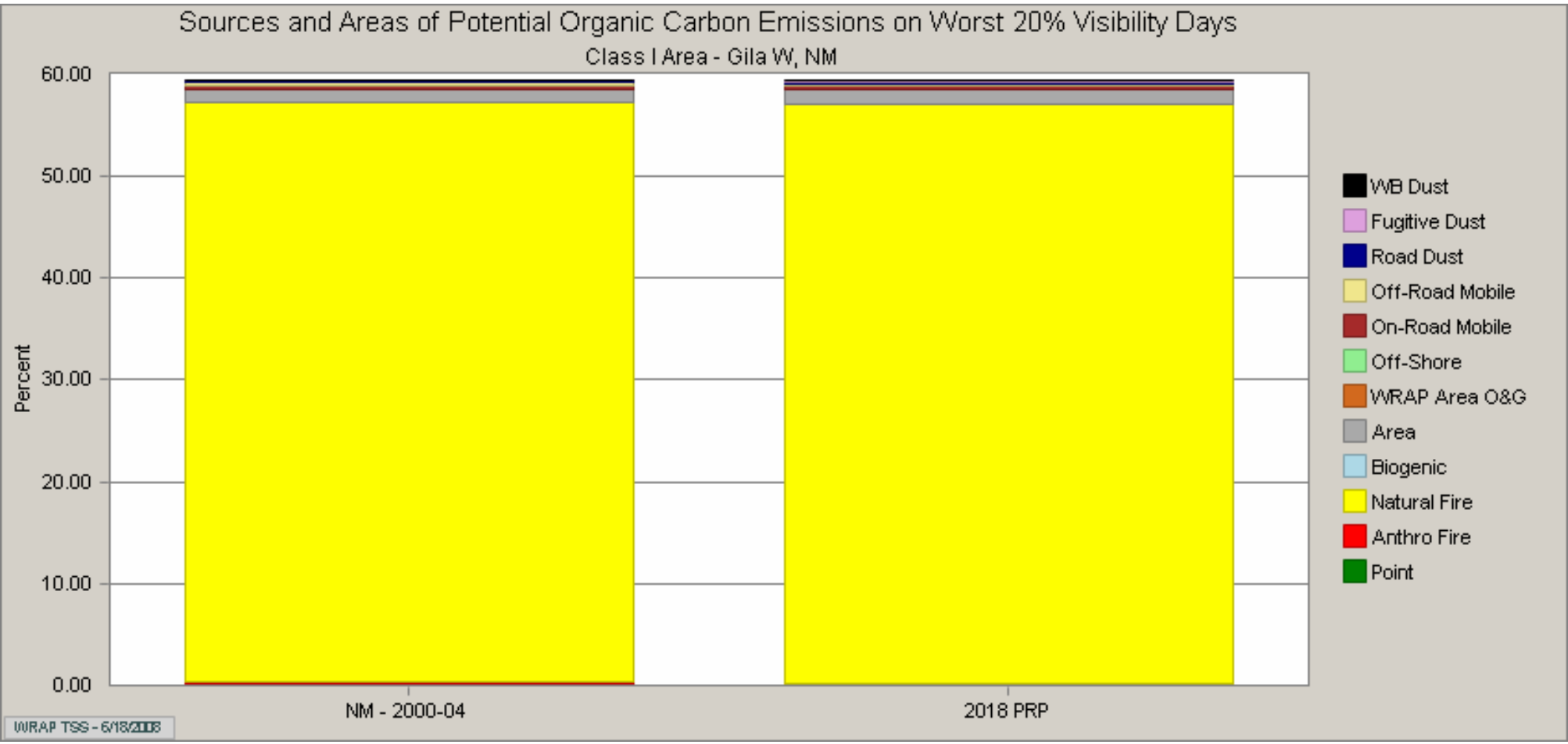
Gila Wilderness [GICL]
Organic Carbon (OC)

The largest potential contributor to visibility impairment by OC at GICL in 2000-04 and 2018 is from natural fire (see bar graph). Looking at the map of Normalized Weighted Emissions Potential (WEP) for GICL, there are not any WEP% values in proximity to Bernalillo County in 2000-04, but there are WEP% values of 1-10 in 2018.

Bernalillo's OC emissions from natural fire in 2002 were 14.947 TPY, which is 0.09% of New Mexico's 16,271.936 TPY, and the predicted emissions in 2018 remain constant at 2002 values.

The 2002 emissions inventory indicates that Bernalillo County's contribution to natural fire emissions is minimal (0.09%), and Bernalillo County is not in proximity to any WEP% values, so it is unlikely that Bernalillo County contributed significantly to the visibility impairment at GICL in 2000-04, but may contribute in 2018 if current projections are accurate.

