Table X. ***Information pertaining to resiliency, rolled up to Management Zone scale***

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
Garton et al. 2011						A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown					
Great Plains (MZ I)																							
Dakotas (*ND, SD*)	Y	ND	66	1-2	C1	C	E	E	G	C	F	U	H	A	D	B	E	H	H	H	U	U	State representation, edge of range, and potential refuge from climate change influence (***CITE***).
Northern Montana (*MT*)	N	1.03	2	1-4	C4	H	E	E	E	D	F	H	E	D	H	F	F	H	E	H	U	U	Connectivity to Canada, positive trends, lowest extinction risk in zone, west side less similar to extirpated parts of range, overall low threat risk, and edge of US range.
Powder River Basin (*WY*)	N	1.03	86	1-4	C2	H	E	E	E	C	D	E	D	A	B	A	E/F	H	F	E	U	U	Connectivity link between N/NE and the rest of the range, positive trends, and west habitat is less similar to extirpated parts of range.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
	Garton et al. 2011					A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown					
Yellowstone Watershed (*MT*)	N	1.01	60	1-3	C3	H	E	B	E	D	F	E	D	B	H	F	F	H	E	H	U	U	Connectivity to Canada via Northern Montana, State representation, positive trends, and only potential threat risk.
Wyoming Basin (MZ II)																							
Eagle-South Routt (*CO*)	Y	0.91	100	2	C1	B	E	G	E	G	E	E	G	G	H	B	F	H	E	B	U	U	Edge of range, connectivity to NWCO with more connectivity potential, State representation because each population has unique with habitat and threats.
Jackson Hole (*WY*)	Y	1.08	100	3	C2	A	E	H	E	H	U	E	G	H	H	H	H	H	D	E	U	U	East-West connectivity, positive trends, and habitat only 10-25% like extirpated parts of range.
Laramie (*WY, CO*)	Y	ND	100	3	C2	A	H	H	D	U	D	G	F	A	U	A	F	H	G	G	U	U	Edge of range and habitat only 10-25% like extirpated parts of range.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
	Garton et al. 2011					A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity									G: Slight Threat H: Unthreatened U: Unknown				
Wyoming Basin (*WY portion*)	N	1.06	11	1-4	C4	H	E	H	E	E	U	H	E	B	H	B	E/F	E	E/F	E	U	U	Connectivity, State representation, positive trend, low threat and extinction risk, and intact habitat.
North Rich County (*UT part of WY Basin*)				1-3																			East-West Connectivity.
Uintah-Diamond Mt (*UT part of WY Basin*)				1-3																			East-West Connectivity and edge of the range.
N. Park (*CO's WY Basin*)	N			3	C4	H	F	G	G	G	G	H	G	B	G	B	F	H	G	B	U	U	State representation, habitat mostly intact, a low threat risk, and a resilient population that has not declined since 1973.
NWCO (*CO's WY Basin*)	N			2-3	C3	H	E	F/G	D	G	G	E	C	B/C	B	A	F	E	F	E*	U	U	State representation and habitat fairly intact intact in the south and mostly intact in the north, and only potential risk.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
Garton et al. 2011						A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown					
Middle Park (*CO*)	Y	0.98	100	2	C2	B	G	G	G	U	U	H	G	G	G	D	F	H	G	A	U	U	Edge of range, State representation, although smaller its trends have been stable overall since 1950s.
Southern Great Basin (MZ III)																							
Strawberry (*UT part of NE Interior*)	Y	1.12	79	1-2																			East-West connectivity.
Carbon (*UT part of NE interior*)	Y			1-2	C2																		Edge of the range, East-West connectivity.
Emery (*UT, formerly Sanpete-Emery Counties*)	Y	1.43	100	2	C2																		Edge of the range, East-West connectivity.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
Garton et al. 2011						A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.					D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown				
Parker Mt. (UT *part of South-Central*)				2-4	C4																		Edge of the range, state representation, low risk level, part of population with lowest extinction risk in zone, and East-West connectivity.
