

# **Vail CWPP Contents**

## **Draft CWPP**

## **Evacuation Plan 09**

## **Vail Fire and Emergency Services**

## **Green Hill Circle – Urban Interface Project**

## **Maps**

# **TOWN OF VAIL**

## **COMMUNITY WILDFIRE PROTECTION PLAN**

**March 11, 2009**

Revised: March 11, 2009

Prepared for:

**Town of Vail Council**

75 S. Frontage Road

Vail, Colorado 81657

Prepared by:

**Vail Fire & Emergency Services**

43 W. Meadow Drive

Vail, Colorado 81657

## **I. Introduction**

Situated in central Colorado, the Town of Vail has a year round estimated population of 4,800. It encompasses 22 square miles, 10,700 acres of which is mountain resort related. Vail is surrounded by 350,000 acres of National Forest and Bureau of Land Management lands crowned by over 5,000 acres of skiable terrain on the largest ski resort in the United States. At the foot of the ski mountain is the Town of Vail. The Town of Vail has the nation's largest free bus system, and the town is filled with shops, restaurants and year-round activities in a pedestrian-friendly environment. Forest cover and vegetative conditions vary widely throughout the Town, and surrounding areas, from dense Lodgepole Pine forest, to sagebrush, Pinon Pine, Gambel Oak, and Aspen.

Since recent mountain pine beetle infestation has killed surrounding pine stands, the threat of wildfire and its disastrous effects have become a primary concern to citizens and guests of the Vail Valley. Wildfires have a great potential to disrupt the tourist economy, damage natural resources, destroy private property, harm residents, guests and firefighters, and induce panic in the general population. Wildfires in Colorado have become increasingly destructive and more expensive every year. Wildfire does not respect any boundaries and strong winds can easily move fire from one side of the valley to the other, jumping across all lanes of Interstate 70. Vail is a particularly susceptible town in Eagle County, due to the narrowness of the upper Gore Creek drainage as compared to the wider Eagle River down valley. In order to prevent a catastrophic wildfire, an inter-agency approach must be taken, highlighting prevention and suppression programs. Success is based upon cooperation by all involved stakeholders, including government agencies and the public, as collaboration is the key element in preventing, responding to and surviving a wildfire.

In Eagle County, the incidence of wildfire is increasing with fires burning year-round, contrary to the popular myth that wildfire season is only three to four months long. Most destructive wildfires are caused by humans, though lightning is also a common cause. Fire potentially originates from structure to wildland and vice versa. While education and enforcement can reduce incidence of human-caused fires, it is important to realize that ignitions will continue to occur. Once an ignition does occur, it is too late to implement an effective wildfire mitigation measure. There are never enough resources (firefighters, water and/or engines) to protect every structure, forcing firefighters to decide which properties are worth saving. A property owner who takes the mitigation actions required will make a tremendous difference in the survival of their home or property.

In 2002, western Colorado was subjected to a prolonged and intense fire siege. Several large forest fires occurred within 80 miles of the Town of Vail (e.g., Coal Seam, Glenwood Springs, and Big Fish, Flat-Tops Wilderness). Throughout the summer of 2002, smoke plumes dominated the skyline and the smell of smoke hung in the air. Views of the mountains were obscured by lingering smoke.

Thousands of acres were burned and local residents and guests were extremely concerned. This is not the first time fires have appeared in Colorado; fires are part of a natural healthy forest and fire cycle.

Vail is a small island that is surrounded by the White River National Forest. Annually Vail Fire and Emergency Services responds to between 10 and 20 small to medium size wildland fires that occur within its response area. Many of these fires are within 500 feet of multi million dollar properties or threaten vital infrastructure.

## **II. Purpose**

The purpose of this plan is to implement a seamless, coordinated effort in determining an appropriate fire management work plan within the Town of Vail, complementing local agreements for wildfire protection. Actions recommended by this plan, when taken, will lessen the hazards to structures and forests bordering the Town from structure fires. Actions proposed in this plan involve implementation by the Town of Vail, United States Forest Service and Eagle County. It will also introduce the **National Fire Plan** to the Town of Vail and other agencies with jurisdiction, including the Bureau of Land Management (BLM), United States Forest Service (USFS), Colorado State Forest Service (CSFS), Town of Avon, Town of Basalt, Town of Eagle, and Eagle County's Fire Protection Districts (FPD's). By implementing this cooperative inter-agency plan, the Town is able to better acquire funding from Federal and State sources for wildland fire mitigation activities.

## **III. Community Goals and Objectives**

Goals and objectives for this CWPP include the following:

- To enhance life safety for residents and responders.
- Mitigate undesirable fire outcomes to property and infrastructure.
- To mitigate undesirable fire outcomes to the environment, watershed and quality of life and local economy.

In order to accomplish these goals the following objectives must be identified:

- Identify, prioritize, plan and implement hazard fuel reduction to reduce the risk of wildfire effects on TOV and the adjoining national forest lands.
- Build response capacity by acquiring engine crews, aerial support, staffing and infrastructure to support initial and extended attack operations.

- Maintain and enhance an interagency approach to hazard mitigation and emergency response operations.
- Continue to identify changing fuel complexities and provide analysis of the fire behavior potential.
- Recommend specific actions that will reduce hazards to the values-at-risk.
- Facilitate fuels reduction through a comprehensive approach including prescribed fire, trimming, chipping, limbing, removal, and utilizing FireWise guidelines.
- Make building code changes requiring the use of fire resistive building materials.

