

# CROOKED RIVER RANCH FIRE & RESCUE



## STANDARDS OF COVER

JULY 2018

## **Community Overview**

The community of Crooked River Ranch is located in the high desert of rural central Oregon and covers 16.4 square miles of rural residential, recreational, and commercial property. Crooked River Ranch is the largest unincorporated subdivision in the State of Oregon. The community is isolated on a peninsula between the Deschutes and Crooked River canyons that are average 400 feet deep and one half mile wide. Another unique feature is that Crooked River Ranch lies within both Jefferson and Deschutes counties.

There are over 2,400 residential homes in Crooked River Ranch. The majority are single family homes on property varying in size from one to ten acres. There are approximately 400 undeveloped lots remaining in the community.

There are commercial/light industrial buildings that include multi-story office occupancies with public meeting spaces, churches, dental office, food services, a convenience store and gas station, recreational facilities including a golf course, tennis courts, and swimming pool, motels and RV parks, RV and public storage facilities, and numerous small business occupancies. There are also several adult care facilities in the community.

Crooked River Ranch is primarily a bedroom community of Redmond, Oregon. Most residents work outside of the community or are retired from work. The median resident age is 57.3 years. The median household income is \$49,268. Unemployment rate is 8.58%. Residents below poverty level 4.82%.

Crooked River Ranch is governed by an elected nine member board of directors who oversee the Crooked River Ranch Club & Maintenance Association. The Crooked River Ranch Club & Maintenance Association is a non-profit corporation and is the largest homeowners association in Oregon, with approximately 5,000 in population. It is considered to be the largest subdivision of its kind - employing over 25 people and utilizing many volunteers to keep owners and guests satisfied during their stay on the Ranch. As with all homeowner associations, dues are collected to assist in maintaining the common properties which the association owns. These common properties include the swimming pool, tennis/pickleball courts, 18-hole golf course, RV Park, MacPherson Park & Pavillion, Panorama Park, baseball field, basketball court, horse arena, and other Ranch amenities. The homeowner's dues do not pay for any services rendered by Crooked River Ranch Fire & Rescue.

## **Community Outcome Expectations**

The community of Crooked River Ranch has identified that fire suppression and emergency medical services are their top two priorities of the District. In order to limit loss of life, property, and environmental impacts the District will adopt updated response standards to minimize the time it takes for resources to arrive with the appropriate number of personnel. This will be accomplished through changes in staffing of the fire station and increasing the number of

Volunteer Firefighters within the District. The District also realizes that feedback from users of services within the community, gathering and evaluating response data, and making changes to improve service delivery are important.

## **Fire District Overview**

In 1977 the property owners of Crooked River Ranch voted to form the Crooked River Ranch Rural Fire Protection District. The District operates under Oregon Revised Statute, Chapter 478, Rural Fire Protection Districts and is governed by a publicly elected five member board of directors. Funding comes from property taxes, a local option levy for operations, and a bond for payment of the fire station constructed in 2008. The base tax rate for property taxes is \$1.8379 per \$1,000 of assessed value. The local option levy for operations is a five year tax levy approved by the voters in 2014 at \$0.69 per \$1,000 of assessed value. In 2007 the voters approved a 25-year bond to fund building a new fire station. The new fire station was completed in 2008 and the bond will be completely paid off in 2032.

Today the District does business as Crooked River Ranch Fire & Rescue and is a modern, full service department. Services provided include: structural and wildland fire suppression, basic and advanced life support emergency medical services, including transport, technical rescue, and fire prevention and life safety programs.

Originally staffed entirely by volunteers the District has grown to include both volunteer and career staff. Our career staff include a Fire Chief, Assistant Fire Chief, three shift Captain/Paramedics, and an Administrative Assistant. Our volunteer staff include an Assistant Fire Chief, Fire Marshal, Captains, Lieutenants, and Firefighters. The District also has a Student Volunteer program where these volunteers work shifts at our station and respond to emergency calls. While in this program they also attend classes at Central Oregon Community College to earn their Associate's of Applied Science in Structure Fire Science and Paramedicine. Both career and volunteer staff are medically trained. The majority are Oregon licensed Emergency Medical Technicians or Paramedics.

