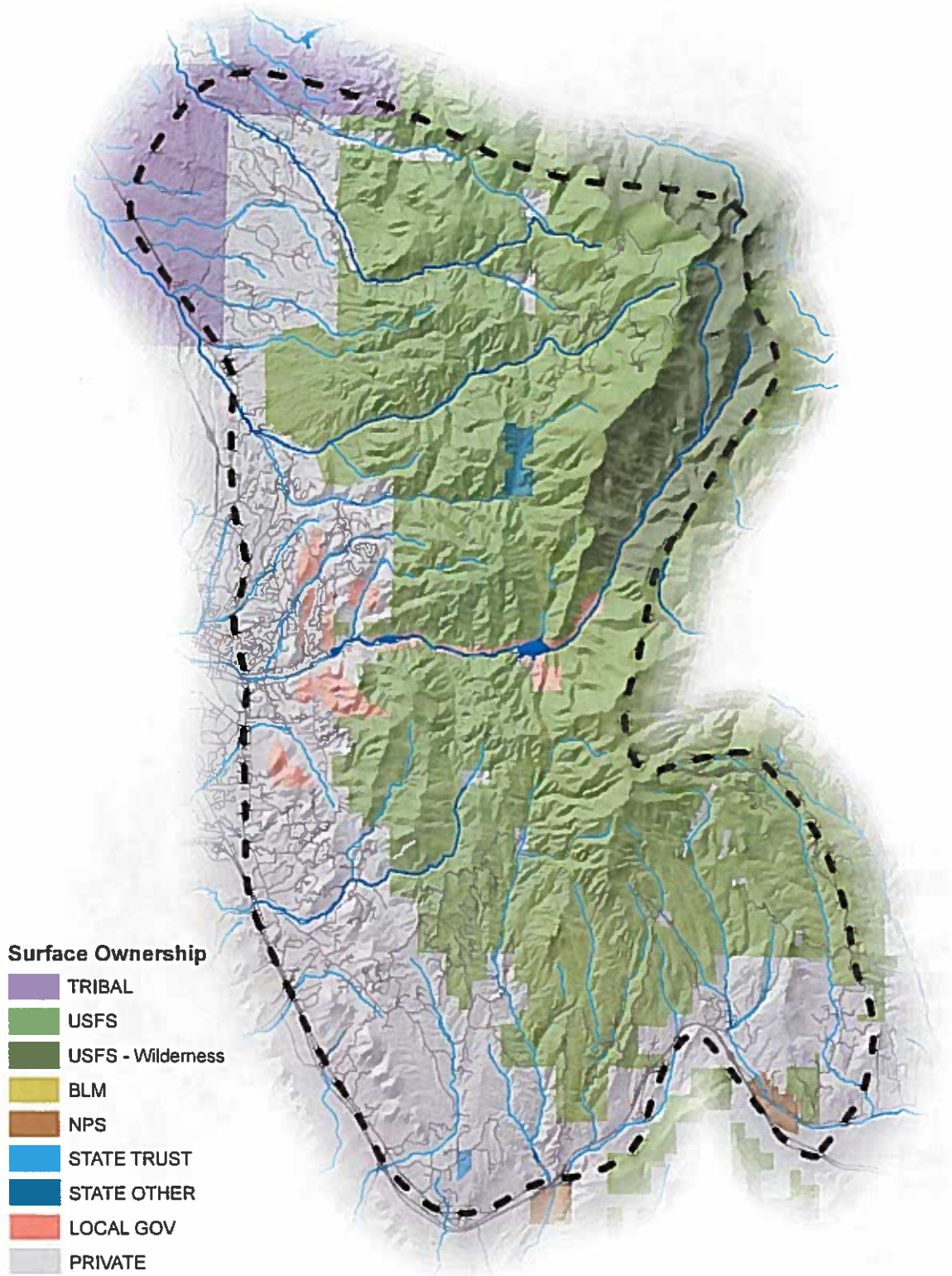


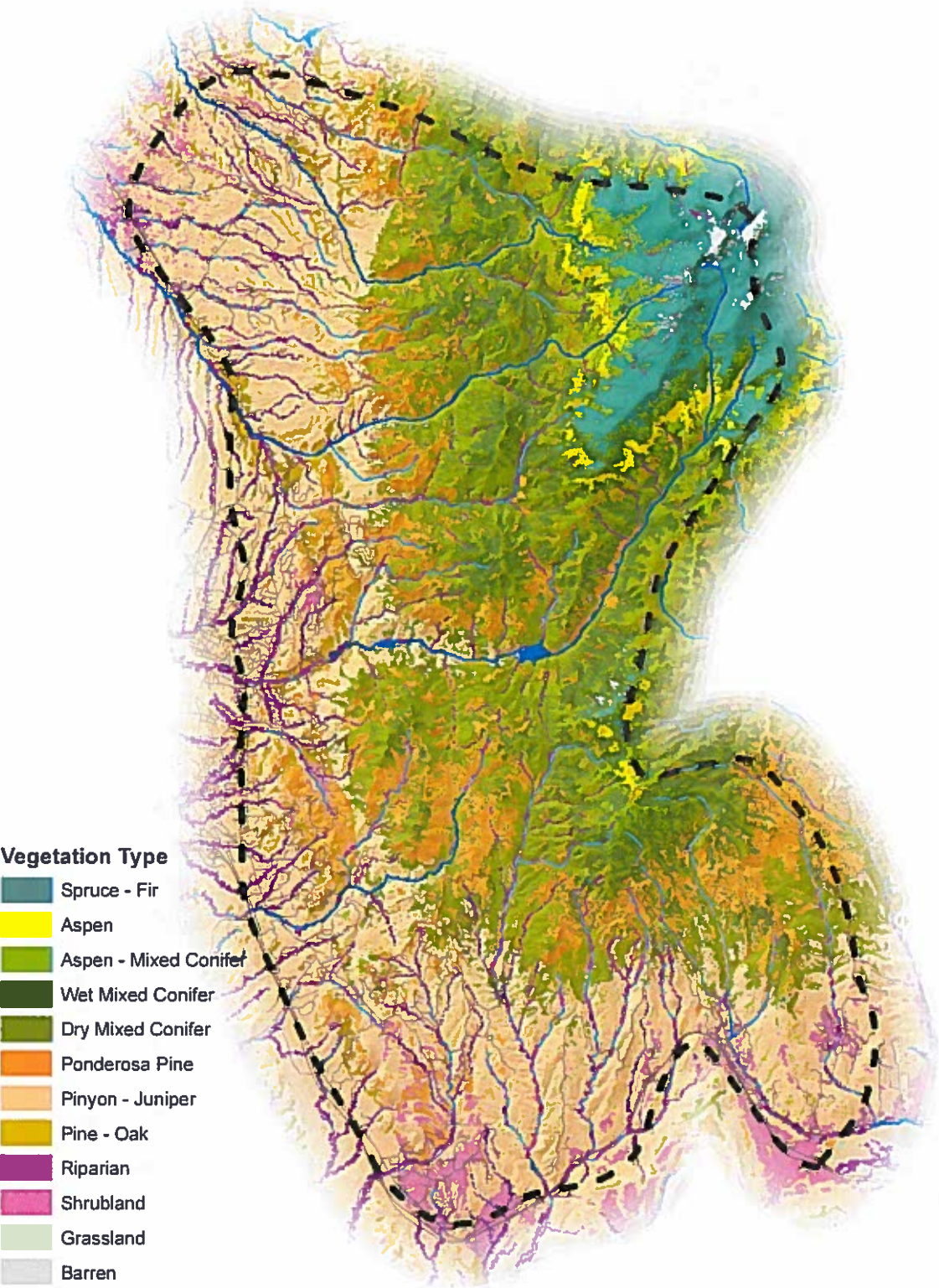
# Land Ownership

Greater Santa Fe  
Fireshed Coalition



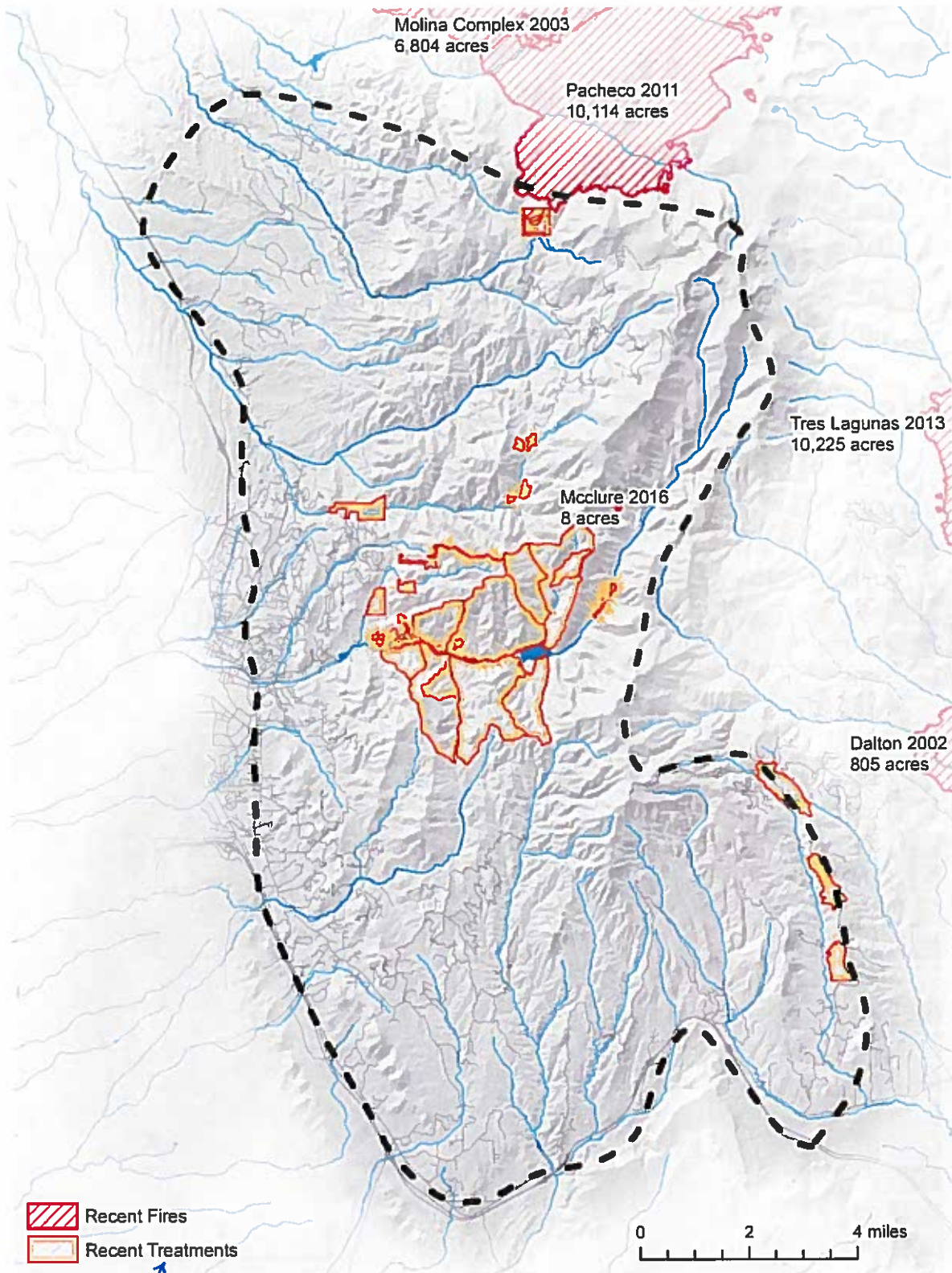
