



Understanding FireLine Score:

Wildfire is a unique peril because the environmental factors around a property influence the risk of loss. FireLine was developed specifically to address the loss potential. Nearly 4.5 million homes in the Western United States are at high or extreme risk of loss due to wildfire. FireLine has fewer elements than the ISO Public Protection Classification program, but it provides a similar scoring mechanism that is translated into a risk score or loss potential classification to help insurers appropriately accept and price fire insurance for properties in an environment at greater risk for loss due to wildfires.

There are three key elements that are used to develop the FireLine score for a given property. These factors are also recognized by the National Fire Protection Association (NFPA).

- Fuel – Grass, trees, or dense brush that feed a wildfire. This refers to the vegetation surrounding the property and calculates a weighted average of fuel amounts in a 3 radial distance bands within a mile of the dwelling
- Slope – Steeper slopes can increase the speed and intensity of a wildfire. This refers to the grade of the land.
- Site Access – Limited access and dead-end roads can impede firefighting equipment and personal. This identifies potential challenges to reach properties via roads or other pathways for fire suppression activities during wildfires.

FireLine is a wildfire risk management tool using advanced remote sensing, machine learning, and digital mapping technology to determine the impact of the three factors that contribute to the wildfire risk.

Scores range from negligible (0) to low (1), moderate (2-3), high (4-12), and extreme (13-30). **The Farmers Insurance Group accepts a FireLine Score of 8 or lower in order to qualify for its Smart Home home-owner's insurance program. FireLine scores of 9 and higher cannot be written with the Farmers Insurance Group of Companies.**

Verisk Insurance Solution's FireLine

Wildfire is a unique peril because the environmental factors around a property influence the risk of loss. FireLine was developed specifically to address that loss potential. A study completed in 2015 found that nearly 4.5 million homes were at high or extreme risk of loss due to wildfire. FireLine has fewer elements than the PPC program, but it provides a similar scoring mechanism that's translated into a risk score or loss potential classification to help insurers appropriately price fire insurance for properties in an environment at greater risk for loss due to wildfires.

Three key elements are used to develop the FireLine score for a given property. These factors are also recognized by the National Fire Protection Association (NFPA).

- Fuel — Grass, trees, or dense brush feed a wildfire.
- Slope — Steeper slopes can increase the speed and intensity of wildfire.
- Access — Limited access and dead-end roads can impede firefighting equipment.

Scores range from negligible (0) to low (1), moderate (2–3), high (4–12), and extreme (13–30). Research conducted on the 2014 California wildfires indicated that 88 percent of damaged or destroyed homes were rated as high or extreme. Ninety-nine percent were identified as exposed to the wildfire hazard. Similarly, 97 percent of properties damaged or destroyed in the Butte fire in 2015 were at moderate to high or extreme risk from wildfire. Studies on wildfires in other western states show comparable results.

Fire risk is part of our daily lives. For many, it's a threat to our largest investments—our homes and businesses. To protect those investments, we look to the insurance industry for help. Insurers have the difficult challenge of balancing risk with affordable and competitive premiums. The tools they use are the keys to developing appropriate fire insurance pricing for the potential loss. Where the risk is great, the right tools produce the appropriate premiums for the many factors involved.

FireLine State Risk Reports: 4.5 Million U.S. Homes at High or Extreme Risk of Wildfire in Western United States

JERSEY CITY, N.J., July 18, 2017 — Despite above-average precipitation and diminished drought conditions in California and other parts of the West, a Verisk Insurance Solutions wildfire risk analysis shows the risk of wildfire losses remains significant, with 4.5 million U.S. homes at high or extreme risk of wildfire. The data was published in Verisk's [2017 FireLine™ State Risk Reports](#), which summarize wildfire risk in 13 wildfire-prone states. Verisk Insurance Solutions is a leading source of information about property/casualty insurance risk and a Verisk Analytics (Nasdaq:VRSK) business.