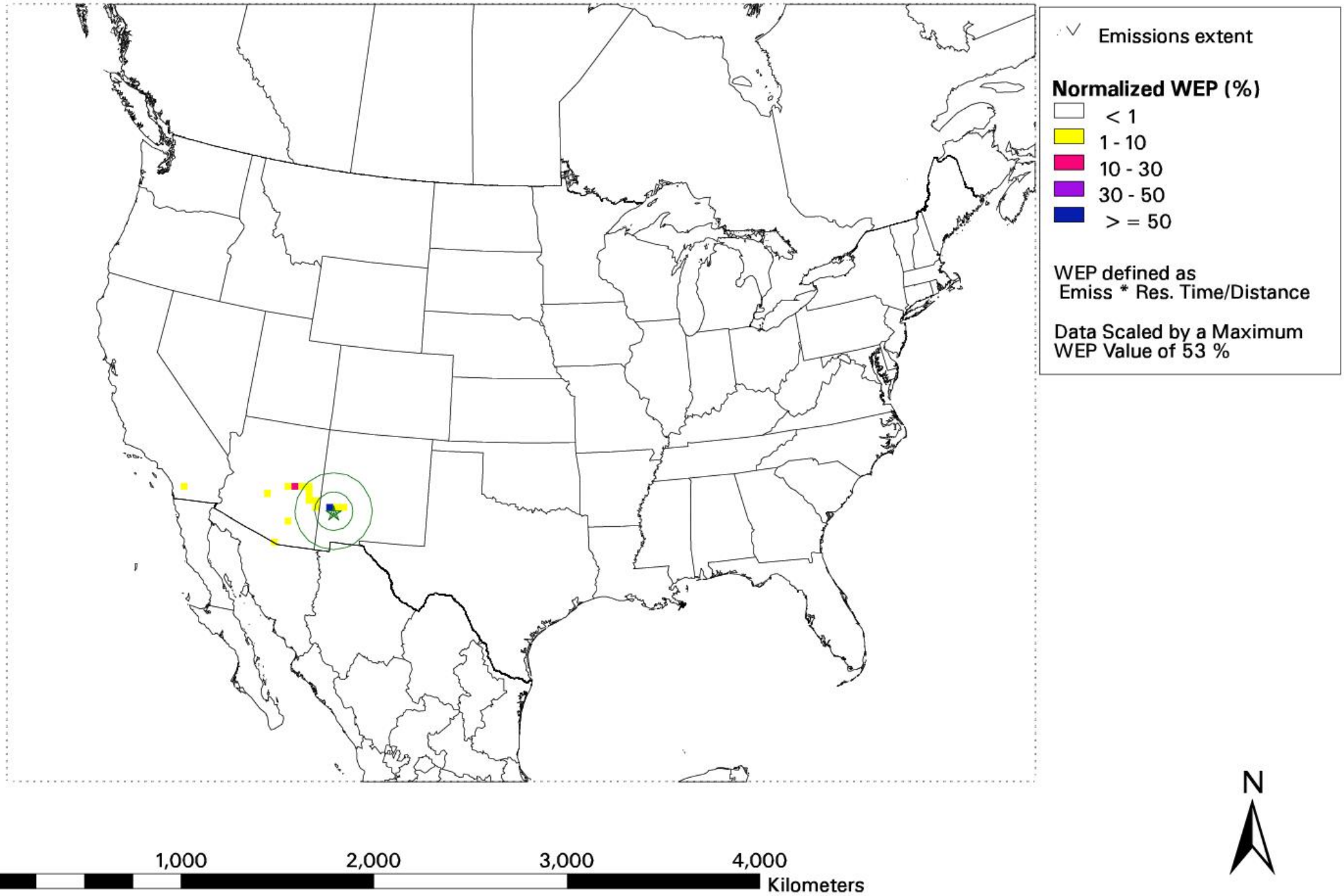

Sources and Areas of Potential Organic Carbon Emissions on Worst 20% Visibility Days
Class I Area - Gila W, NM
Percent
60.00
50.00
40.00
30.00
20.00
10.00
0.00
NM - 2000-04
2018 PRP
WB Dust
Fugitive Dust
Road Dust
Off-Road Mobile
On-Road Mobile
Off-Shore
WRAP Area O&G
Area
Biogenic
Natural Fire
Anthro Fire
Point
WRAP TSS - 6/18/2008

Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Organic Carbon (POA)

2000-04 Baseline

20% Worst Visibility Days

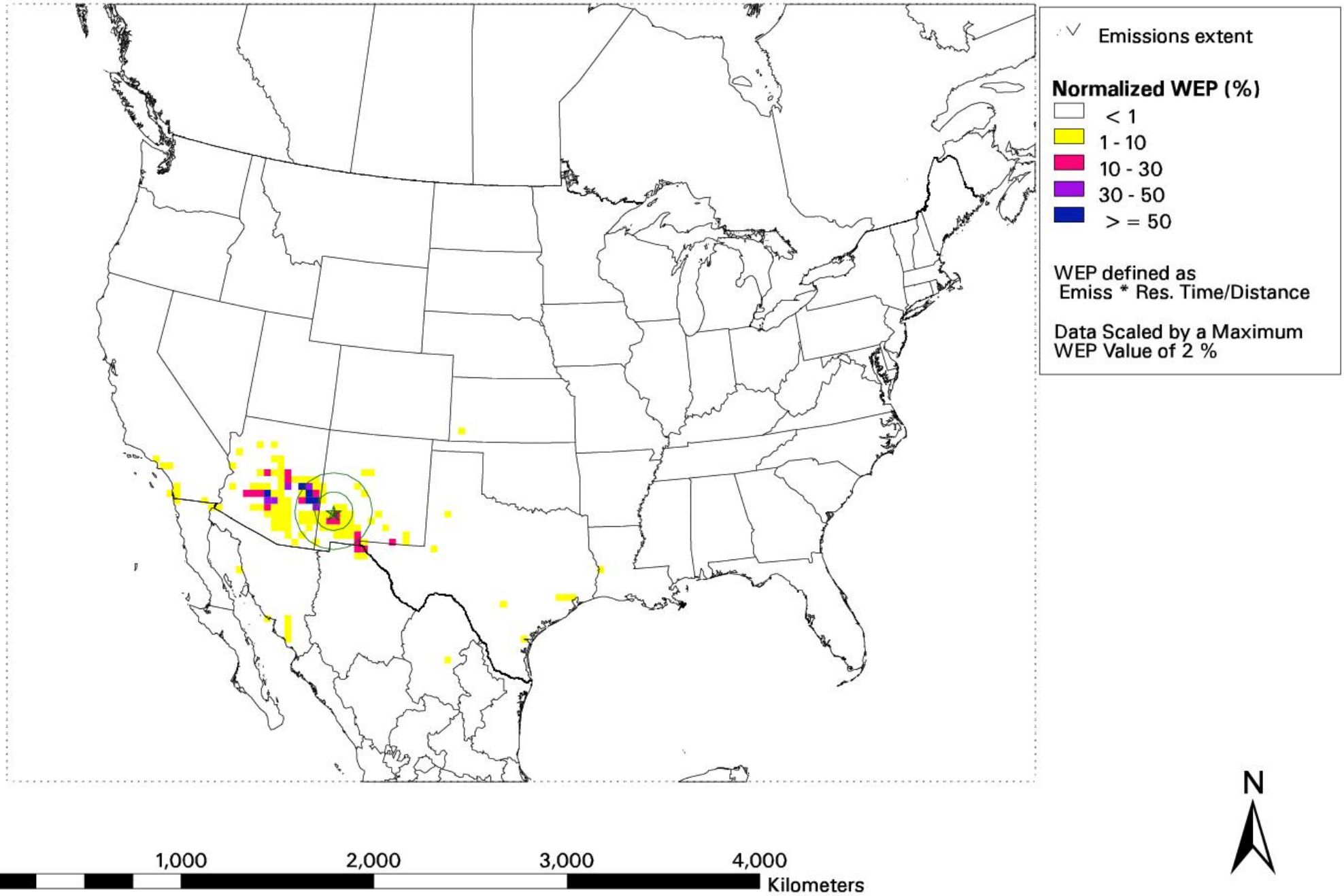


Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Organic Carbon (POA)

