



Sanders County Fire Risk Rating Form

This form may be used to rate the risks from wildfire hazards in new subdivisions and other developments. Conditions anticipated after development of roads, water supplies, etc., should be the focus.

Name of Subdivision: _____

Landowner or Subdivider: _____

Legal Description: _____

Location: _____

General Description of Subdivision: _____

Date of Assessment: _____

Name, Qualifications, and Contact Information of Preparer: _____

Verified by local Fire District, DNRC, USFS, or other qualified person: _____

Signature

Date

Instructions: Circle the score beside the appropriate descriptions in each subsection, add points, and enter on page 6. Preparers have discretion to assign appropriate scores based on conditions and their judgment.

Section	Attributes	Points	
1	Vehicular and Emergency Service Provider Access (20%)		
	A Ingress/Egress		
	A	Two or more full-time primary access roads	0
		One full-time primary access road with functional secondary or emergency access road	2
		One full-time primary access road	4
	B	Width of Primary Access Road (driving surface)	
		24 feet or more	0
		20 to 24 feet	1
		20 feet	2
		16 to 20 feet	3
		Less than 16 feet	4
	C	Width of Secondary Access Road (the road most likely to be used for escape if primary access is blocked or closed)	
		24 feet or more	0
		20 to 24 feet	1
		20 feet	2
		12 to 20 feet	3
		None or less than 12 feet	4
	D	Maximum Road Grade of Primary Access Route	
		5%	0
		8%	1
		10%	2
		12%	3
		>12%	4
E	Maximum Road Grade of Secondary or Emergency Access Route		
	5%	0	
	10%	1	
	12%	2	

	>12% or none	3
F	Primary Access Terminus	
	Primary road connects with another road (i.e., no turnaround necessary)	0
	Fully compliant cul-de-sac or other turnaround	1
	Substandard turnaround but largest fire department apparatus is capable of turnaround under normal summer conditions	2
	No turnaround or turnaround in which largest fire department apparatus is incapable of turnaround under normal summer conditions	3
G	Length of Primary Dead End Road as Only Full-Time Primary Access (measured from edge of intersecting public road that provides two exit routes, along centerline to road terminus or end of turnaround)	
	600 feet or less, or if primary road does not dead end	0
	600 feet to 1,000 feet	1
	>1,000 feet	3
H	Road surface conditions (on worst road if more than one)	
	Hard-surfaced (paved), excellent conditions throughout	0
	Hard-surfaced (paved or chip seal), with partial gravel, potholes, or deteriorating conditions that may minimally slow but not hinder emergency service access; or gravel, excellent condition	1
	Gravel, with areas of washboard, potholes, or other deterioration conditions that may slow but not hinder emergency service access	2
	Deteriorating or similar conditions that may slow or otherwise measurably hinder emergency service access	3
I	Vertical Clearance	
	No obstructions to a height of 13.5 feet or more	0
	Minimal, temporary overhead obstructions under 13.5 feet in height, such as occasional tree branches that emergency vehicles can easily manage	1
	Overhead vegetation less than 13.5 feet in height that may significantly slow or obstruct emergency vehicles	2
	Permanent obstructions less than 13.5 feet in height	3
J	Driveways (driveways that exceed 600 feet in length shall be factored as roads above and given a non-compliant rating)	

		Driveway lengths do not exceed 600 feet as measured along the centerline from the primary access road to the end of where a fire department water tender will typically park to conduct structural fire suppression	0
		Driveway extends to within 150 feet of all points of occupied buildings	0
		Driveway width exceeds 12 feet	0
		Driveways include a turnaround in which largest fire department apparatus is capable of turnaround under normal, summer conditions	0
		For each aspect a driveway does not comply with the above, assign one point	1 or 2 or 3 or 4
		Driveway includes 13.5 feet of vertical clearance of all obstructions	0
		Driveway does not include 13.5 feet of vertical clearance of all obstructions	2
		Street Signs and Posted Address Numbers	
	K	Fully present and compliant with rural addressing requirements	0
		Not fully present or compliant	3
<i>Section 1 Subtotal Score (add Sec. 1. A-K above) =</i>			
		Vegetation (30%) (see IWUIC definitions below)	
		On-site fuel loads based on mapping and site assessment	
	A	Light	5
		Medium	10
		Heavy	20
		Predominant fuel types within ½ mile of project site based on mapping and site assessment	
	B	Light	5
		Medium	10
		Heavy	20
		Defensible spaces or fuels reduction at building sites at final plat	
	C	Not necessary	0
		No defined building sites or no way to ensure it is carried out	10
		Needed but will not be carried out	20
<i>Section 2 Subtotal Score (add Sec. 2. A-C above) =</i>			
		Topography (20%)	
		Surrounding topography 150 feet to ½ mile from building sites	
	A	Characterized by typical slopes of 8% or less	1
		Characterized by typical slopes of >8% and <25%	5

