

## Appendix 3A: South Dakota Hazard Ranking Worksheet

Hazard Type	Probability	Impact			Total Score	Hazard Planning Consideration
		Affected Area	Primary Impact	Secondary Impacts		
Flooding	4	4	2	3	48.80	Significant
Winter Storms	4	4	2	3	48.80	Significant
Wildfires	4	2	4	3	47.20	Significant
Drought	4	3	2	4	46.40	Significant
Tornadoes	4	1	4	4	44.80	Significant
Wind	4	2	2	2	32.00	Moderate
Hazardous Materials	4	1	1	3	24.00	Moderate
Landslides/Mudflows	2	1	1	2	10.00	Limited
Earthquake	2	1	1	1	8.00	Limited

<u>Probability: Importance 2.0</u>	<u>Score</u>
Unlikely	1
Somewhat Likely	2
Likely	3
Highly Likely	4
<u>Affected Area: Importance 0.8</u>	<u>Score</u>
Isolated	1
Small	2
Medium	3
Large	4
<u>Primary Impact: Importance: 0.7</u>	<u>Score</u>
Negligible - less than 10% damage	1
Limited - between 10% and 25% damage	2
Critical - between 25% and 50% damage	3
Catastrophic - more than 50% damage	4
<u>Secondary Impacts: Importance 0.5</u>	<u>Score</u>
Negligible - no loss of function, downtime, and/or evacuations	1
Limited - minimal loss of function, downtime, and/or evacuations	2
Moderate - some loss of function, downtime, and/or evacuations	3
High - major loss of function, downtime, and/or evacuations	4

Total Score = Probability x Impact, where:

Probability = (Probability Score x Importance)

Impact = (Affected Area + Primary Impact + Secondary Impacts), where:

Affected Area = Affected Area Score x Importance

Primary Impact = Primary Impact Score x Importance

Secondary Impacts = Secondary Impacts Score x Importance

Hazard Planning Consideration

<u>Total Score Range</u>	<u>Hazard Level</u>
0.0 - 20.0	Limited
21.0 - 42.0	Moderate
43.0 - 64.0	Significant