2018 Preliminary Reasonable Progress

20% Worst Visibility Days

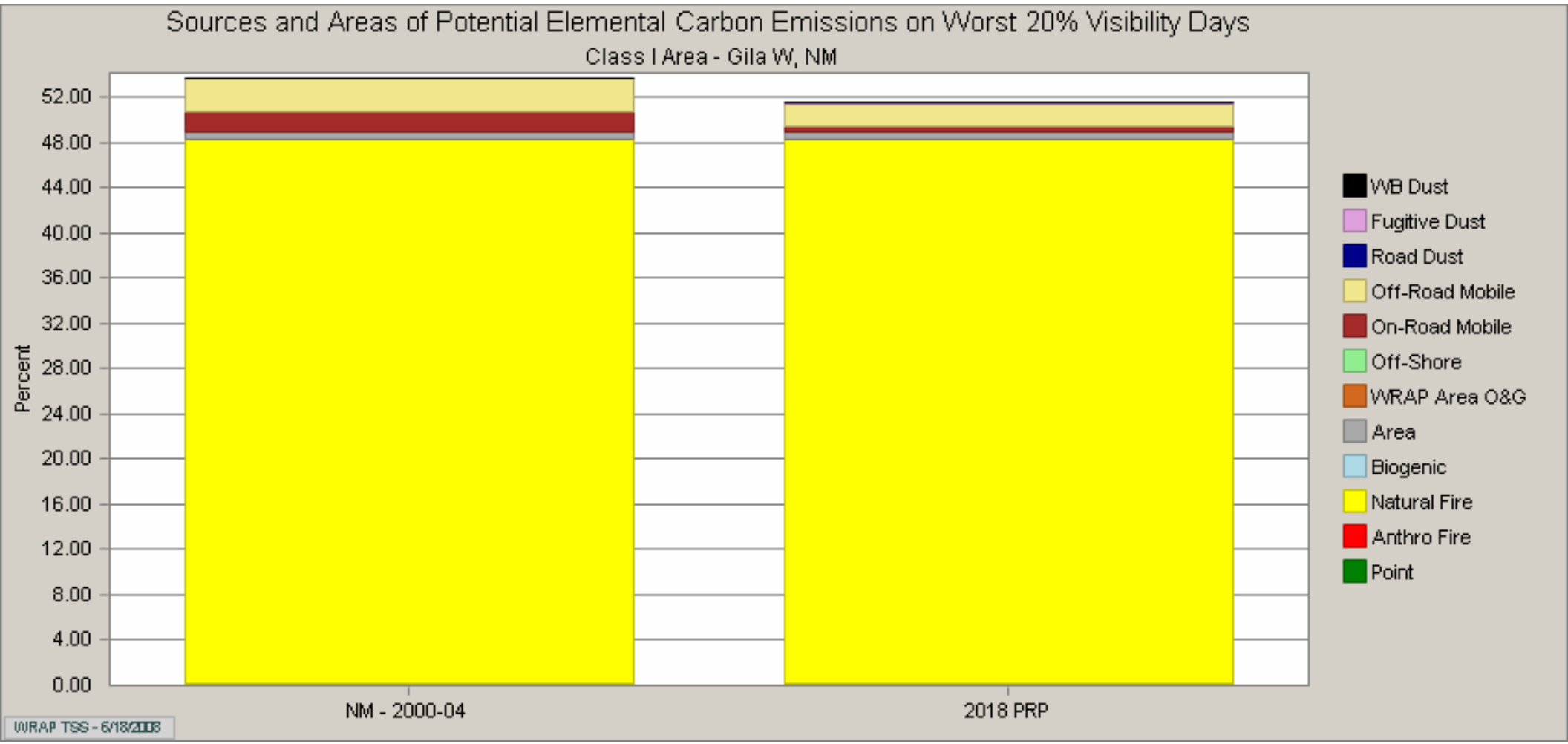


Gila Wilderness [GICL]
Elemental Carbon (EC)

The largest potential contributor to visibility impairment from EC in 2000-04 and 2018 is natural fire, followed by Off-Road Mobile and On-Road Mobile (see bar graph). Looking at the map of Normalized Weighted Emissions Potential (WEP) for GICL, there are not any WEP% values in proximity to Bernalillo County in 2000-04, but for 2018 there is a WEP value of 1-10%.

Bernalillo's EC emissions from natural fire in 2002 were 2.307 TPY, which is 0.07% of New Mexico's 3293.129 TPY, and the predicted emissions for Bernalillo County in 2018 remain constant at 2002 values. Bernalillo's EC emissions from Off-Road Mobile were 171.0425 TPY in 2002, which is 11.2% of New Mexico's 1526.44 TPY, and the predicted emissions for Bernalillo County in 2018 are 81.73 TPY, which is 9.2% of New Mexico's 884.855 TPY. Bernalillo's EC emissions from On-Road Mobile in 2002 were 170.2 TPY, which is 22.5% of New Mexico's 756.1025 TPY, and the predicted emissions for Bernalillo County in 2018 are 44.395 TPY, which is 21.7% of New Mexico's 204.775 TPY.

The 2002 emissions inventory indicates that Bernalillo County's contribution to EC from natural fire emissions is minimal (0.07%), and Bernalillo County is not in proximity to any WEP% values for the 2000-04 baseline, so it is unlikely that Bernalillo County contributed significantly to the visibility impairment at GICL in 2000-04, but may contribute in 2018 if current projections are accurate.

