

**Conservation Estate Portfolio for the
Sedge wren
(*Cistothorus platensis*)**

**Bird Conservation Region 23
(Prairie Hardwood Transition)**



<http://www.mbr-pwrc.usgs.gov/id/framlst/i7240id.html>

By Jason J. Rohweder and Wayne E. Thogmartin
U.S. Geological Survey, Upper Midwest Environmental
Sciences Center, La Crosse, WI 54603
Email: wthogmartin@usgs.gov

February 2007

Preface

Mapped patterns in the distribution and abundance of rare or focal species can be useful in identifying priority areas for conservation. We have modeled and mapped rare bird abundance in the upper midwestern United States for more than a dozen species of conservation concern. Our work has focused on the Prairie Hardwood Transition (Bird Conservation Region 23). This portfolio describes the conservation context of one species in the Prairie Hardwood Transition. We outlined areas of peak predicted abundance relative to federal, tribal, and state managed lands. This juxtaposition of predicted relative abundance and land management authorities is the conservation estate for this focal species. Identifying these land management authorities relative to areas in which the species is most abundant may help to focus conservation resources in those areas in which they may do the most good.

Data References

Major Cities depicted using data acquired from the National Atlas of the United States web site (<http://nationalatlas.gov/mld/citiesx.html>). Major cities were determined to be those that had a population in 2000 of greater than 5,000 persons.

Major Roads depicted using data acquired from the National Atlas of the United States web site (<http://nationalatlas.gov/mld/roadtrl.html>). Roads were determined to be Major if they were classified as *Principal Highway* or *Limited Access Highway* according to the data field “Feature”.

States data were created by Geographic Data Technology, Inc. This data was published by Environmental Systems Research Institute (ESRI) and made available for distribution.

Counties data were acquired from the National Atlas of the United States web site (<http://www.nationalatlas.gov/mld/countyp.html>).

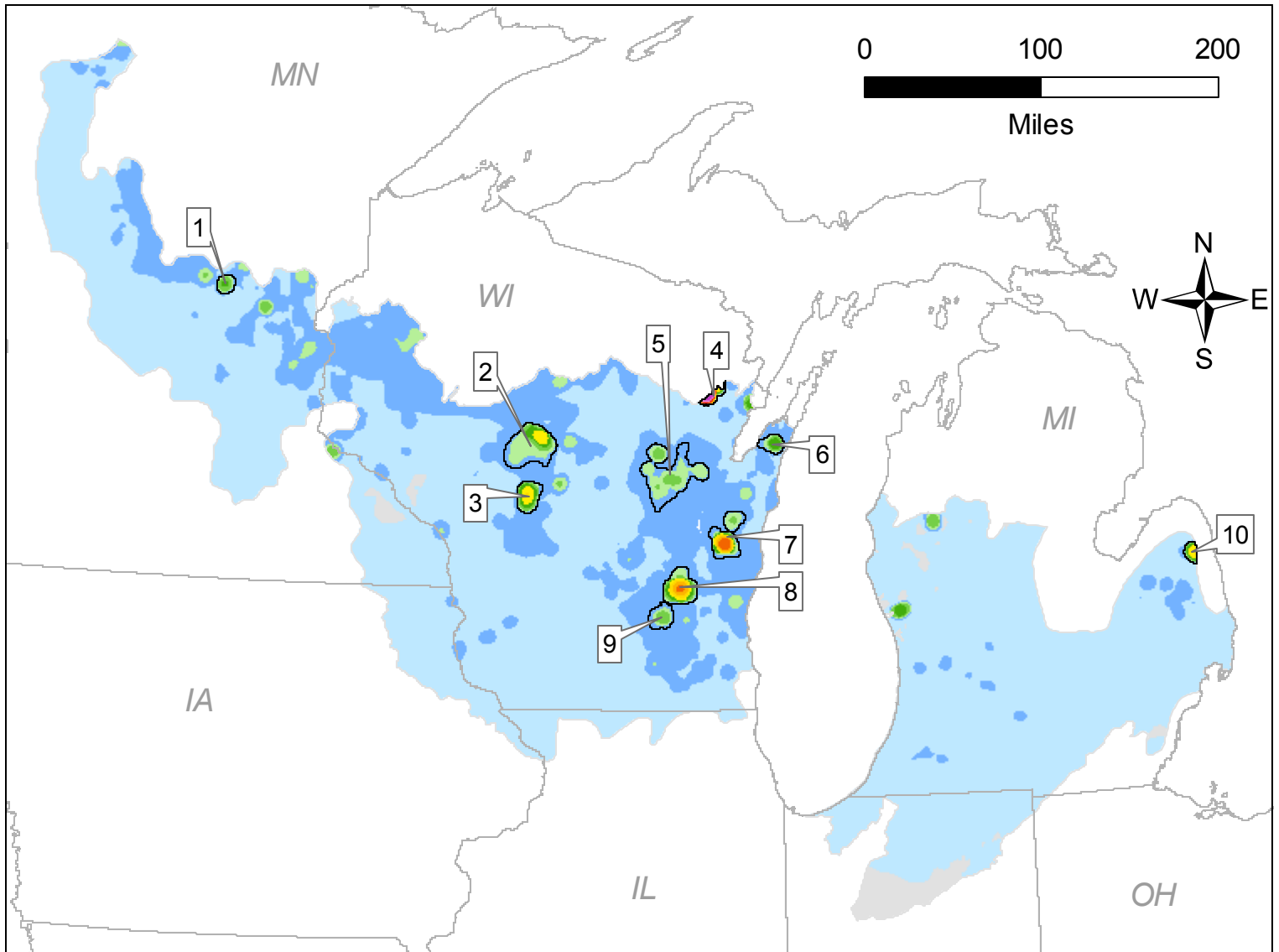
Federal and State lands depicted using Protected Areas Database, version 4: (<http://www.consbio.org/cbi/projects/PAD/index.htm>). Federal and State lands were identified based upon the data field “Owner”.




Tribal lands depicted using data acquired from the National Atlas of the United States web site (<http://www.nationalatlas.gov/mld/indlanp.html>).

Methodology

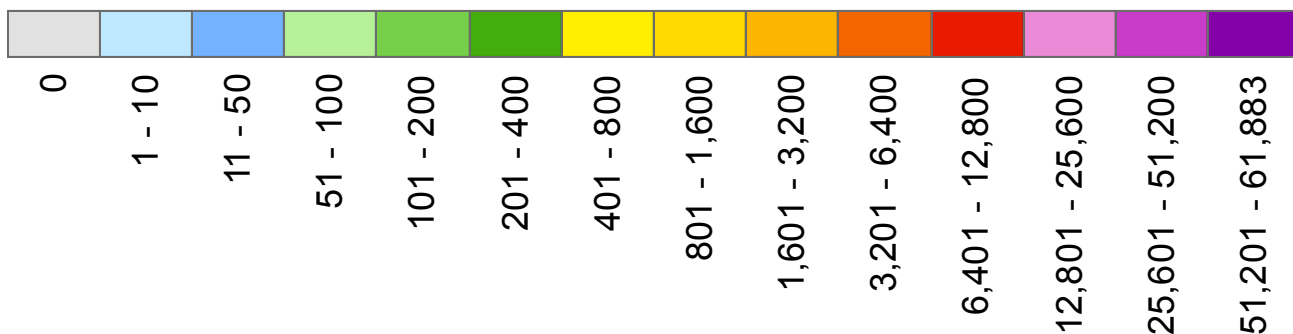
For detailed methodology on avian abundance modeling, see: http://www.umesc.er.usgs.gov/terrestrial/migratory_birds/bird_conservation_methods.html

Predicted Relative Abundance and 10-Highest Peaks of Predicted Relative Abundance for the Sedge Wren



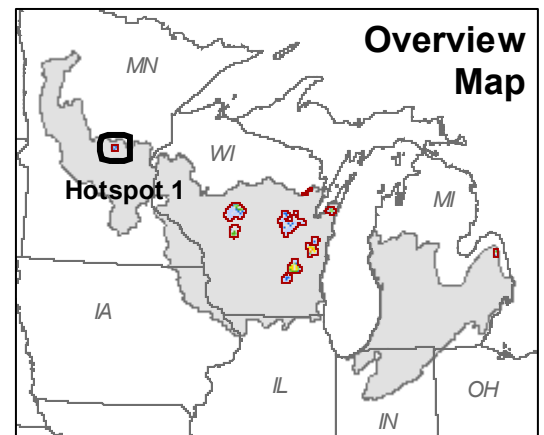
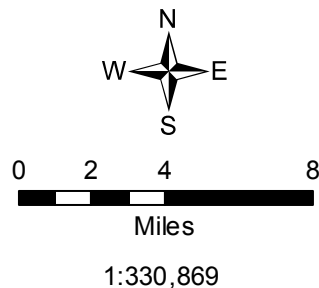
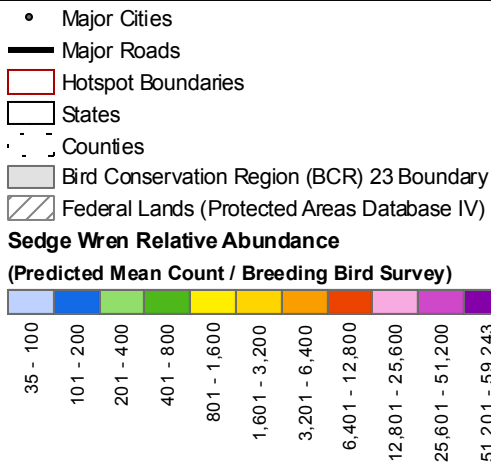
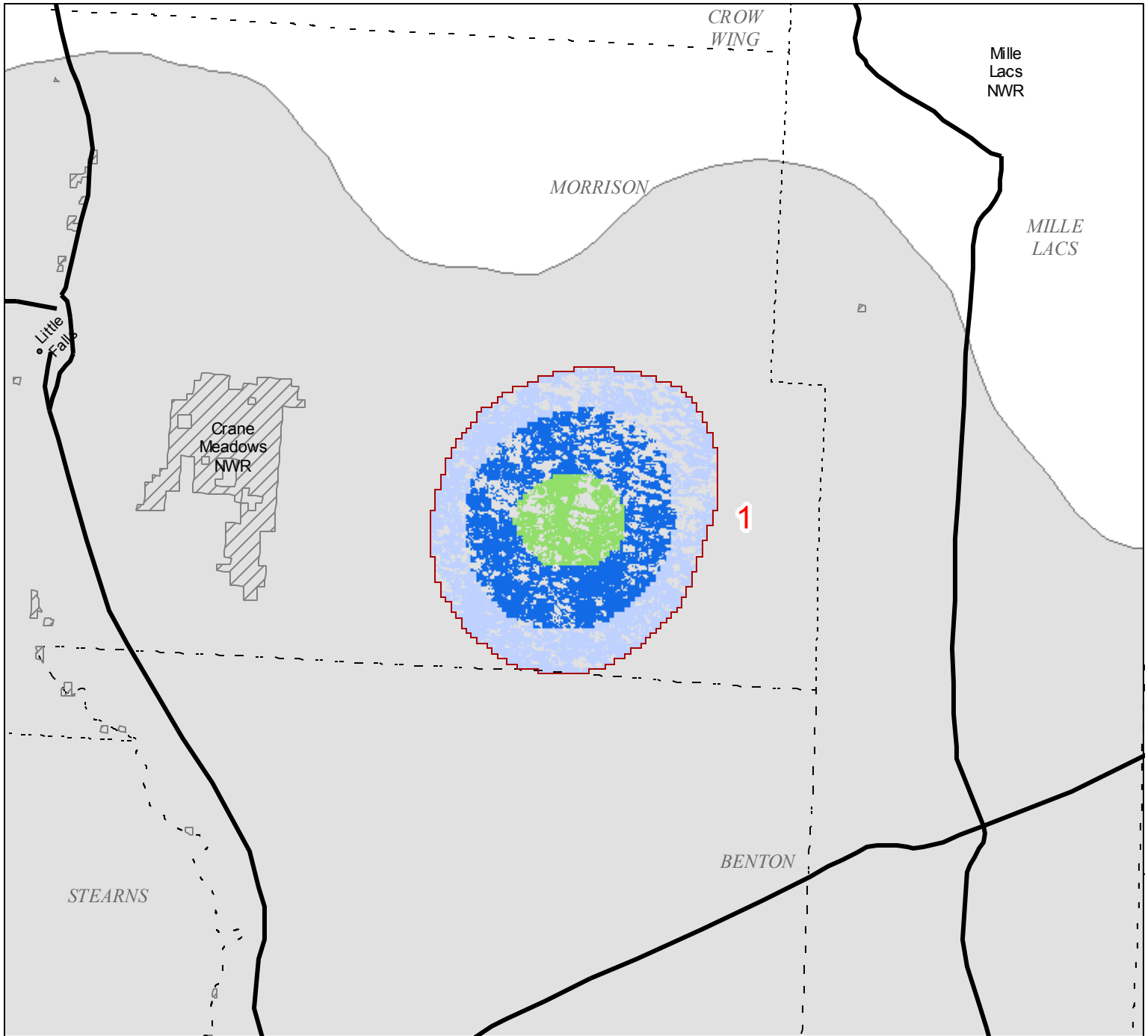
-  Top 10 Hotspots
-  States
-  Bird Conservation Region (BCR) 23 Boundary

