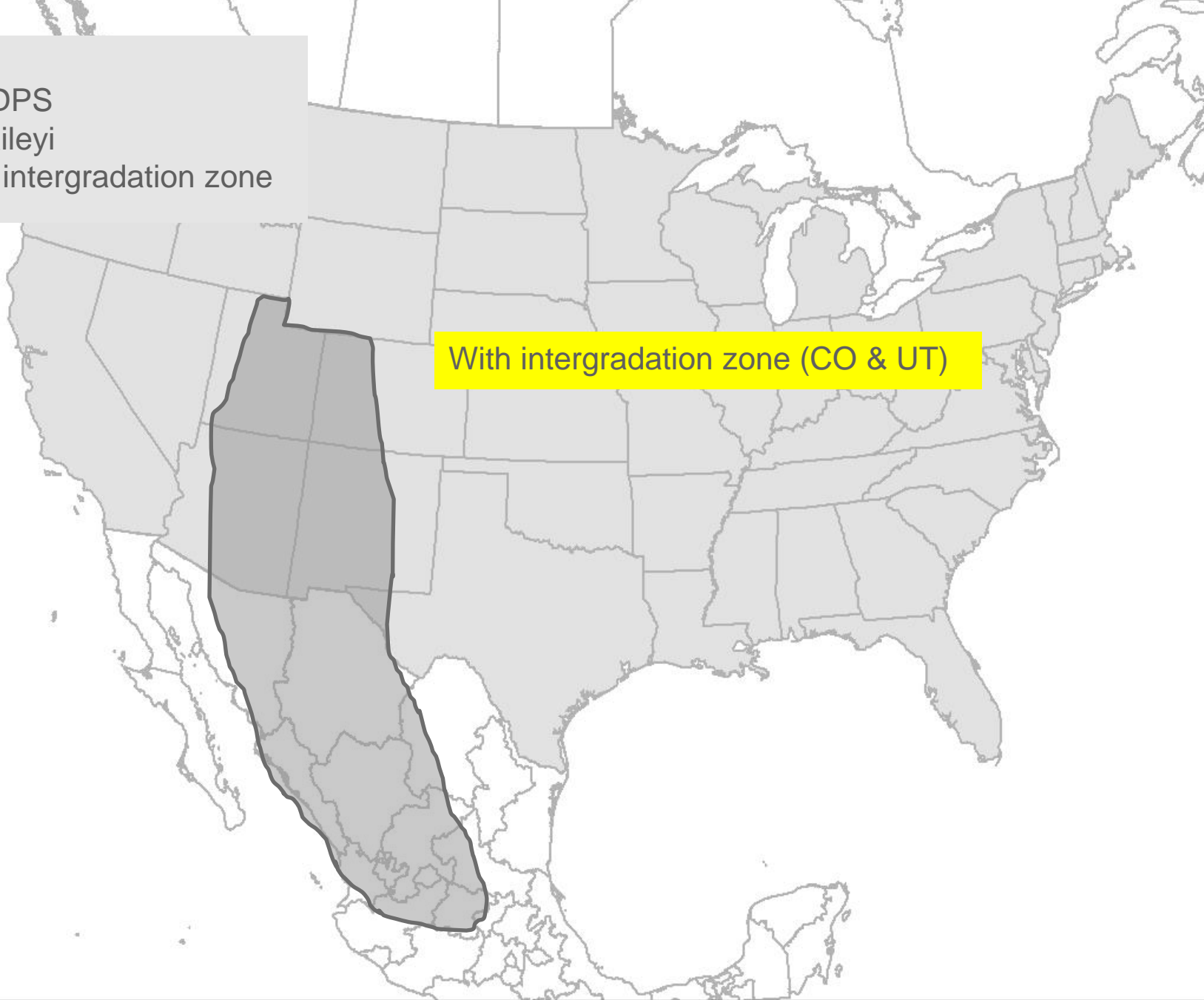
ALT 1
Subspecies *C. l. baileyi*
"where found"



C. l. baileyi Where Found

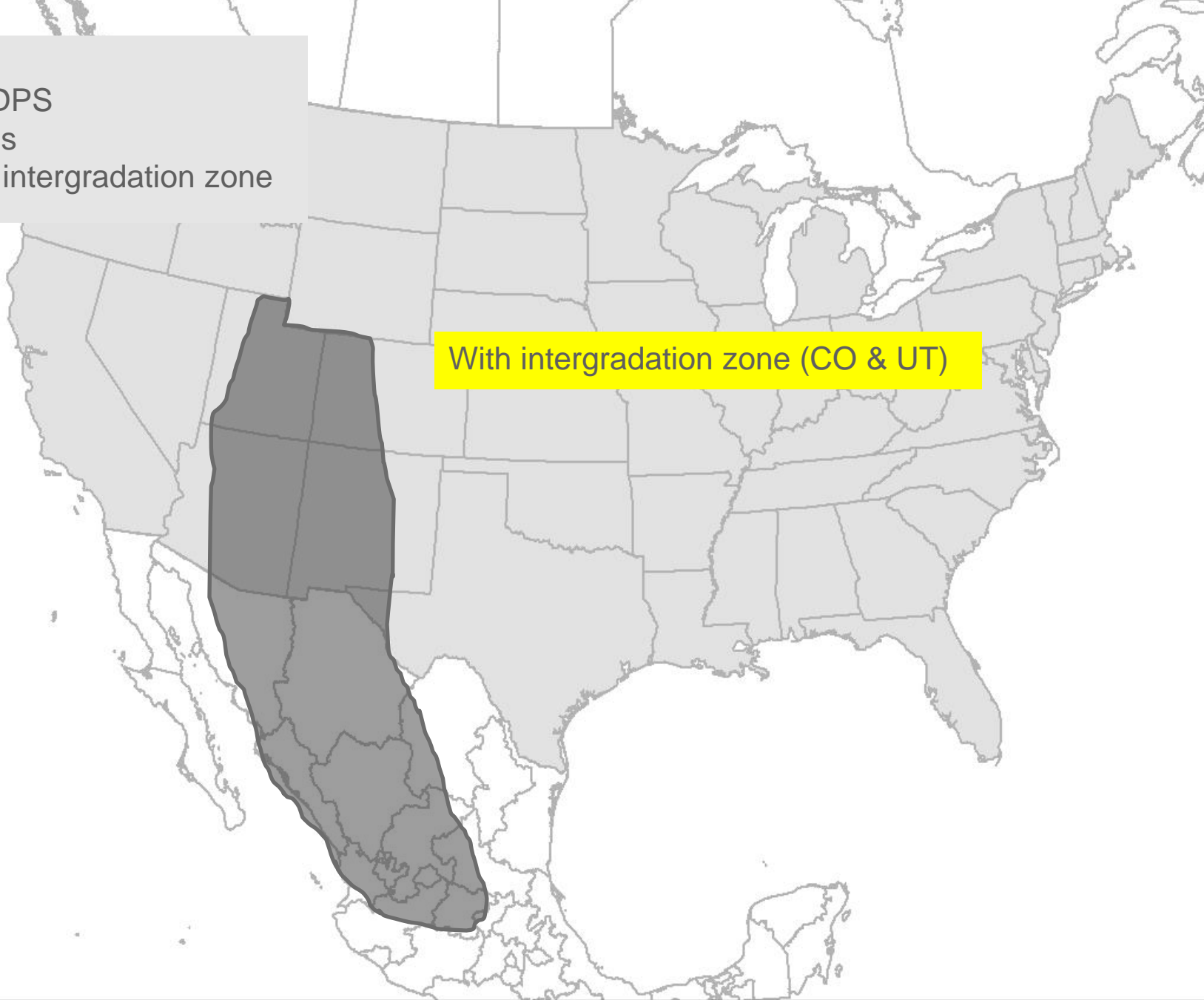
ALT 2
Single DPS
C. l. baileyi
Include intergradation zone

With intergradation zone (CO & UT)



ALT 3
Single DPS
C. lupus
Include intergradation zone

With intergradation zone (CO & UT)