# Vegetation Type

Greater Santa Fe  
Fireshed Coalition



# Recent Fires and Treatments

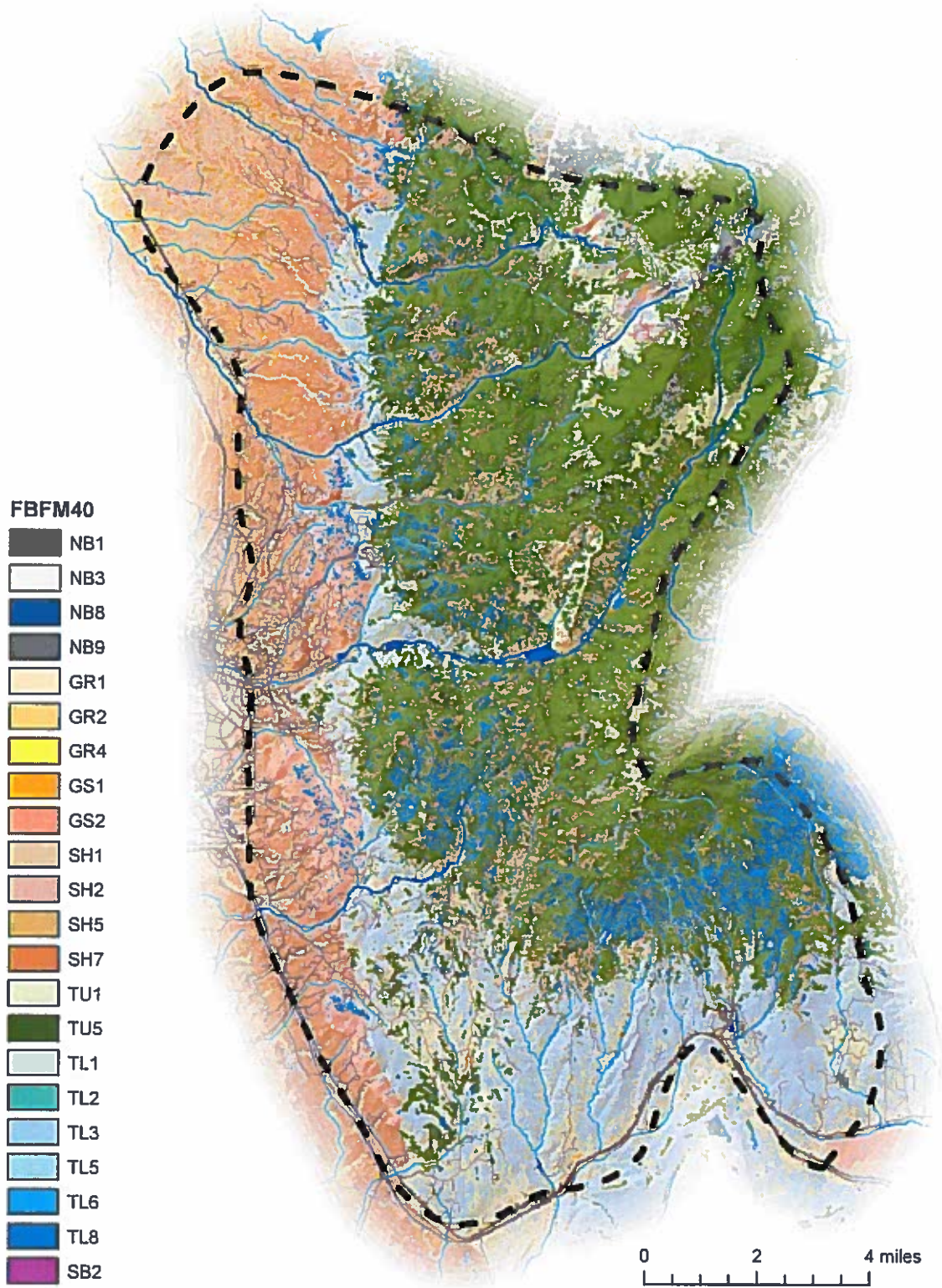
Greater Santa Fe  
Fireshed Coalition



*(Completed)  
ONLY*