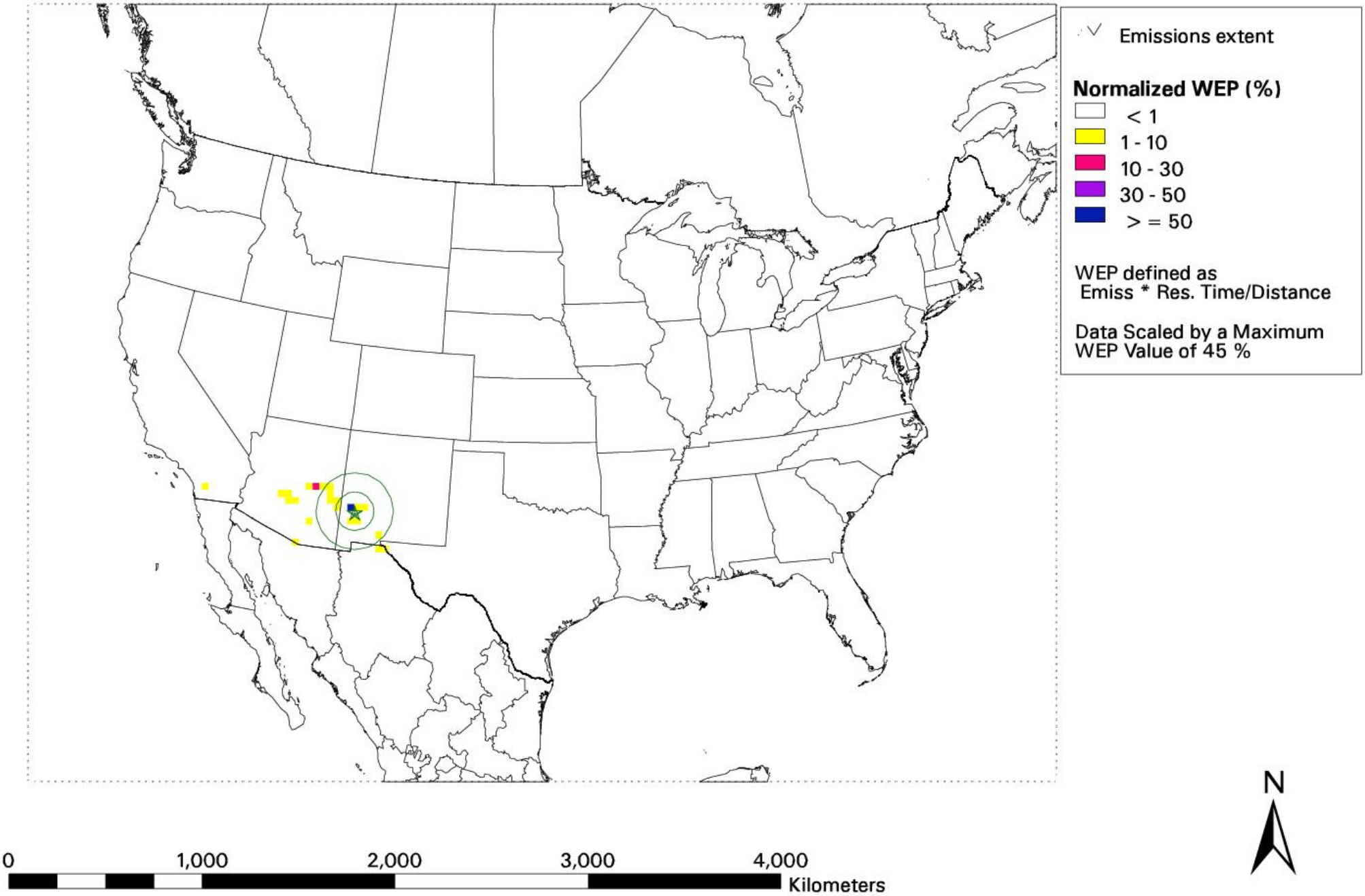

Sources and Areas of Potential Elemental Carbon Emissions on Worst 20% Visibility Days
Class I Area - Gila W, NM
Percent
52.00
48.00
44.00
40.00
36.00
32.00
28.00
24.00
20.00
16.00
12.00
8.00
4.00
0.00
NM - 2000-04
2018 PRP
WB Dust
Fugitive Dust
Road Dust
Off-Road Mobile
On-Road Mobile
Off-Shore
WRAP Area O&G
Area
Biogenic
Natural Fire
Anthro Fire
Point
WRAP TSS - 6/18/2008

Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Elemental Carbon (PEC)

2000-04 Baseline

20% Worst Visibility Days

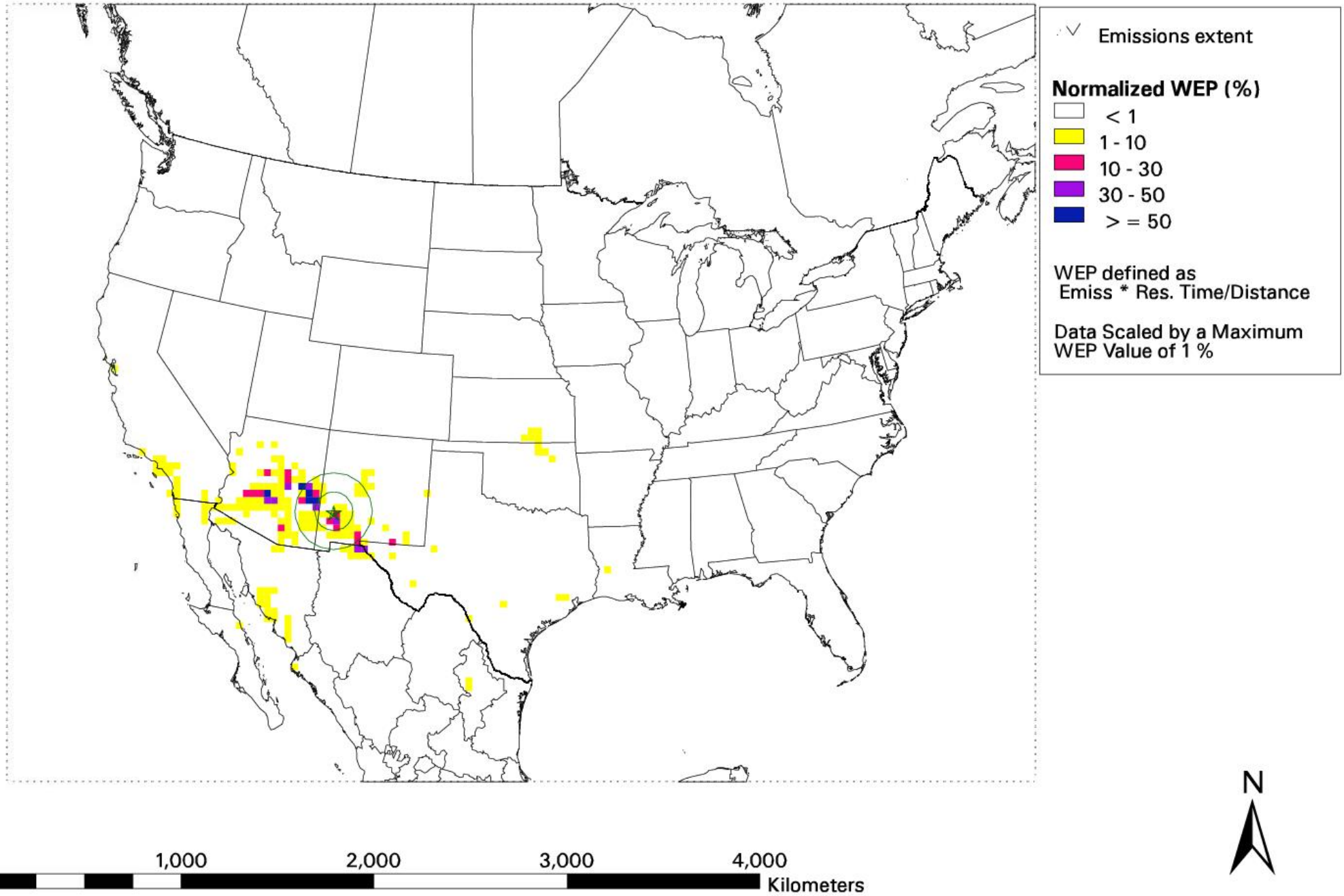


Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Elemental Carbon (PEC)