#### IV. **Other Desired Outcomes**

- Quantification of the community's risk from wildfire will facilitate public awareness, assist in creating public action, and support existing and proposed town ordinances to mitigate defined hazards.
- Improve wildfire prevention through education, awareness, combined with education, will help to reduce the risk of unplanned natural and human caused ignitions.
- Facilitate and prioritize appropriate hazardous fuel reductions by organizing and prioritizing hazard mitigation actions into Fire Management Units (neighborhoods) will provide stakeholders with social and fire-management perspectives, allowing them to make better decisions about their future efforts.
- Promote and improve the effectiveness of response, accuracy of pre-planning, and facilitate the implementation of cross-boundary and multi-jurisdictional projects.

## V. **Authorities**

The Town of Vail Community Wildfire Protection Plan is implemented under various intergovernmental agreements under the **Memorandum of Understanding for Multi-Jurisdictional Cooperation Regarding Forest Fuel Reduction and Wildfire Mitigation**. This plan sets standard operating guidelines (SOG's) and responsibilities between all involved governmental agencies to implement cooperative wildfire mitigation programs in Eagle County.

Related documents are the **National Fire Plan**, which authorizes the development of "Community Fire Plans", the **Interior and Related Agencies Appropriations Act (P.L. 106-291)**, which directs close collaboration among citizens and government as a key component to wildfire planning, and the **Colorado House of Representatives, Bill 00-1283**, which authorizes local governmental agencies and the County Sheriff's office to implement fire management plans.

## VI. **Current Status of Fire Management in the Town of Vail**

Ultimately, each jurisdiction must take responsibility for wildland fire protection on its own lands. The County Sheriff has statutory responsibility for wildfires on unincorporated lands of Eagle County. However, all fire districts are contracted for fire suppression in those unincorporated areas. All fire districts are involved in inter-governmental agreements for fire suppression in unincorporated areas of Eagle County. Vail Fire & Emergency Services is responsible for properties within the Town of Vail and in areas of Eagle County between mile markers 171 to 190 on Interstate 70.

Other jurisdictional agencies under mutual aid agreements with the Town of Vail include, Eagle County, Eagle County Airport Fire/Rescue, Eagle River Fire Protection District, Greater Eagle Fire Protection District, Gypsum Fire Protection District, and Basalt & Rural Fire Protection Districts, Colorado State Forest Service, Bureau of Land Management and United States Forest Service.

## VII. **Elements for Assessment and Planning Fire Management**

### a. Management Objectives

#### 1. Prevention

a. Education and Outreach

Develop and implement a public awareness campaign to address prevention and defense against wildland fire. Videos and publications will be made readily available annually to schools, public libraries, homeowner associations, and other public offices near wildland-urban-interface (WUI) communities. Currently, several wildfire mitigation presentations per year are made by Eagle County, Colorado State Forest Service, and Vail Fire & Emergency Services (VFES). Additionally, consultations and site assessments are available for individual Vail homeowners upon request.

b. Burn restrictions, closures and bans

Burn restrictions and bans are coordinated and enforced by Eagle County Sheriff's Office in unincorporated Eagle County. The Town of Vail manages burning within town boundaries according to Vail Fire and Emergency Services burn guidelines. Additionally in 1990, Colorado adopted an open burning regulation, specifically for smoke mitigation. Under this regulation, non-agricultural burns are regulated by Eagle County and the various fire districts. Recreational burns are not regulated, unless there are restrictions in place issued by the Eagle County Sheriffs' Office, or the governor's office respectively.

2. Preparedness

a. Agreements

Wildland fire suppression in Eagle County operates under the **Eagle County Annual Wildfire Operating Plan for Control and Extinguishment of Wildland Fire (AOP)**. This document describes existing fire operating agreements such as the Interagency Cooperative Fire Management Agreement, the Emergency Fire Fund (EFF), a contract agreement for forest and watershed fire control, Initial Attack, and Aircraft Agreement for Wildfire Suppression. A copy of the agreement attached.

b. Resource Availability / Mobilization Plan

The Town of Vail is provided fire protection by Vail Fire & Emergency Services. The Upper Colorado River Interagency Fire Management Unit is responsible for wildland fire suppression efforts on public lands. The **Eagle County Annual Wildfire Operating Plan for Control and Extinguishment of Wildland Fires** has been developed and implemented in Eagle County. This AOP enables Eagle County, local FPD's, CSFS, USFS, and BLM to set forth standard operating guidelines, policies, and responsibilities to implement cooperative wildland fire protection on all lands within Eagle County. This AOP is revised and updated annually to provide detailed description of available resources/equipment and cooperative needs and commitments.

c. Special Resource Concerns

Special resources for fire management concerns are described in the **Eagle County Annual Wildfire Operating Plan for Control and Extinguishment of Wildland Fires**. All cooperating agencies will annually review the AOP and make necessary changes. These changes will be discussed at the annual AOP update meeting. It is understood that special resource concerns will arise with changing land use and evolving agency policies.

d. Training

The Town of Vail Wildfire training plan will coordinate wildfire training opportunities for local fire fighters. The CSFS and USFS will, to the extent possible, assist in providing requested training. Nationally recognized fire training courses approved by the National Wildfire Coordination Group are provided periodically by the CSFS, USFS, BLM and other agencies. As these courses are scheduled, all pertinent employees will be informed and assigned to participate. See Appendix A: Vail Fire & Emergency Services Wildfire Preparedness and Training

3. Mitigation

a. Planning and Zoning

Article 5-1-5, Vail Town Code, Abatement of Mountain Pine Beetle, states that the spread of mountain pine beetle poses an immediate threat to the pine trees located within the Town. In order to contain the spread of the mountain pine beetle and protect the health, safety and welfare of the inhabitants of the Town, Article 5-1-5 requires that trees infected with the mountain pine beetle are a public nuisance and must be abated by the property owner. If owners do not comply, the Town has authority to mitigate the infected trees as necessary. This regulation is meant to aid in the prevention and suppression of wildfires, lessen the hazards to structures from wildfires and lessen the hazards to lands bordering the Town from structure fires.