Sedge Wren Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)



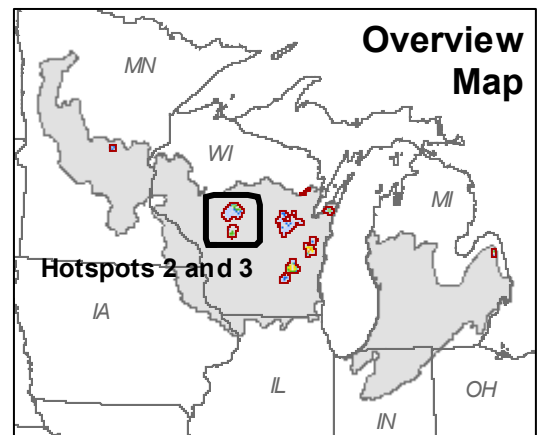
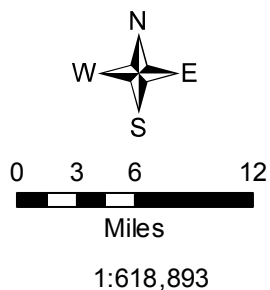
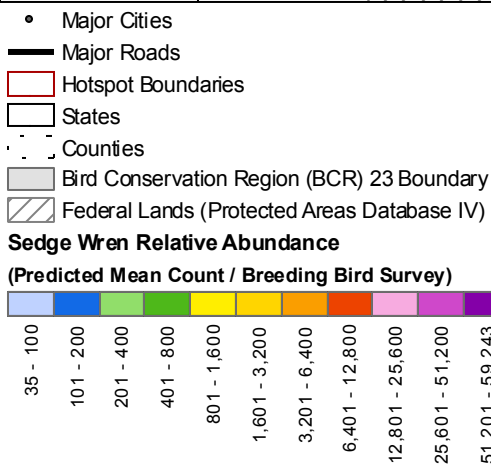
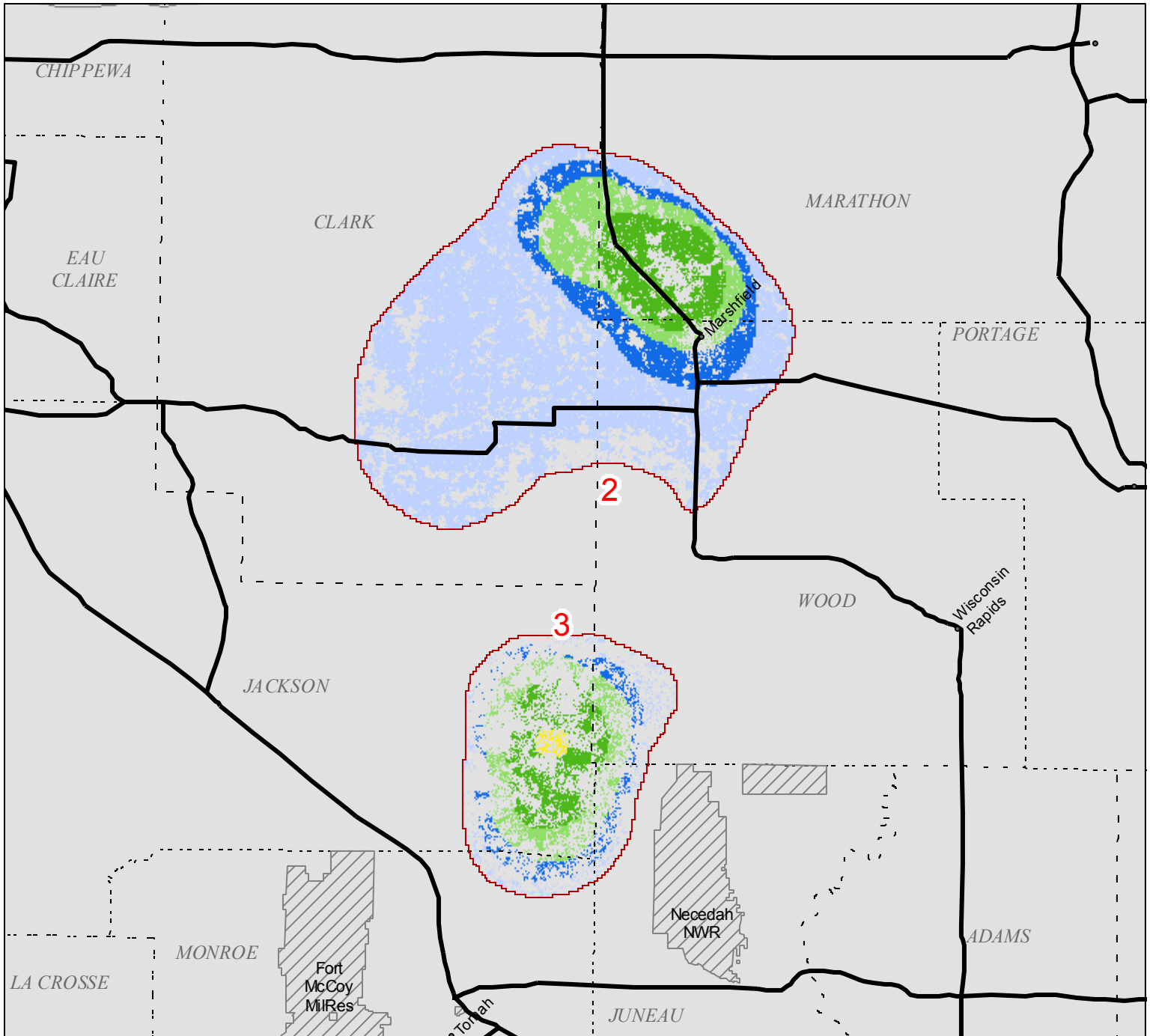
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Federal Lands

Hotspot 1



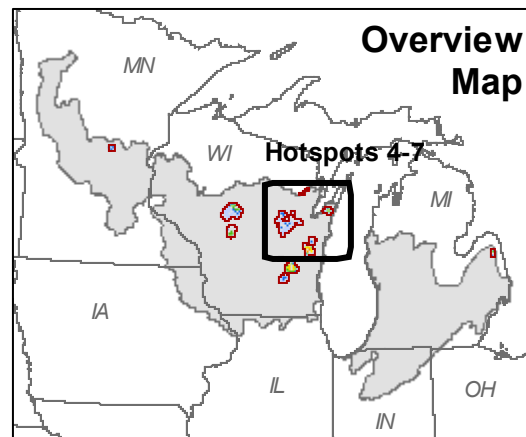
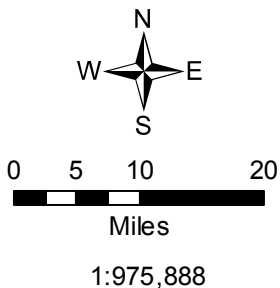
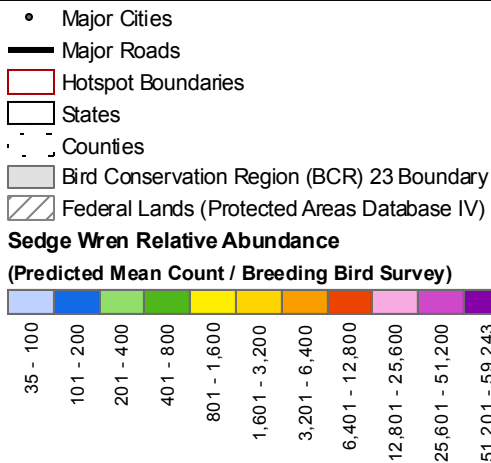
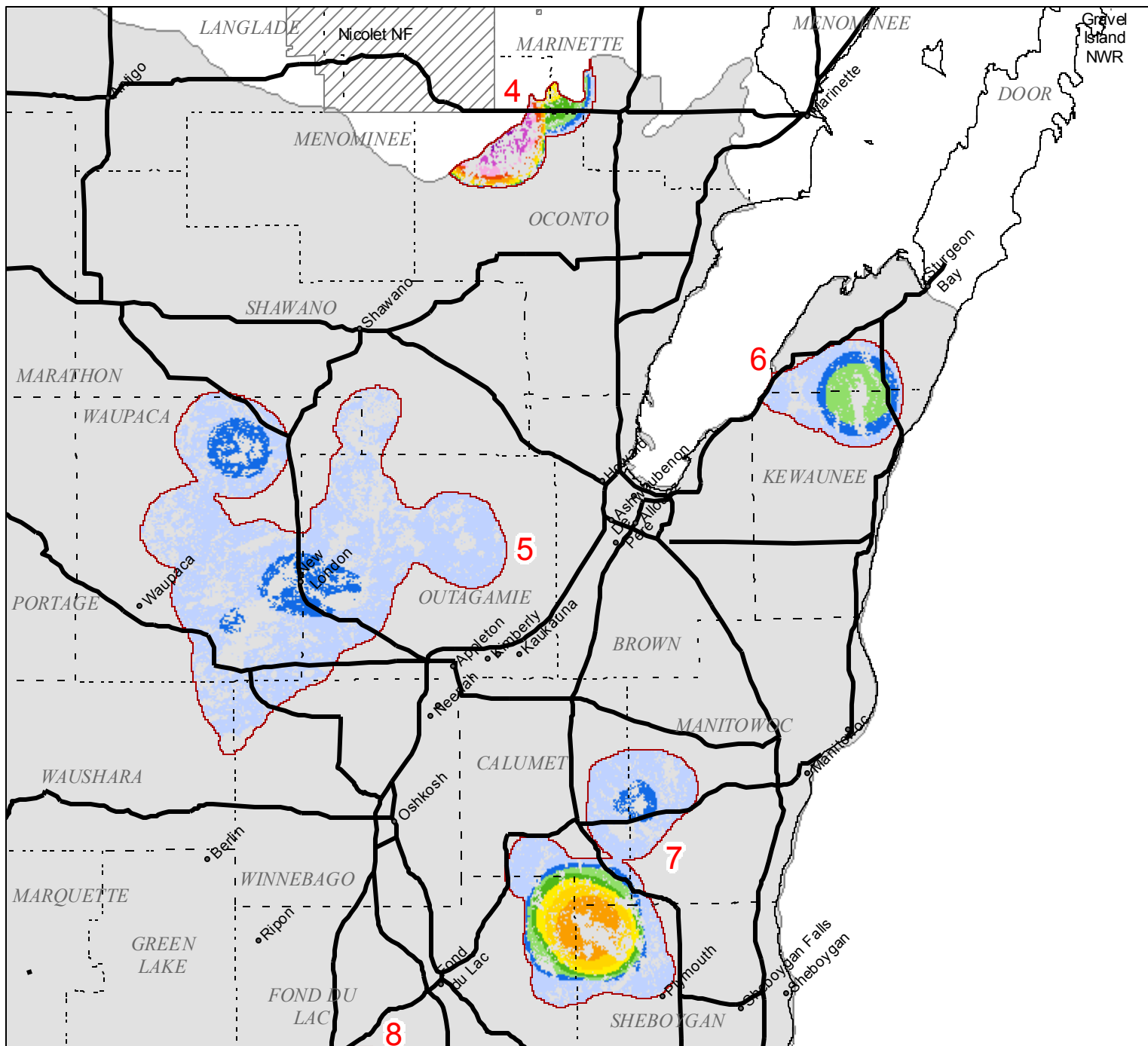
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Federal Lands