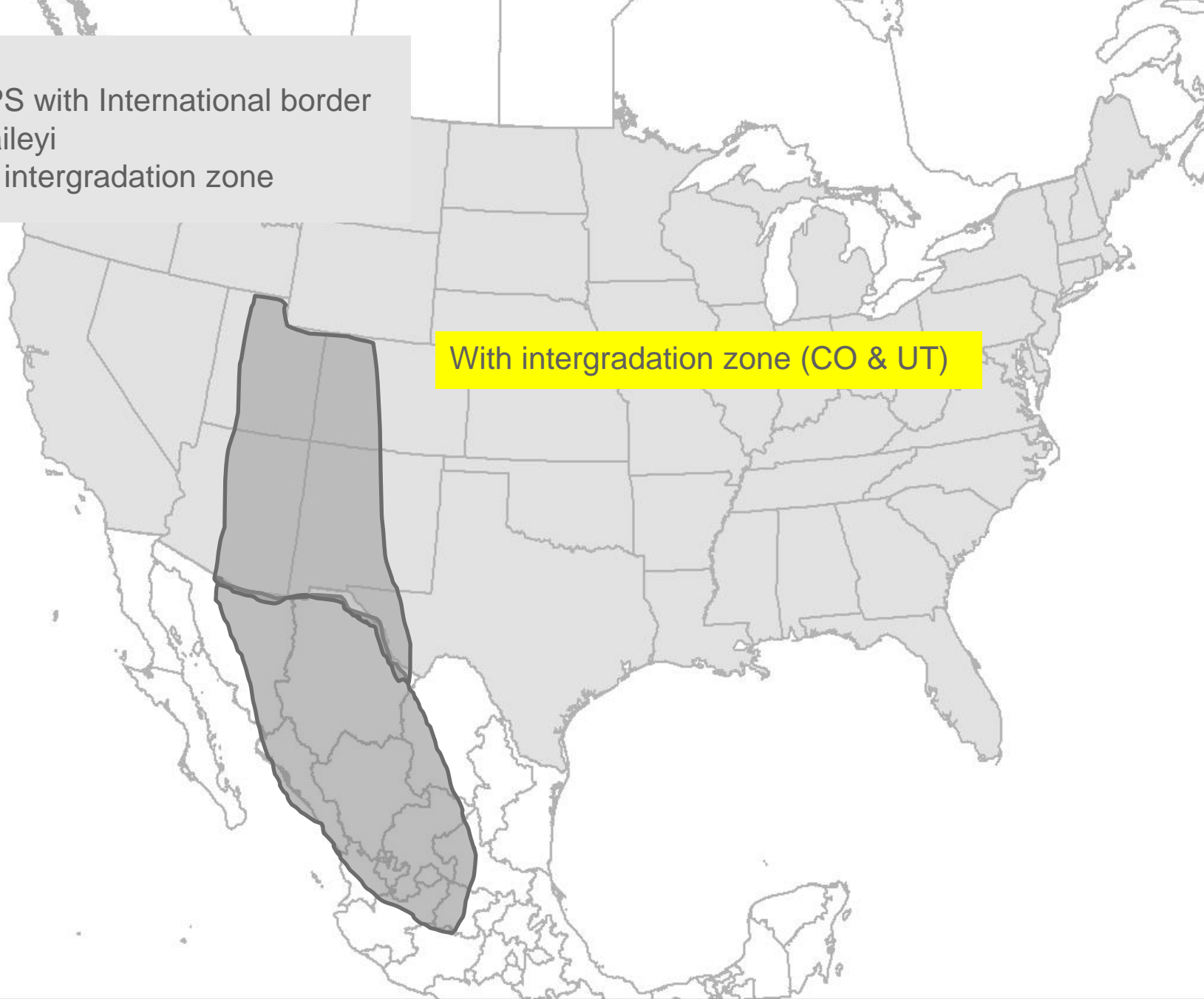


ALT 8

Two DPS with International border

C. l. baileyi

Include intergradation zone



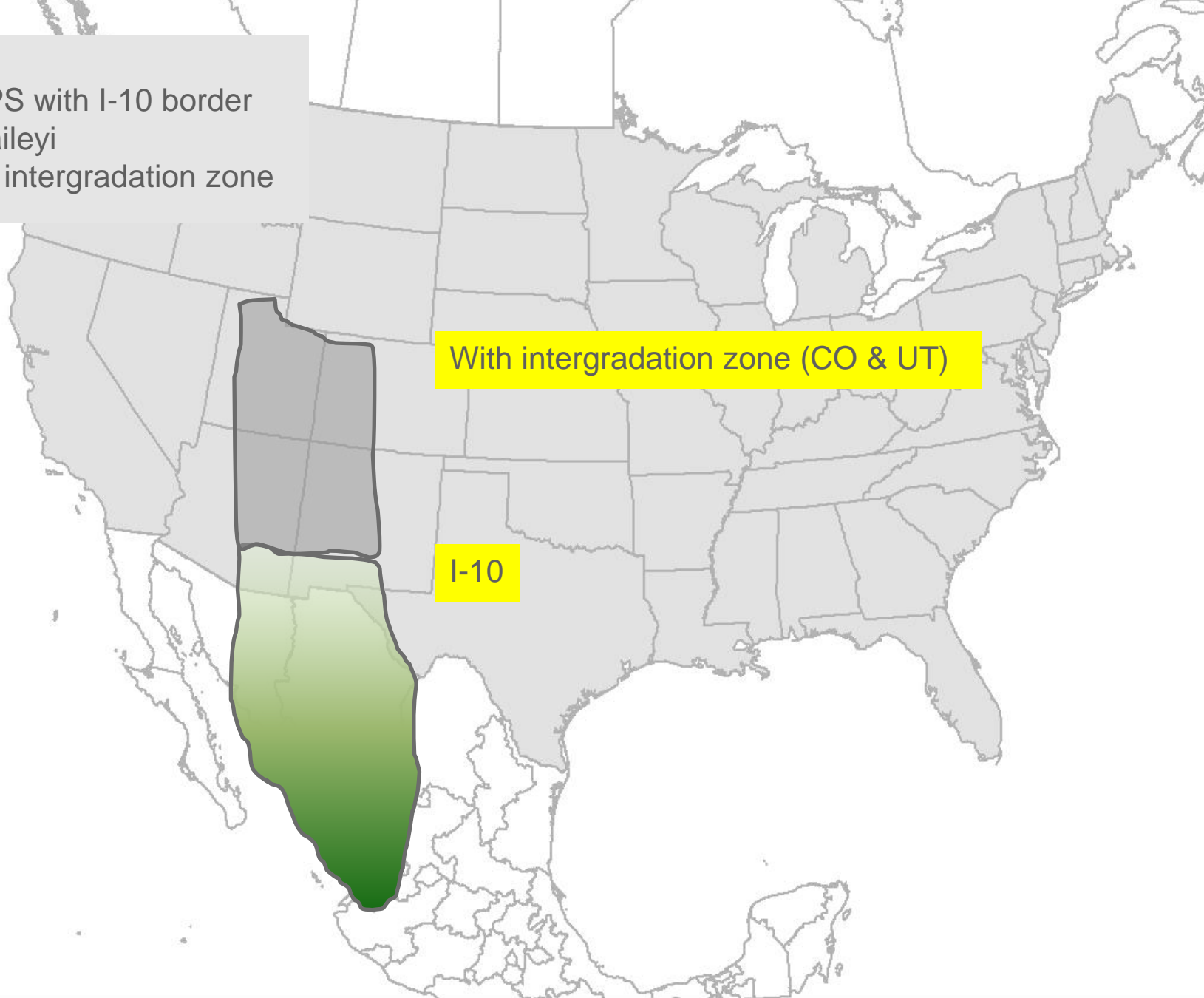
With intergradation zone (CO & UT)

ALT 12

Two DPS with I-10 border

C. l. baileyi

Include intergradation zone

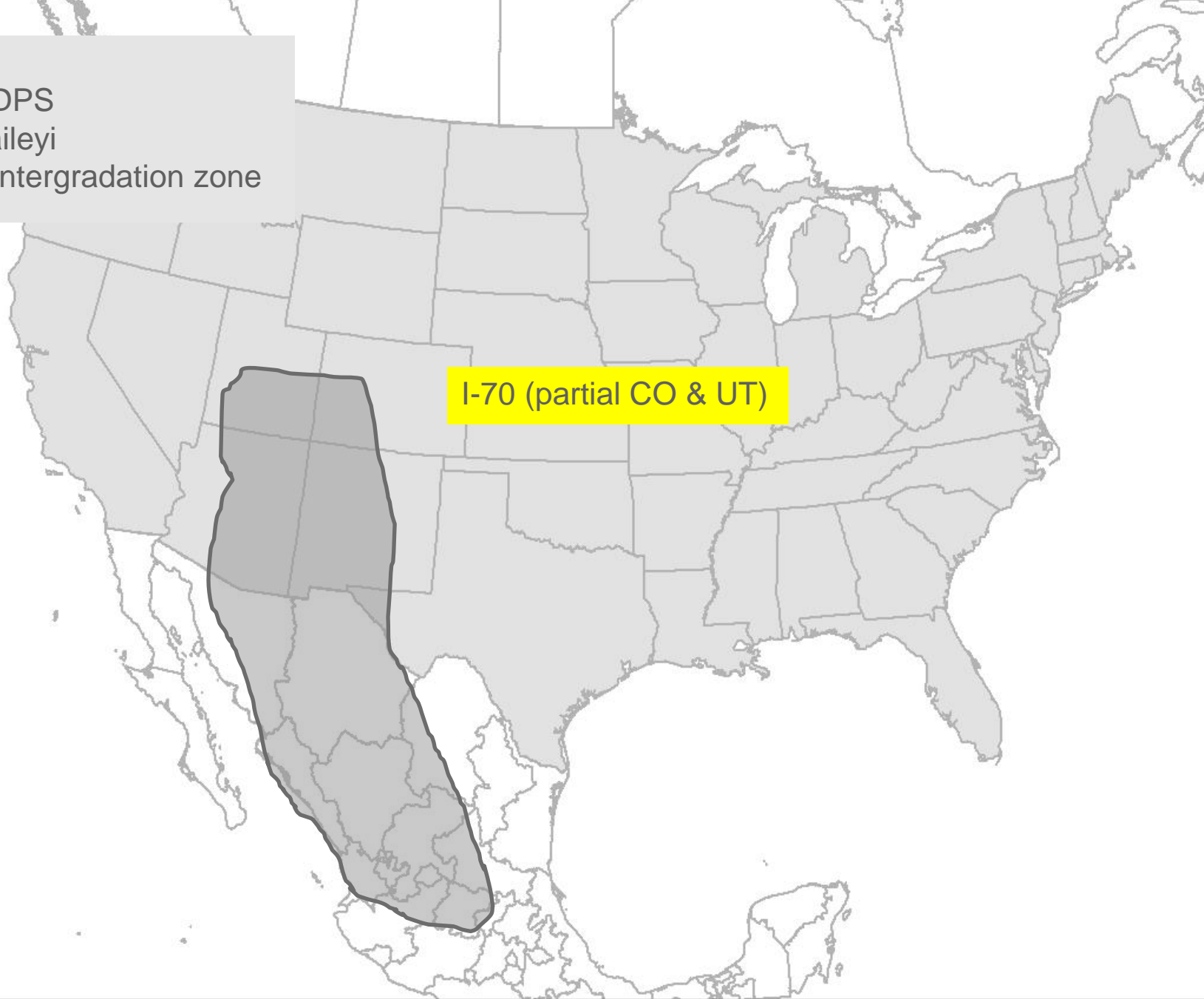


With intergradation zone (CO & UT)