# Fuel Model (original)

Greater Santa Fe  
Fireshed Coalition



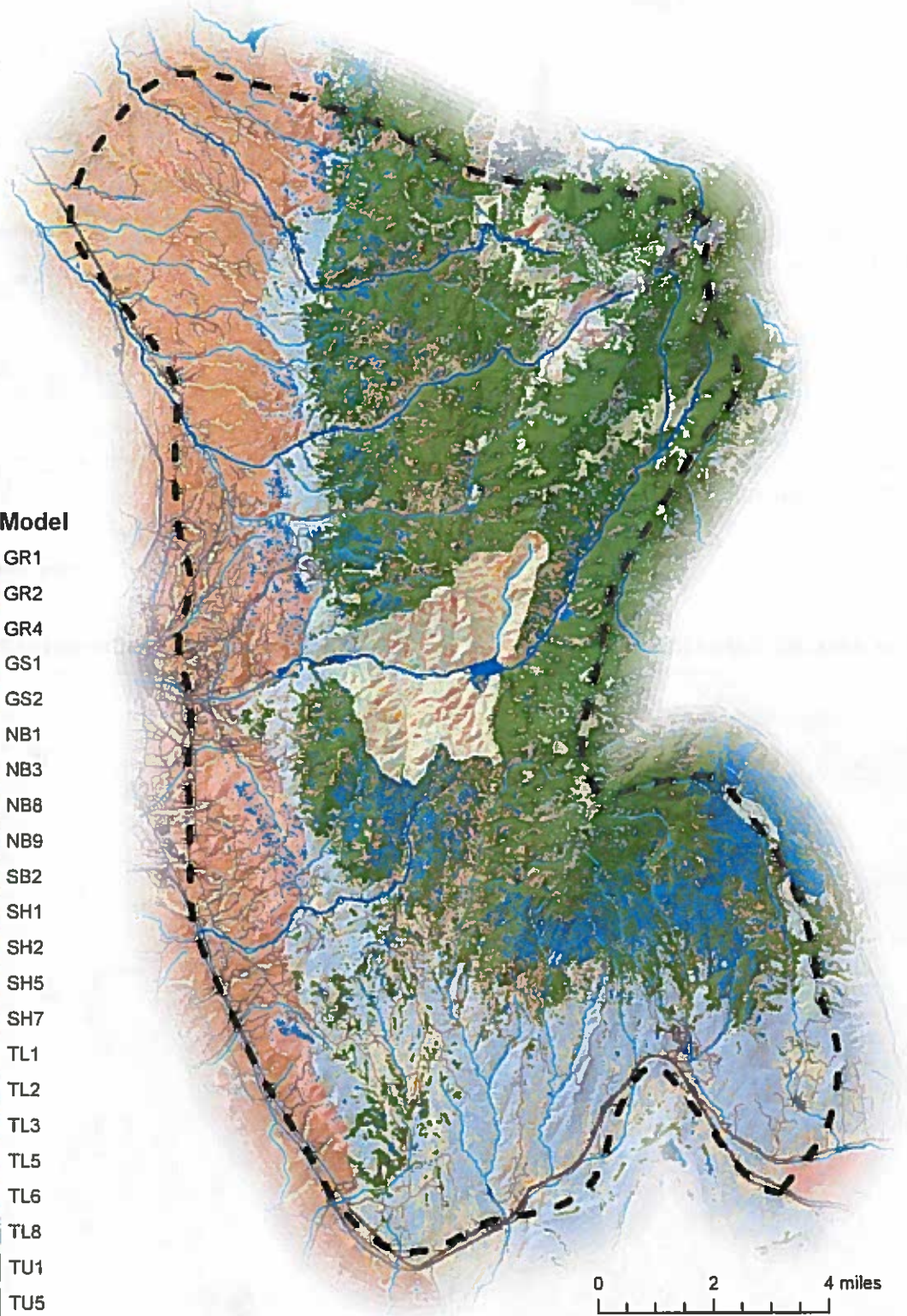
*Lowline  
Fuel model*

# Fuel Model (Updated)

Greater Santa Fe  
Fireshed Coalition