b. Fuels Treatment

Currently, under the National Fire Plan, the Town of Vail and public land management agencies, have been assessing fuels treatment projects. This includes the USFS Ranger Districts and the Bureau of Land Management. The Colorado State Forest Service administers private land ownership programs, such as the Forest Stewardship Program and the Fire Wise Defensible Space Program. Colorado State Forest Service administers grants as funding sources to assist communities and local governments with wildfire hazard mitigation as funds are available. The Town of Vail promotes hazardous fuel treatment through Town sponsored wildfire fuels reduction projects, which include prescribed fire on approved projects with in the Town of Vail.

Interagency cooperation is allowing for seamless, cross-boundary mitigation projects to be planned and implemented. The Town of Vail and other interested communities have the opportunity to implement fuels reduction projects on adjacent federal lands.

Colorado State Forest Service administers grants as funding sources to assist communities and local governments with wildfire hazard mitigation as funds become available.

c. Smoke Management

The Colorado Department of Public Health and Environment (CDPHE) have several Air Quality Laws in place, specifically, Regulation 9, which regulates levels of smoke and particulate,

derived from any prescribed or controlled burn. A smoke management permit from CDPHE is required for any burning operation. This regulation dictates that the Town controls the amount of particulate in the air from any given source at any given time, during prescribed or controlled burning operations, including tree slash piles. The State has incorporated these guidelines and the county can either meet these guidelines or exceed them. The Town of Vail is attempting to meet and exceed these guidelines.

#### 4. Suppression

##### a. Safety

Human safety is always a top priority on any wildfire incident. Through training, proper pre-incident planning, and coordination safety will be increased and the lives of the public and firefighters can be spared.

Fire suppression operations in the wildland-urban-interface (WUI) are exceptionally dangerous, due to additional hazards that exist. Coordination of resources and appropriate response is critical to the safety of personnel in the interface zone.

##### b. Emergency Evacuation Plan

The purpose of the Vail Emergency Evacuation Plan is to inform the citizens and guests of Vail how to respond to an emergency requiring evacuation and also serves as a guide for the Town of Vail emergency responders. The Emergency Evacuation Plan includes plans for both a partial or full evacuation of the town. See attached Town of Vail Emergency Evacuation Plan. See Appendix 1

##### c. Coordination

Coordination of resources and fire suppression activity is thoroughly discussed in the Eagle County AOP. That document

serves as the guide for setting standard operating guidelines (SOG's), policies, and responsibilities. See Appendix G: VFES Wildfire SOGs

d. Response

1. Human Caused Wildfires

According to Fire Use Plans from the surrounding public land management offices, all human caused fire starts will be aggressively suppressed. In the past, aggressive suppression effects have included aerial tanker drops, regional-aid fire services response, and use of countywide fire resources.

2. Naturally Caused Wildfires

All naturally caused fires will be suppressed within the Town of Vail boundaries. Lightning strikes in the surrounding area will be evaluated and extinguished as necessary, particularly on Vail Mountain.

5. Fiscal Considerations

a. Emergency Fire Fund

Eagle County has been a participating member of the Emergency Fire Fund (EFF) since 1990. This fund is used to assist counties and local communities in wildfire suppression costs once certain conditions and commitments have been met. The Town of Vail has access to the EFF when determined by the Colorado State Forest Service after all resources have been exhausted. *For further information regarding the EFF, see the Eagle County AOP.*

When possible, aggressive initial attack, including the use of aircraft, is generally the most cost-effective approach for dealing with wildfires. Occasionally, initial attack will be unsuccessful due to lack of resources, multiple fire starts, extreme burning conditions, or inability to mitigate firefighter safety issues.

Due to relatively low numbers of citizens and full-time fire personnel, each jurisdiction must be ready to cover the cost of ordering dedicated firefighting resources when extended-attack fires occur. Cost containment does not always mean utilizing non-reimbursable mutual-aid resources, if these resources have a low probability of success. Often, cost containment means spending a significant amount of money early, to keep the fire small and manageable. Additionally, where warranted by low resource values, jurisdictions should consider utilizing existing natural or man made control features some distance from the fire to minimize cost, even though it may mean sacrificing more acres.

As a Colorado EFF member, Town of Vail can request EFF implementation if a fire meets certain criteria through Eagle County. It is important for the Town to understand that even if EFF is approved, it will continue to incur significant costs that will not be eligible for reimbursement by EFF funds. Likewise, fire protection districts should not expect reimbursement for their personnel and equipment when fighting an EFF designated fire within their districts. Detailed documentation of all firefighting costs is required and is the responsibility of the host agency for any reimbursements from EFF.

b. Fire Management Map

In 2004 Eagle County contracted the Dynamic Corporation to model wildfire hazard rating on all private lands in the county and 200 meters into any public lands adjacent to all private lands. Fire Behavior Fuel Models (FBFM's) for the Town of Vail were digitized from aerial photographs with a two acre minimum mapping unit. Fuel models developed were visually verified through on the ground assessments to ensure accuracy. A wildfire hazard index was then calculated using the *Colorado Wildland Urban Interface Hazard Assessment Methodology (Edel 2002)* using the FBFM's developed and a 110 meter Digital Elevation Model (DEM) of Eagle County acquired from the National Elevation Dataset (NED). The result is a wildfire hazard rating map that ranks wildfire hazard into 5 categories as follows; **Very low, low, Moderate, High and Extreme.** See attached. Appedex 2

The definition of the Wildland Urban Interface (WUI) for purposes of this plan shall be broadly defined, and include areas within 1.5 miles of the Town of Vail boundary, structures, and contiguous ski areas that have a direct or indirect effect from avalanche, land slide or debris flow and flooding.