I-10

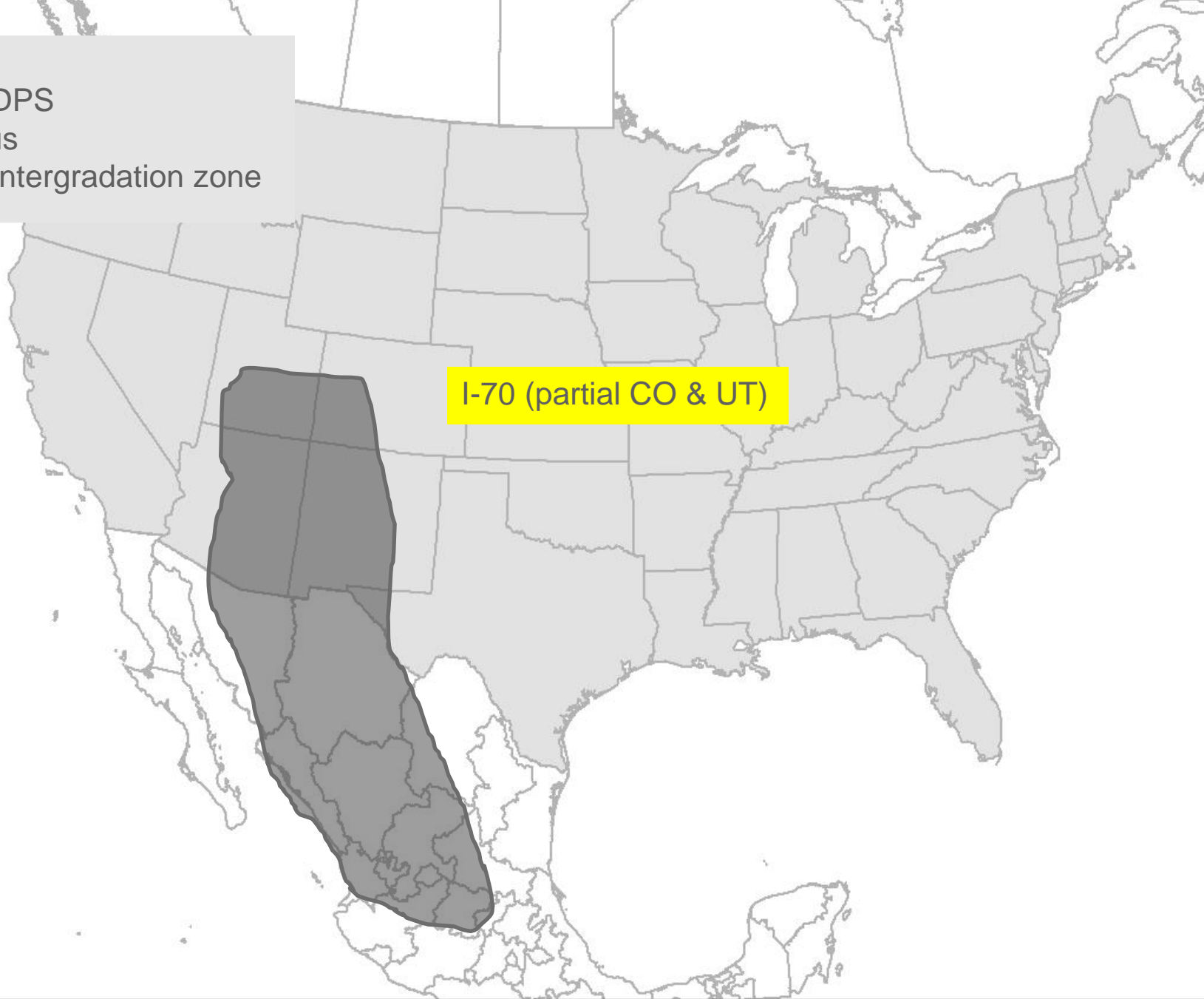
ALT 4
Single DPS
C. l. baileyi
Partial intergradation zone

I-70 (partial CO & UT)



ALT 5
Single DPS
C. lupus
Partial intergradation zone

I-70 (partial CO & UT)