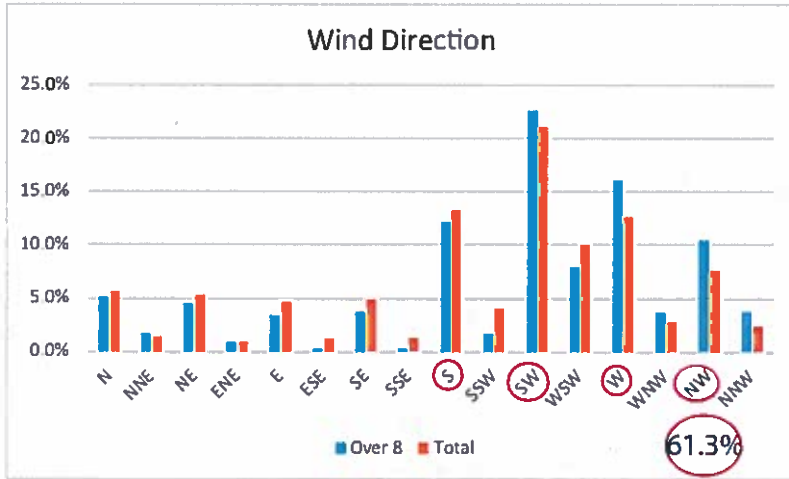
## Fuel Model

-  GR1
-  GR2
-  GR4
-  GS1
-  GS2
-  NB1
-  NB3
-  NB6
-  NB9
-  SB2
-  SH1
-  SH2
-  SH5
-  SH7
-  TL1
-  TL2
-  TL3
-  TL5
-  TL6
-  TL8
-  TU1
-  TU5