The [FireLine State Risk Reports](#) identified the number and percentage of homes at highest risk for wildfire. Additional key findings from the 2017 analysis include:

- More than 2 million households in California are at high or extreme risk of wildfire, the highest in the U.S.
- Texas ranks second with 715,300 homes at high or extreme risk of wildfire.
- Montana (28%) and Idaho (26%) have the highest percentage of households at high or extreme risk of wildfire.
- Seven states have 13 percent or more of households at high or extreme risk of wildfire.

“Wildfires have scorched nearly 3.5 million acres so far in 2017, according to the [National Interagency Fire Center](#),” said Dr. Arindam Samanta, director of product management and innovation for Verisk Insurance Solutions. “For the first half of 2017, the number of acres burned by wildfires is up 34 percent over 2016 and the ten-year average.”

Verisk conducted the wildfire risk analysis using FireLine, its wildfire risk management tool. FireLine uses advanced remote sensing, machine learning, and digital mapping technology to determine the impact of three factors that contribute to wildfire risk: fuel, which refers to the vegetation surrounding the property; slope, or grade of the land; and site-access, identifying potential challenges to reach properties via roads or other pathways for fire suppression activities during wildfires.

“Wildfires have generated more than \$5.1 billion in insured losses in the last decade—with \$3 billion alone in just the past five years. These fires represent one of the leading catastrophe exposures facing the industry today,” said Dr. Samanta. “The ability to accurately identify the true wildfire exposure is critical to maintaining cost-based pricing. It also allows insurers that may have avoided the marketplace to explore expanding their book of business in these hazard areas.”

The FireLine State Risk Reports provide snapshot views of wildfire risk in each of the states covered and include:

- wildfire risk at a glance
- FireLine wildfire hazard map
- percentage and number of housing units at high, medium, and low wildfire risk
- top five counties by number of housing units and by highest concentration of high and extreme wildfire risk

The Verisk 2017 FireLine State Risk Reports can be accessed at www.verisk.com/riskreport.

About Verisk Insurance Solutions

A Verisk Analytics (Nasdaq:VRSK) business, Verisk Insurance Solutions is a leading source of information about property/casualty insurance risk. Drawing upon unique data assets and deep domain expertise to provide innovative solutions that are integrated into customer workflows, Verisk Insurance Solutions includes the industry-leading brands of ISO, AIR Worldwide, and Xactware. Around the world, Verisk Insurance Solutions helps customers protect people, property, and financial assets. For more information, visit www.verisk.com/insurance.



Understanding ISO Public Protection Classification:

Insurance Services Office (ISO) for property and casualty insurers to properly assess their risk by rating fire protection services throughout the United States.

ISO is a leading source of information about property/casualty insurance risk. For a broad spectrum of commercial and personal lines of insurance, we provide statistical, actuarial, underwriting, and claims data; policy language; information about specific locations; fraud identification tools; consulting services; and information for marketing, loss control, and premium audit. ISO collects information useful in many aspects of insurance underwriting. That information includes evaluations of public fire protection, flood risk, and the adoption and enforcement of building codes in individual communities. Information on municipal services helps communities with their efforts to manage and mitigate risk.

For more than 40 years, ISO has provided a wide array of data, analytics, and decision support services to help property/casualty insurers define and quantify their risk. One of our flagship community mitigation programs — the Public Protection Classification (PPCTM) program — provides important, up-to-date information about municipal fire protection services throughout the country. The PPC program benefits insurers, the fire service, and the general public. What is the ISO Public Protection Classification (PPC) Program? Through the PPC program, ISO collects information on municipal fire protection efforts in more than 47,000 communities and fire districts throughout the United States. In each of those communities, ISO analyzes the relevant data using our Fire Suppression Rating Schedule (FSRS). We then assign a Public Protection Classification from 1 to 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area's protection doesn't meet ISO's minimum criteria. Many communities use PPC as a benchmark for measuring the effectiveness of their fire protection services. By classifying communities' ability to suppress fires, ISO helps them evaluate their public fire protection services. A community's investment in fire mitigation is a proven and reliable predictor of future fire losses. Many insurance companies use PPC information to help establish fair premiums for fire insurance — generally offering lower premiums in communities with better protection. The program provides an objective countrywide standard that helps fire departments plan and budget for facilities, equipment, and training. And by securing lower fire insurance premiums for communities with better public

protection, the Public Protection Classification program provides incentives and rewards for communities that choose to improve their firefighting services. A community's PPC depends on an evaluation of:

- fire alarm and communication systems, including telephone systems, telephone lines, staffing, and dispatching systems
- the fire department, including equipment, staffing, training, and geographic distribution of fire companies
- the water supply system, including the condition and maintenance of hydrants, and the amount of available water compared with the amount needed to suppress fires.

A community can benefit by keeping ISO apprised of its changes in fire protection. If the level of changes indicates ISO should reevaluate a community, ISO will make an appointment at a convenient time. But even if the level of changes does not warrant a reevaluation, the changes made can lead to premium reductions for individual homeowners or businesses. More than half of the communities ISO reevaluates in any year receive better Public Protection Classifications. So it pays to let ISO know about any changes that could affect a classification, such as a new fire station, a relocated fire station, revised response area boundaries, automatic aid from neighboring communities to structure fires, or installation of water mains, hydrants, or tanker/tender hauled-water capabilities. Sharing information about changes in fire departments with ISO is easy. Call ISO at 1-800-444-4554, option 2, to speak with an ISO representative, or send e-mail to custservice@iso.com. For more information on ISO's community mitigation capabilities, please go to ISO Mitigation Onlin

HOW COMMUNITIES USE ISO CLASSIFICATIONS

Despite its long-standing history within both the insurance industry and the fire service community, we still occasionally hear the mistaken view that many insurance companies may not use ISO's PPC. In fact, insurers representing roughly 75 percent of the residential and commercial market (based on premiums) access ISO's PPC to help inform their underwriting and/or pricing for various insurance coverages. In general, the price of insurance in a community with a good PPC will often be lower than in a community with a poor PPC, assuming all other factors are equal.

One question we're routinely asked is, "If our grading changes, what will be the effect on the insurance premiums in the community?" The answer is complicated. Generally, insurance companies file their rates with each state's Department of Insurance independently. Even though many such insurers may use PPC inside their rating, there can be variations on exactly what each such company will charge for individual classifications. This being said, the general trend is that lower classification often translates to lower rates. For the most accurate answer to this question, communities can consider working with their local insurance agents on running local property samples through different classification scenarios.

By classifying the ability to suppress fires at the community level, the information ISO produces can also help communities analyze their public fire protection services:

- Emergency communications.
- Community risk reduction.
- Fire departments.
- Water services.

The program provides objective countrywide criteria that may prove helpful in connection with fire departments and communities planning and budgeting for facilities, equipment and training. When companies have fewer or lower claims to pay, the premiums they collect can be lower. Therefore, by recognizing the potential effect of improved fire suppression on fire insurance losses, in that respect, our PPC program can often serve as an objective mechanism that can help recognize communities that choose to maintain and improve their firefighting services.

PPC can also be an important factor in overall community resilience and provides a consistent measurement tool that can help in these efforts, from the structural fire response perspective. Given the potential effect on fire insurance rates, our PPC could also be a factor considered by some businesses and developers to determine where to make investments.

While ISO's primary focus is to measure the effectiveness of a community's ability to respond to structure fires for insurance purposes, there are many derivative benefits. These include providing a statistically-proven method of measuring performance; a methodology that can help as part of planning, budgeting for and making improvements; a tool that can be used to further the concept of community resilience; and a metric that can help encourage investment in a community.