## VIII. **Planned Actions**

Planned actions are continually being determined and completed during the course of time. With a changing environment and completion of objectives, priorities will also change over time. Therefore, it is imperative to continually update the Town of Vail Community Wildfire Protection Plan.

### a. Prevention

Awareness is a key element to fire prevention. A wildfire education program and annual work plan will be developed for the Town of Vail through collaboration with Eagle County. Videos, pamphlets, and posters will be made available to the public through local government offices, fire stations, libraries, and schools.

Forums will be held prior to fuels mitigation projects and on an as-needed basis. Topics to be included in these forums will include Fire Wise information, introductory fire behavior and what to do during a wildfire, particularly home and family preparedness.

### b. Planning and Zoning

All applications for new development adjacent to public lands should be referred to the appropriate public lands management agency at early stages during the approval process. The development should be reviewed to determine any need for wildfire mitigation activities that should take place on adjacent public lands. The Town of Vail Department of Community Development has worked with VFES and amended the Town of Vail Development Standards Handbook, eliminating wood shingled roofs in all areas of the Town of Vail.

### c. Preparedness

Eagle County communities and the Town of Vail have been urged to utilize the Community Wildfire Protection Plan (CWPP) format to prepare for wildfire emergencies and to qualify for grant funding from state and federal agencies. Eagle County Board of County Commissioners has adopted a countywide Wildfire Protection Plan in January, 2003. This plan

received review and input from municipal and fire district agencies during its development.

d. Mitigation

The Town of Vail will continue planning with other agencies in Eagle County to discuss priority fuels treatment projects. Priorities will be determined utilizing the following criteria:

1. Life Safety
2. Forest Health
3. Essential Infrastructure
4. Homes/Businesses
5. Municipal Water Supplies
6. Resource Values

i. Forest Health

- ii. Air Quality
- iii. Cultural Habitat
- iv. Recreational Infrastructure

e. Planned Mitigation Projects

Currently, the following projects are planned for implementation over the next five (5) years, including manual, mechanical and prescribed fire, or a combination of all three:

**Year Action Type Project Project Mgr(s)** 2006 Fuel Haz Reduction Green Hill Circle TOV, USFS

2006 Fuel Haz Reduction Intermountain WUI #5 TOV, USFS

2006 Aspen Enhancement VVFB #202 USFS, TOV, VR

2006 Aspen Enhancement VVFB #203 USFS, TOV,

2006 Aspen Enhancement VVFB #201 USFS, TOV, VR

2006 Fuel Haz Reduction Private Land TOV, USFS

2006 Prevention/Education Town of Vail TOV, USFS

2007 Aspen Enhancement VVFFH #209 TOV, USFS

2007 Aspen Enhancement VVFFH #207 TOV, USFS

2007 Aspen Enhancement VVFFH #206 TOV, USFS      2007 Aspen  
Enhancement VVFFH #204 TOV, USFS

2007 Aspen Enhancement VVFFH #205 TOV, USFS

2007 Aspen Enhancement VVFFH #208 TOV, USFS

2007 Aspen Enhancement VVFFH #617 TOV, USFS

2007 Aspen Enhancement VVFFH #618 TOV, USFS

2007 Aspen Enhancement VVFFH #619 TOV, USFS

2007 Fuel Haz Reduction Private Land TOV,USFS

2007 Prevention/Education Town of Vail TOV, USFS

**Year Action Type Project Project Mgr(s)**

2008 Fuels Haz Reduction VVFFH #514-Phase I TOV, USFS

2008 Fuels Haz Reduction VVFFH #515-Phase I TOV, USFS

2008 Fuels Haz Reduction Private Land TOV, USFS

2008 Fire Prevention Town of Vail TOV, USFS

2009 Pile Burning VVFFH #514-Phase II USFS

2009 Pile Burning VVFFH #515 Phase II USFS

2009 Aspen Enhancement VVFFH #620 USFS

2009 Fuels Haz Reduction Private Land TOV, USFS

2009 Prevention/Education Town of Vail TOV, USFS

2010 Aspen Regeneration &

Broadcast Burn VVFH #514&411 USFS

2010 Aspen Regeneration &

Broadcast Burn VVFH#515&412 USFS

2010 Aspen Regeneration &

Broadcast Burn VVFH #313 USFS

2010 Fuels Haz Reduction Private Land TOV, USFS

2010 Fire Prevention Town of Vail TOV, USFS

2010 Budget

The project plan will be revisited and updated every three (3) years to include new projects according to changing forest conditions.

## **IX. Implementation**

Each of the public land management agencies have been planning fuels reduction projects to be implemented over the next several years. These projects will be evaluated for priority and implemented by each respective agency.

### **a. Education**

Educational programs will be provided on an as-needed basis to homeowners groups, schools and concerned citizens. Educational materials will be available at Town of Vail offices, fire stations, and at all federal agencies involved with this plan.

### **b. Mitigation**

Mitigation project implementation will follow a standard operating guideline as follows:

1. Hazard Survey: A hazard analysis will be performed prior to implementation of a project. This analysis will include numerous inputs:

- a. Values-at-Risk
- b. Fuel Hazard
- c. Topographical Hazard
- d. Existing mitigation
- e. Natural barriers

2. Map projects: All projects will be mapped. This will aid in training, implementation, and tracking. Mapping shall include treatment area, values-at-risk, affected area, etc.