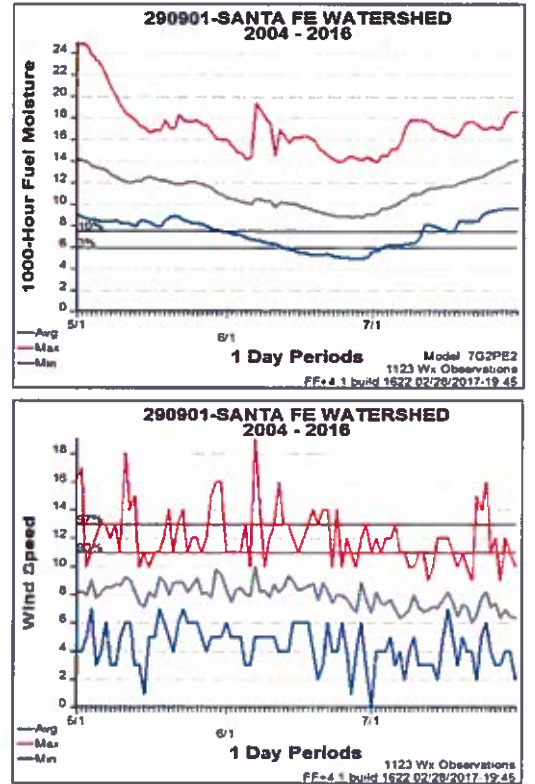
*Clumpy-based ?*  
*Issue - we are at the intersection of 3 fuel modeling zones, so issue of OTC occurs at that Actual hypothesis fuel model*

# Fire Model Parameters

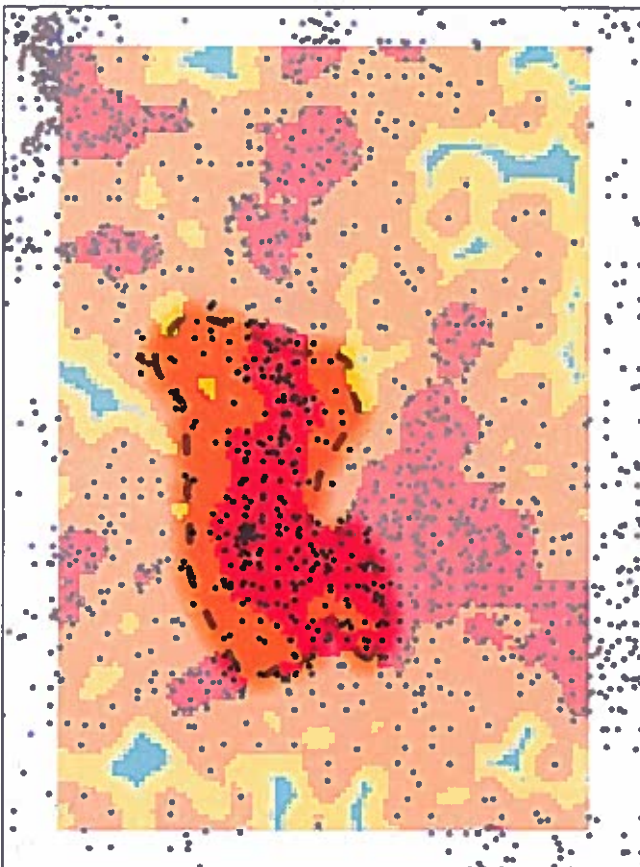


1981-2016  
 May 1-July 31  
 12:00-15:00  
 Station #290702 (Jemez)