2018 Preliminary Reasonable Progress

20% Worst Visibility Days

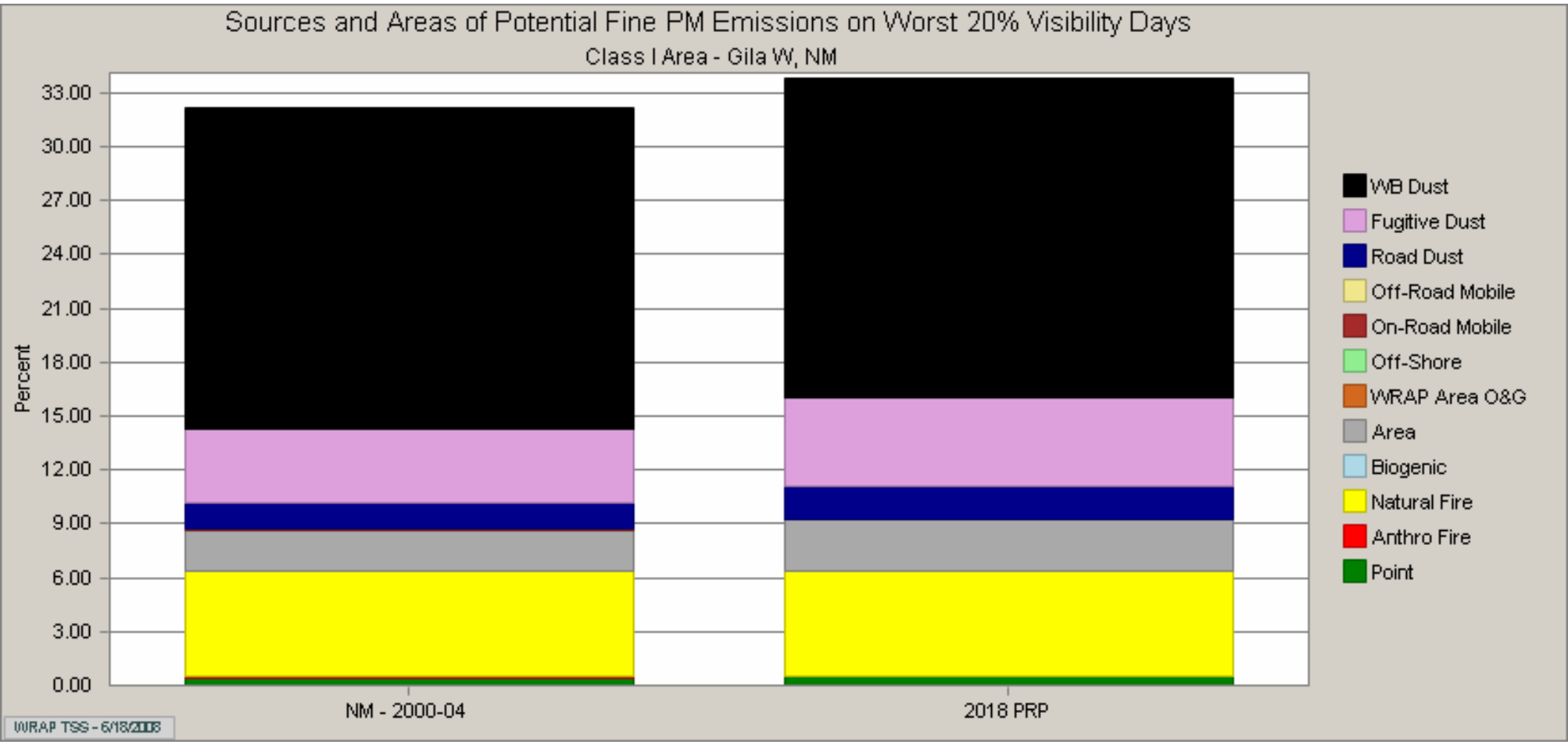


Gila Wilderness [GICL]
Particulate Matter fine (PMf)

The largest potential contributor to visibility impairment in 2000-04 and 2018 from PMf is due to WB Dust, followed by Natural Fire and Fugitive Dust (see bar graph). Looking at the map of Normalized Weighted Emissions Potential (WEP) for GICL, the nearest WEP% values to Bernalillo County are 1-10% for 2000-04 and 2018.

In 2002, Bernalillo's PMf emissions form WB Dust were 93.5505 TPY, which is 0.57% of New Mexico's 16,398.8 TPY, and the predicted emissions for Bernalillo County and New Mexico in 2018 remain constant at 2002 levels.

In 2002 Bernalillo County was the largest contributor of PMf in New Mexico. However, WB Dust was the largest fraction of PMf emissions impacting GICL, while the largest fraction of PMf emissions in Bernalillo County was due to Fugitive Dust. This would indicate that Bernalillo County is less likely to contribute to the visibility impairment at GICL from PMf, but this parsing of individual categories of dust may not preclude Bernalilllo's impact on GICL. Therefore, it is possible that Bernalillo County's PMf emissions contribute to the visibility impairment at GICL.