3. Educational Meetings: Once a project has been mapped, meetings will be held to inform all affected land owners; adjacent landowners, agencies involved, and concerned citizens to discuss treatments, objectives, and potential pitfalls.

4. Public Comment: A period of public comment shall be held to allow for alternative ideas, concerns, needs, and additional detailed information.

5. Funding: Funding opportunities will be sought to complement cooperating private land owner projects. The Town of Vail has taken a lead role in providing specific project funding, by utilization of Real Estate Transfer Tax dollars over the next five years.

6. Implementation: Project work will commence, once approval is granted.

- a. Local Treatment: Cooperative implementation between agencies and land owners affected.
- b. Landscape Treatments: Focus on forest health and private property defensible space recommendations.

Several neighborhoods within the Town of Vail have been identified as potential areas of elevated risk. These neighborhoods are:

- Intermountain
- West Vail North/South
- Buffehr Creek
- Cascade Village/Streamside
- Sandstone
- Potato Patch
- Middle Creek
- Spraddle Creek
- Bald Mountain
- Chamonix/Davos Trail
- Booth Falls
- Bighorn Subdivision
- Pitkin Creek/The Falls Condos

Several municipal water supplies within the VFES response area were also identified as areas for potential mitigation activity. These include:

- Gore Creek
- Black Gore Creek
- Pitkin Creek
- Bighorn Creek
- Red Sandstone
- Middle Creek
- Mill Creek
- Miller Creek

The above mentioned areas will undergo further evaluation to determine potential mitigation strategies and priorities. The prioritization of these areas should be assessed to address the greatest needs in a timely manner. The priority list should be reevaluated on an annual basis, to ensure that it reflects environmental and social changes.

c. Suppression

The VFES Standard Operating Guideline (SOG) shall continue to be a guiding document for wildfire suppression activities, including safety, training, preparedness, coordination and response. This SOG shall be revised and updated to ensure that it meets the current needs of Vail firefighters cooperating under mutual-aid, regional-aid and countywide AOP agreements. **See attached VFES Wildland Fire SOG**

This plan has been reviewed and approved by John Gulick, Chief, Vail Fire and Emergency Services and the Eagle County Wildland Fire Mitigation Specialist, Ben Garrett and the Colorado State Forest Service Granby District.

\_\_\_\_\_

Mark A. Miller, Vail Fire Chief Date: \_\_\_\_\_

\_\_\_\_\_

Eric Lovgren, Eagle County Date: \_\_\_\_\_

\_\_\_\_\_

Colorado State Forest Service Granby District Date: \_\_\_\_\_

# **Emergency Evacuation Plan**

The Emergency Evacuation Plan was developed to inform the citizens and guests of Vail on how to respond should an emergency requiring an evacuation occurs. It is also a guideline for the Town of Vail emergency responders. The Emergency Evacuation Plan has been assigned for a partial or full evacuation of the town.

The residents of Vail will be presented with the information twice a year, in June and December. The Communication Information Office will provide the information through local media, and will also be available on the Town of Vail website ([www.vailgov.com](http://www.vailgov.com)). The information provided will include emergency broadcast information, recorded information available by phone, neighborhood pick-up locations, evacuation center locations, shelter locations, and a notification for citizens with special needs.

Evacuations will be organized through a Unified Incident Command Structure, which will be responsible for all personnel issues.

CLOSING NOTE:

When implementing the Emergency Evacuation Plan, the Vail Communications Center will utilize the Emergency Phone Notification, also known as Reverse 911, or through Roam Secure messages to the homes, hotels, and businesses in the affected area(s). The message will contain the type of emergency and evacuation instructions.

**Check-In Locations:**

- 1.
- 2.
- 3.

**Evacuation Instructions:**

**A. Self-Evacuation by Vehicle:**

1. Exit the area in the safest direction
2. Respond to a predetermined check-in location

**B. Evacuation by Public Transportation:**

1. Respond to the nearest neighborhood pick-up location
  - a. Citizens will then be transported to the evacuation center to check in.

Citizens who self-evacuate or evacuate by public transportation, will be asked to indicate that they have already evacuated their residence by displaying a large, white object, such as a sheet, in a visible, conspicuous location, on the front, street-side of their home.

**Special Needs Notification:** This will be used to identify citizens and guests that will require assistance leaving their residence or those who have medical needs that require electricity in the case of a power outage. This is only for those who do not have transportation and cannot make it to the designated neighborhood pick-up location. The citizen provided information will be relayed to the Vail Police Department in order to determine how many special needs persons require assistance, their location, and how to transport them for appropriate evacuation.

**Recorded Information:** The Town of Vail will provide the public with a telephone number to receive updated information. It will be a recorded update in an attempt to reduce a possible overwhelming call volume to the dispatch center. The recording will be made by the town Public Information Officer (PIO), who will be designated by the Incident Commander, unless otherwise assigned. Whenever possible, the updated information will also be posted on the Town of Vail website ([www.vailgov.com](http://www.vailgov.com)) and on the Eagle County website ([www.eaglecounty.us](http://www.eaglecounty.us)).

**Neighborhood Pick-up Location:** The current neighborhood pick-up locations are the Town of Vail bus stops. If possible, the buses will follow their regular route. If a resident or guest is unable to make it to their neighborhood pick-up location, then they should respond to the nearest alternative pick-up location for a safe evacuation.

**Alternative Pick-up Locations:**

- 1.
- 2.
- 3.

**Vail Mountain:** If residents and guests are on Vail Mountain when an emergency situation takes place in the Town of Vail, they should remain on the mountain, as long as it is safe. Vail Resort employees may then reroute them across the mountain.