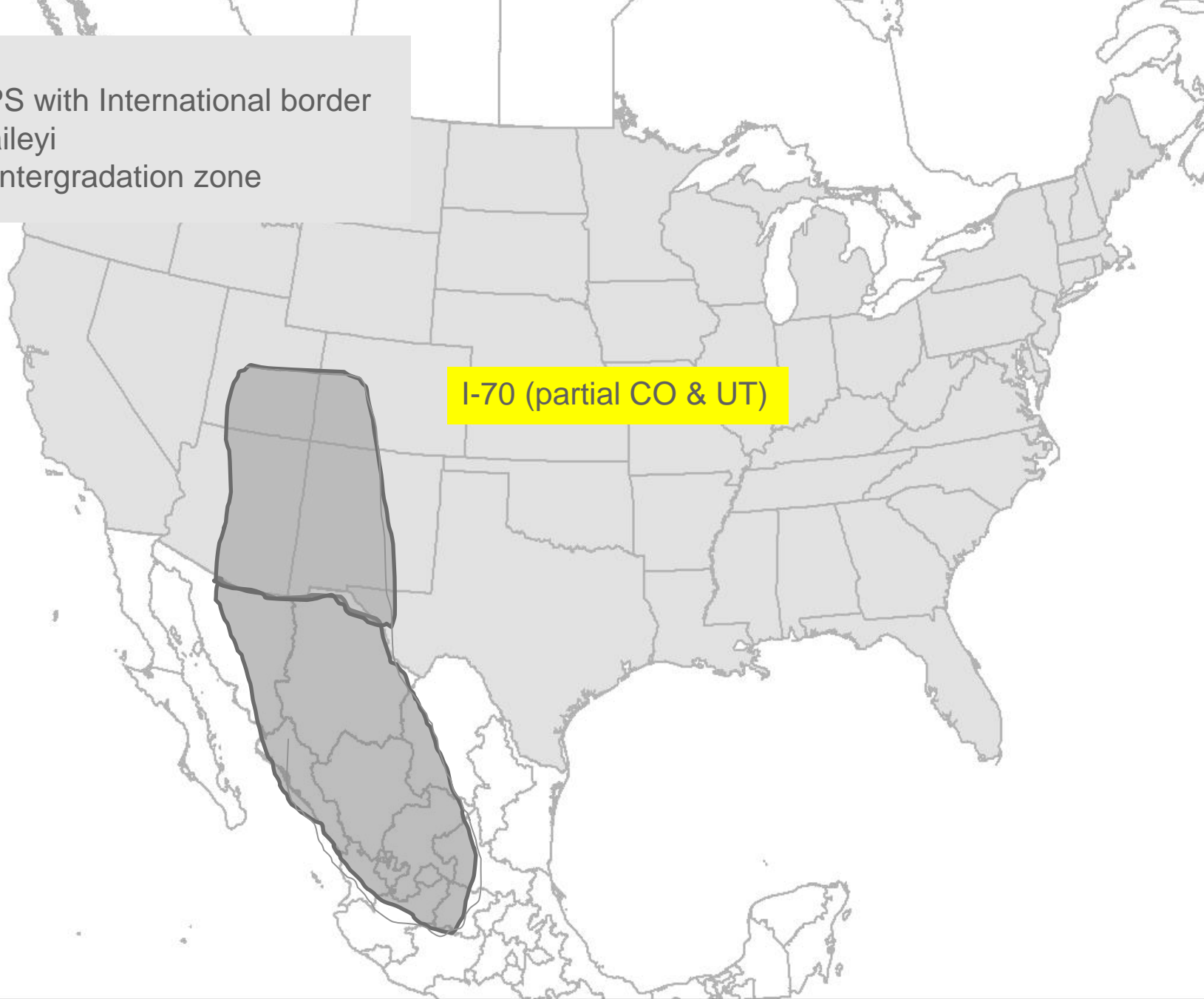


ALT 9

Two DPS with International border

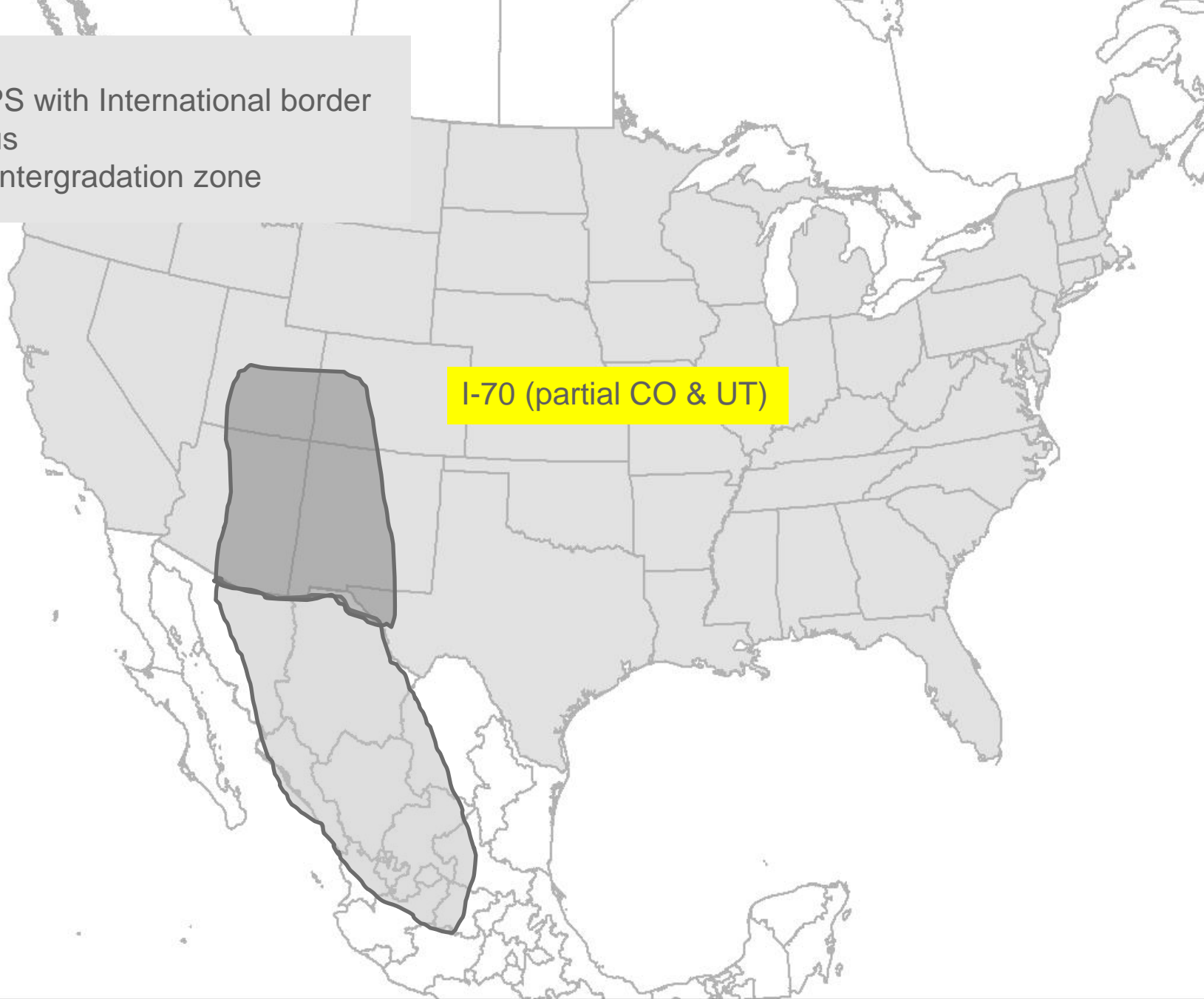
C. l. baileyi

Partial intergradation zone



I-70 (partial CO & UT)

ALT 10
Two DPS with International border
C. lupus
Partial intergradation zone



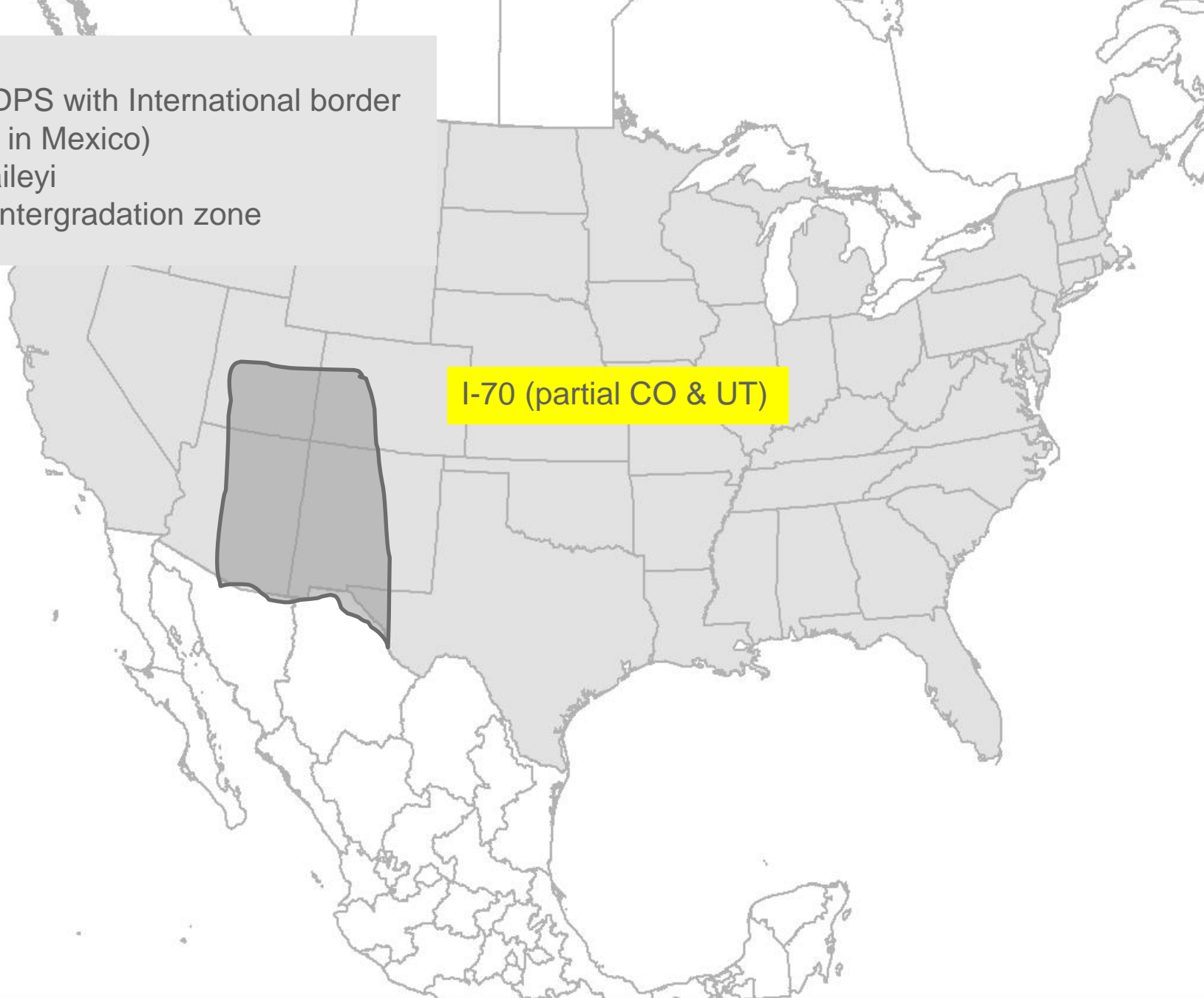
I-70 (partial CO & UT)

ALT 13

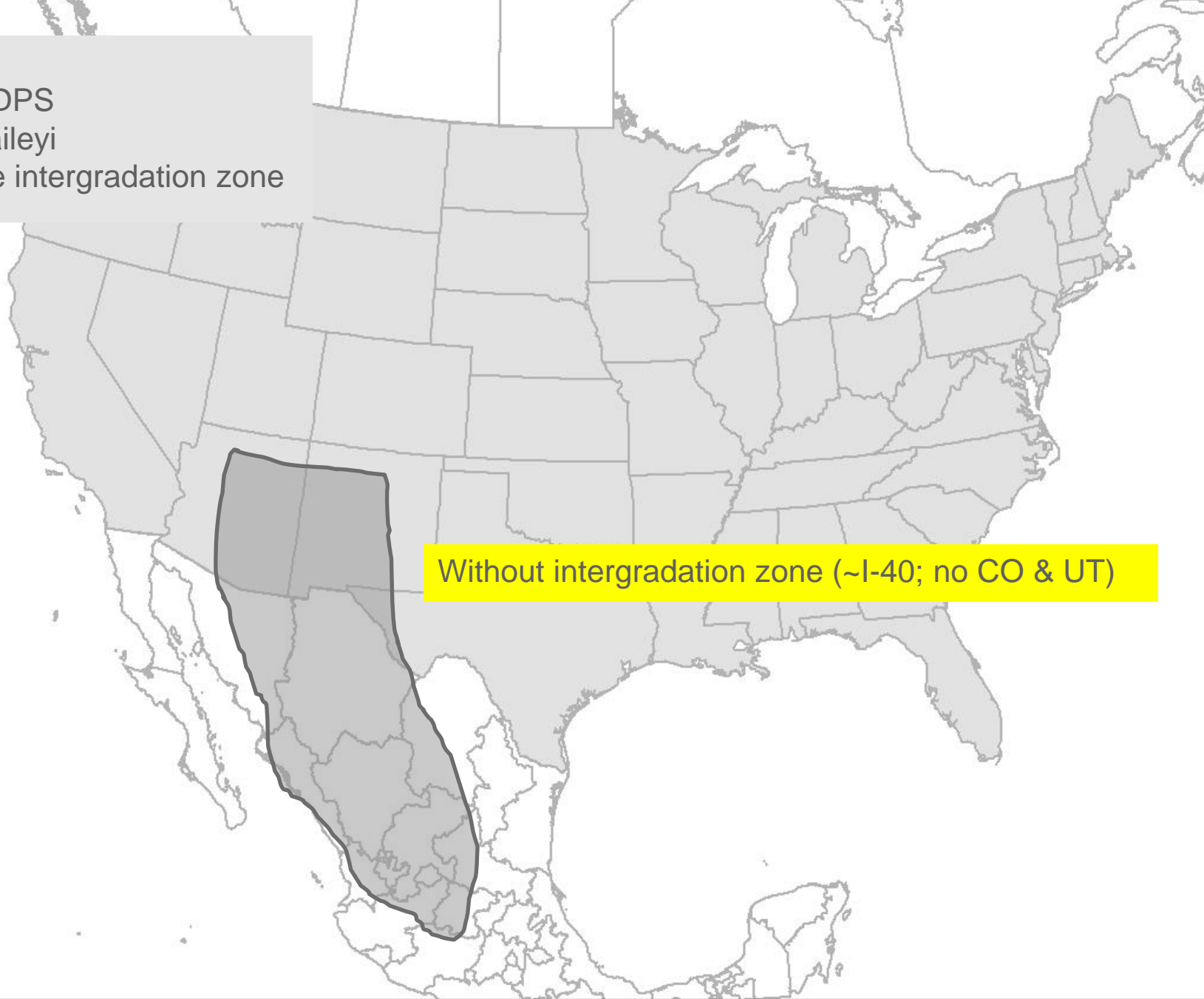
Single DPS with International border
(no unit in Mexico)