Taos Ski Valley Fire Department



Mailing Address and Contact Information

(Updated Jan 2017)

Taos Ski Valley Fire Department (575) 776-8220 Office
P.O. Box 100 (575) 776-1145 Fax
Taos Ski Valley, NM 87525 (575) 758-2216 Dispatch
(non-emergent)

Primary Administrative Contacts

Mitch Daniels, Fire Chief (575) 776-7212 Cell
Radio Unit #: *Taos Ski Valley 336* (575) 776-8118 Work
Email: fire@vtsv.org

Leland Thompson, Assistant Chief (505) 231-8337 Cell
Radio Unit #: *Taos Ski Valley 327* (575) 776-2291 Work
Email: lelandthompson@gmail.com

Physician Medical Director

Quigley Peterson, MD

Agency Description

Municipal Fire Department ISO Class 6
FDID No. 55025
EMS Bureau ID No. 130095

Services Provided

- Structural Fire Suppression
- Wildfire Suppression
- Firefighter Rehab
- EMS First Response
- Light Extrication/Rescue
- Portable Air & Light

Jurisdiction Description: within the municipal boundaries

North: Forest Service Boundary
South: Taos Ski Valley Special Use Permit area
East: Forest Service Boundary at Williams Lake
West: SR 150 and SR 230 intersection

Number of Stations 2
Number of Engines 3
Number of Water Tenders 0
Number of Rescue Trucks 1

Taos Ski Valley Fire Department

Station Information

Station	Address/Location	Apparatus Assigned
TSV Main Station	7 Firehouse Road Taos Ski Valley, NM 87525 N 36° 35.7' x W 105° 27.3'	<ul style="list-style-type: none"> • Engine 314 • Medic 311 • Rescue 311 • Air & Light 311 • Command / Rehab Trailer
Kachina Substation	Taos Ski Valley Taos Ski Valley, NM 87525 N 36° 36.63' x W 105° 26.35'	<ul style="list-style-type: none"> • Engine 312

Engines

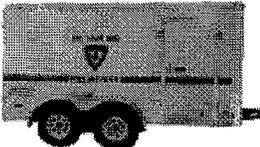
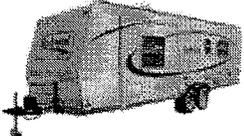
Unit No.	Description	Image
Engine 312	Type 2, 4x4 1986 E-one 500 gal / 1000 gpm 3 person crew	
Engine 313	Type 6, 4x4 1998 Chevrolet 250 gal / 150 gpm 4 person crew	
Engine 314	Type 2, 4x4, 2001 Master-Body 750 gal / 1250 gpm 2 person crew	

Rescue Vehicles

Unit No.	Description	Image
Rescue 311	EMS First Response/Hvy Extrication 1988 GMC, 4x4 6 person crew	
Medic 311	EMS First Response/BLS Transport Capable 2005 Chevy Express Van, 4x4 2 person crew	

Taos Ski Valley Fire Department

Other Equipment

Unit No.	Description	Image
Air & Light 311	Trailer with Generator & Breathing Air Cascade System	
Command/Rehab Trailer	32' Trailer	

Radio Frequencies

Function	Repeater / Direct	Rx Freq	Tone	Tx Freq	Tone
Primary Dispatch	TSV Fire	465.600	100.0	460.600	100.0
Command	TSV Fire	465.600	100.0	460.600	100.0
Structural TAC	TAC 4	154.115		154.115	
Wildfire TAC	TAC 1	168.050		168.050	
Taos Dispatch Center (Zone)	TSV Repeater	169.175		169.975	156.7

Hondo-Seco Fire District

Mailing Address and Contact Information

(Updated Jan 2017)

Hondo-Seco Fire District (575) 776-2498 Station
 P.O. Box 255
 Arroyo Hondo, NM 87513

Primary Administrative Contacts

Edmundo Jaramillo, Chief (575) 776-8871 Work
 Radio Unit #: *Hondo-Seco 6* (505) 776-8871 Home

Physician Medical Director

Lesla Fraker, MD

Agency Description

County Fire District ISO Class 6
 FDID No. 55031
 EMS Bureau ID No.