Hotspots 2 and 3



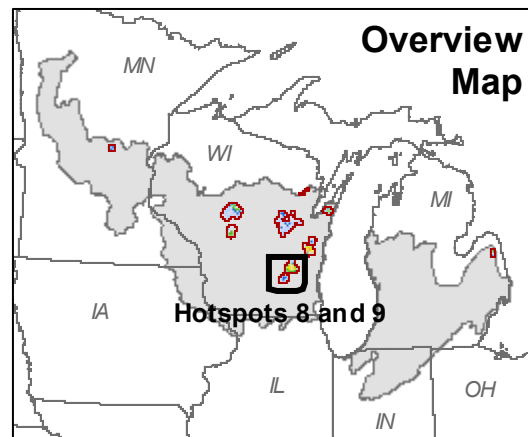
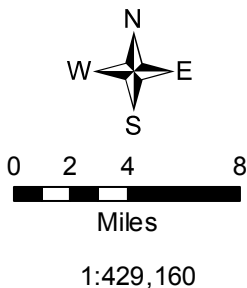
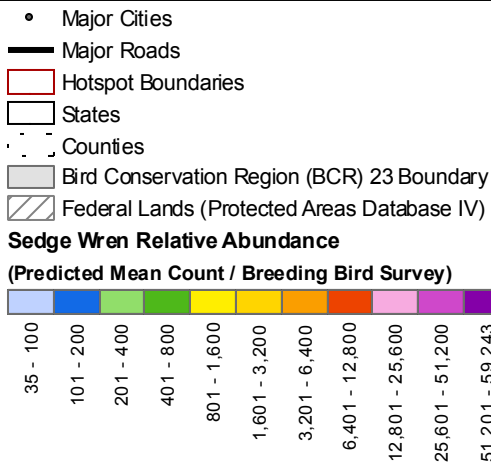
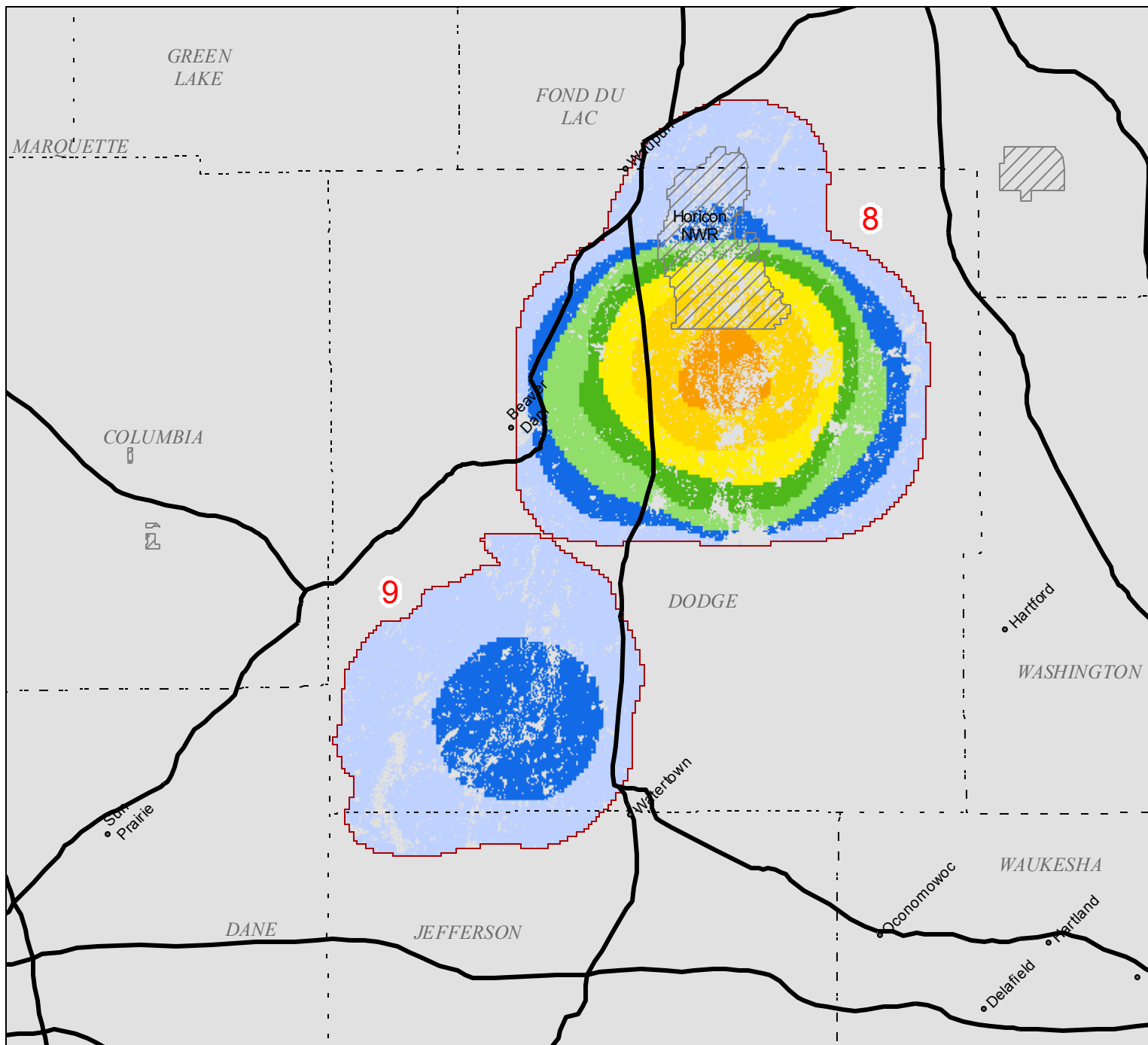
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Federal Lands

Hotspots 4-7



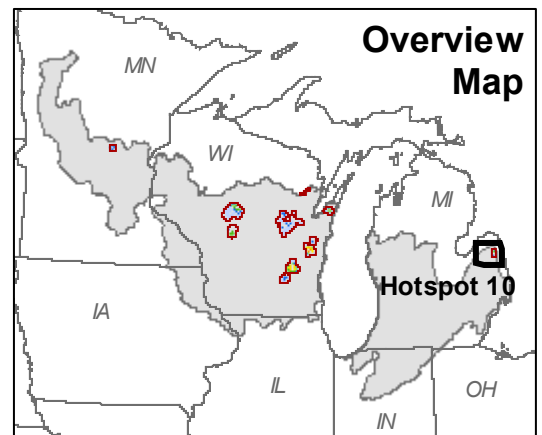
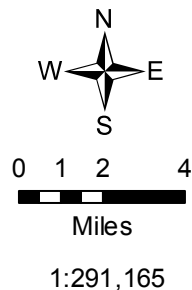
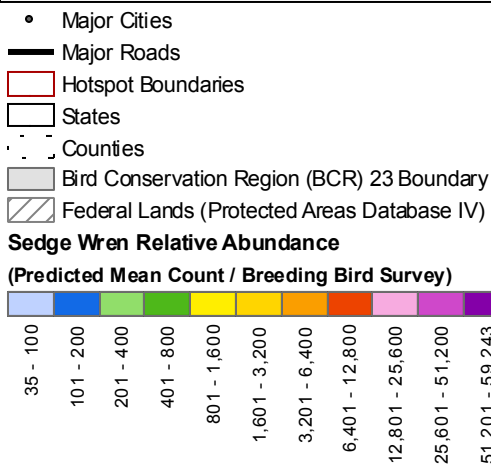
Sedge Wren (SEWR) Predicted Relative Abundance Overlayed with Federal Lands

Hotspots 8 and 9



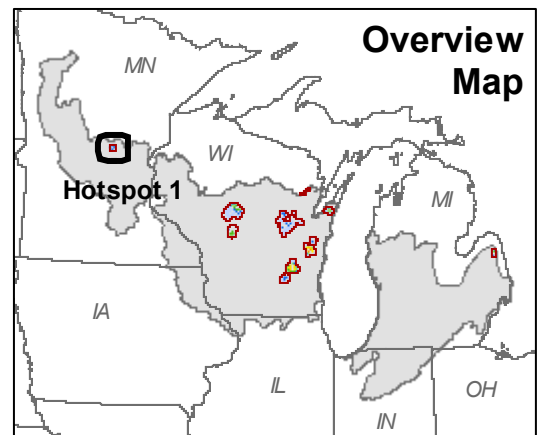
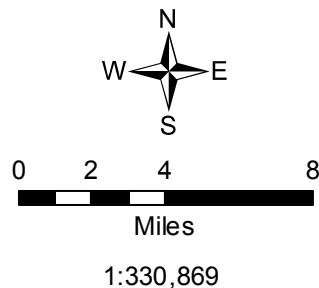
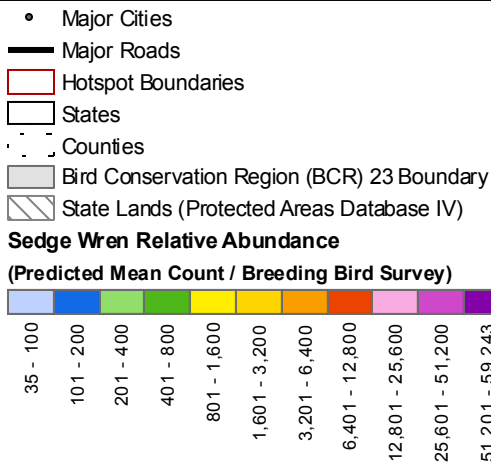
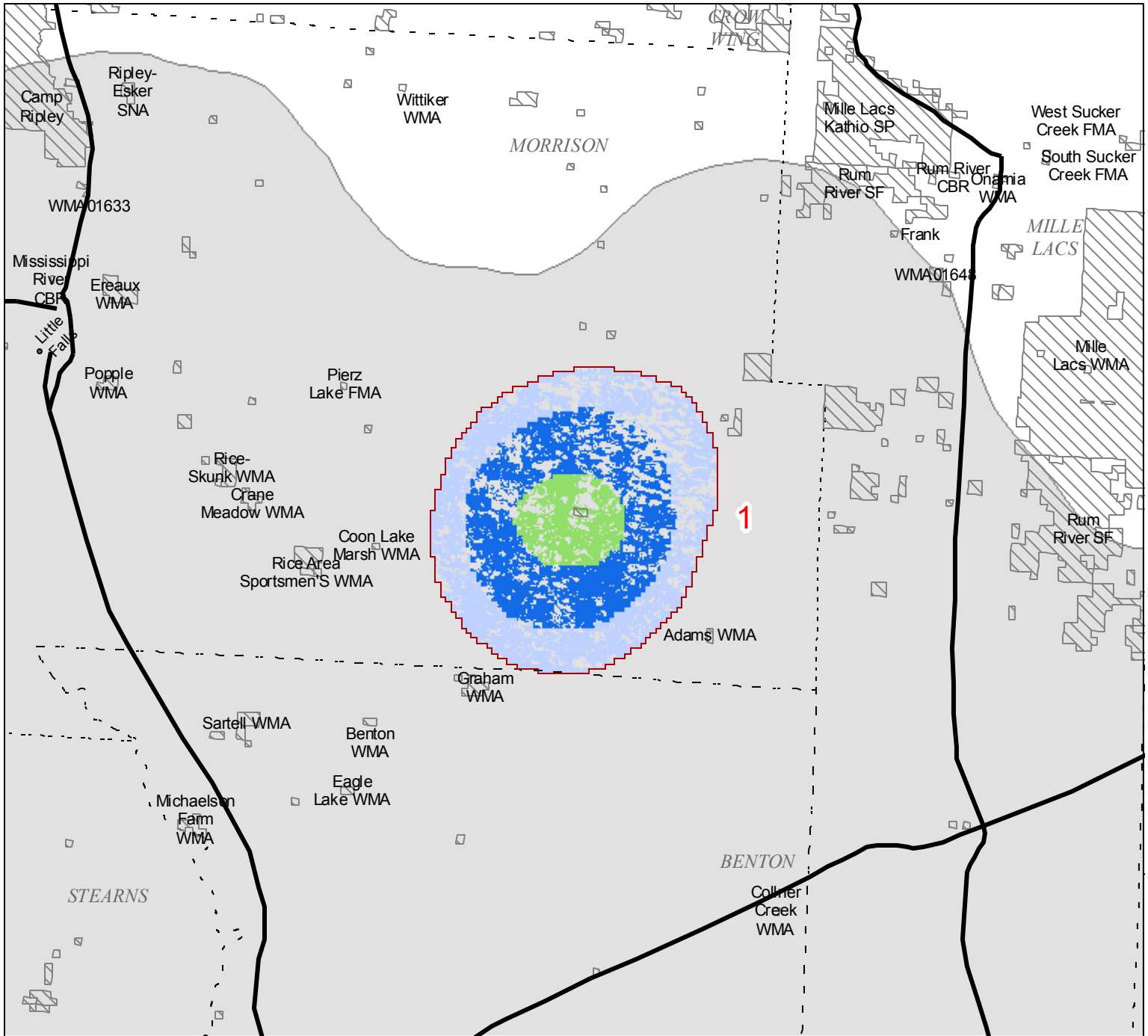
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Federal Lands