C. l. baileyi

Partial intergradation zone

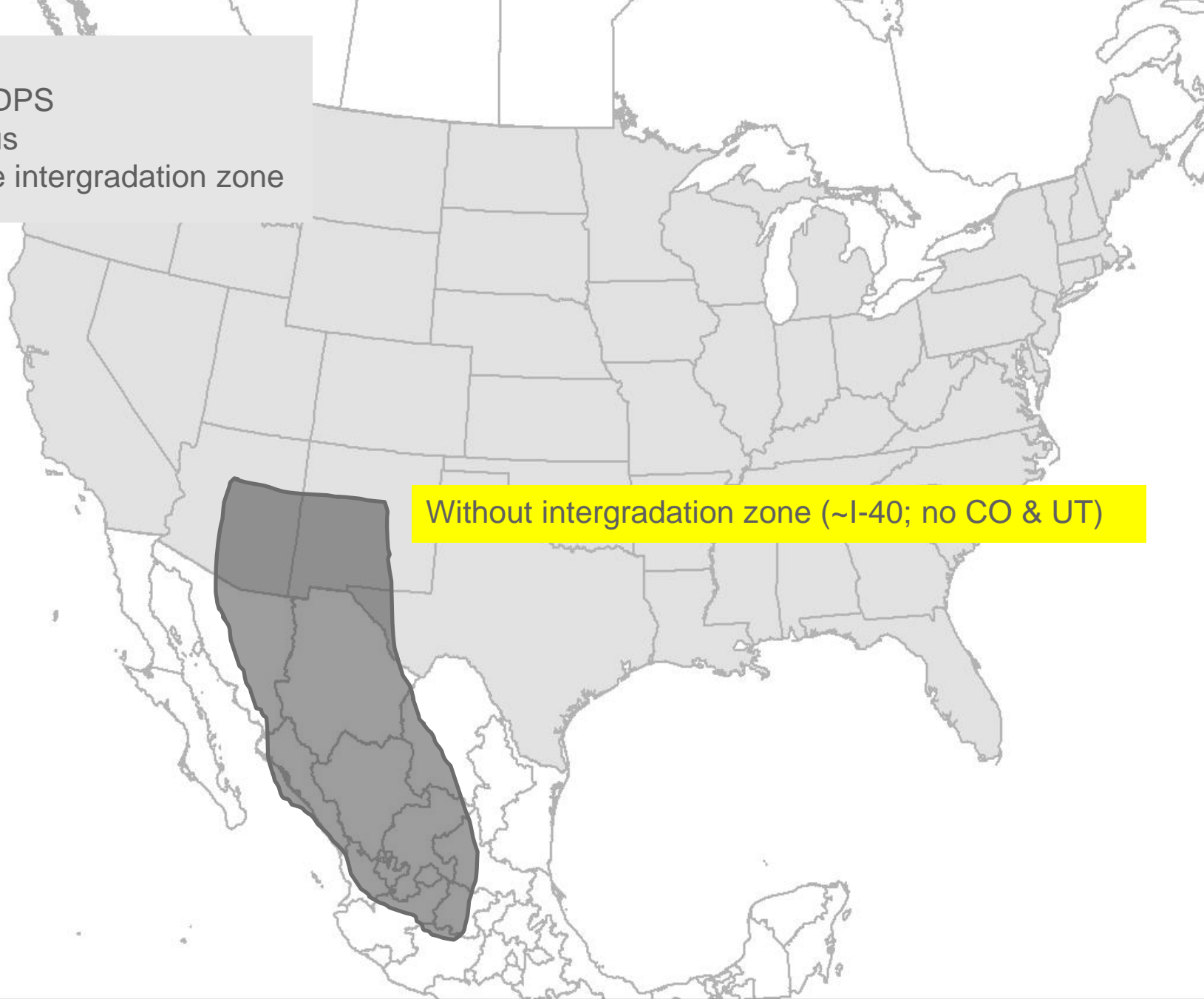


ALT 6
Single DPS
C. l. baileyi
Exclude intergradation zone



Without intergradation zone (~I-40; no CO & UT)

ALT 7
Single DPS
C. lupus
Exclude intergradation zone



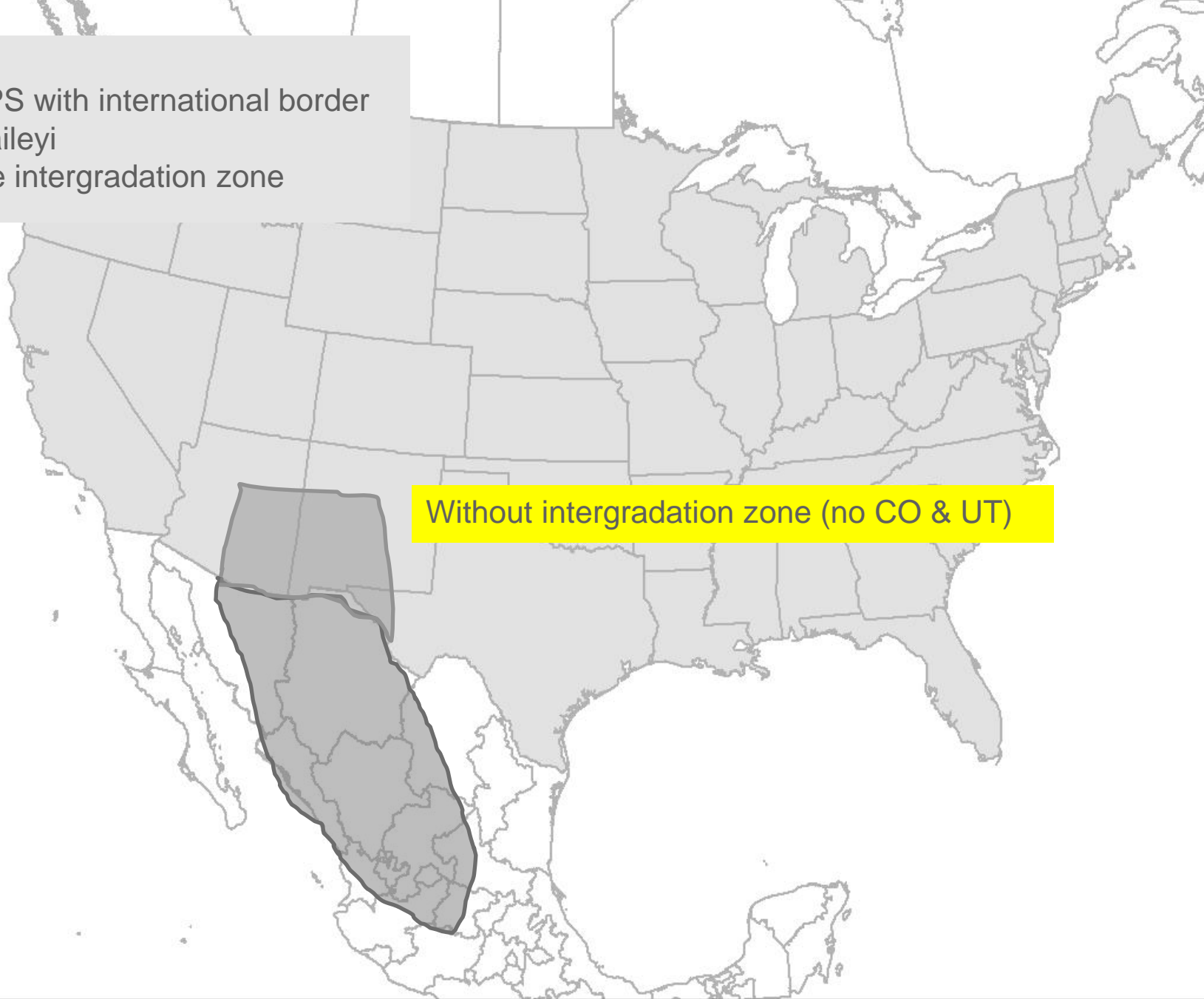
Without intergradation zone (~I-40; no CO & UT)