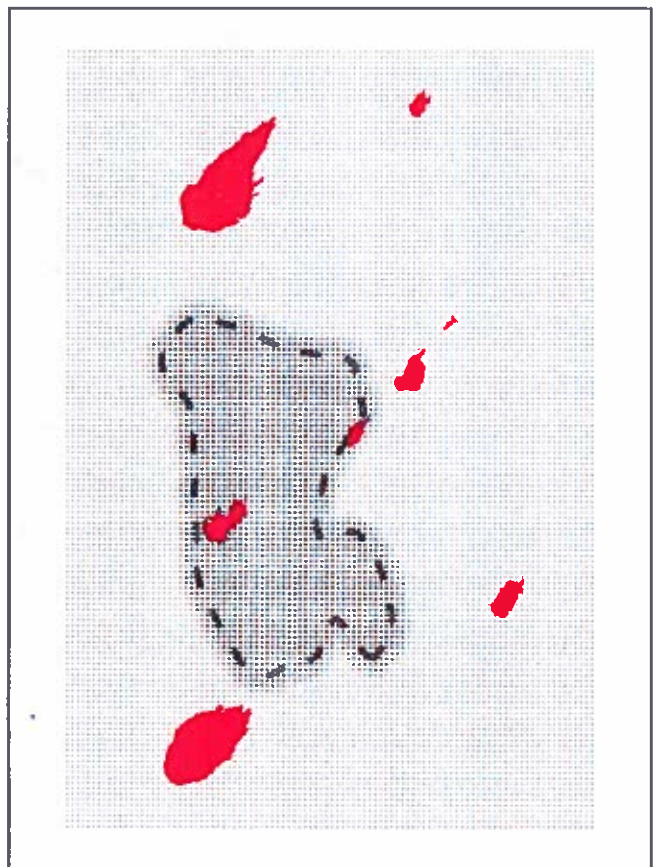
# Fuel Moisture and Wind



# Historical Fire Starts and Modeled Start Prob

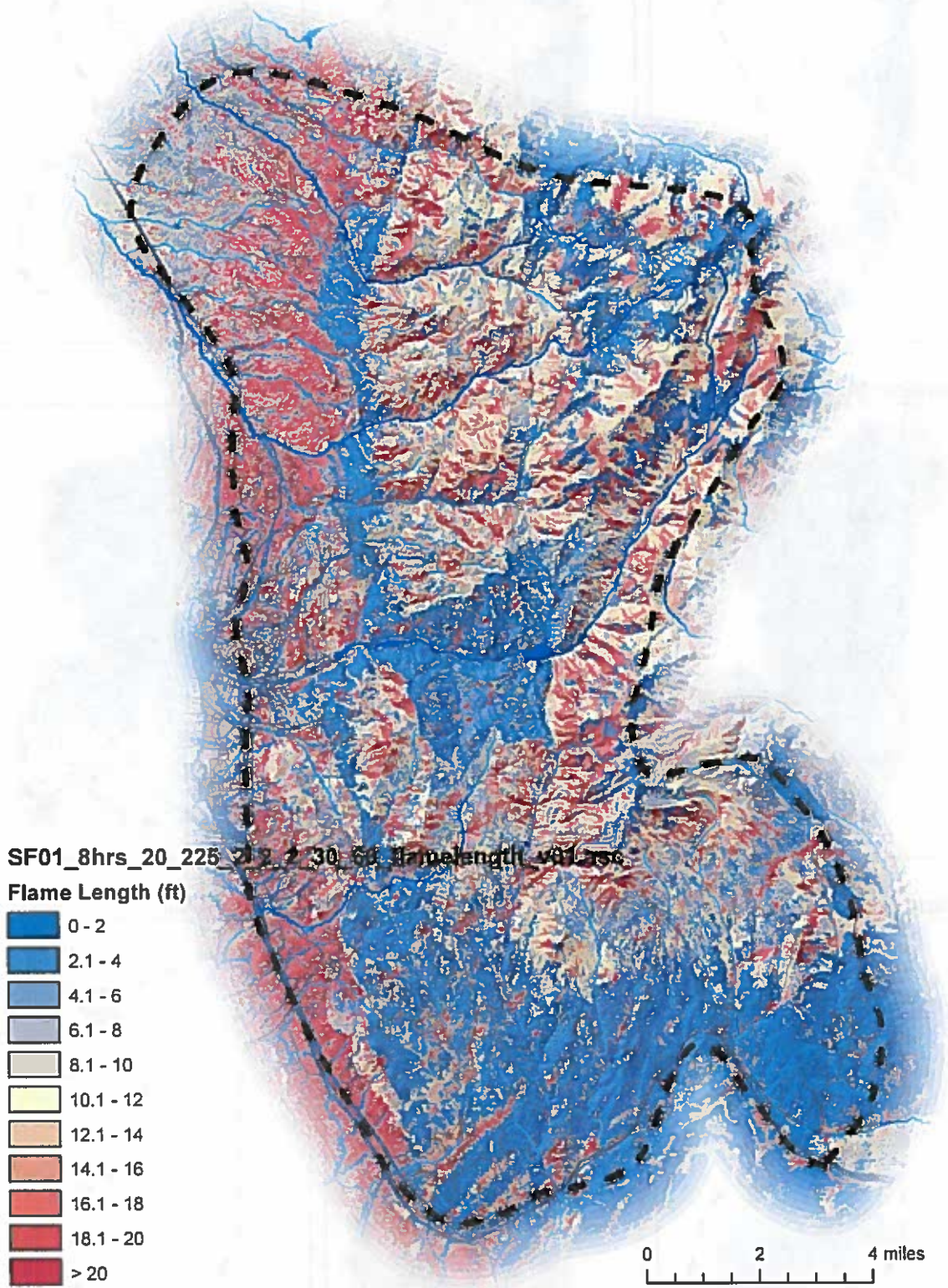


# Fire Starts for Simulation and Sample Fire Perimeters



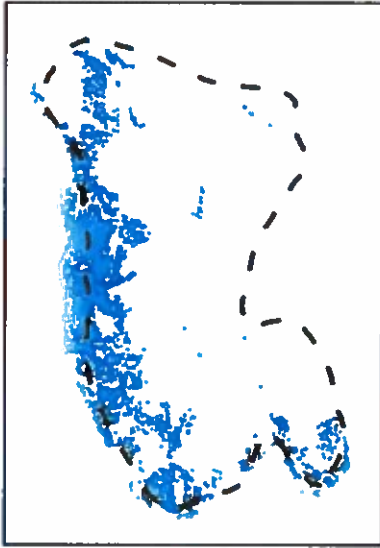
# Fire Intensity — Flame Length

Greater Santa Fe  
Fireshed Coalition



Value density increases with blueness.  
Benefit Density vs. Supply Density

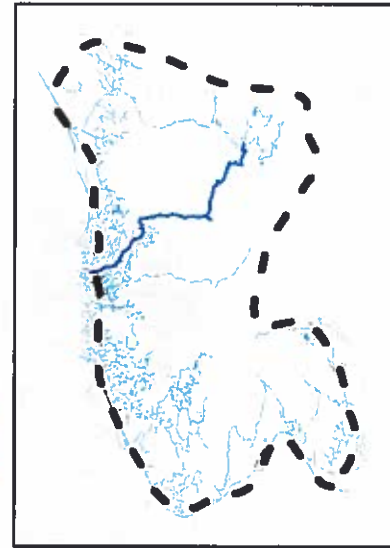