Hotspot 10



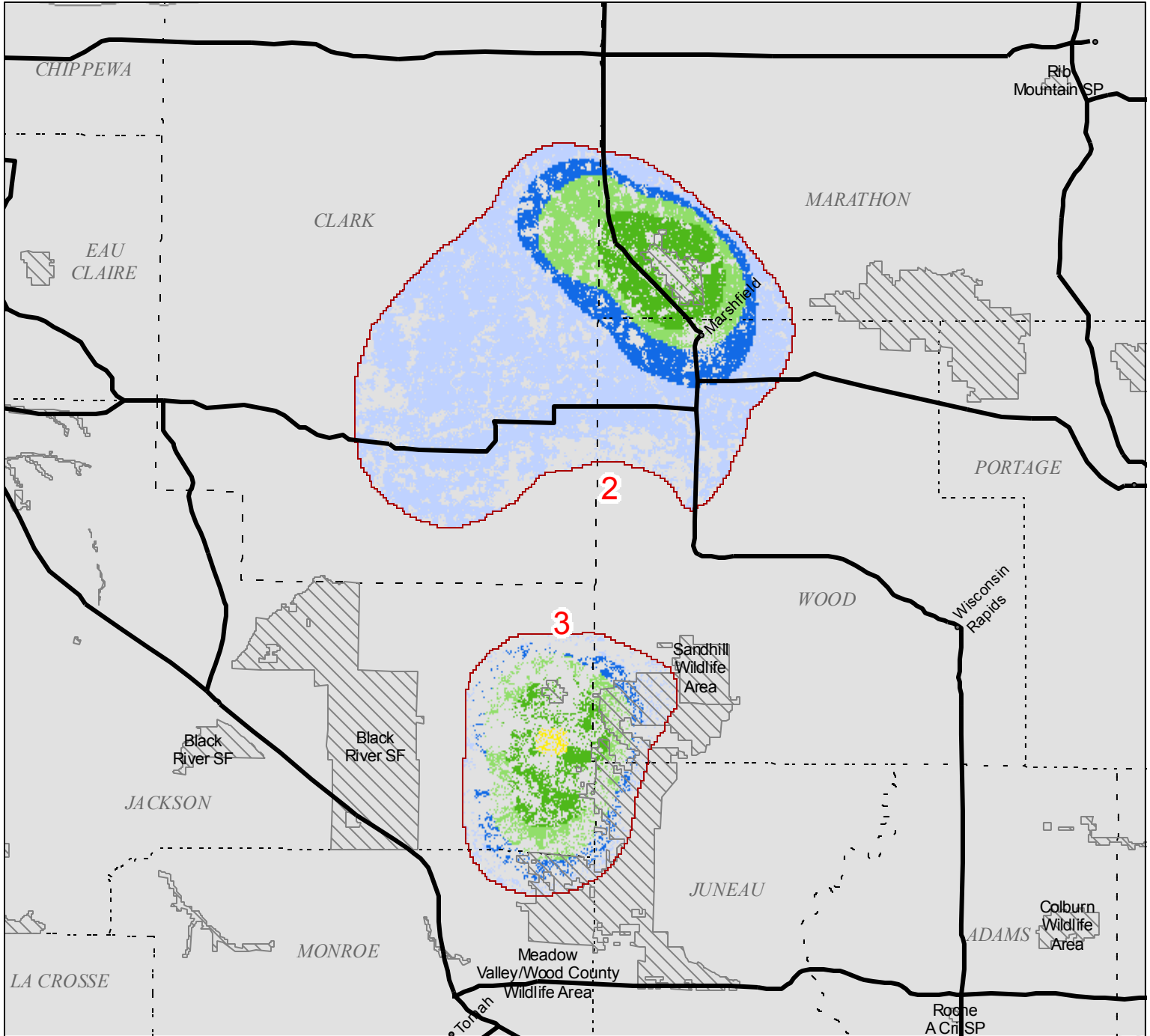
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with State Lands

Hotspot 1



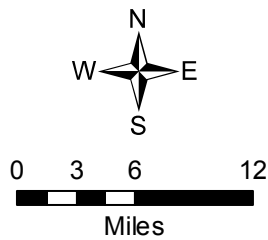
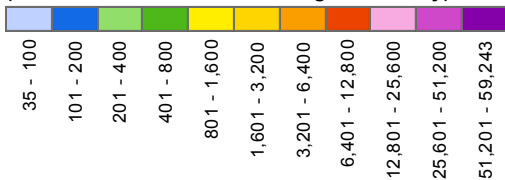
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with State Lands

Hotspots 2 and 3

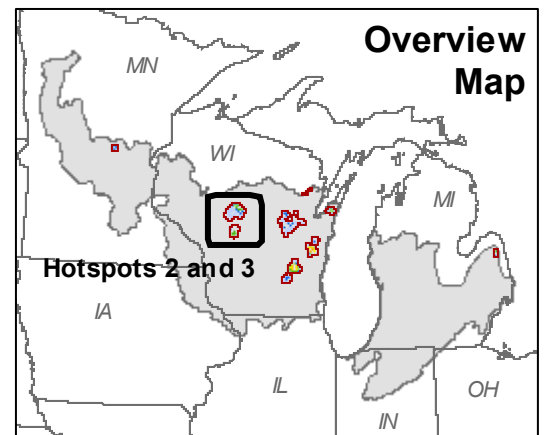


- Major Cities
- Major Roads
- ▭ Hotspot Boundaries
- ▭ States
- - - Counties
- ▭ Bird Conservation Region (BCR) 23 Boundary
- ▨ State Lands (Protected Areas Database IV)

Sedge Wren Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)

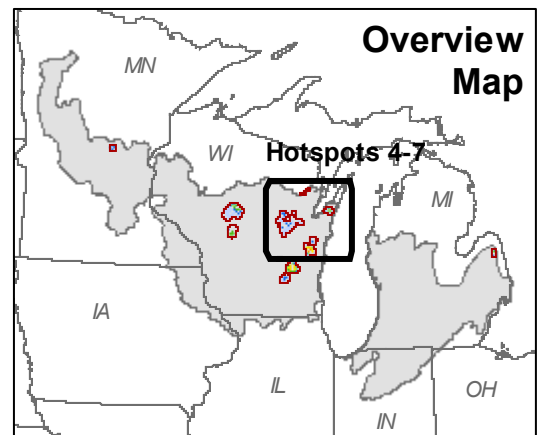
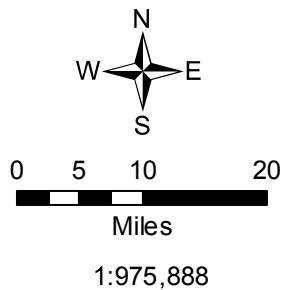
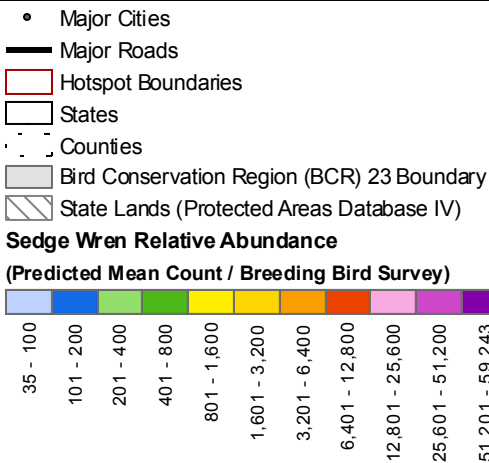
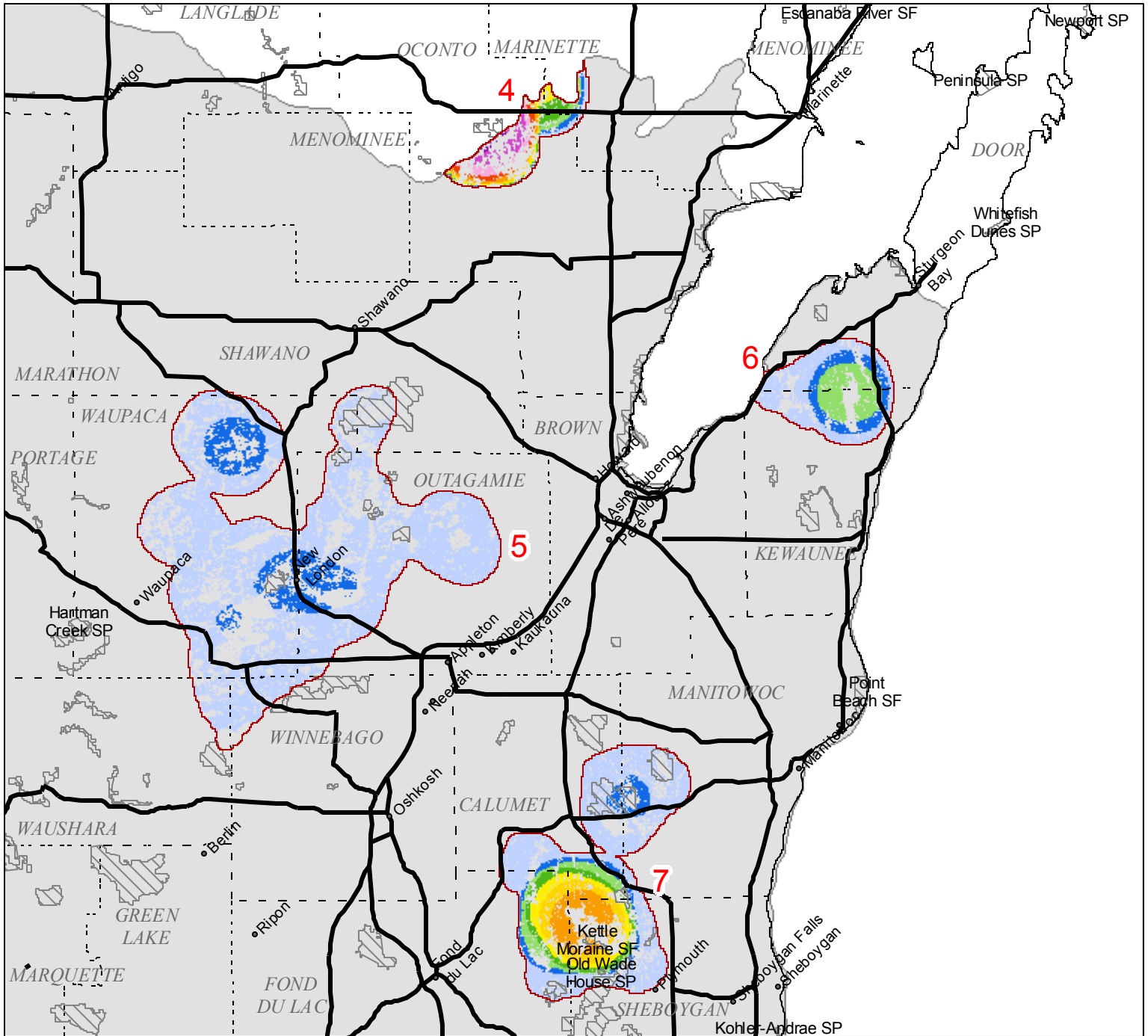