ALT 11

Two DPS with international border

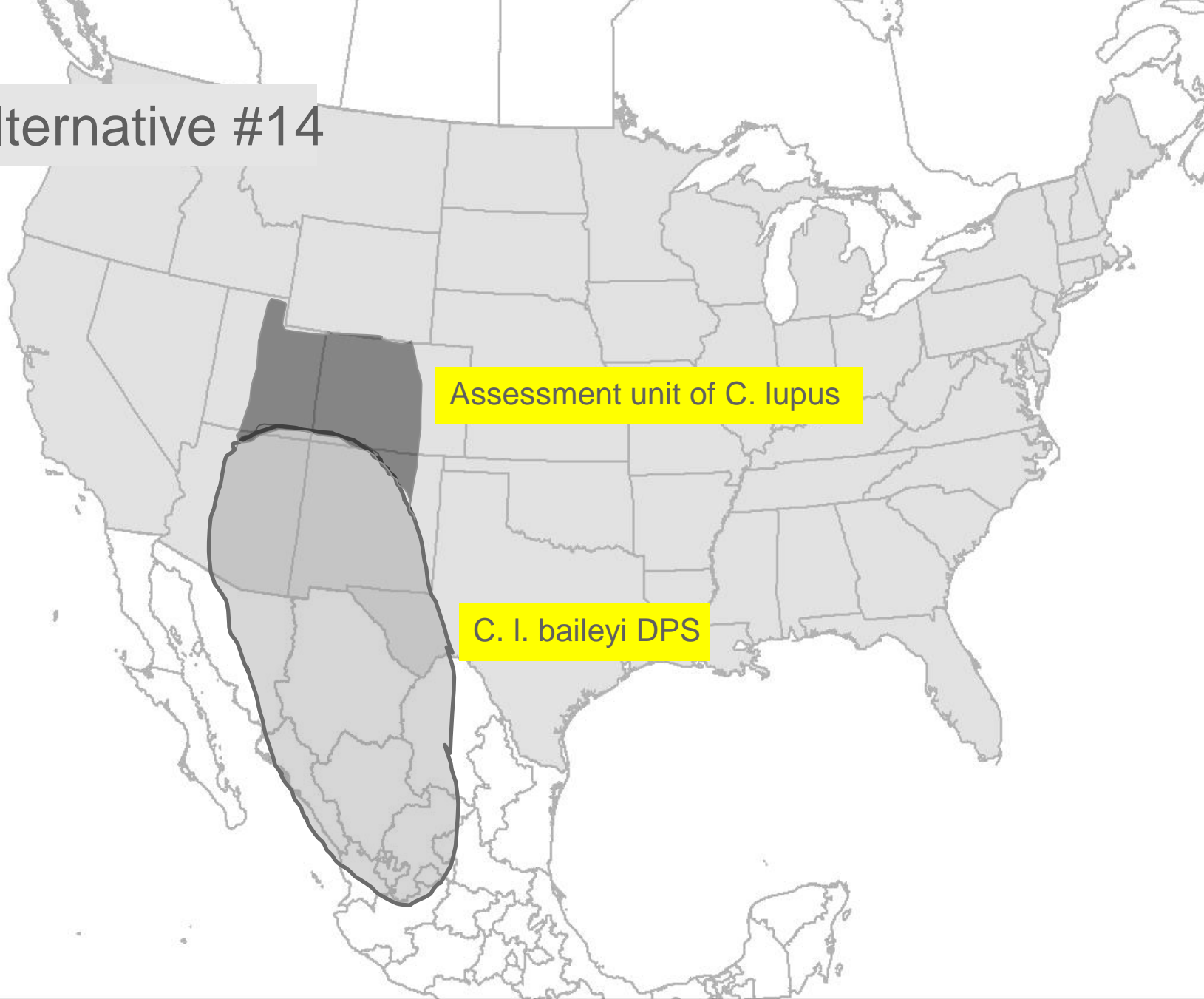
C. l. baileyi

Exclude intergradation zone



Without intergradation zone (no CO & UT)

Alternative #14



Assessment unit of *C. lupus*

C. l. baileyi DPS

Consequence Table

Management Alternative				Mean Response							
#				1a: Biol. Integ w/	1b: Biol. Integ b/	2: Legal Defense	3.c.i. Long-term state	3.c.ii. Short-term State	5.a. Public Burden	5.c.ii. Understandable	6.a. Efficiency
				0-4 max	0-1 max	0-3 max	0-2 max	0-# states max	1-5 min	1-6 max	yr min
Subspecies											
1	where found			2.7	1	2.8	0.43	0	5	4	73.6
DPS incl. CO/UT											
2	DPS (baileyi)			3.3	1	1.5	0.43	0	4	6	73.6
3	DPS (lupus)			3.3	1	1.2	0.43	0	4	6	73.6
8	2 DPS (baileyi) @ MX			2.8	1	1.3	0.3	0	4	6	61.7
12	2 DPS (baileyi) @ I-10			2.8	1	1.0	0.3	0	4	6	67.7
DPS to I-70											
4	DPS (baileyi)			2.7	1	1.8	0.43	0	3	6	75
5	DPS (lupus)			2.7	1	1.2	0.43	0	3	6	75
9	2 DPS (baileyi) @ MX			2.3	1	1.3	0.3	0	3	6	64.5
10	2 DPS (lupus) @ MX			2.3	1	1.2	0.3	0	3	6	64.5
13	DPS (baileyi), US only			2.7	0.5	0.5	0.50	0	2	6	69
DPS to I-40											
6	DPS (baileyi)			2.2	0.8	1.5	0.6	0	1	6	78
7	DPS (lupus)			2.2	0.8	1.0	0.6	0	1	6	78
11	2 DPS (baileyi) @ MX			2.0	1	1.0	0.433	0	1	6	78
DPS to Colorado River											
14	DPS (baileyi), with AE			3.5	1	3	0.27	0	3	6	78



Swing Weights

				Objective							
				1a: Biol. Integ w/	1b: Biol. Integ b/	2: Legal Defense	3.c.i. Long- term state	3.c.ii. Short-term	5.a. Public Burden	5.c.ii. Understan	6.a. Efficiency
Weight	AZ			0.2000	0.1053	0.2105	0.1684	0.0000	0.1053	0.1053	0.1053
	NM			0.1087	0.2174	0.1739	0.0978	0.0000	0.1304	0.1087	0.1630
	UT			0.0317	0.0317	0.2857	0.2698	0.0000	0.3175	0.0317	0.0317
	FWS R2			0.2632	0.2368	0.2368	0.0658	0.0000	0.0658	0.0658	0.0658
Average				0.1509	0.1478	0.2267	0.1505	0.0000	0.1547	0.0779	0.0915

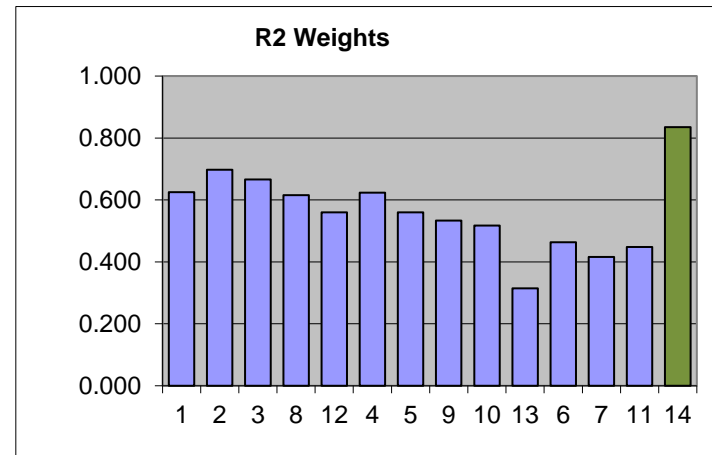
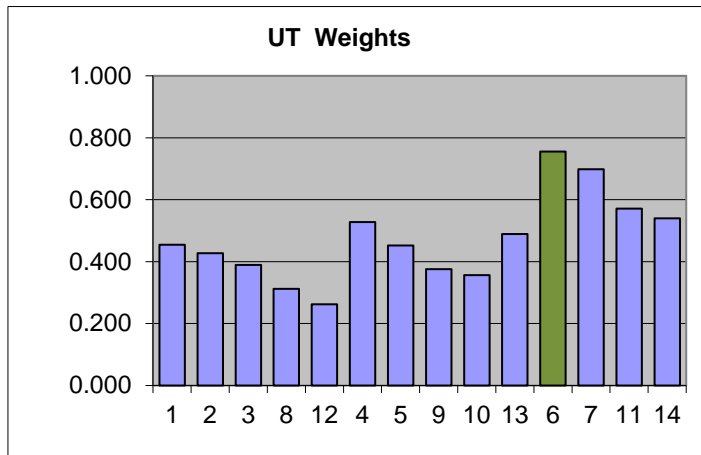
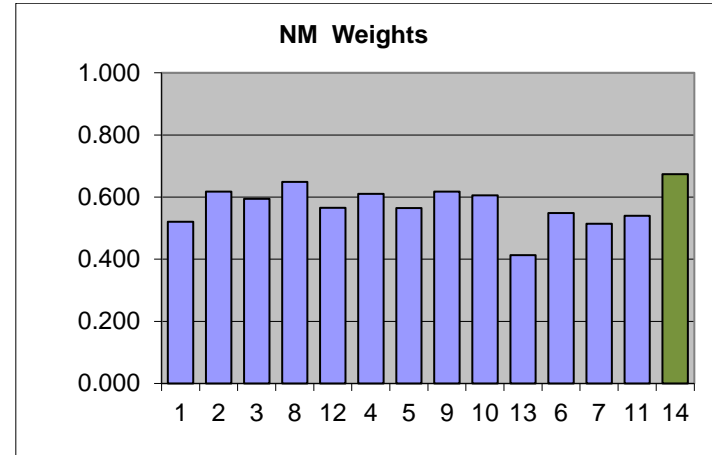
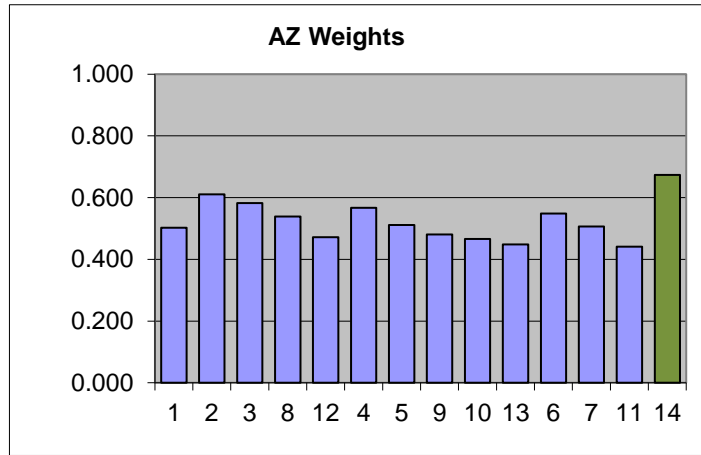