**Evacuation Center Check-in:** There will be a system in which evacuees will check-in and be assigned to a temporary shelter, or be released to take care of their own shelter needs. The required check-in information will consist of the person's name, birth date, home address, cell phone numbers, and, if needed, which temporary shelter the person will be placed. Evacuees will be assigned to shelters based upon the area of their residence. Buses will then transport evacuees from the check-in location to their assigned temporary shelter. The Red Cross or Salvation Army will conduct check-in operations and set up a phone system to assist those needing to locate family members.

## **Unified Command Structure:**

### Involved Departments:

#### Primary Responsibility

Police Department

Transportation Department

Community Information Office

#### Secondary Responsibility

Fire Department

Public Works Department

Eagle County Ambulance District

#### Staffing Evacuation Center Check-In Locations

Administration/Human Resources Department

Library

#### Shelter Operations

Salvation Army

Vail Valley Cares

Red Cross

Town of Vail Administrator, Nina Timm (970) 479-2144

Section #2 – Emergency Evacuation Checklist

Section #3 – Evacuation Transport Resources

Section #4 – Evacuation Pick-up Locations

Section #5 – Shelter Locations

## VAIL FIRE AND EMERGENCY SERVICES

<b>SECTION:</b> Response	<b>SOG #:</b>
<b>TITLE:</b> Wildland Response Procedures	<b>PAGE:</b>
<b>APPROVED BY:</b>	<b>EFFECTIVE DATE:</b>

**PURPOSE:** Create a safe and immediate response procedure to wildland reports of fire and/or smoke, that incorporates first due engines in their response areas and the wildland brush crew when it is activated.

**RESPONSIBILITY:** All command staff and personnel responding to wildland incidents are expected to follow this procedure.

### DEFINITIONS:

Town of Vail (TOV) Vail Wildland Mitigation Team (VWMT): A seasonal wildland team hired by the TOV to mitigate the threat of wildland fire in the community through preventative and suppression strategy and tactics. The WMT employs Minimum Impact Suppression Tactics (MIST), whenever possible to produce the least possible impact on the resource being protected

Wildland: An area in which development is nonexistent, except for roads, rail roads, power lines, and similar facilities, structures, if any, are widely scattered.

Wildland Fire: An unmanaged and uncontrolled fire occurring in a wildland area and thus requires a suppression response.

Wildland Urban Interface: A phrase to describe the imaginary line between wildland and development. One example would be a housing subdivision butting against the forest service boundary

### PROCEDURE:

Chief's directive:

**\* In addition to the first due engine, the WMT will respond to all reports of wildland fires and smoke reports when the Town of Vail's WMT is in operation\*.**

1) Wildland incidents in the Vail response district:

The first due engine officer will acknowledge tones.

The first due will go in service by confirming the location of the call.

The first due will confirm Grand Junction Air Center is advised  
the VWMT when one is in operation\*.

\*This can be assigned to

The VWMT supervisor will go in service and report from what location, so the first due can determine response time based on the location.

Upon arrival at an incident the first due engine will give a size up of the incident. If the VWMT is not needed they will then be disregarded and will return to the previous assignment.

\*Whenever possible the first due should

bring VWMT to the scene to gain experience\*.

If the VWMT is needed they will continue in and assist the first due. If the situation warrants, command of the incident can be transferred to the VWMT, so the first due can return to their service area.

**\*If a wildland incident appears to be intentionally set, then the I.C. should secure the scene and contact the fire marshal's office for investigation.\***

2) Automatic, mutual, or regional wildland incidents:

Station -2

OIC will acknowledge tones

The VWMT will acknowledge tones, give their location, go in service, and start moving towards engine.

\* Unless other wise requested the VWMT will be first response to a wildland fire\*

If a type -1 engine is requested the station 2 OIC will advise to what mix of wildland and structural personnel will respond

3) Interagency Grand Junction Air Center Assignments:

Grand Junction Air Center or Vail Dispatch will advise the VWMT Supervisor of request who will advise OIC and the Chief Officer on duty of the assignment.

480 will assemble wildland personnel and prepare for deployment.

**\*Unless other wise requested the VWMT will be the first response to an Interagency request from Grand Junction.\***

**\*If a command officer is requested, he will respond as well\*.**

If a type I engine is requested the VWMT supervisor and the OIC will advise as to what crew or mix of personnel will be responding

April 5, 2006

## **Green Hill Circle-Urban Interface Project**

### **Fuel Reduction Scope of Work**

#### **Town of Vail Open Space Property**

### **Proposed Treatment for Hazardous Fuels Reduction**

The Forest Service and Town of Vail are working cooperatively to reduce the hazard of wildland fire in the wildland/urban interface between the town and U.S. Forest Service lands. The following is the proposed hazardous fuels treatment for the 19.3 acre Green Hills Circle parcel owned as open by the Town of Vail.

#### Fuels Reduction & Timber Harvest Activities

- Remove beetle infested lodge pole pine marked by the town and forest service.
- Thin live green lodge pole pine trees to achieve desired spacing between crowns of 6-10 feet, targeting only trees infested with mountain pine beetle.
- All logs will be processed (delimbed and bucked to length) at the stump to a 6 inch top diameter. Residual slash will be treated to lie less than 18 inches in height, and no longer than 4 feet in length unless requested by the town.
- All stumps will be cut to the lowest height safely possible (3-6 inches above ground). All logs will be placed into organized bundles with the log butts facing the skidding direction.
- Skidding will be accomplished by use of a skidder with a swing grapple.
- All logs will be performed from a truck mounted log loader.
- Transportation will occur on full size tractors using long log trailers. All trucks will be loaded to the legal town weight limits. The trucking schedule and operation will be reviewed and approved by the Town.