3 (cont.)		Characterized by typical slopes of >25% and <35%	10	
		Characterized by typical slopes of 35% and greater	15	
	B	Topography within 150 feet surrounding building sites		
		Characterized by typical slopes of 8% or less	1	
		Characterized by typical slopes of >8% and <25%	5	
		Characterized by typical slopes of >25% and <35%	10	
		Characterized by typical slopes of 35% and greater	15	
	C	Presence of fire chimneys or other hazardous features that may impact the subdivision within ½ mile from buildings and building sites		
		No fire chimneys or hazardous features	0	
		Fire chimneys or hazardous features exist but are not a common characteristic	3	
		Fire chimneys or hazardous features are a common characteristic	5	
	D	Predominant aspect		
		North or east	0	
West or south		3 or 5		
Section 3 Subtotal Score (add Sec. 3. A-D above) =				
4	Water Sources for Fire Protection (15%)			
	A	Hydrants/draft sites (choose best water source available)		
		500-GPM hydrant within 500 feet of each building	0	
		500-GPM hydrant within 1,000 feet of each building	3	
		500-GPM hydrant farther than 1,000 feet from each building, but within 5 minutes, round trip	5	
		10,000+ gallon draft site within 1,000 feet of each building	12	
		10,000+ gallon draft site farther than 1,000 feet of each building, but within 5 minutes round trip	15	
		Water source providing 10,000+ gallons; 5 - 10 minutes round trip including fill time	20	
		Water source providing <10,000 gallons; more than 10 minutes round trip including fill time	25	
	B	Internal sprinkler systems		
		Internal sprinkler systems in all regularly occupied buildings	0	
No internal sprinkler systems in all regularly occupied buildings		5		
Section 4 Subtotal Score (add Sec. 4. A-B above) =				
	Miscellaneous Fire Dangers (15%)			
	A	Electrical/power lines		
All underground		0		

5		Some underground, some above	3
		All above ground	5
5 (cont.)	B	Propane and other gas tanks	
		None	0
		All underground	1
		Above ground or allowed above ground	3
	C	Other Risks: Add one point for each if the risk is present or likely to be present on site or present within surrounding ½ mile; add two points for each with multiple occurrences	
		Campsite, picnic area, or home with fire pit	0 or 1 or 2
		Commercial activity	0 or 1 or 2
		Debris burning	0 or 1 or 2
		Domestic wood heat	0 or 1 or 2
		Agricultural operation	0 or 1 or 2
		Lumber mill, mines, other industrial activity	0 or 1 or 2
		Overhead high-voltage powerlines	0 or 1 or 2
		Active railroad	0 or 1 or 2
Major highway or off-road vehicle trail/road		0 or 1 or 2	
Historic wildfires over last 10 years	0 or 1 or 2		
Others: describe each	0 or 1 or 2		
Section 5 Subtotal Score (add Sec. 5. A-C above) =			
TOTAL SCORES FROM SECTION 1-5			
Total Score from Section 1 (Access):			
Total Score from Section 2 (Vegetation)			
Total Score from Section 3 (Topography)			
Total Score from Section 4 (Water Sources)			
Total Score from Section 5 (Misc. Risks)			
TOTAL PROJECT SCORE:			
RISK RATING (see range below):			
Risk Rating Range:			
< 99 = Low Risk		100-130 = Moderate Risk	> 131 = High Risk

REFERENCES AND MODEL CODES:

The Fire Risk form was developed from several model codes and existing literature. The purpose of this form is to provide a template and guidance for Sanders County regarding best practices and opportunities to mitigate wildfire risk to homes and property. Risk variables should be reviewed by the county, fire personnel, and emergency management officer to identify and prioritize risks most applicable to Sanders County.

References and Resources

- [Department of State Lands Fire Risk Rating for Existing and Planned Wildland Residential Interface Developments in Montana. 1993.](#)
- [National Fire Protection Association Wildfire Hazard Severity Form Checklist NFPA 299 / 1144. 2018.](#)
- [International Wildland Urban Interface Code Appendix C. 2012.](#)
- [U.S. Fire Administration. Wildland Urban Interface Toolkit: Codes and Standards. 2019.](#)
- [National Volunteer Fire Council. Wildland Fire Assessment Program. 2019.](#)
- [Fire Adapted Communities Learning Network. FAC Self-Assessment Tool. 2019.](#)

Fuel Type Definitions – see [Appendix D, 2012 International Wildland Urban Interface Code](#)

- *Light fuel:* Vegetation consisting of herbaceous plants and round wood less than ¼ inch in diameter. See Fuel Models A, C, E, L, N, P, R, and S.
- *Medium fuel:* Vegetation consisting of round wood ¼ to 3 inches in diameter. See Fuel Models B, D, F, H, O, Q, and T.
- *Heavy fuel:* Vegetation consisting of round wood 3 to 8 inches in diameter. See Fuel Models G, I, J, K and U.