1:618,893



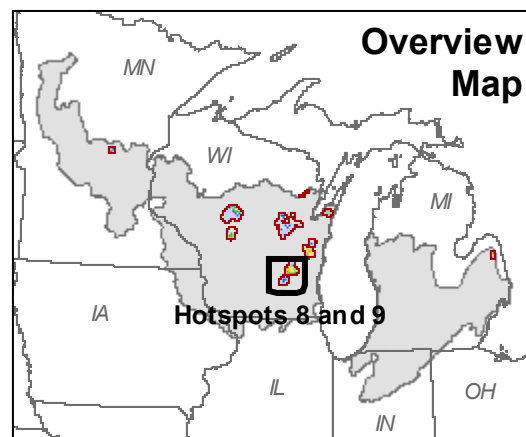
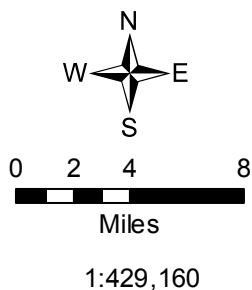
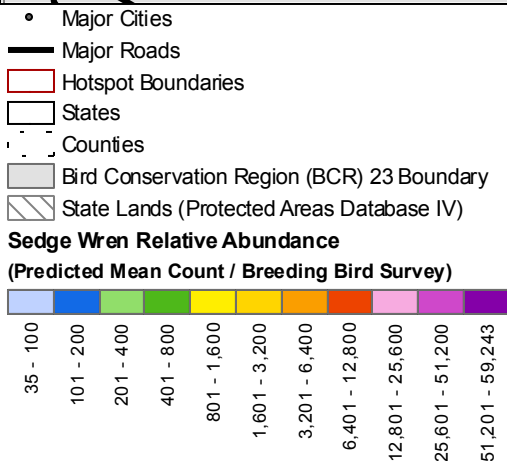
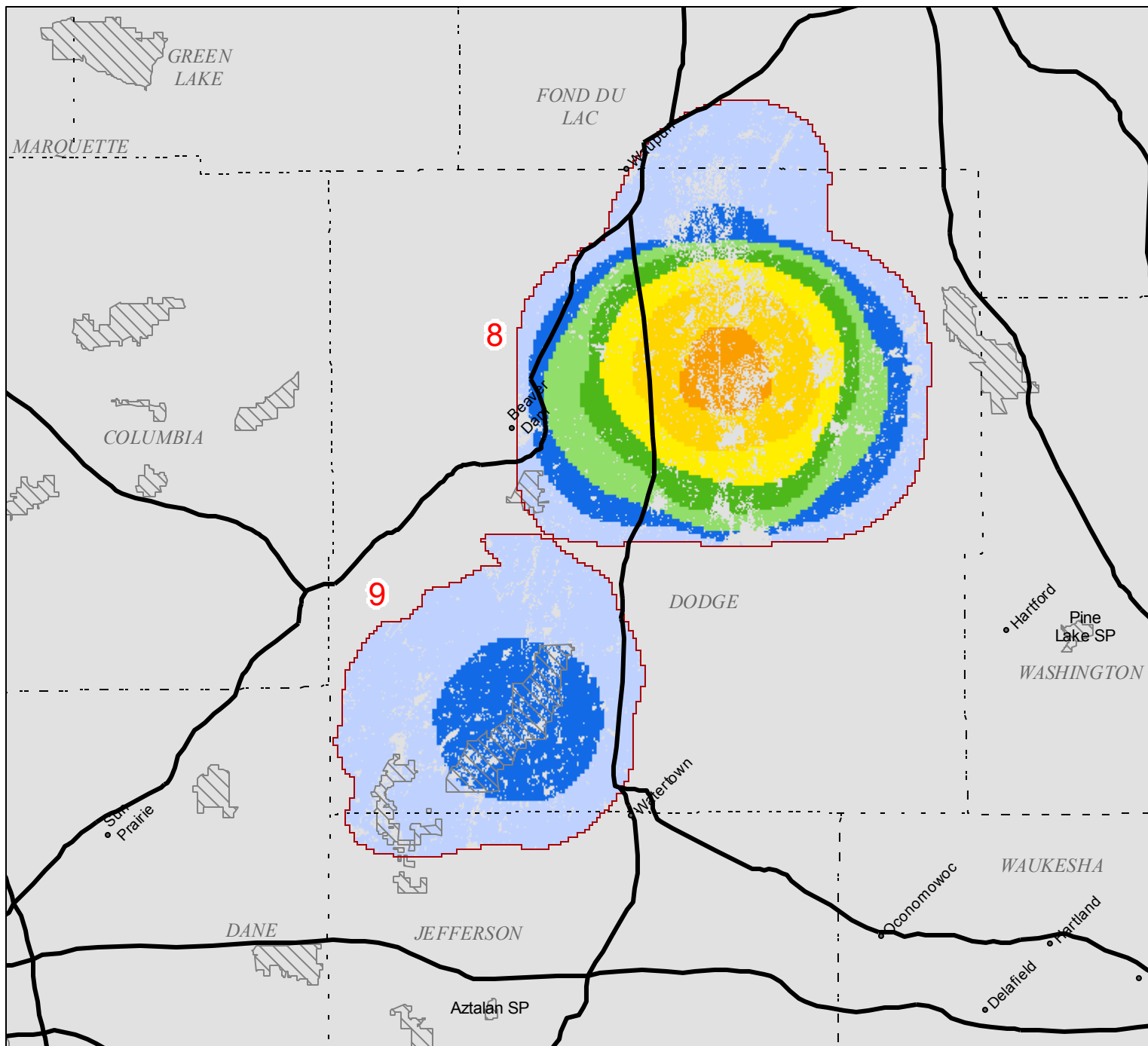
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with State Lands

Hotspots 4-7



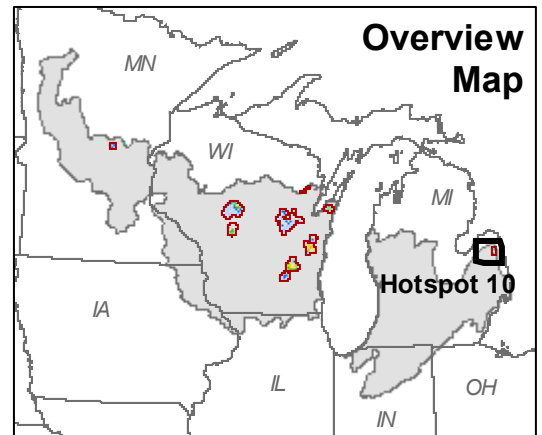
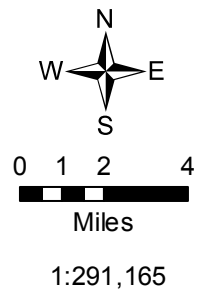
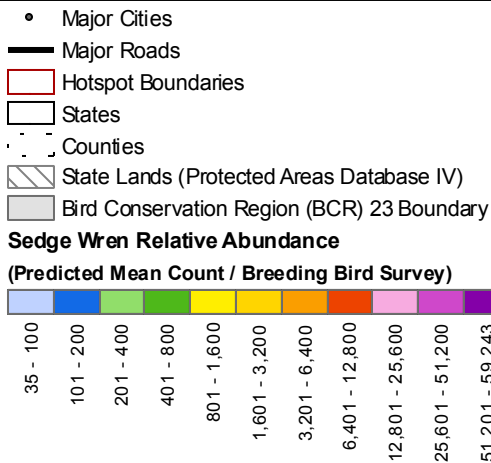
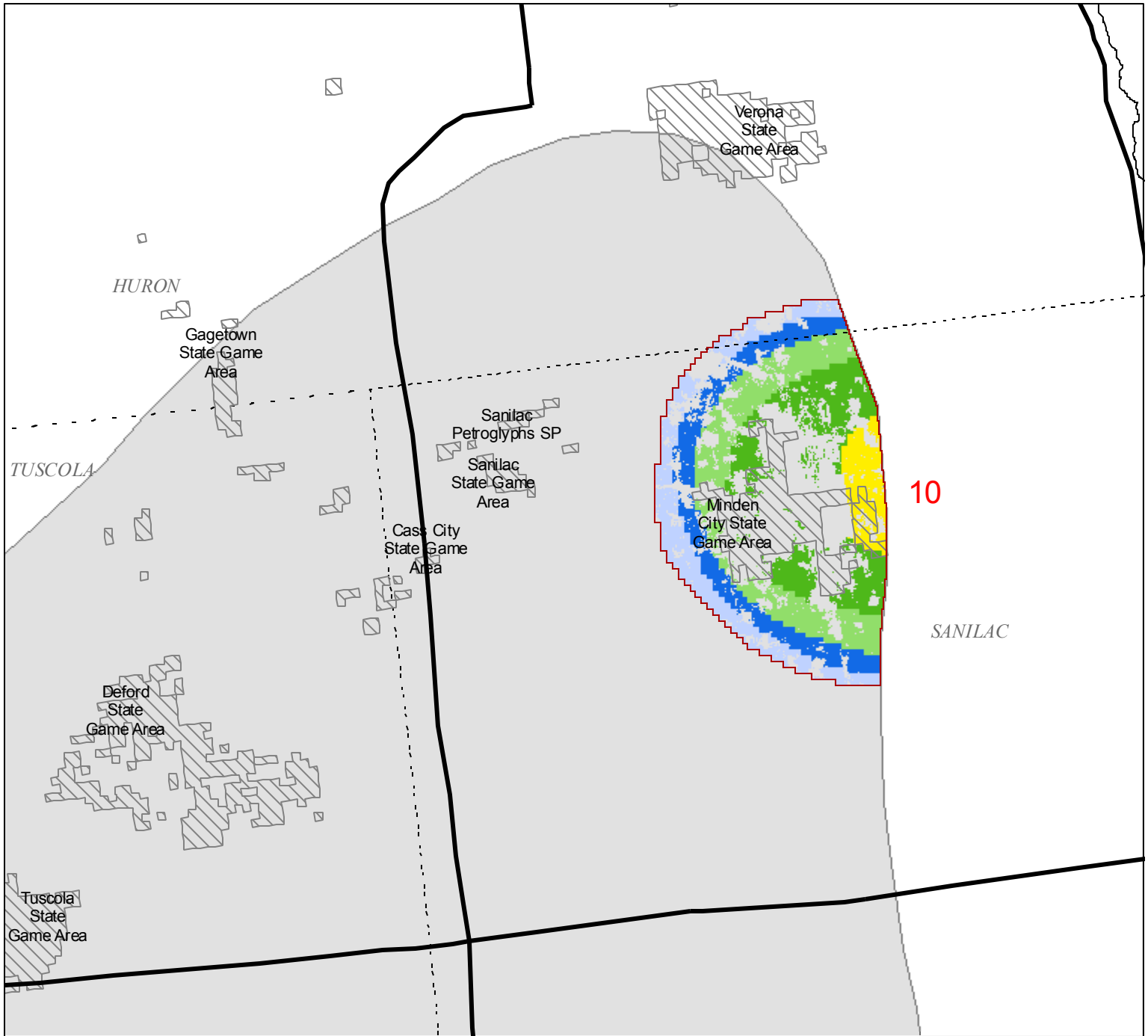
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with State Lands

Hotspots 8 and 9



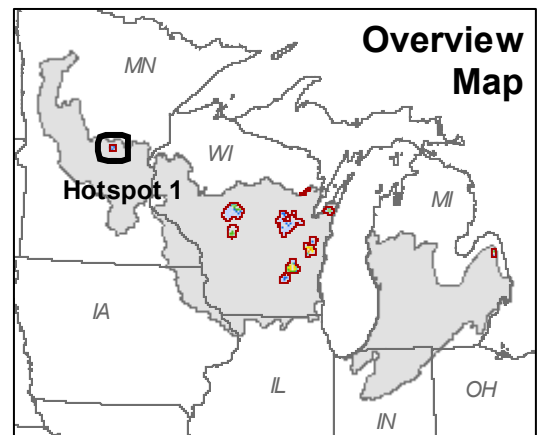
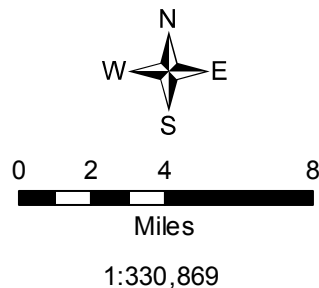
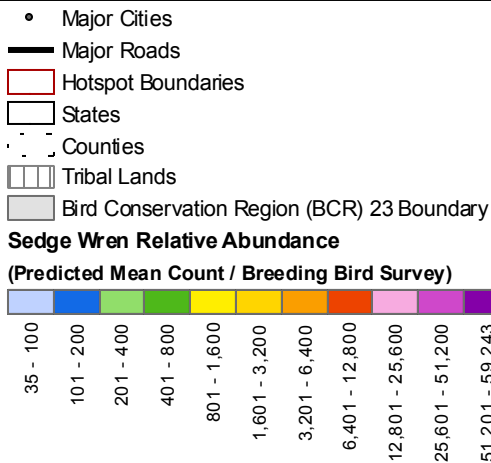
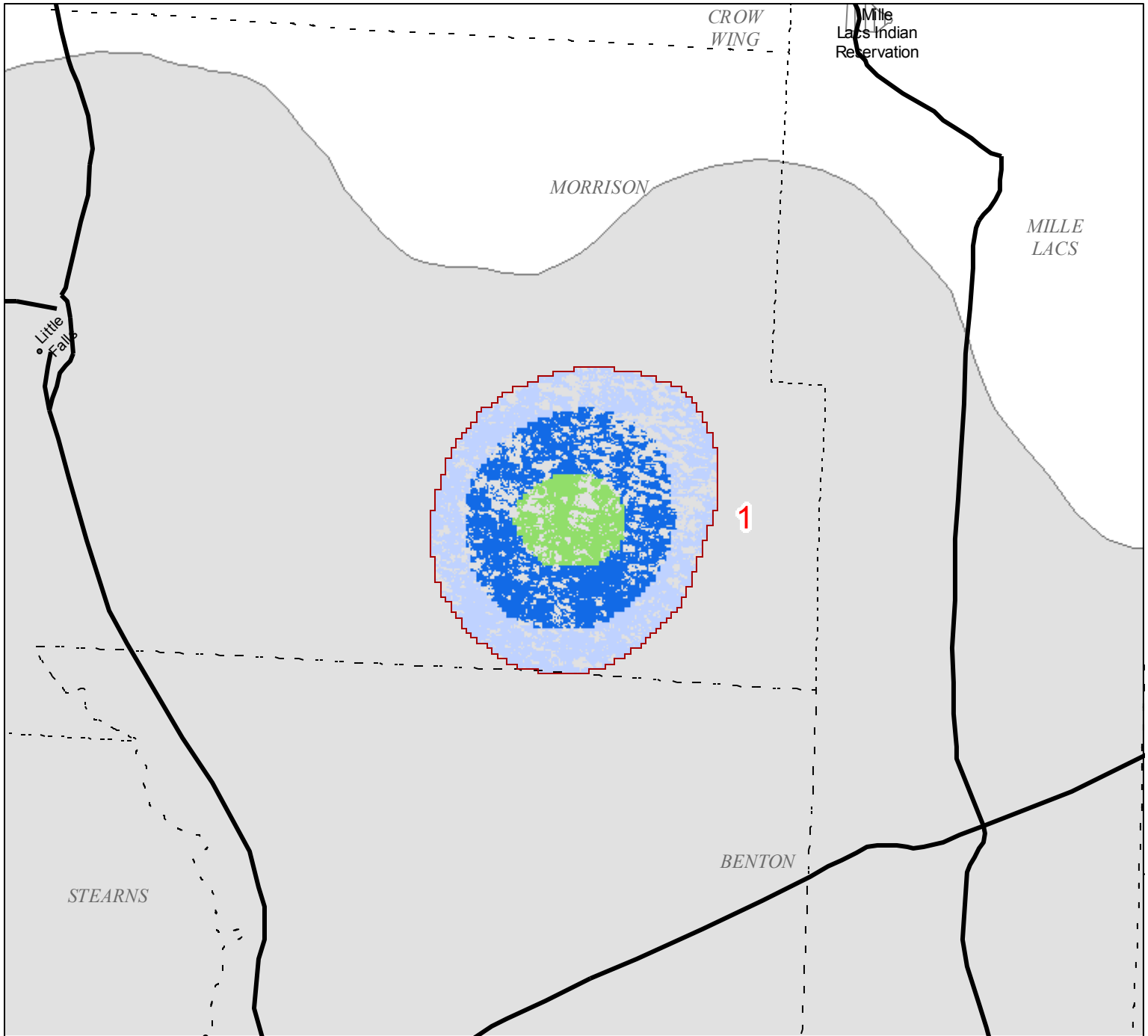
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with State Lands