#### Site Access

Access to the 19.3 Green Hills parcel will be gained from the Upper Donovan Bench property from the west, and/or one of the two access easements (15 feet wide) off of Green Hill Court and West Haven Circle.

## Slope Re-contouring & Revegetation

Areas requiring slope re-contouring, seeding, mulching and water baring will be identified by Tom Talbot, TOV project manager. All visible ruts shall be smoothed out and restored to it's natural contour with ruts smoothed out and all stumps removed. All work shall be performed when soil conditions support such work with out compounding the existing surface scaring and damage.

## Schedule

Prior to starting the project, a signed contract between the TOV and contractor needs to be submitted to the town attorney for review and approval. If the project is put on hold or stopped by the Town of Vail, the town will be responsible for payment of project activities up to that date. Upon contact signing and desposit, the contractor will start the project with in 7 days, completing the project with in 30 days of the start date. Weather delays will not count towards the minimum completion time. The project will operate during approved hours of operation per town policy. The Town of Vail expects completion of the above finished grading and re-vegetation prior to final invoice payment.

## **Proposed Hazardous Fuels Treatment**

### **Green Hill Circle**

The area was identified based on the following selection criteria:

- Areas within conifer fuel types, LPP.
- Areas with structures in close proximity to hazardous fuels.
- Areas experiencing mountain pine beetle activity and tree mortality.
- Areas with steep slopes and hazardous fuels.

Current Vegetation Condition:

- Mature mix conifer (lodgepole, Douglas fir, spruce, fir) with aspen intermixed.

Proposed Vegetation Treatment:

- Remove dead trees; standing and down within 100-150 feet from structures.

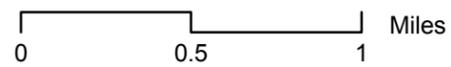
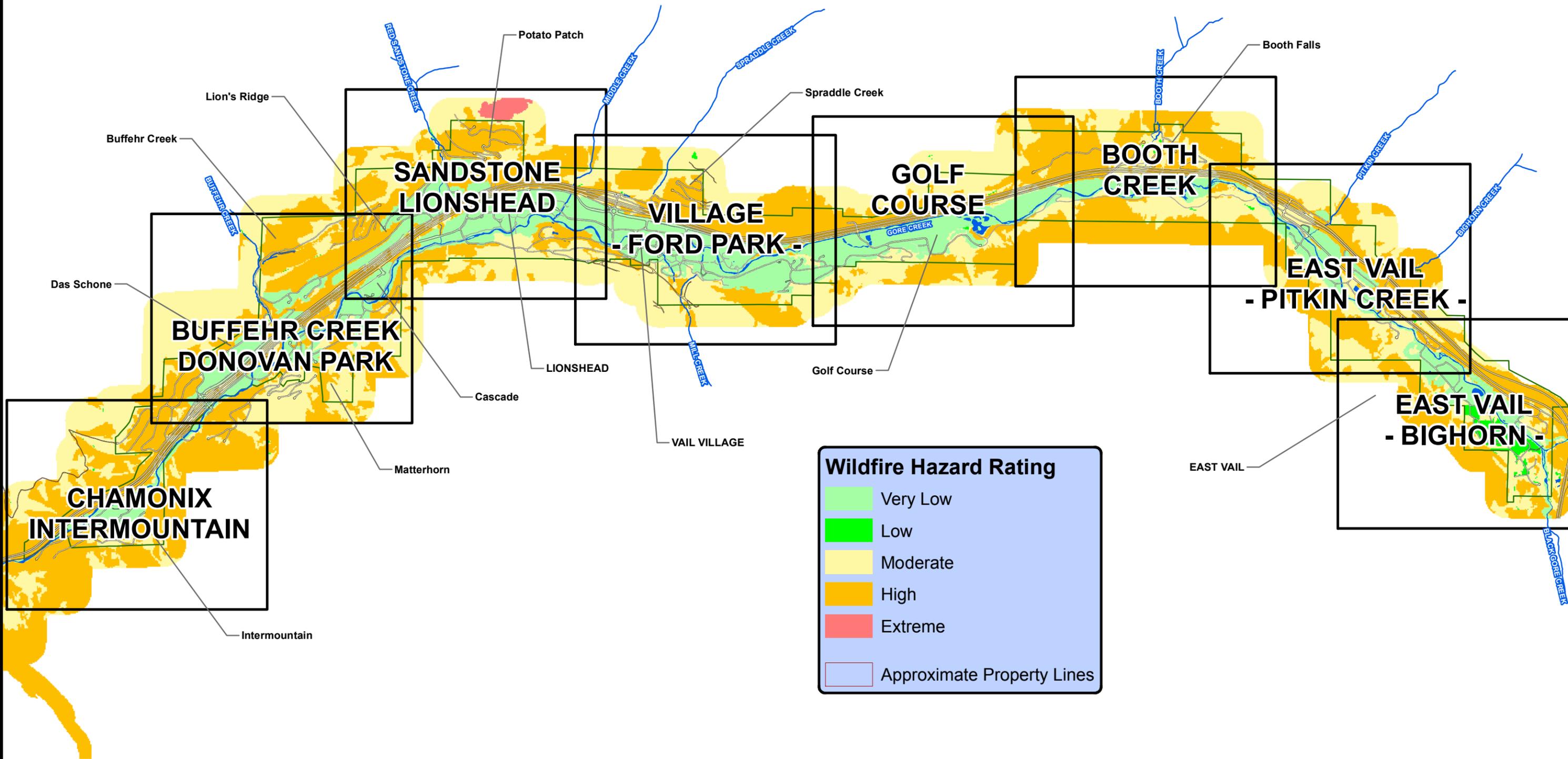
- Remove trees infested with mountain pine beetle within 100-150 feet from structures.
- Remove shrubs and flammable ground vegetation within 30-50 feet from structures.