Services Provided

- Structural Fire Suppression
- Wildfire Suppression
- EMS First Response
- Heavy Extrication

Jurisdiction Description:

North: San Cristobal Hill, DH Lawrence Road
 South: Hwy 64 & SR 522
 East: SR 230 & SR 150 to mm 7
 West: Hwy 64 to Juan Martinez Road, (Olguins Sawmill)

Number of Stations 2
 Number of Engines 4
 Number of Water Tenders 3
 Number of Rescue Trucks 3

Station Information

Station	Address/Location	Apparatus Assigned
Hondo Seco Station 1 Main Station	78 Hondo-Seco Rd (B-143) Arroyo Hondo, NM 87513 N 36° 22.8 x W 105° 34.1	<ul style="list-style-type: none"> • Engine 3 • Engine 6 • Engine 11 • Tanker 4 • Tanker 5 • Rescue 9
Hondo Seco Station 2	20 Canada Rd (B-075) Arroyo Hondo, NM 87513 N 36° 31.5 x W 105° 36.2	<ul style="list-style-type: none"> • Engine 10 • Tender 7 • Rescue 2

Hondo-Seco Fire District

Engines

Unit No.	Description	Image
Engine 3	Pending	
Tanker 4	Type 2, 2x4, 2005 Freightliner 2000 gal/ 500 gpm 2 person crew	
Tanker 5	Type 2, 2x4, 2005 Freightliner 2000 gal/ 500 gpm 2 person crew	
Engine 6	Type 2, 4x4 1992 International 750 gal / 1250 gal 3 person crew	
Engine 11	Type 6, 4x4, 1996 Dodge 350 gal / 250 gpm 3 person crew	
Engine 10	Type 2, 2x4 1983 Chevy 1250 gal / 750 gpm 3 person crew	

Water Tenders

Unit No.	Description	Image
Tender 7	Support Type 3, 1998 International 1800 gal / ___ gpm 2 person crew	

Rescue Vehicles

Unit No.	Description	Image
Rescue 2	EMS First Response / Light Rescue 2009 Ford 4x4 2 person crew	
Rescue 9	Type 6, 4x4, 2008 Chevy 350 gal / 250 gpm 3 person crew	

Radio Frequencies

Function	Repeater / Direct	Rx Freq	Tone	Tx Freq	Tone
Primary Dispatch	Hondo Seco Rptr				
Command	Hondo Seco Rptr				
Structural TAC					
Wildfire TAC	TAC 1	168.0500		168.0500	
Taos Dispatch Center (Zone)	San Antonio Rptr	169.1750		169.9750	0151.4

Taos Volunteer Fire Department

Mailing Address and Contact Information

(Updated Jan 2016)

Taos Volunteer Department (575) 758-3386 Business
4591 NDCBU (575) 737-2665 Fax
Taos, NM 87571 (575) 758-3361 Dispatch (non-emergent)

Primary Administrative Contacts

Leroy Gonzales, Chief / Admin Chief (575) 779-5123 Cell
Radio Unit #: *Taos Fire 1* (575) 758-3386 Work
Email: lgonzales@taosgov.com

EJ Abeyta, Deputy Chief (575) 758-3386 Work
Radio Unit #: *Taos Fire 7* (575) 779-5021 Cell
Email: Abeyta2@taosgov.com

Anthony Martinez, Assistant Chief (575) 758-3386 Work
Radio Unit #: *Taos Fire 17*
Email: Martinez4@taosgov.com

Bert Lucero, Assistant Chief (575) 758-3386 Work
Radio Unit #: *Taos Fire 8*
Email: Lucero@taosgov.com

Physician Medical Director

Steve Cetrulo, MD

Agency Description

Municipal Fire Department ISO Class 4
FDID No. 55067

Services Provided

- Structural Fire Suppression
- Wildfire Suppression
- Technical Rescue
- First Response Haz-Mat
- Heavy Extrication
- Swift Water Rescue
-

Jurisdiction Description: within the municipal boundaries

North: Hwy 64 West

South: Stakeout Drive

East: Intersection of Hwy 64 East & SR 585 / Taos Pueblo & Carson National Forest Boundary