The services provided by the District are augmented by the Central Oregon Mutual Aid Agreement that establishes a mechanism to receive emergency response from regional fire agencies. Under the same agreement the District also provides services in the areas surrounding the District as requested. Current mutual partners include:

- Redmond Fire & Rescue
- Bend Fire & Rescue
- Jefferson County RFPD #1
- Cloverdale RFPD
- Sisters-Camp Sherman Fire District
- Crook County Fire & Rescue
- Lapine Fire & Rescue

- Sunriver Fire & Rescue
- Black Butte Ranch Fire District
- Alfalfa Fire District
- Warm Springs Fire & Safety
- Jefferson County EMS
- Oregon Department of Forestry
- Bureau of Land Management
- US Forest Service.

The District also maintains auto-aid agreements with Redmond Fire & Rescue and Cloverdale RFPD. On major emergencies at target hazards within district these agreements for outside aid assist the District in providing the necessary firefighting and emergency service capabilities. An auto-aid agreement with Jefferson County Fire District #1 is used for technical high- and low-angle rope rescue incidents.

The District operates out of one fire station centrally located within Crooked River Ranch, sitting at the junction of three major roadways, providing quick access in all directions of travel. The station is equipped with the following apparatus:

Apparatus Kind	Total Number
Structural Fire Engines	1
Interface Fire Engines	1
Water Tenders	2
Heavy Brush Engines	2
Light Brush Engines	1
Ambulances	2
Specialty Rescue Vehicles	1
Utility/Staff/Command Vehicles	3

### **Community Risk Assessment**

As part of the Standards of Cover, the District evaluated and identified different target hazards and risks within Crooked River Ranch. Target hazards within the District’s response area are occupancies that require more expertise or response capability than a standard residential structure fire. These hazards are assigned a risk level to indicate the severity of the hazard. This risk level is based on: life safety hazards, type of building construction and fire flow needed for extinguishment, historical data and likelihood of recurrence of an event, and impact to the

community. The risk levels are low, moderate, high, and extreme. An example of a low risk level would be a 2,000 square foot residential structures without any exposures to other buildings. For detailed information on hazard risk assessment process please see Appendix A: Community Risk Assessment Guide.

Life safety considerations include: the occupant load, the mobility of the occupants, the alarm alerting capability to warn occupants, and existing fire suppression capability available to the occupants. Building factors that would be considered are: type of construction materials, other adjacent exposed buildings, and the total floor square foot area. Fire flow includes: available and needed fire flow as well as existing sprinkler systems. Value to the community includes: the people on site, the economic value, the value of the infrastructure, and the historical value. Other risks evaluated include: the past experience at that location, the types of activities that transpire at that location, types of hazards on-site, the capacity to control a fire at that location, and the overall fire load.

Target hazards noted within the District are (the order of the following list and the risk level DOES NOT indicate priority of importance as a target hazard):

1. Commercial Facilities
  - a. Big Dog Saloon - moderate risk
  - b. Charlie's Trading Post - moderate risk
  - c. Mint Snuff Factory - high risk
  - d. Mini Storage Facilities - low risk
  - e. Ranch Administration Building - moderate risk
  - f. Ranch House & Senior Center - high risk
  - g. Sandbagger Saloon - moderate risk
2. Government Facilities
  - a. Fire Station - moderate risk
3. High Density Residential Properties
  - a. Crooked River Ranch Cabins - high risk
  - b. Residential Care Facilities - high risk
  - c. RV Parks/Campgrounds - moderate risk
  - d. Sunview Motel - high risk
4. Places of Worship
  - a. Ranch Chapel - moderate risk
  - b. Upper Room Christian Fellowship - moderate risk
5. Recreational Facilities/Areas
  - a. 18-hole golf course - low risk
  - b. Disc golf course - low risk
  - c. Hiking trails on public land - moderate risk
    - i. Steelhead Falls Trail
    - ii. Scout Camp Trail
    - iii. Folley Waters Trail
    - iv. Hollywood Trail
    - v. Otter Bench Trail System
    - vi. Sandridge Trails

- d. Swimming pool - high risk
6. Special Events - moderate risk
  - a. Independence Day Celebration
  - b. Halloween Trunk or Treat Carnival
  - c. Steel Stampede Motorcycle Race
7. Utilities
  - a. Crooked River Ranch Road Department Shop - moderate risk
  - b. Crooked River Ranch Water Company and water distribution infrastructure - moderate risk
  - c. Pacific Power Electrical Substation - moderate risk
  - d. Communications Infrastructure (ex. Cell towers, internet services, two-way radio communications, etc.) - low risk