Composite Scores

Management Alternative			Weighted Score				
#			Avg	AZ	NM	UT	R2
1	Subspecies		0.526	0.502	0.520	0.455	0.625
2	CO/UT	DPS (baileyi)	0.588	0.611	0.617	0.427	0.698
3		DPS (lupus)	0.558	0.583	0.594	0.389	0.666
8		2 DPS (baileyi) @ MX	0.529	0.539	0.649	0.312	0.616
12		2 DPS (baileyi) @ I-10	0.465	0.472	0.566	0.262	0.560
4	I-70	DPS (baileyi)	0.582	0.567	0.611	0.528	0.623
5		DPS (lupus)	0.522	0.511	0.564	0.452	0.560
9		2 DPS (baileyi) @ MX	0.502	0.480	0.617	0.375	0.533
10		2 DPS (lupus) @ MX	0.486	0.466	0.606	0.356	0.518
13		DPS (baileyi), US only	0.416	0.449	0.413	0.490	0.314
6	I-40	DPS (baileyi)	0.579	0.549	0.549	0.756	0.463
7		DPS (lupus)	0.534	0.506	0.514	0.699	0.416
11		2 DPS (baileyi) @ MX	0.500	0.441	0.540	0.571	0.448
14	DPS (baileyi), with AE		0.681	0.674	0.674	0.540	0.836



Composite Scores



Patterns in Workshop Results

- Not surprisingly, the area of the geographic unit is tied to many of the tradeoffs, both among objectives and across decision makers
- Multiple-DPS options generally less desired (tied to Efficiency objective)
- DPS of *baileyi* better than *lupus* (based on legal defensibility)
- Alternative 14 is unique (really 2 alternatives at once)



Questions

- How reliable are the consequence scores that were used for the analysis?
- Did the panel score Alternative 14 appropriately?
- Did the measurable attributes reflect the objectives they were tied to?
- Were any important objectives left out?



Current policy considerations

- FWS questions whether it's possible to designate a single DPS of a taxon, with no other corresponding DPS (whether implicit or explicit)
 - i.e., DPS of *baileyi*
- To date, FWS has stated that it's inconsistent with current policy to designate a DPS for an area that is unoccupied
 - This largely eliminates all the multiple-DPS options





June 2011 Workshop

Purpose of Workshop

- Seek mutual understanding of the perspectives of the management partners (FWS and the states) regarding the taxonomic and geographic entity that should be assessed

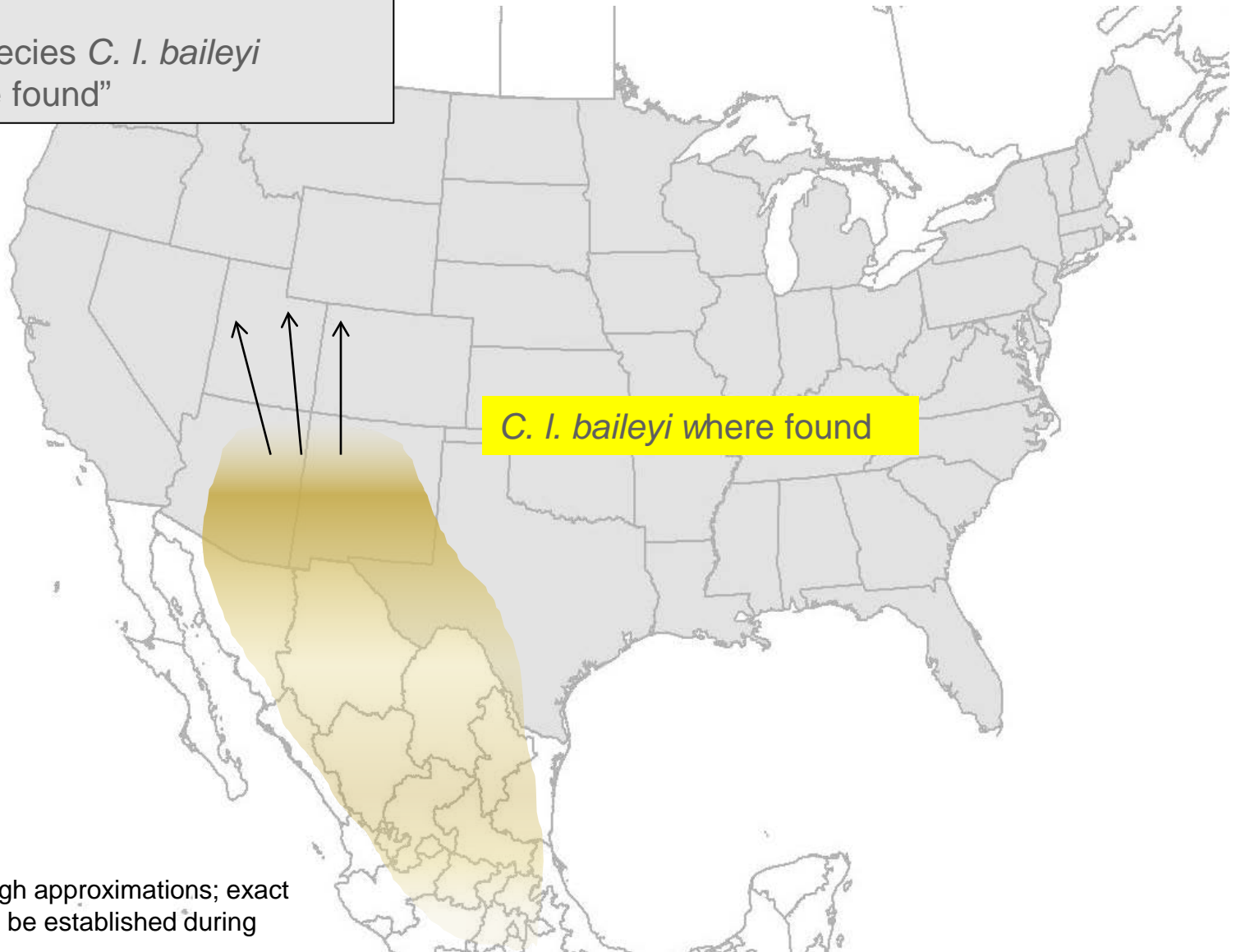


Proposal

- For the workshop, let's focus on the crux of the matter
 - Reduced set of alternatives
 - Explore objectives (reduced, current, or expanded)
 - Develop narrative consequences

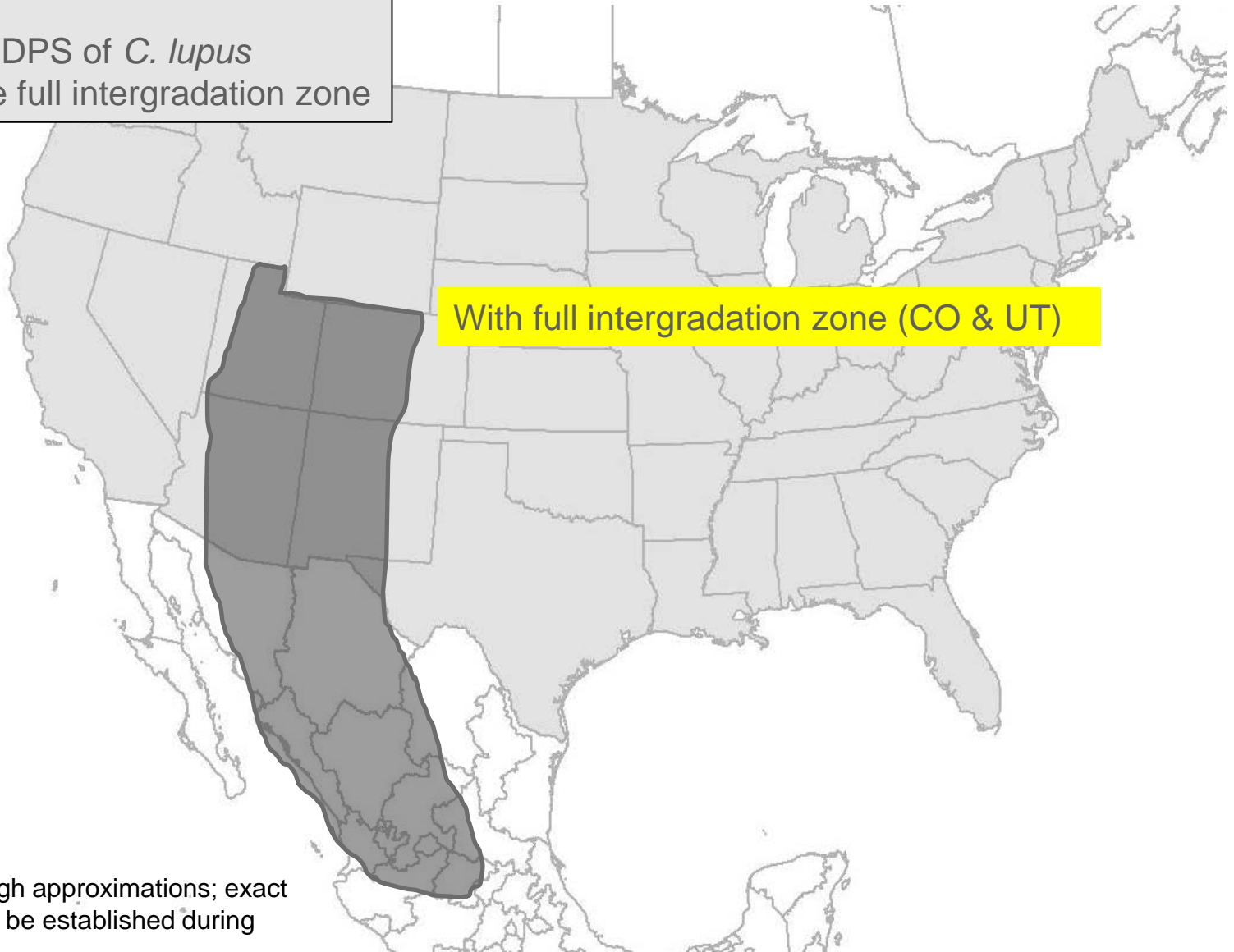


ALT 1
Subspecies *C. I. baileyi*
“where found”