West: Rio Grande

Number of Stations 4
Number of Engines 4
Number of Aerials 1
Number of Water Tenders 3
Number of Rescue Trucks 1

Taos Volunteer Fire Department

Station Information

Station	Address/Location	Apparatus Assigned
Station 1	323 Camino de la Placita Taos, NM 87571 N 36° 24.62' x W 105° 26.45'	<ul style="list-style-type: none"> • Engine 5 • Engine 14 • Ladder 1 • Tanker 2 (<i>Water Tender</i>) • Rescue 12 • Unit 4
Station 2	123 Camino de Santiago Taos, NM 87571 N 36° 22.98' x W 105° 35.09'	<ul style="list-style-type: none"> • Engine 2 Tanker 3 • Engine 6 Engine 10 • Engine 9 • Tanker 1 (<i>Water Tender</i>)
Station 3	183 Los Cordovas Road Taos, NM 87571 N 36° 22.44' x W 105° 39.32'	<ul style="list-style-type: none"> • Engine 7 • Engine 8 • Mobil Command 1
Station 4	Airport Raod Taos, NM 87571 N 36° 27.65' x W 105° 40.23'	<ul style="list-style-type: none"> • Engine 11

Engines

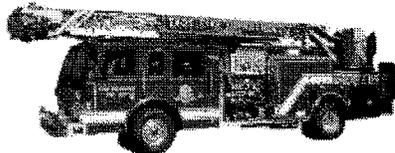
Unit No.	Description	Image
Engine 2	Type 1, 2x4 2003 Pierce Quantum 750 gal / 1500 gpm / CAFS 4 person crew	
Engine 5	Type 1, 2x4, 2008 Pierce Quantum 750 gal / 1500 gpm 4 person crew	
Engine 6	Type 3, 4x4, 2012 Pierce Hawk 500 gal / 500 gpm 3 person crew	
Engine 7	Type 6, 4x4, 2003 Ford 500 gal / 350 gpm 2 person crew	
Engine 8	Type 1, 2x4, 1994 Pierce Saber 750 gal / 1250 gpm 4 person crew	
Engine 9	Type 6, 4x4, 1993 Dodge 300 gal / 300 gpm 2 person crew	

Taos Volunteer Fire Department

Engines (continued)

Unit No.	Description	Image
Engine 10		
ARFF 2	1993 Oshkosh Crash/Rescue	
Engine 14		

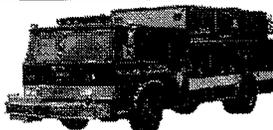
Aerial Truck

Unit No.	Description	Image
Ladder 1	75' Straight Stick Quint 400 gal / 1500 gpm 2004 Pierce Enforcer 4 person crew (minimum)	

Water Tenders

Unit No.	Description	Image
Tanker 1	Support Type 3, 2x4 Pierce Arrow 2000 gal / 1000 gpm 1 person crew	
Tanker 2	Support Type 2, 2x4 Pierce Arrow 2000 gal / 1000 gpm 1 person crew	
Tender 3	Support Type 3, 4x4 INT/Smeal 1800 gal / 500 gpm 1 person crew	

Rescue Vehicles

Unit No.	Description	Image
Rescue 12	1989 2x4, Pierce Arrow Engine Based Heavy Rescue 3 person crew (also used as Squad)	

Taos Volunteer Fire Department

Other Equipment

Unit No.	Description	Image
Unit 4	Dodge 1500, 4x4 Command Vehicle Also used for EMS Response 4 person crew	
Mobile Command 1	2005 2x4, GMC 450 Mobile Command Post 2 person crew	

Radio Frequencies

Function	Repeater / Direct	Rx Freq	Tone	Tx Freq	Tone
Primary Dispatch	Taos Fire	154.0700	0082.5	154.0700	0082.5
Command	Taos Fire	154.0700	0082.5	154.0700	0082.5
Structural TAC	?				
Wildfire TAC	TAC 1	168.0500		168.0500	
Taos Dispatch Center (Zone)	TSV Repeater	169.1750		169.9750	0156.7