Panguitch *(UT part of South-Central)*		1.05	21	2-3	C1																		Edge of the range, state representation, part of population with lowest extinction risk in zone, and East-West connectivity.
Bald Hills *(UT part of South-Central)*				2	C1																		Edge of the range, state representation, part of population with lowest extinction risk in zone, and East-West connectivity.
Summit Morgan Counties (*UT, south part of Rich County*)	Y	0.99	100	1	C1																		East-West connectivity.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
	Garton et al. 2011					A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity									G: Slight Threat H: Unthreatened U: Unknown				
Sheeprock (*UT, was Toole-Juab Counties*)	Y	1.06	100	2-3	C1																		
Ibapah (*UT part of Southern Great Basin*)		1.02	78	4	C1																		Habitat unlike that in extirpated parts of the range.
Hamlin Valley (*UT part of Southern Great Basin*)				4	C2																		Habitat unlike that in extirpated parts of the range, edge of the range, and East-West connectivity.
Southern Great Basin (*NV portion*)	N			1-2	C3	G	E	F	B	U	G	A	A	E	E	E	E	E	F	H	U	U	Resiliency, only a potential risk level.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
Garton et al. 2011						A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown					
Northwest Interior (*NV*)	Y	0.94	100	2-4	C1	A	H	F	A	U	F	F	A	U	G	F	B	B	F	H	H	U	Population at high risk, could provide connectivity but this area is highly fragmented from wildfires, making restoration very challenging.
Quinn Canyon Range (*NV*)	Y	ND	ND	2	C1	U	H	F	D	U	F	B	B	U	H	B	B	B	F	H	U	U	Edge of range.
Snake River Plains (MZ IV)																							
Baker (*OR*)	N	0.95	100	1-2	C2	D	G	G	G	G / U	U	E	D	E	G	E	U	H	E	E	U	U	Populations larger and more connected than previously thought (>500), connectivity to Weiser, and edge of range (aside from WA).
East Central (*ID*)	Y	0.84	100	1-3	C1	A	E	G	E	D	F	G	E	D	H	F	F	H	E	H	U	U	East-West Connectivity.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
	Garton et al. 2011					A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown					
Southwest Montana (*formerly Bannack, Red Rocks, Wisdom, and Bridges*)	N	.93-1.11	92-100	1-4	C4	H	E	H	E	H	F	E	D	E	E	E	F	H	E	E	U	U	Telemetry shows Bannack, Red Rocks, Wisdom, and Bridges all connected. Low risk level and part has positive trend.
Belt Mountains (*MT*)	Y			1-2	C1	A	E	B	E	H	F	E	D	E	H	E	F	H	E	E	U	U	
Weiser (*ID*)	N			1	C2	B	E	E	E	D	F	E	D	D	H	E	F		E	E	U	U	
Northern Great Basin (*OR, ID, NV portion*)	N	1.01	100	1-4	C3	H	E	E	A	E	F	B	A	E	E	B	F	E	F	G	U	U	Resiliency. Habitat unlike extirpated portions of the rage.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
	Garton et al. 2011					A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.				D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity									G: Slight Threat H: Unthreatened U: Unknown				
Sawtooth (*ID*)	Y	ND	ND	4	C1	A	E	H	E	D	U	U	E	H	H	F	F	H	E	H	U	U	Habitat non similar to habitat in extirpated parts of range.
Box Elder (*UT portion of Northern Great Basin*)				1-4																			
Snake-Salmon-Beaverhead (*ID*)	N	1.03	27	1-4	C4	H	E	E	A	E	F	E	B	D	H	E	F	F	E	H	C	U	Positive trend, state representation, less similar to extirpated habitat in northern part of population, low risk level, and lowest extinction risk in zone.