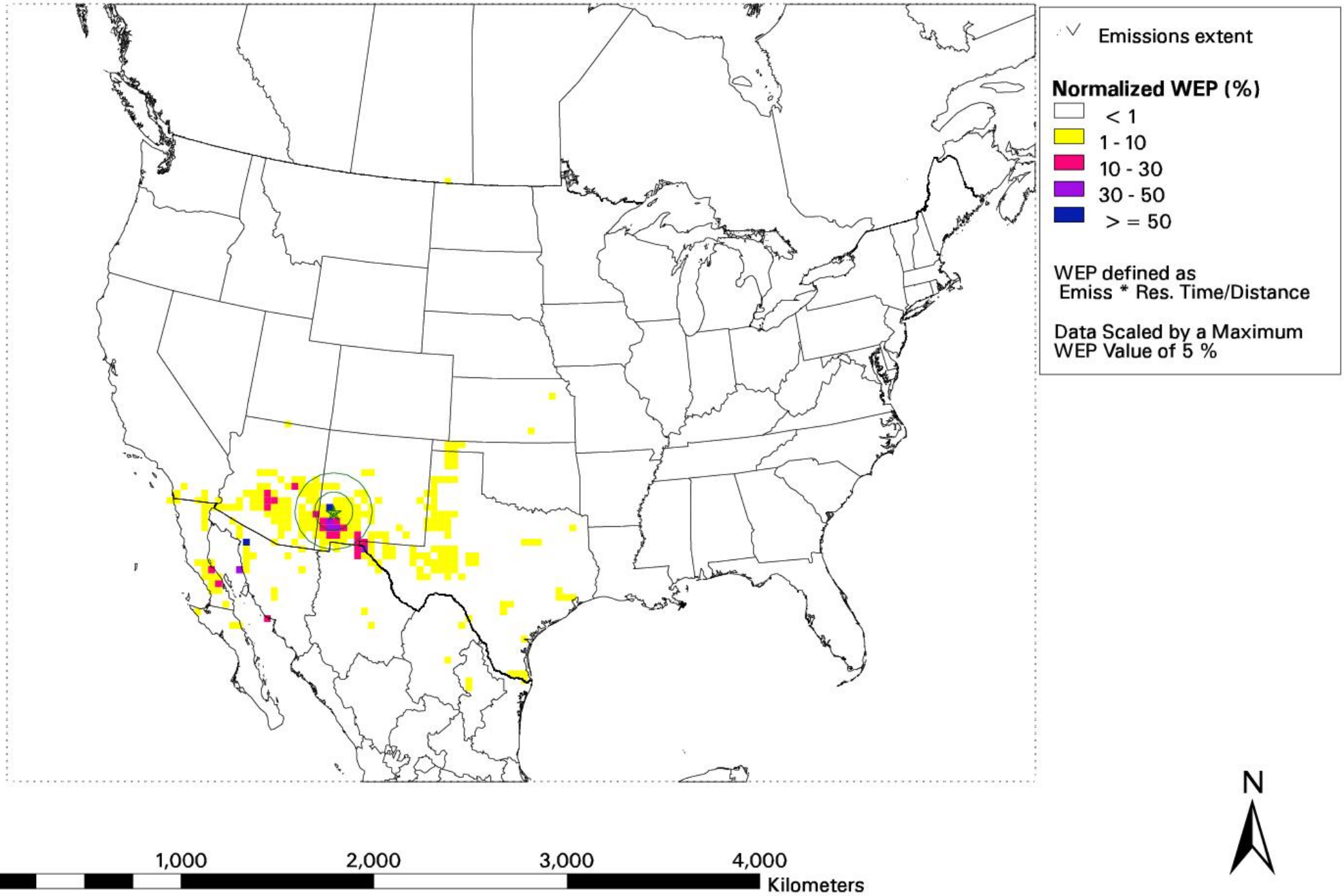

Sources and Areas of Potential Fine PM Emissions on Worst 20% Visibility Days
Class I Area - Gila W, NM
Percent
33.00
30.00
27.00
24.00
21.00
18.00
15.00
12.00
9.00
6.00
3.00
0.00
NM - 2000-04
2018 PRP
WB Dust
Fugitive Dust
Road Dust
Off-Road Mobile
On-Road Mobile
Off-Shore
WRAP Area O&G
Area
Biogenic
Natural Fire
Anthro Fire
Point
WRAP TSS - 6/18/2008

Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Fine Particulate Matter (PMFINE)

2000-04 Baseline

20% Worst Visibility Days

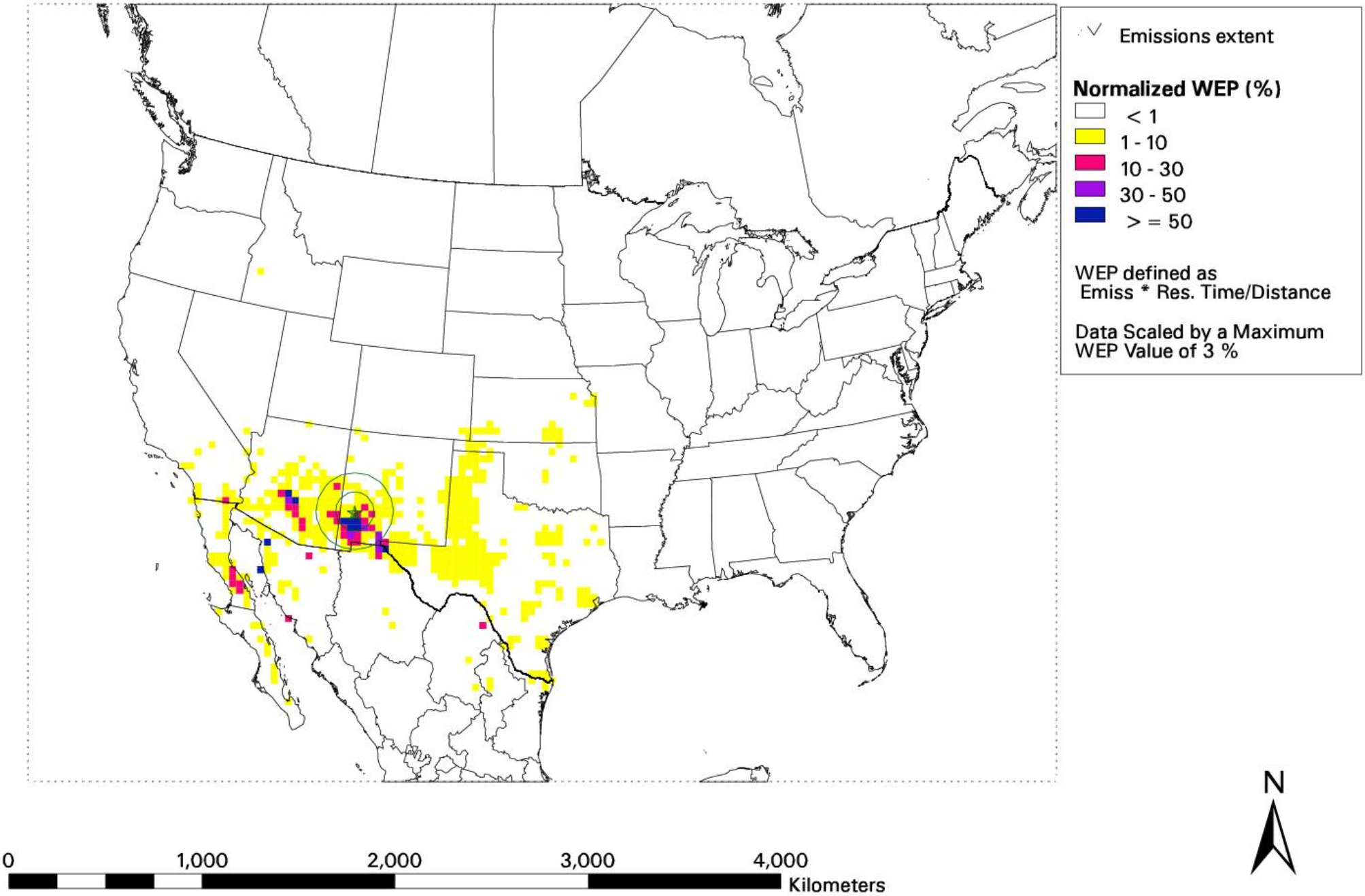


Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Fine Particulate Matter (PMFINE)

