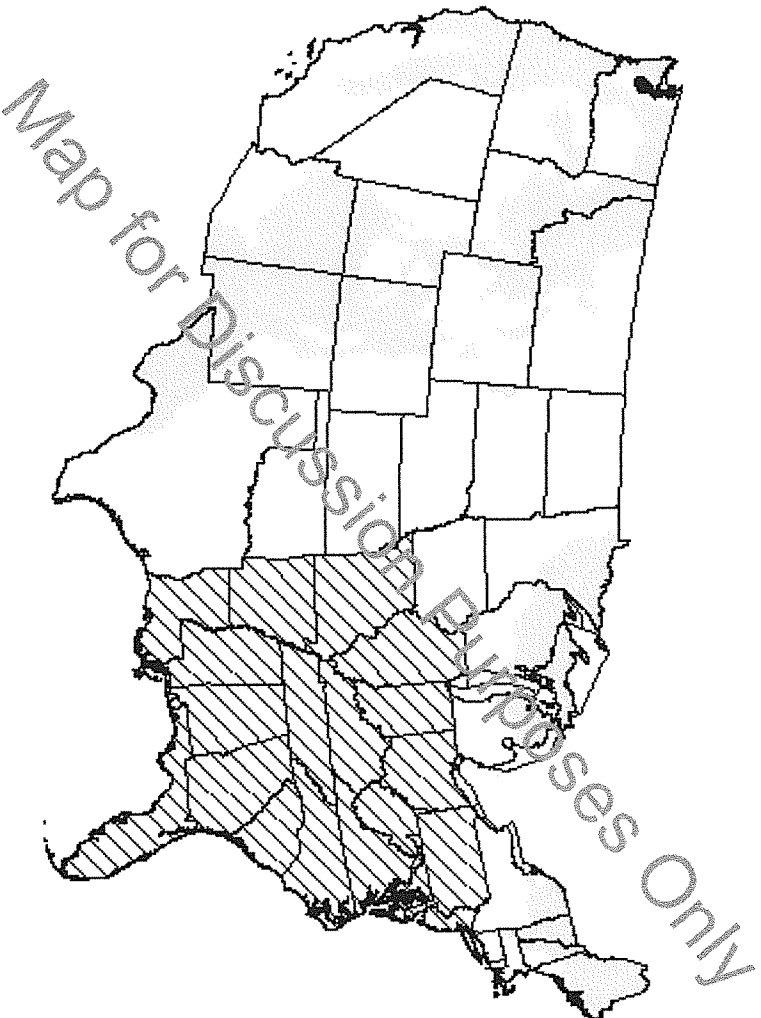# Some Questions

- 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?

Gray shading: potential habitat based on synthesis of existing spatial models.
Hatched area: spatial habitat models are not yet available.

12

Group measurable attributes

1. Legal defensibility groups
   - Qualitative scale based on sense of the probability of prevailing chance of being litigated
     o High (5) to Low (1)

2. Public acceptance group
   - clarify of public and time/area regulated
   - Leichardt scale – 1-5 scale. Subjective expert ranking
     o Very high acceptance (5),
     o High acceptance (4)
     o Acceptance (3)
     o Some acceptance (2)
     o very low acceptance (1 = very active opposition – e.g. people bringing notices, people ringing congress etc) …

3. Wolf Conservation
   - Units designated to maintain/maximize genetic diversity of genus across units
   - Qualitative 1-3 ranking
     o 3 = high probability of contributing to wolf conservation
     o 2 = Med probability of contributing to wolf conservation
     o 1 = Low probability of contributing to wolf conservation

4. Efficiency
   - Used a qualitative scale,
     o 1-3 (Low to High)
   - Based on 4 components
     o Efficiency
     o Expediency
     o Enduring
     o Potential for petitions
   - Used modified Delphi approach

Consequence Table

#	Management Alternative	Mean Response			
		Legal Defense 1-5 max	Public Acceptance 1-5 max	Wolf Conserv 1-3 max	Efficiency 1-3 max
1	Species only	4.0	1.0	1.0	1.0
2	Subspecies only	5.0	2.1	2.5	2.0
3	Small DPSs	2.0	3.3	3.0	2.5
4	Large DPSs	3.0	1.6	2.0	1.5
5	Hybrid	2.0	2.1	2.75	2.0

#	Management Alternative	Normalized Responses				Weighted Score (avg)
		Legal Defense	Public Acceptance	Wolf Conserv	Efficiency	
1	Species only	0.667	0.000	0.000	0.000	0.189
2	Subspecies only	1.000	0.478	0.750	0.667	0.736
3	Small DPSs	0.000	1.000	1.000	1.000	0.717
4	Large DPSs	0.333	0.261	0.500	0.333	0.361
5	Hybrid	0.000	0.478	0.875	0.667	0.488
	Normalized scale: Worst Case	2	1	1	1	
	Normalized scale: Best Case	5	3.3	3	2.5	
	Weight (avg)	0.283	0.259	0.281	0.178	

	Weight (alt 1)	Weight (alt 2)	Weight (alt 3)
Legal Defense	0.357	0.286	0.100
Public Acceptance	0.179	0.357	0.300
Wolf Conserv	0.179	0.214	0.400
Efficiency	0.286	0.143	0.200

Weighted Score	Alt 1	Alt 2	Alt 3
	0.238	0.190	0.067
	0.767	0.712	0.677
	0.643	0.714	0.900
	0.350	0.343	0.378
	0.432	0.454	0.627

Objective	Legal	Public	Cons	Efficiency	Rank	Score
Alt	1-5	1-5	1-3	1-3		5	0
baseline	2					
A	5					
B	2	3.3				
C	2	1	1	1	1	
D	2	1	1	3	2.5	1

Decision Maker	Scores					Weights			
	1 (1-5)	2 (1-5)	3 (1-3)	4 (1-3)	5	1	2	3	4
R1	60	80	100	40		0.214	0.286	0.357	0.143
R2	95	75	100	45		0.302	0.238	0.317	0.143
R3	100	60	80	40		0.357	0.214	0.286	0.143
R4	50	90	100	70		0.161	0.290	0.323	0.226
R5	100	50	50	80		0.357	0.179	0.179	0.286
R6	70	60	100	75		0.230	0.197	0.328	0.246
R9	65	70	100	30		0.245	0.264	0.377	0.113
WA	100	70	60	30		0.385	0.269	0.231	0.115
UT	80	100	30	70		0.286	0.357	0.107	0.250
WY	100	95	95	30		0.313	0.297	0.297	0.094
AZ	100	79	80	25		0.352	0.278	0.282	0.088
NM	70	100	75	80		0.215	0.308	0.231	0.246
ND	80	100	60	40		0.286	0.357	0.214	0.143
WI	85	90	100	50		0.262	0.277	0.308	0.154
MN	90	50	100	30		0.333	0.185	0.370	0.111
MI	100	50	70	80		0.333	0.167	0.233	0.267
NY	100	80	95	75		0.286	0.229	0.271	0.214
VT	25	75	100	50		0.100	0.300	0.400	0.200
NH	100	75	85	50		0.323	0.242	0.274	0.161
ME	100	75	70	65		0.323	0.242	0.226	0.210
						0.283	0.259	0.281	0.178