**Structures**



**Private Land**



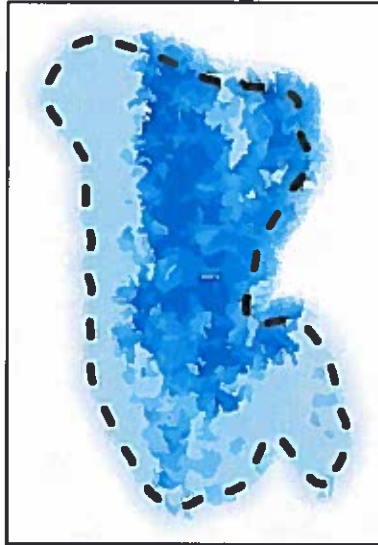
**Infrastructure**



**Erosion Mitigation**



**Debris Flow Mitigation**



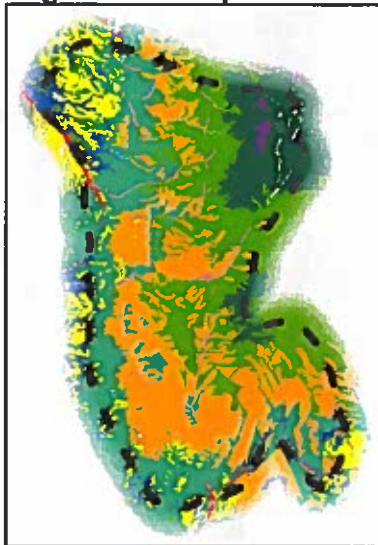
**Water Yield**



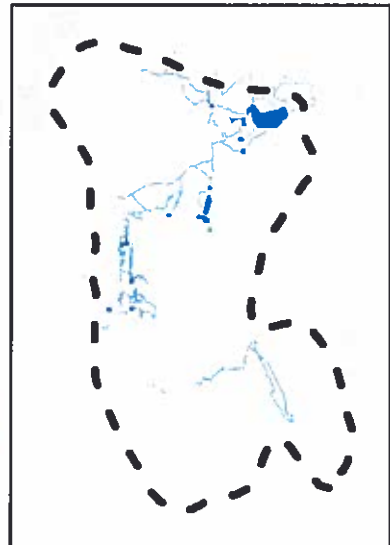
**Flood Control**



**Vegetation Response**



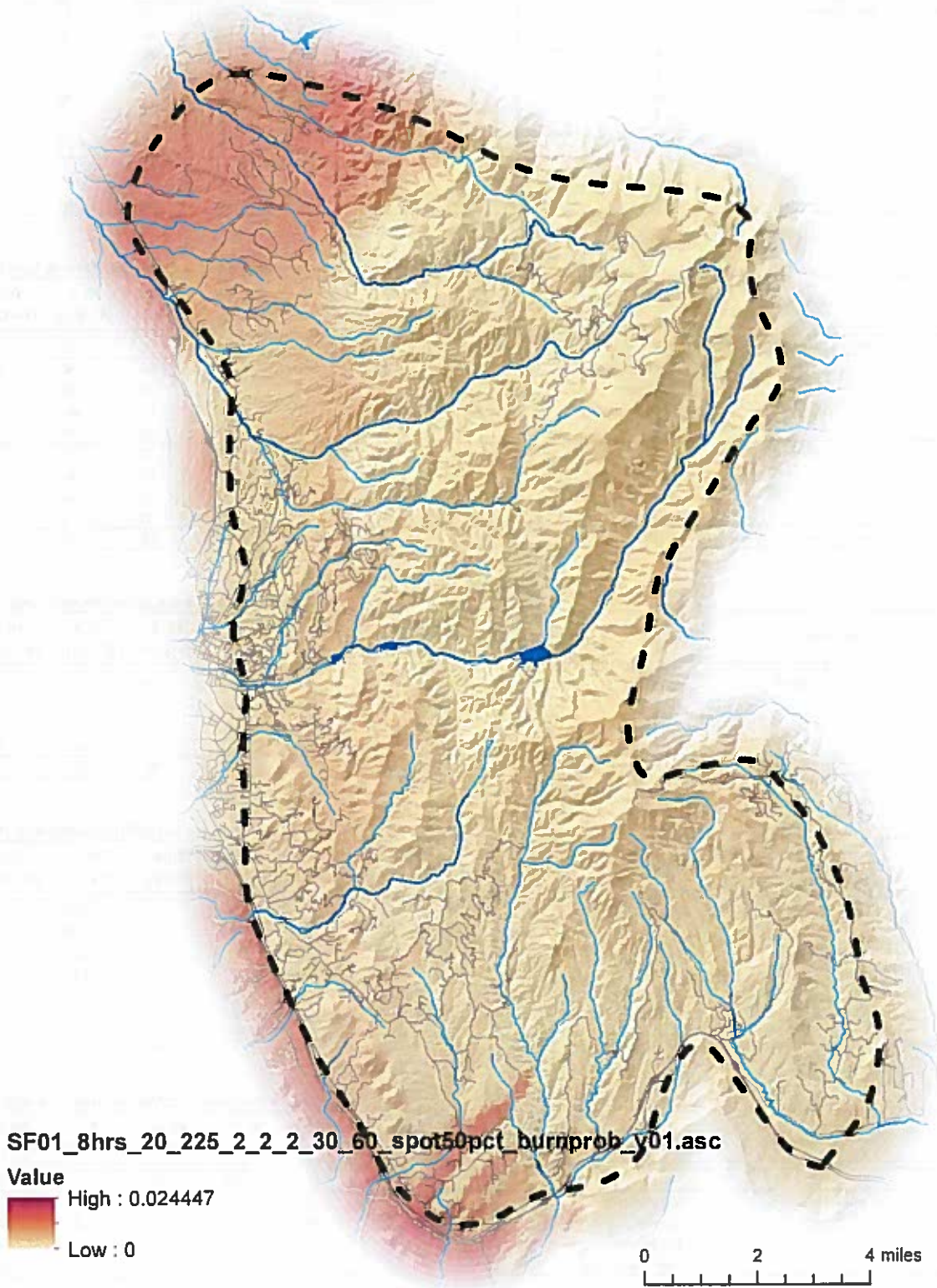
**Cultural Use**





# Burn Probability

Greater Santa Fe  
Fireshed Coalition



*This is one (of 104) modeling scenarios, that will be run for the full risk assessment.*