2018 Preliminary Reasonable Progress

20% Worst Visibility Days

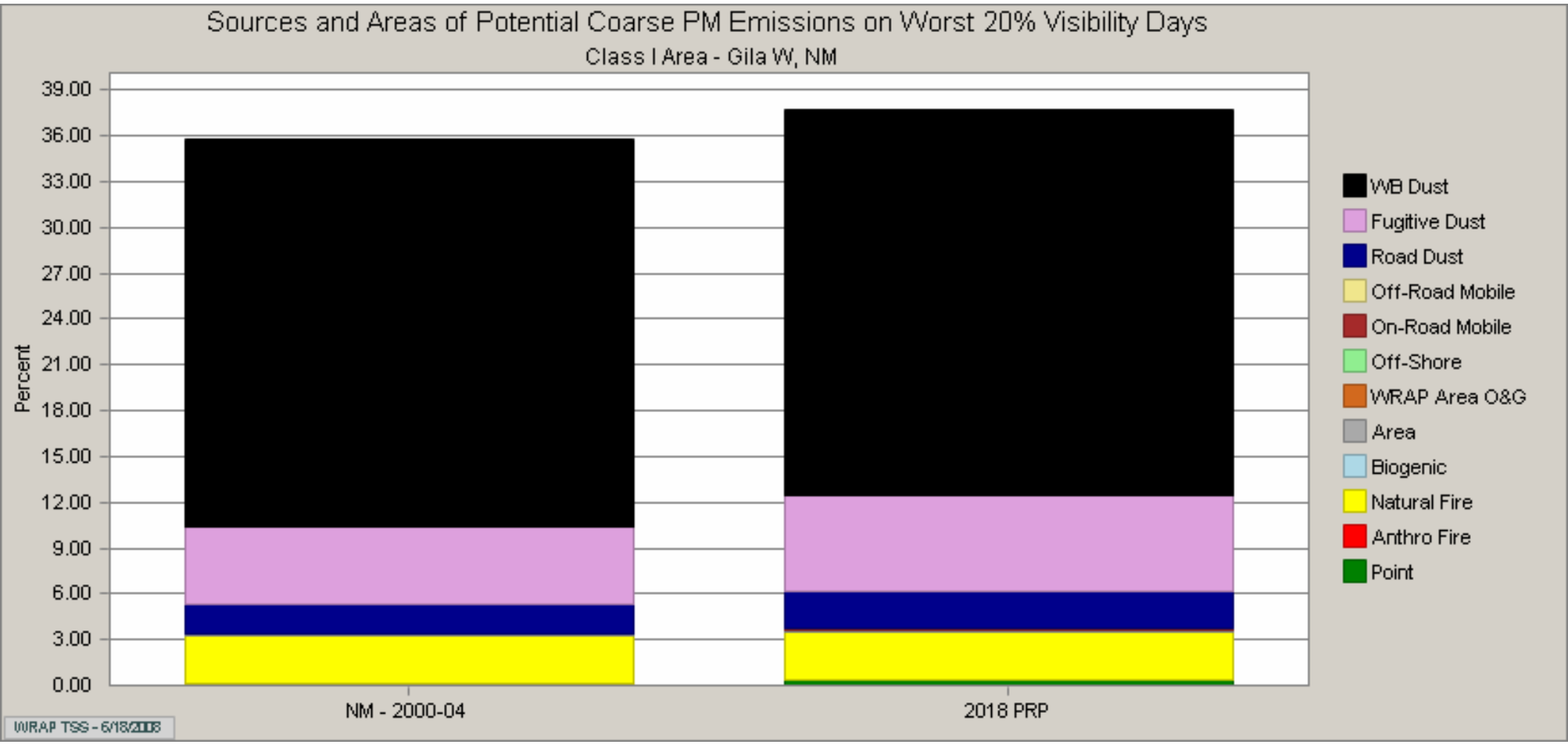


Gila Wilderness [GICL]
Particulate Matter coarse (PMc)

The largest potential contributor to visibility impairment in GICL from PMc emissions for 2000-04 is WB Dust, followed by Fugitive Dust and Natural Fire (see bar graph). Looking at the map of Normalized Weighted Emissions Potential (WEP) for GICL, the nearest WEP% value to Bernalillo County is 1-10% for 2000-04 and for 2018 as well.

In 2002, Bernalillo's PMc emissions from WB Dust were 841.9548 TPY, which is 0.57% of New Mexico's 147,589.19 TPY, and the predicted emissions for Bernalillo County and New Mexico in 2018 remain constant at 2002 values.

In 2002 Bernalillo County was the largest contributor of PMc in New Mexico. However, WB Dust was the largest fraction of PMc emissions impacting GICL, while the largest fraction of PMc emissions in Bernalillo County was due to Fugitive Dust. This would indicate that Bernalillo County is less likely to contribute to the visibility impairment at GICL from PMc, but this parsing of individual categories of dust may not preclude Bernalilllo's impact on GICL. Therefore, it is possible that Bernalillo County's PMc emissions contribute to the visibility impairment at GICL.