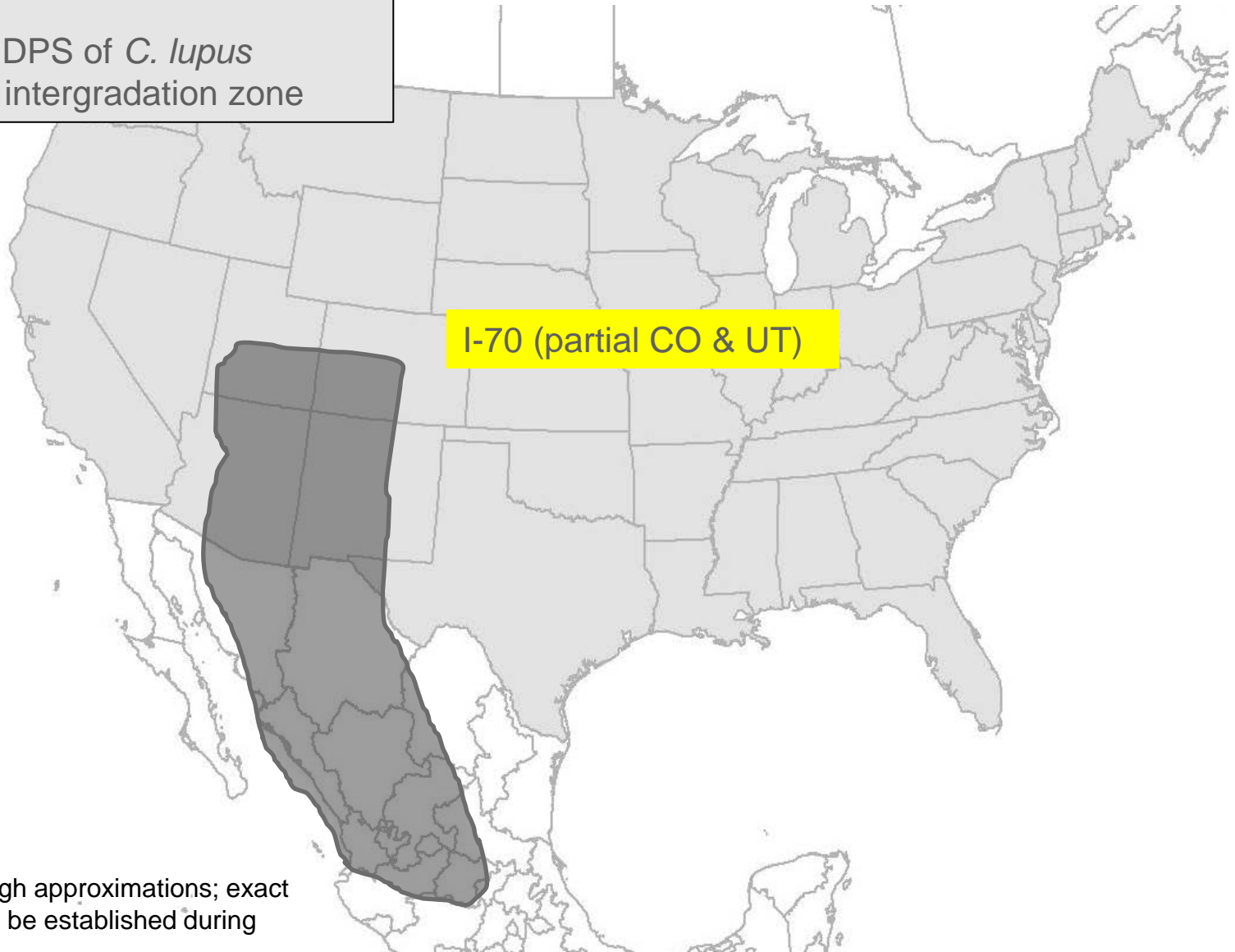
Map lines are rough approximations; exact boundaries would be established during rulemaking.

ALT 3
Single DPS of *C. lupus*
Include full intergradation zone



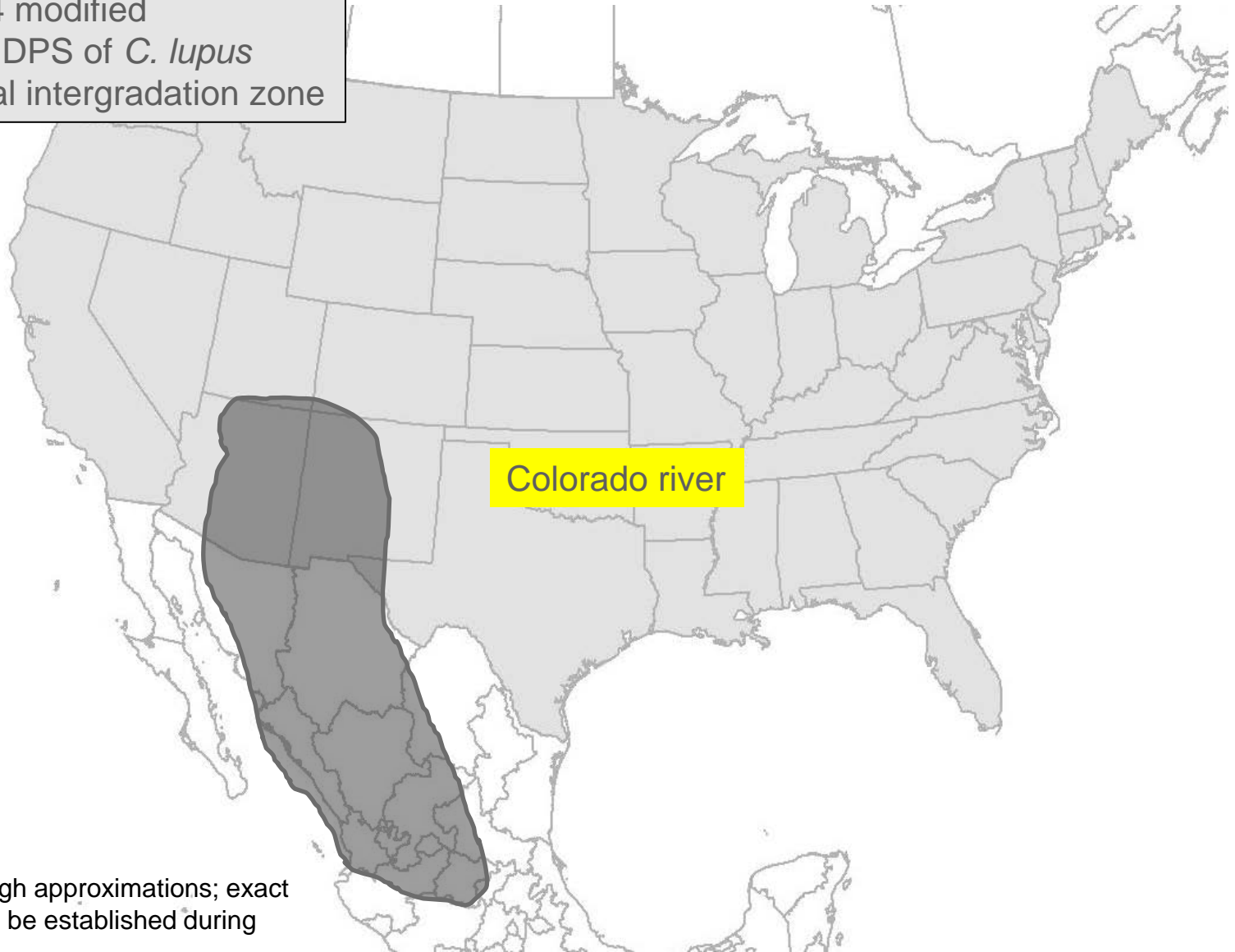
Map lines are rough approximations; exact boundaries would be established during rulemaking.

ALT 5
Single DPS of *C. lupus*
Partial intergradation zone



Map lines are rough approximations; exact boundaries would be established during rulemaking.

ALT 14 modified
Single DPS of *C. lupus*
Minimal intergradation zone



Map lines are rough approximations; exact boundaries would be established during rulemaking.

Workshop Agenda

- Thursday, June 16 (1-5 pm)
 - Review process through August 2010
 - Updates
 - FWS, regulations and policy interpretations
 - Recovery team
 - States
 - Agree on limited set of alternatives for consideration
 - Explore objectives that are operating
 - Develop narrative consequence table
- Friday, June 17 (8 am – 12 pm)
 - Articulate individual perspectives on how to manage the tradeoffs