Response Functions (value lost by fire intensity level (FIL))

HVRA	Sub-HVRA	Sub Class	Sub Weight	FIL 1 (0-2 ft)	FIL 2 (2-4 ft)	FIL 3 (4-6 ft)	FIL 4 (6-8 ft)	FIL 5 (8-10 ft)	FIL 6 (10-12 ft)	FIL 7 (>12 ft)
Private Land			1	10	0	0	-20	-40	-60	-80
Structure Threat Zone (450m)	Structure Count	<= 2	1	-10	-30	-40	-50	-70	-80	-90
		= 3	2	-10	-30	-40	-50	-70	-80	-90
		= 4	3	-10	-30	-40	-50	-70	-80	-90
		= 5	4	-10	-30	-40	-50	-70	-80	-90
		= 6	5	-10	-30	-40	-50	-70	-80	-90
		= 7	6	-10	-30	-40	-50	-70	-80	-90
		= 8	7	-10	-30	-40	-50	-70	-80	-90
		= 9	8	-10	-30	-40	-50	-70	-80	-90
		= 10	9	-10	-30	-40	-50	-70	-80	-90
		> 10	10	-10	-30	-40	-50	-70	-80	-90

Response Functions (value lost by fire intensity level (FIL))

HVRA	Sub-HVRA	Sub Class	Sub Weight	FIL 1 (0-2 ft)	FIL 2 (2-4 ft)	FIL 3 (4-6 ft)	FIL 4 (6-8 ft)	FIL 5 (8-10 ft)	FIL 6 (10-12 ft)	FIL 7 (>12 ft)
Water Yield Index	elevation and aspect	index value	by index	50	30	10	0	-10	-20	-30
Erosion Mitigation	Severity Class	Very Severe	8	-10	-20	-40	-60	-80	-100	-100
		Severe	4	0	-10	-20	-40	-60	-80	-100
		Moderate	2	0	0	-10	-20	-40	-60	-80
		Slight	1	0	0	0	-10	-20	-40	-60
Debris Flow Mitigation	Relative Hazard	> 1000	8	0	0	-20	-40	-60	-80	-100
		100-1000	4	0	0	0	-20	-40	-60	-80
		10-100	2	0	0	0	0	-20	-40	-60
		< 10	1	0	0	0	0	0	-20	-40
Flood Control	Development at Risk	acres by basin	acres	0	0	-20	-40	-60	-80	-100

Response Functions (value lost by fire intensity level (FIL))

HVRA	Sub-HVRA	Sub Class	Sub Weight	FIL 1 (0-2 ft)	FIL 2 (2-4 ft)	FIL 3 (4-6 ft)	FIL 4 (6-8 ft)	FIL 5 (8-10 ft)	FIL 6 (10-12 ft)	FIL 7 (>12 ft)
Roads	Erosion Hazard	Very Severe	1	-10	-10	-10	-20	-40	-50	-80
		Severe	1	0	-10	-10	-10	-20	-40	-50
		Moderate	1	0	0	-10	-10	-20	-40	-50
		Slight (and null)	1	0	0	0	-10	-20	-40	-50
Powerlines				-10	-20	-40	-80	-100	-100	-100

Response Functions (value lost by fire intensity level (FIL))

HVRA	Sub-HVRA	Sub Class	Sub Weight	FIL 1 (0-2 ft)	FIL 2 (2-4 ft)	FIL 3 (4-6 ft)	FIL 4 (6-8 ft)	FIL 5 (8-10 ft)	FIL 6 (10-12 ft)	FIL 7 (>12 ft)
Biophysical Setting	Forest Type/BPS/ERU	Spruce-Fir	1	10	30	50	70	100	100	100
		MC — Wet	1	30	50	70	90	100	100	100
		Aspen MC	1	50	50	70	90	100	100	100
		Aspen	1	50	50	70	90	100	100	100
		MC — Dry	1	100	100	70	30	-20	-50	-100
		Ponderosa	1	100	100	70	30	-20	-50	-100
		PJ	1	100	100	70	30	-20	-50	-100

Response Functions (value lost by fire intensity level (FIL))

HVRA	Sub-HVRA	Sub Class	Sub Weight	FIL 1 (0-2 ft)	FIL 2 (2-4 ft)	FIL 3 (4-6 ft)	FIL 4 (6-8 ft)	FIL 5 (8-10 ft)	FIL 6 (10-12 ft)	FIL 7 (>12 ft)
Developed Rec. Area			1	0	-10	-20	-55	-75	-75	-75
Trails	Erosion Hazard	Very Severe	1	-10	-10	-10	-20	-40	-50	-80
		Severe	1	0	-10	-10	-10	-20	-40	-50
		Moderate	1	0	0	-10	-10	-20	-40	-50
		Slight (and null)	1	0	0	0	-10	-20	-40	-50