Hotspot 10



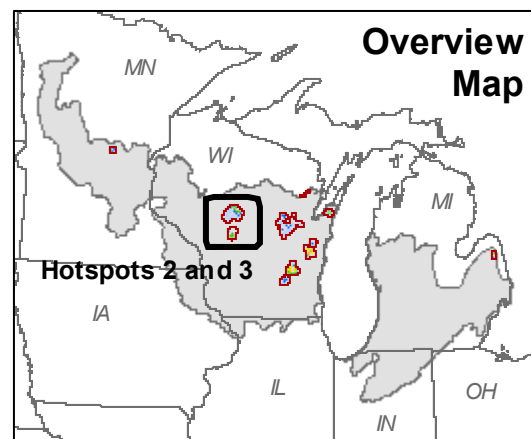
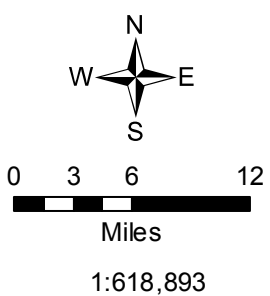
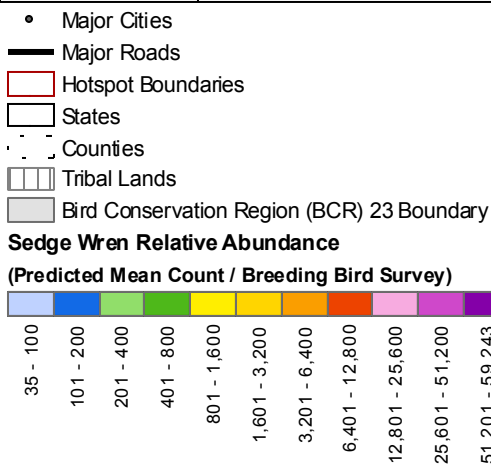
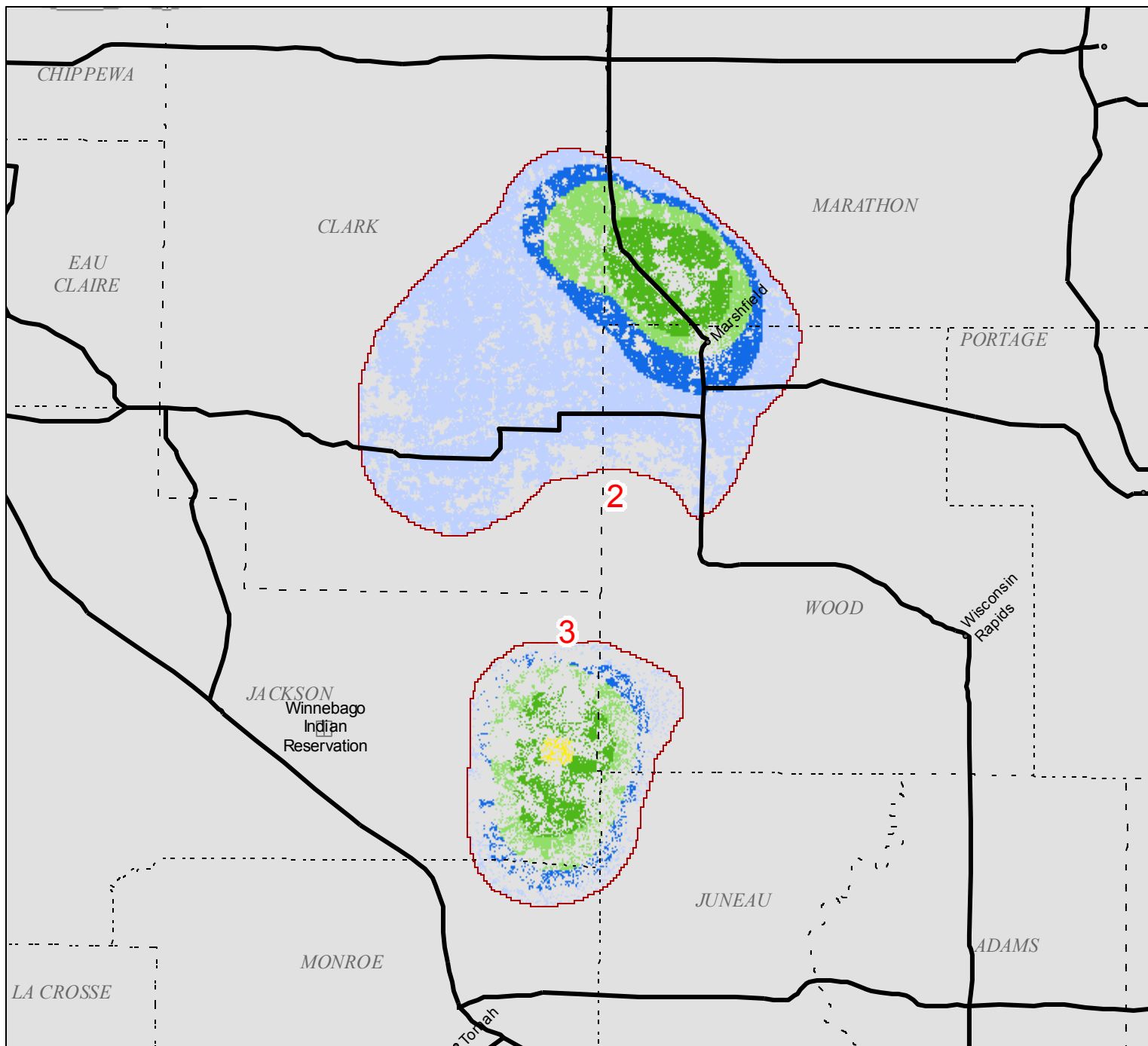
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspot 1



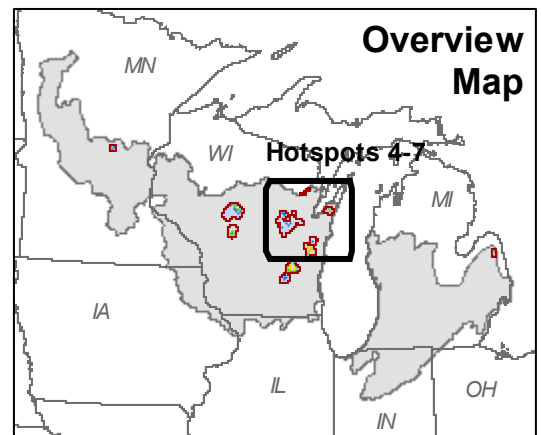
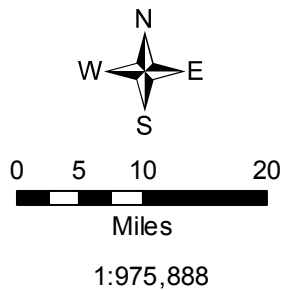
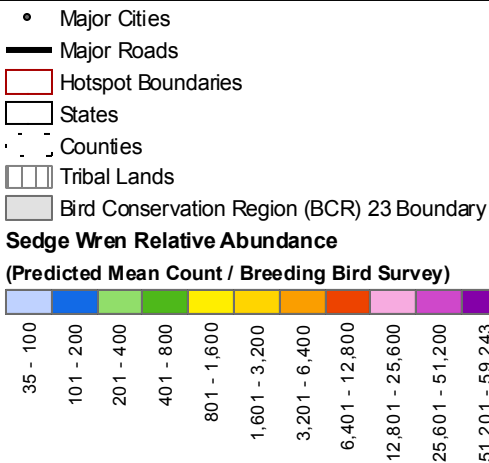
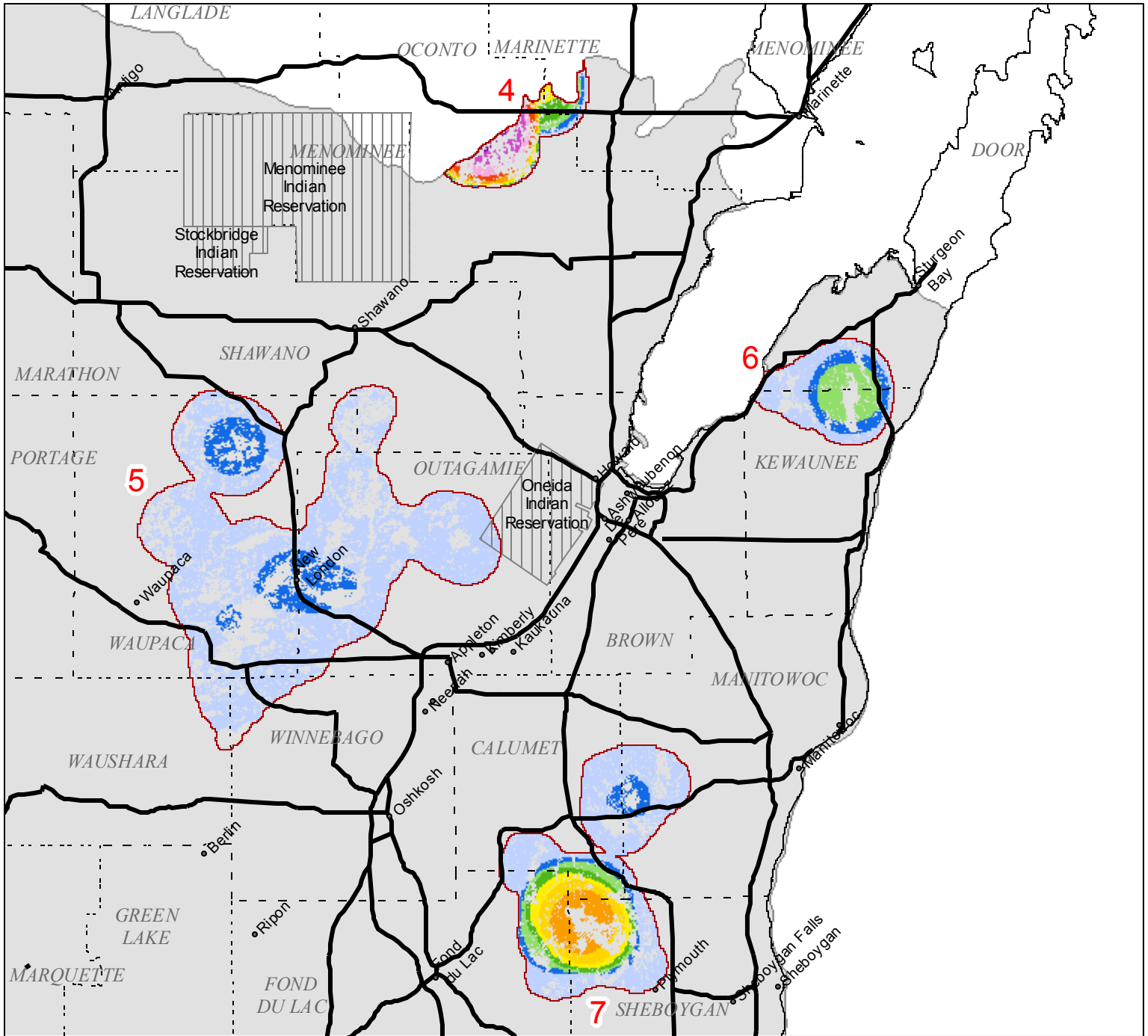
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspots 2 and 3