The District has identified risks to Crooked River Ranch that include:

- A single county road that provides access to the entire community from the south causes delays in automatic and mutual aid agencies responding to assist
- Narrow driveways with low hanging tree limbs, limited access, and small turn around areas for apparatus
- The community water system provides hydrants to approximately one-third of the community. Hydrants on the system are also spread out making the need to rely on water tenders for supplying firefighting water very high.
- A wilderness study area (WSA) on Federal land that is immediately adjacent to the west boundary of the community. Fuels mitigation within the WSA is non-existent and private property directly borders these extreme hazard areas.

Factors affecting call responses and actions:

- Staffing levels are much lower between September and June reducing available resources
- Response to calls for service are generally better in the evening and night hours when more volunteers are available
- Training and experience of available resources
- Oregon Occupational Safety and Health Administration (OR-OSHA) two-in, two-out rule for firefighting
- Snow and ice on roadways during winter months slows response times
- The road system within the community has both paved and unpaved roads which are narrow, have low hanging obstacles, and cul-de-sacs limiting the types of apparatus that can access certain areas
- Response time for automatic and mutual aid partners of 15 minutes or greater
- Technical rescue response, other than vehicle extrication and high/low angle rope rescue, comes from mutual aid partners at least one hour away
- Hazardous materials response team is regionalized with the state of Oregon with the nearest team being in Salem, approximately three hours away

In addition to the more obvious tangible risks and target hazards being protected there is also risk to the private and commercial revenue in the community. The Crooked River Ranch Club and Maintenance Association and the small businesses within the community rely on visitor revenue to be successful. During the past decade wildland fires have caused lost revenue due to smoky conditions, potential evacuations, and people's actual fear of fire. While the majority of these fires have occurred outside the community there have been small fires that have occurred. Any future wildland fire puts the residents, visitors, and businesses at risk of losing income. This would affect all who live and work at Crooked River Ranch.

### **Service Level Objectives**

Oregon Administrative Rule (437-002-182 Oregon Rules for Firefighters) requires that fire departments maintain a written policy describing their organizational structure, functions, and training. In addition, OAR 437. Division 2, Subdivision L: Fire Protection, describes specific parameters for firefighting, and in particular limits interior firefighting to those departments that can maintain a specified level of response, provide regularly defined training, maintain and regularly test respiratory equipment, and sustain other critical requirements. The District currently meets these standards.

The District's organizational priorities are:

1. Respond to calls safely and efficiently
2. Train to a high level of proficiency
3. Maintain a high level of mental and physical fitness
4. Communicate effectively

The District applies the following guidelines to Risk Management:

1. We respond to emergencies believing we can make a bad situation better.
2. We will not make a bad situation worse by risking our lives to protect lives and/or property that are obviously lost.
3. With calculated consideration, we will jeopardize our safety to protect savable property.
4. If necessary, we will risk our lives to protect the life of a fellow human being.

The District will utilize available resources to make bad situations better by responding to all calls for service with the right resources, in the most efficient response manner.

## Response Analysis

Incident Type	Total Alarms (2017)
Fire (structure, wildland, vehicle, etc.)	34
EMS & Rescue	334
Hazardous Conditions (no fire)	7
Service Call	79
Good Intent	52
False Alarm & False Call	27
Special Incidents	2
	<b>Total: 535</b>

### Emergency Medical & Rescue Response Analysis

Emergency medical calls make up 62% of all requests for service. The District strives to provide an Advanced Life Support ambulance on all first-out medical calls. When an Advanced Life Support ambulance is not available, such as in the case of simultaneous emergency calls, the District will attempt to provide a Basic Life Support ambulance and request mutual aid Advanced Life Support help from a neighboring agency. Personnel trained in emergency medical care are provided the necessary equipment and education as required by the State of Oregon to achieve the above standard.

The District responds to various rescue related requests for service. These requests may be related to water emergencies, high-angle or low-angle rope rescues or rescues requiring a wheeled litter to access patients in unsafe or difficult to access areas.