Northern Great Basin (MZ V)																							
Central Oregon (*OR*)	N	0.96	91	1-4	C2/ C3	H	E	E	C	U	U	B	D	E	G	E	D	U	E	E	U	U	Edge of range (aside from WA), and SE part is more intact.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
Garton et al. 2011						A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.					D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown				
Klamath (*OR, CA*	Y	ND	100	1-2	C1	A	U	U	D	U	U	A	D	E	H	G / U	U	U	U	U	U	U	Edge of range, significant amount of partnership effort to restore population.
Warm Springs Valley (*NV*)	N			1-3	C2	D	G	G	A	U	B	F	B	D	G	B	G	E	F	C	U	U	Part of the Great Basin but at risk of becoming isolated and edge of range.
Western Great Basin (*OR, CA, NV*)	N	1.03	99	2-4	C3	H	G	G	B	G	U	B	B	E	E	E	B / C	B	U	H	U	U	Most resilient population for Oregon, some of most intact habitat in range, and only potential risk level.
Columbia Basin (MZ VI)																							
Moses Coulee (*WA*)	Y	1.00	100	1	C2	B	F	A	E	U	F	H	D	D	H	D	F	H	G	F	U	G	Edge of range, changes in Farm Bill program is biggest risk, stable population trend as of 2007.
Crab Creek (*WA*)	Y	ND	ND	1	C1	A	F	B	E	U	F	G	D	F	H	D	D	H	G	F	U	G	Edge of range.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
Garton et al. 2011						A: Substantial, Imminent B: Moderate, Imminent C: Substantial, Non-Imm.					D: Moderate, Non-Imminent E: Localized, Substantial F: Widespread, Low severity								G: Slight Threat H: Unthreatened U: Unknown				
Yakama Indian Nation (*WA*)	Y	ND	ND	1	C1	A	H	H	A	U	F	H	B	D	H	B	G	H	G	G	U	G	Edge of range.
Yakima Training Center (*WA*)	Y	0.94	100	1	C1	A	H	E	D	U	F	G	B	H	H	F	G	A	G	H	U	G	Edge of range.
Colorado Plateau (MV VII)																							
East Tavaputs Plateau (*UT*)				2-3																			Edge of range.
Parachute-Piceance-Roan Basin (CO, *formerly Piceance Basin*)	Y	1.22	100	2	C1	A	E	H	D	U	F	A	E	A	C	A	F	G	H	H	U	U	Edge of range, positive trend, has linkage corridor (potential connectivity) to NWCO, is naturally fragmented by high plateaus, habitat is available and population could do well if substantial threats are addressed.

Unit Name	<500 birds?	2000-2007 λ	% Chance of <500 birds in 2107	Similarity to Extirpated Range[1]	Risk Level[2]	Isolated/Small Population	Sagebrush Elimination	Agriculture Conversion	Fire	Disease	Predation	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Livestock	Feral Horses	Recreation	Urbanization	Drought	Climate Change	Important Features
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Meeker-White River (*CO*)	Y	ND	ND	2	C1	A	G	G	C	U	E	H	E	D	D	D	F	H	H	A	U	U	The NWCO and Parachute-Piceance-Roan corridor connects into this area and edge of range.
Bi-State																							
North Mono Lake (*CA, NV*)	Y	1.05	100	2	C3																		Lyon/Mono Distinct Population Segment, edge of range.
South Mono Lake (*CA*)	Y	1.08	100	3	C3																		Lyon/Mono Distinct Population Segment, edge of range.
Pine Nut (*NV*)	Y			1	C1																		Lyon/Mono Distinct Population Segment, edge of range.
White Mountains (*CA, NV*)	Y			3	C2/ C3																		Lyon/Mono Distinct Population Segment, edge of range.

[1] This is based on Wisdom et al. 2011 (p. 465, Figure 18.5). A rank of 4 means habitat is 0-10 percent similar to habitat in extirpated sage-grouse range. A rank of 3 = >10-25 percent similarity, 2 = >25-50 percent similarity, and 1 = >50-100 percent similarity.
[2] Where C1 = high risk, C2 = at risk, C3 = potential risk, and c4 = low risk.