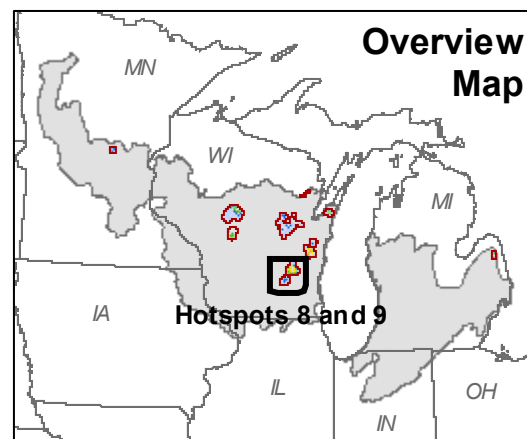
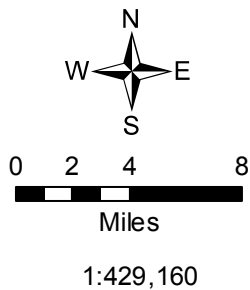
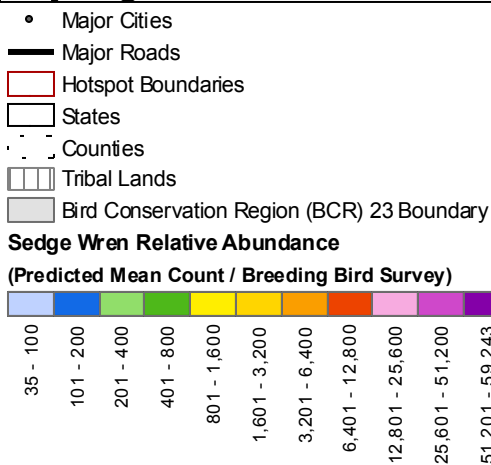
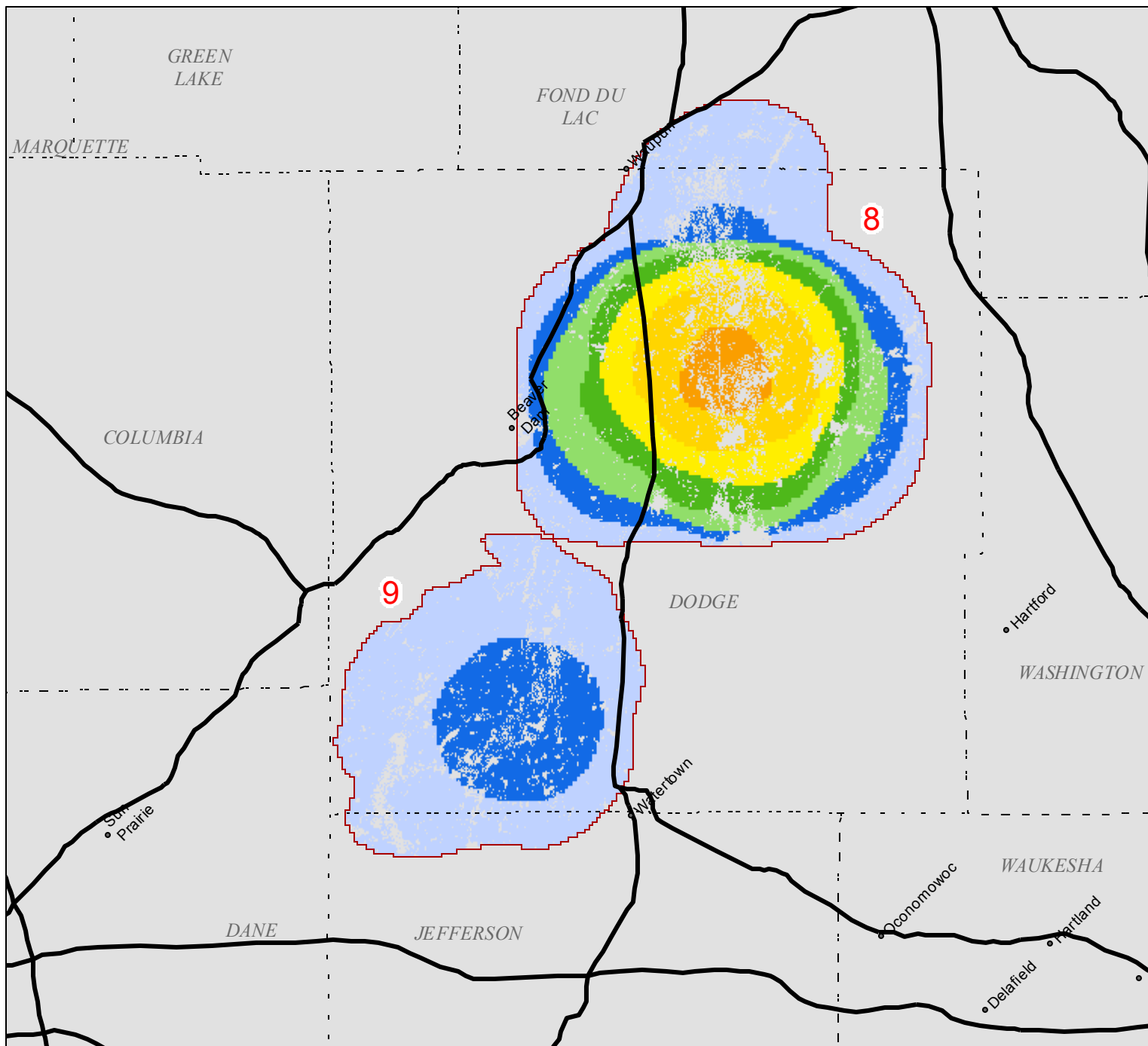
Sedge Wren (SEWR) Predicted Relative Abundance Overlayed with Tribal Lands

Hotspots 4-7



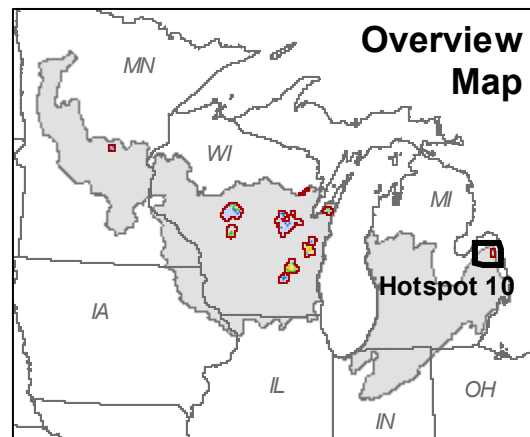
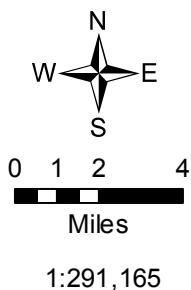
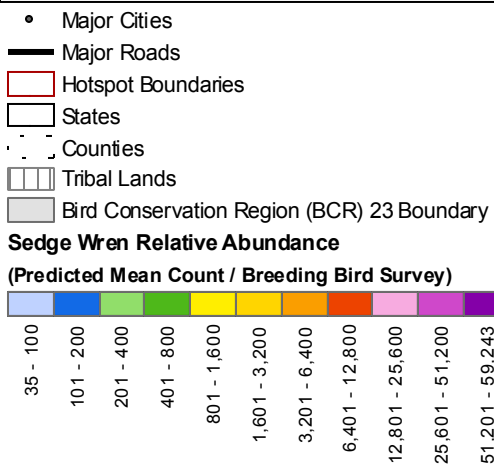
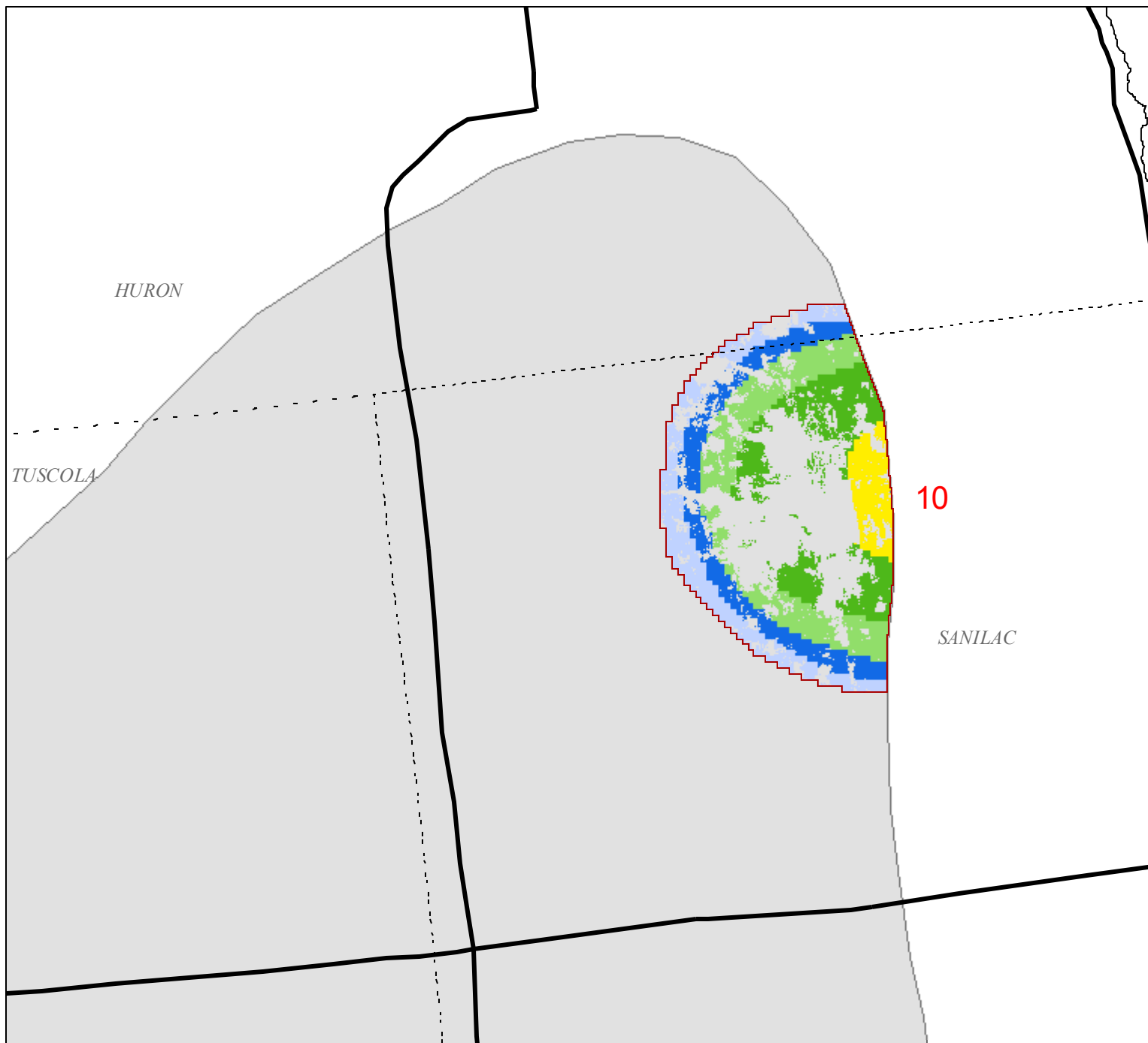
Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspots 8 and 9



Sedge Wren (SEWR) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspot 10



**Sedge Wren Predicted Relative Abundance Summary by Hotspot
Federal Managed Lands Versus Lands Not Under Federal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
Hotspot 1 - Unmanaged by Federal	235.35	0.00	83.63	213.00	213.00	71.20	21,869,600	100.00	100.00
Hotspot 1 - Managed by Federal	0.00								
Hotspot 2 - Unmanaged by Federal	1,383.39	0.00	102.46	723.00	723.00	149.09	157,486,000	100.00	100.00
Hotspot 2 - Managed by Federal	0.00								
Hotspot 3 - Unmanaged by Federal	524.61	0.00	98.22	868.00	868.00	196.77	57,251,000	100.00	100.00
Hotspot 3 - Managed by Federal	0.00								
Hotspot 4 - Unmanaged by Federal	186.22	0.00	4747.73	59243.00	59243.00	10929.20	982,363,008	100.00	100.00
Hotspot 4 - Managed by Federal	0.00								
Hotspot 5 - Unmanaged by Federal	1,906.92	0.00	40.76	155.00	155.00	38.11	86,365,504	100.00	100.00
Hotspot 5 - Managed by Federal	0.00								
Hotspot 6 - Unmanaged by Federal	306.65	0.00	104.97	311.00	311.00	98.16	35,766,500	100.00	100.00
Hotspot 6 - Managed by Federal	0.00								
Hotspot 7 - Unmanaged by Federal	861.48	0.00	564.00	5490.00	5490.00	1203.05	539,859,968	100.00	100.00
Hotspot 7 - Managed by Federal	0.00								
Hotspot 8 - Unmanaged by Federal	712.91	0.00	594.53	3977.00	3977.00	886.44	470,947,008	89.18	88.74
Hotspot 8 - Managed by Federal	86.47	0.00	621.82	3262.00	3262.00	929.11	59,739,700	10.82	11.26
Hotspot 9 - Unmanaged by Federal	425.52	0.00	67.95	181.00	181.00	49.74	32,127,100	100.00	100.00
Hotspot 9 - Managed by Federal	0.00								
Hotspot 10 - Unmanaged by Federal	181.92	0.00	197.37	1051.00	1051.00	259.23	39,894,900	100.00	100.00
Hotspot 10 - Managed by Federal	0.00								