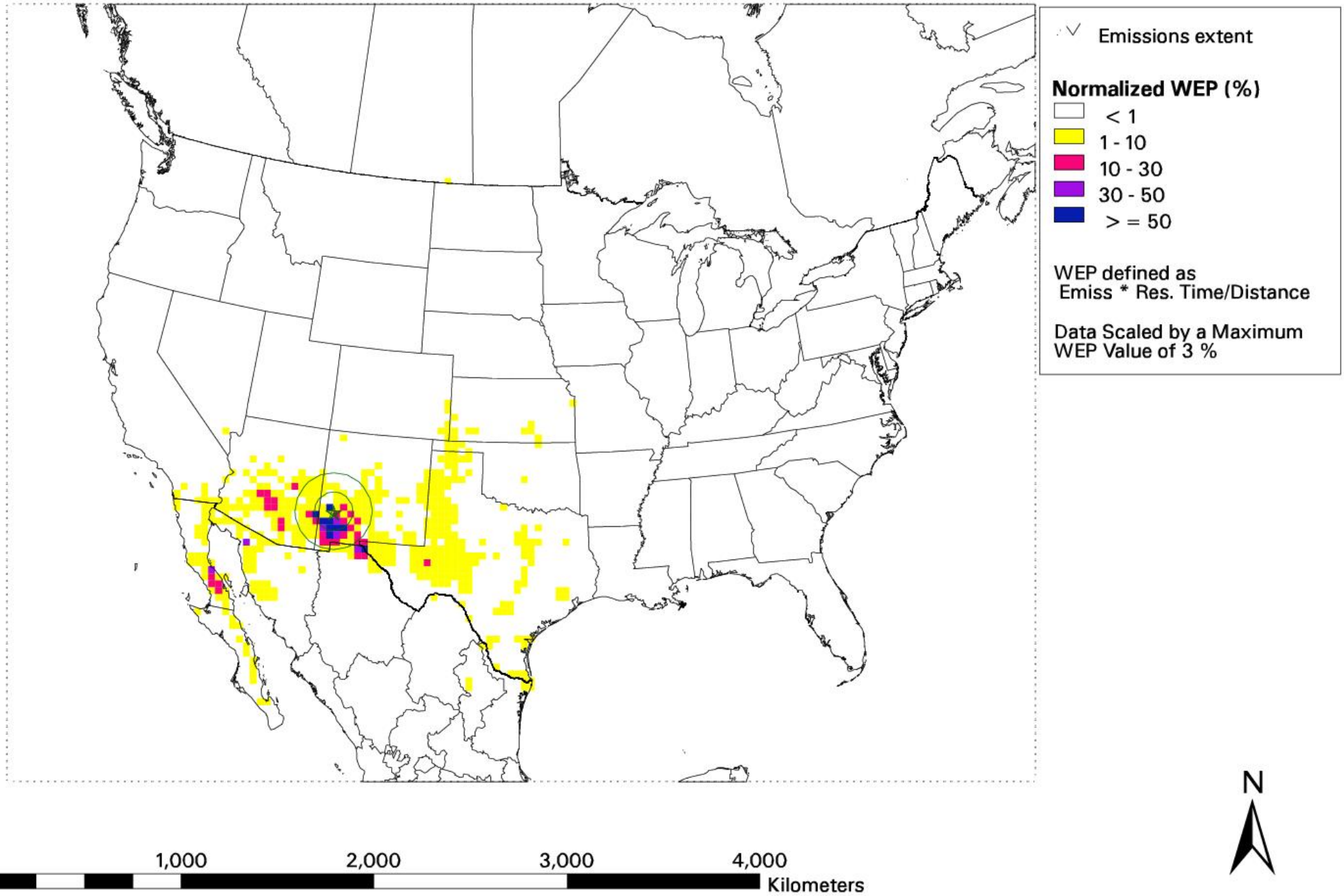

Sources and Areas of Potential Coarse PM Emissions on Worst 20% Visibility Days
Class I Area - Gila W, NM
Percent
39.00
36.00
33.00
30.00
27.00
24.00
21.00
18.00
15.00
12.00
9.00
6.00
3.00
0.00
NM - 2000-04
2018 PRP
WB Dust
Fugitive Dust
Road Dust
Off-Road Mobile
On-Road Mobile
Off-Shore
WRAP Area O&G
Area
Biogenic
Natural Fire
Anthro Fire
Point
WRAP TSS - 6/18/2008

Gila Wilderness, NM

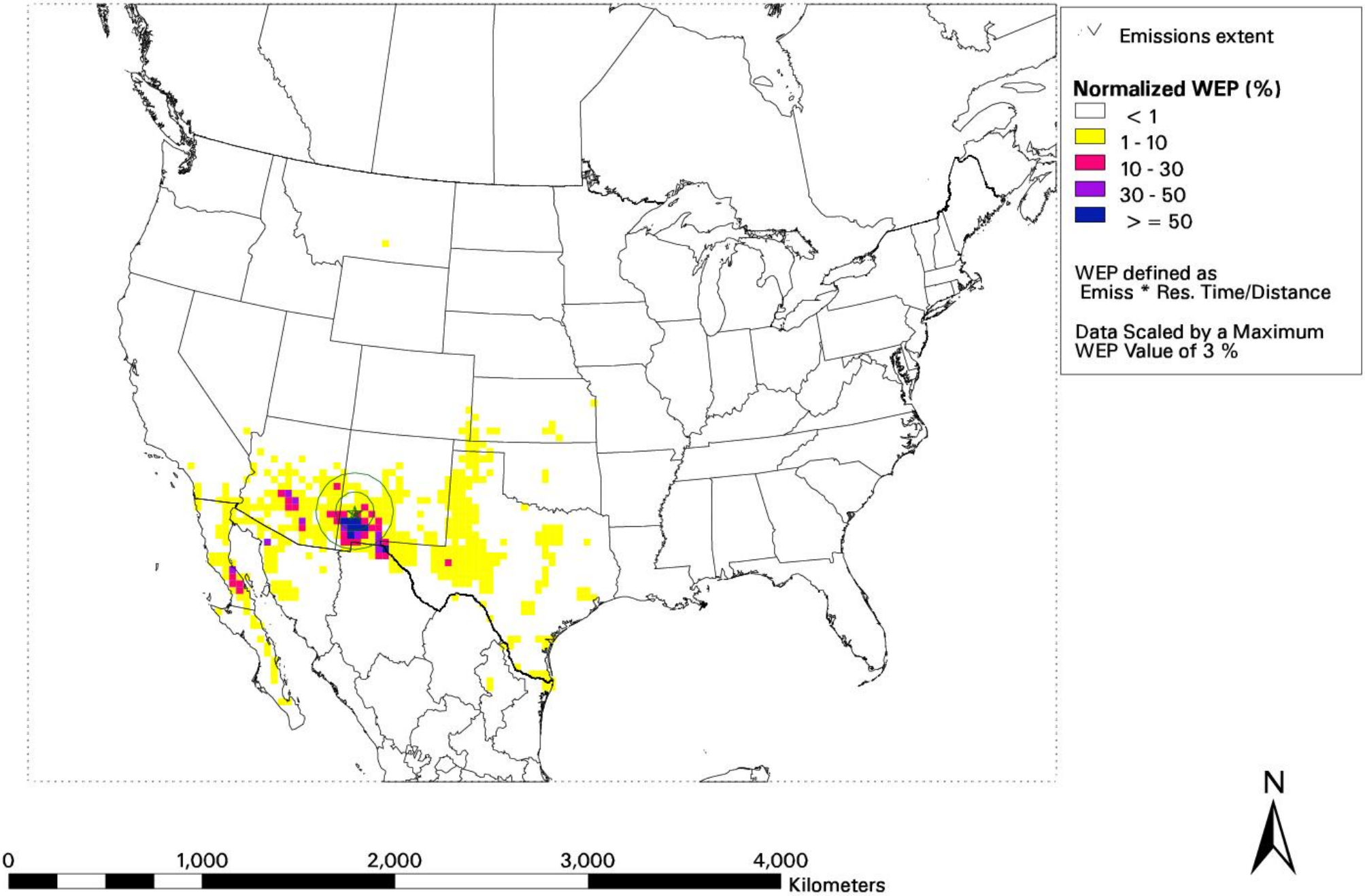
Normalized Weighted Emission Potential (WEP) for Coarse Particulate Matter (PMC)

2000-04 Baseline

20% Worst Visibility Days



Gila Wilderness, NM

Normalized Weighted Emission Potential (WEP) for Coarse Particulate Matter (PMC) 2018 Preliminary Reasonable Progress

20% Worst Visibility Days