For the high- and low-angle rope rescue operations the District have personnel trained to the Technician Level. All other personnel are trained to an Operations Level. In the event of a request requiring the need for additional personnel and equipment to safely access, stabilize, or remove a patient, outside resources may be called into assist. These resources include:

- Jefferson County Fire District #1
- Redmond Fire & Rescue
- Jefferson County Sheriff's Office, Camp Sherman Hasty Team
- Deschutes County Search & Rescue



### Fire & Hazardous Conditions Response Analysis

The District will respond to all structure fires with the available duty crew not committed to other emergency calls and available volunteers who respond from home or work. Based on that level of response and operating under the Risk Management Statement the District personnel will perform the following if required:

- Enter an IDLH environment and provide 2-in and 2-out minimums prior to entry. District personnel are trained and equipped to perform the above. The necessary staff cannot be guaranteed to perform entry into IDLH environments at all times. The necessary level of staff can be provided via emergency call-back and mutual aid request. This muster of personnel can take up to one hour.
- The District will fight fires from the exterior, contain the fire to the building of origin, and protect nearby structures. This may require entry into the “hot zone” with appropriate protective clothing and SCBA.
- The District meets the required level of training set forth by the State of Oregon and Oregon-OSHA to do the above as noted based on staffing/personnel response levels.

National Fire Protection Association (NFPA) 1720 is a national standard that specifies personnel resources needed to adequately and safely attack and suppress a structure fire.

Based on a 2,000 square foot home, NFPA 1720, states an adequate response would include 6 personnel arriving on-scene within 14-minutes of being dispatched. NFPA 1720 continues to state that this standard contains minimum requirements relating to organization and deployment of fire suppression operations and special operations to the public by combination agencies.

The District cannot meet NFPA 1720 with the on-duty crew. Volunteers are notified at the same time as the on-duty crew. Volunteers who respond to the call must safely get to the fire station, turnout, and respond on appropriate apparatus. This total time often exceeds the 14-minute benchmark NFPA 1720 recommends. The District utilizes automatic and mutual aid agreements to support fire suppression operations however those resources can be up to an hour away from the scene.

Utilizing a well-established risk management statement and operational procedures the District utilizes the resources available to safely and effectively extinguish fires with a continual goal of meeting NFPA 1720 whenever possible.

### Hazardous Materials Response Analysis:

The District will respond to all hazardous material incidents in the District. Members are trained to the Operations Level and are able to manage incidents at that level within the guidelines of our Risk Management Statement.

If a hazardous materials incident requires a response above the Operations level, Crooked River Ranch Fire & Rescue will request a State of Oregon Hazardous Materials Response Team.

### **Response Plan**

Standard response levels are based on available staff and can change significantly in the event of multiple calls. All 9-1-1 services are provided by Deschutes County 9-1-1 and specific details are outlined in the 9-1-1 Dispatch Run Cards.

#### Response Times:

Response time goals are related to statistics gathered in 2017. Response times include turnout time (call received by the District from 9-1-1) and travel time (responding to arrival on scene). Total response time is calculated from the time the District receives the alarm from Dispatch until the first unit arrives on scene.

Crooked River Ranch Fire & Rescue will strive to respond to all emergency requests for service within 8 minutes on 80% of requests within our response area. This time is considered the response time.

### **Summary**

This standard of cover document outlines the response capabilities of the District. This tool communicates staffing and capabilities as they exist at the time of document completion.

The District is able to deal with the above identified risk in a reliable and effective manner within the constraints of the Risk Management Statement and available resources. Recognizing that the majority of calls for service are EMS related, the organization is well suited to provide excellent customer service that meets all State of Oregon requirements.

For the majority of structure fires if the entire on-duty crew is available and volunteer response is adequate these incidents can be mitigated in a safe, effective, and efficient manner. If the District is managing multiple calls the ability to perform interior structure firefighting and saving savable life in a safe manner may not be possible.

If structure or wildland fires escalate, emergency personnel call-back, auto-aid resources, and mutual aid resources are utilized to ensure adequate resources are summoned to manage the emergency.

**APPENDIX A: Community Risk Assessment Guide, Step 2A & Step 2B**

<http://riskassessment.strategicfire.org/step-2-prioritize-risks/describe-risk-attributes-and-vulnerability/>

<http://riskassessment.strategicfire.org/step-2-prioritize-risks/rating-scoring-target-hazards/>