SUMMARY

Total Area Unmanaged (sq km)	6,724.98	Sum* Total Unmanaged	2,423,930,588
Total Area Managed (sq km)	86.47	Sum* Total Managed	59,739,700
Total Area (sq km)	6,811.45	Total Sum*	2,483,670,288

Total Area Unmanaged %	98.73	Sum* Total Unmanaged %	97.59
Total Area Managed %	1.27	Sum* Total Managed %	2.41

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

Sedge Wren Predicted Relative Abundance Summary by Hotspot State Managed Lands Versus Lands Not Under State Management

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
Hotspot 1 - Unmanaged by State	235.00	0.00	83.60	213.00	213.00	71.14	21,829,800	99.85	99.82
Hotspot 1 - Managed by State	0.35	0.00	102.61	213.00	213.00	106.12	39,711	0.15	0.18
Hotspot 2 - Unmanaged by State	1,358.62	0.00	100.63	723.00	723.00	144.09	151,904,000	98.21	96.46
Hotspot 2 - Managed by State	24.77	0.00	202.82	719.00	719.00	303.81	5,582,320	1.79	3.54
Hotspot 3 - Unmanaged by State	403.72	0.00	111.54	868.00	868.00	213.40	50,036,300	76.96	87.40
Hotspot 3 - Managed by State	120.89	0.00	53.71	673.00	673.00	115.58	7,214,700	23.04	12.60
Hotspot 4 - Unmanaged by State	186.04	0.00	4730.42	59243.00	59243.00	10885.40	977,820,032	99.90	99.54
Hotspot 4 - Managed by State	0.18	0.00	22382.00	58877.00	58877.00	27950.50	4,543,540	0.10	0.46
Hotspot 5 - Unmanaged by State	1,842.13	0.00	41.91	155.00	155.00	38.11	85,774,800	96.60	99.32
Hotspot 5 - Managed by State	64.79	0.00	8.21	128.00	128.00	18.58	590,765	3.40	0.68
Hotspot 6 - Unmanaged by State	306.65	0.00	104.97	311.00	311.00	98.16	35,766,500	100.00	100.00
Hotspot 6 - Managed by State	0.00								
Hotspot 7 - Unmanaged by State	776.65	0.00	609.43	5490.00	5490.00	1240.79	525,905,984	90.15	97.42
Hotspot 7 - Managed by State	84.83	0.00	148.05	4749.00	4749.00	641.13	13,954,200	9.85	2.58
Hotspot 8 - Unmanaged by State	794.99	0.00	600.54	3977.00	3977.00	892.70	530,471,008	99.45	99.96
Hotspot 8 - Managed by State	4.39	0.00	44.24	100.00	100.00	19.54	215,711	0.55	0.04
Hotspot 9 - Unmanaged by State	376.18	0.00	65.79	179.00	179.00	45.23	27,498,900	88.41	85.59
Hotspot 9 - Managed by State	49.34	0.00	84.43	181.00	181.00	73.75	4,628,180	11.59	14.41
Hotspot 10 - Unmanaged by State	150.57	0.00	215.09	1051.00	1051.00	251.42	35,985,800	82.77	90.20
Hotspot 10 - Managed by State	31.35	0.00	112.22	974.00	974.00	278.55	3,909,050	17.23	9.80

SUMMARY

Total Area Unmanaged (sq km)	6,430.57	Sum* Total Unmanaged	2,442,993,124
Total Area Managed (sq km)	380.89	Sum* Total Managed	40,678,177
Total Area (sq km)	6,811.45	Total Sum*	2,483,671,301

Total Area Unmanaged %	94.41	Sum* Total Unmanaged %	98.36
Total Area Managed %	5.59	Sum* Total Managed %	1.64

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Sedge Wren Predicted Relative Abundance Summary by Hotspot
Tribal Lands Versus Lands Not Under Tribal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
Hotspot 1 - Unmanaged by Tribal	235.35	0.00	83.63	213.00	213.00	71.20	21,869,600	100.00	100.00
Hotspot 1 - Managed by Tribal	0.00								
Hotspot 2 - Unmanaged by Tribal	1,383.39	0.00	102.46	723.00	723.00	149.09	157,486,000	100.00	100.00
Hotspot 2 - Managed by Tribal	0.00								
Hotspot 3 - Unmanaged by Tribal	524.61	0.00	98.22	868.00	868.00	196.77	57,251,000	100.00	100.00
Hotspot 3 - Managed by Tribal	0.00								
Hotspot 4 - Unmanaged by Tribal	186.22	0.00	4747.73	59243.00	59243.00	10929.20	982,363,008	100.00	100.00
Hotspot 4 - Managed by Tribal	0.00								
Hotspot 5 - Unmanaged by Tribal	1,895.99	0.00	40.75	155.00	155.00	38.17	85,844,704	99.43	99.40
Hotspot 5 - Managed by Tribal	10.93	0.00	42.90	85.00	85.00	26.04	520,834	0.57	0.60
Hotspot 6 - Unmanaged by Tribal	306.65	0.00	104.97	311.00	311.00	98.16	35,766,500	100.00	100.00
Hotspot 6 - Managed by Tribal	0.00								
Hotspot 7 - Unmanaged by Tribal	861.48	0.00	564.00	5490.00	5490.00	1203.05	539,859,968	100.00	100.00
Hotspot 7 - Managed by Tribal	0.00								
Hotspot 8 - Unmanaged by Tribal	799.38	0.00	597.49	3977.00	3977.00	891.20	530,687,008	100.00	100.00
Hotspot 8 - Managed by Tribal	0.00								
Hotspot 9 - Unmanaged by Tribal	425.52	0.00	67.95	181.00	181.00	49.74	32,127,100	100.00	100.00
Hotspot 9 - Managed by Tribal	0.00								
Hotspot 10 - Unmanaged by Tribal	181.92	0.00	197.37	1051.00	1051.00	259.23	39,894,900	100.00	100.00
Hotspot 10 - Managed by Tribal	0.00								

SUMMARY

Total Area Unmanaged (sq km)	6,800.52	Sum* Total Unmanaged	2,483,149,788
Total Area Managed (sq km)	10.93	Sum* Total Managed	520,834
Total Area (sq km)	6,811.44	Total Sum*	2,483,670,622

Total Area Unmanaged %	99.84	Sum* Total Unmanaged %	99.98
Total Area Managed %	0.16	Sum* Total Managed %	0.02

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Sedge Wren Predicted Relative Abundance Summary by State
Federal Managed Lands Versus Lands Not Under Federal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
IA - Unmanaged by Federal	6,982.18	0.00	2.22	17.00	17.00	1.89	17,248,800	96.80	98.51
IA - Managed by Federal	230.67	0.00	1.02	17.00	17.00	2.62	261,529	3.20	1.49
IL - Unmanaged by Federal	3,208.05	0.00	3.19	9.00	9.00	2.32	11,360,900	96.68	98.73
IL - Managed by Federal	110.30	0.00	1.19	7.00	7.00	2.28	145,862	3.32	1.27
IN - Unmanaged by Federal	13,070.80	0.00	0.66	3.00	3.00	0.56	9,529,790	99.68	99.91
IN - Managed by Federal	41.35	0.00	0.19	1.00	1.00	0.39	8,572	0.32	0.09
MI - Unmanaged by Federal	57,537.80	0.00	2.76	1051.00	1051.00	19.38	176,546,000	98.06	99.88
MI - Managed by Federal	1,139.19	0.00	0.17	293.00	293.00	2.60	214,633	1.94	0.12
MN - Unmanaged by Federal	49,220.50	0.00	5.98	213.00	213.00	12.98	327,025,984	98.73	98.38
MN - Managed by Federal	635.37	0.00	7.62	150.00	150.00	18.90	5,376,510	1.27	1.62
OH - Unmanaged by Federal	110.41	0.00	0.73	1.00	1.00	0.44	89,662	100.00	100.00
OH - Managed by Federal	0.00								
WI - Unmanaged by Federal	96,519.50	0.00	28.90	59243.00	59243.00	546.19	3,099,610,112	99.00	98.05
WI - Managed by Federal	976.24	0.00	56.97	3262.00	3262.00	327.85	61,796,700	1.00	1.95

SUMMARY

Total Area Unmanaged (sq km)	226,649.24	Sum* Total Unmanaged	3,641,411,248
Total Area Managed (sq km)	3,133.12	Sum* Total Managed	67,803,806
Total Area (sq km)	229,782.36	Total Sum*	3,709,215,054

Total Area Unmanaged %	98.64	Sum* Total Unmanaged %	98.17
Total Area Managed %	1.36	Sum* Total Managed %	1.83

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Sedge Wren Predicted Relative Abundance Summary by State
State Managed Lands Versus Lands Not Under State Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
IA - Unmanaged by State	7,046.34	0.00	2.22	17.00	17.00	1.92	17,344,400	97.69	99.05
IA - Managed by State	166.51	0.00	0.90	16.00	16.00	2.08	165,957	2.31	0.95
IL - Unmanaged by State	3,278.40	0.00	3.13	9.00	9.00	2.33	11,393,000	98.80	99.01
IL - Managed by State	39.95	0.00	2.56	8.00	8.00	3.46	113,682	1.20	0.99
IN - Unmanaged by State	12,948.40	0.00	0.66	3.00	3.00	0.56	9,469,160	98.75	99.27
IN - Managed by State	163.72	0.00	0.38	3.00	3.00	0.53	69,199	1.25	0.73
MI - Unmanaged by State	56,466.40	0.00	2.69	1051.00	1051.00	18.08	168,694,000	96.23	95.44
MI - Managed by State	2,210.56	0.00	3.28	974.00	974.00	37.96	8,066,090	3.77	4.56
MN - Unmanaged by State	48,427.60	0.00	6.00	213.00	213.00	12.96	323,096,000	97.14	97.20
MN - Managed by State	1,428.22	0.00	5.86	213.00	213.00	16.35	9,306,510	2.86	2.80
OH - Unmanaged by State	101.07	0.00	0.76	1.00	1.00	0.43	85,469	91.54	95.32
OH - Managed by State	9.34	0.00	0.40	1.00	1.00	0.49	4,193	8.46	4.68
WI - Unmanaged by State	94,536.00	0.00	29.60	59243.00	59243.00	550.24	3,109,420,032	96.96	98.36
WI - Managed by State	2,959.68	0.00	15.81	58877.00	58877.00	305.69	51,988,700	3.04	1.64

SUMMARY

Total Area Unmanaged (sq km)	222,804.21	Sum* Total Unmanaged	3,639,502,061
Total Area Managed (sq km)	6,977.98	Sum* Total Managed	69,714,331
Total Area (sq km)	229,782.19	Total Sum*	3,709,216,392

Total Area Unmanaged %	96.96	Sum* Total Unmanaged %	98.12
Total Area Managed %	3.04	Sum* Total Managed %	1.88

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Sedge Wren Predicted Relative Abundance Summary by State
Tribal Lands Versus Lands Not Under Tribal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
IA - Unmanaged by Tribal	7,212.85	0.00	2.18	17.00	17.00	1.93	17,510,300	100.00	100.00
IA - Managed by Tribal	0.00								
IL - Unmanaged by Tribal	3,318.35	0.00	3.12	9.00	9.00	2.35	11,506,700	100.00	100.00
IL - Managed by Tribal	0.00								
IN - Unmanaged by Tribal	13,112.10	0.00	0.65	3.00	3.00	0.56	9,538,360	100.00	100.00
IN - Managed by Tribal	0.00								
MI - Unmanaged by Tribal	58,154.70	0.00	2.72	1051.00	1051.00	19.29	176,027,008	99.11	99.58
MI - Managed by Tribal	522.27	0.00	1.26	4.00	4.00	1.10	733,778	0.89	0.42
MN - Unmanaged by Tribal	47,959.20	0.00	6.12	213.00	213.00	13.27	325,963,008	96.20	98.06
MN - Managed by Tribal	1,896.59	0.00	3.06	85.00	85.00	5.26	6,439,640	3.80	1.94
OH - Unmanaged by Tribal	110.41	0.00	0.73	1.00	1.00	0.44	89,662	100.00	100.00
OH - Managed by Tribal	0.00								
WI - Unmanaged by Tribal	96,268.00	0.00	29.52	59243.00	59243.00	547.90	3,157,530,112	98.74	99.88
WI - Managed by Tribal	1,227.65	0.00	2.84	85.00	85.00	6.99	3,876,720	1.26	0.12

SUMMARY

Total Area Unmanaged (sq km)	226,135.61	Sum* Total Unmanaged	3,698,165,150
Total Area Managed (sq km)	3,646.51	Sum* Total Managed	11,050,138
Total Area (sq km)	229,782.12	Total Sum*	3,709,215,288

Total Area Unmanaged %	98.41	Sum* Total Unmanaged %	99.70
Total Area Managed %	1.59	Sum* Total Managed %	0.30

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.