Prune conifer trees 10-12 feet from ground or 1/3 of total crown height within 30-50 feet from structures.

Removal of approximately 450 Lodge Pole Pine and 450 dead or diseased aspen on the central and western portion of the parcel.

# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado



Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment – see Town of Vail's Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15

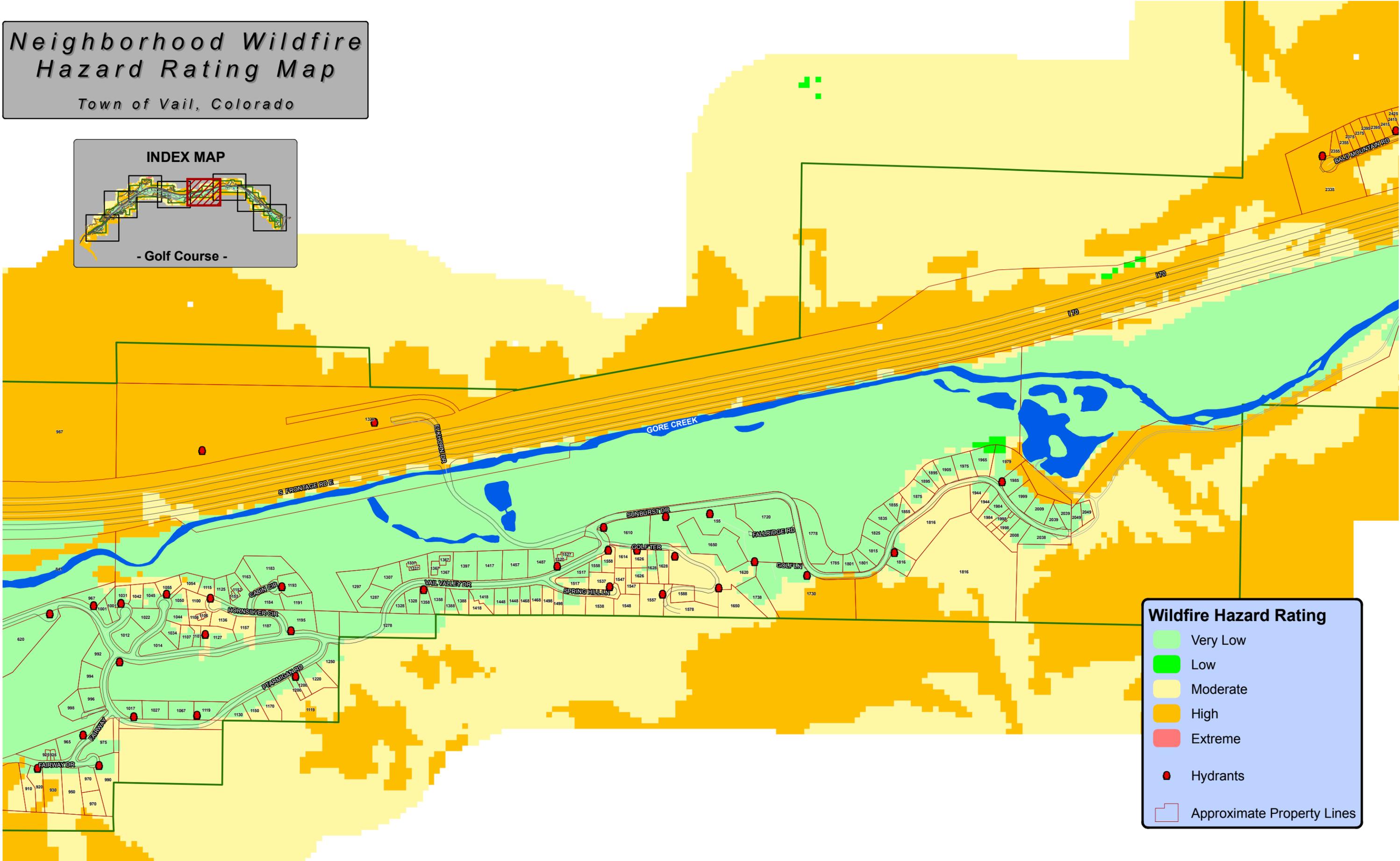
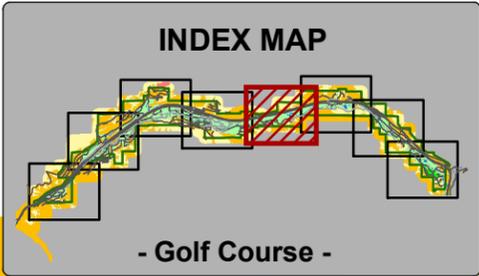
This map was created by the Town of Vail GIS Team. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein. (where shown, parcel line work is approximate)

June, 2007



# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado

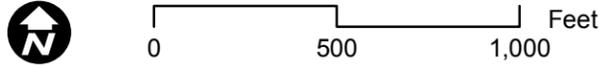


**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines

Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment - see Town of Vail's Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15

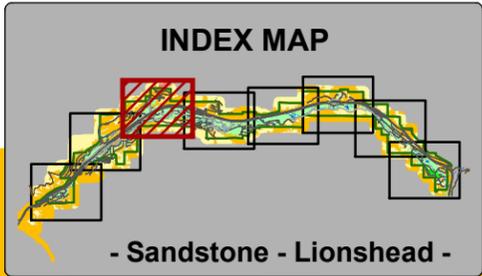


This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)



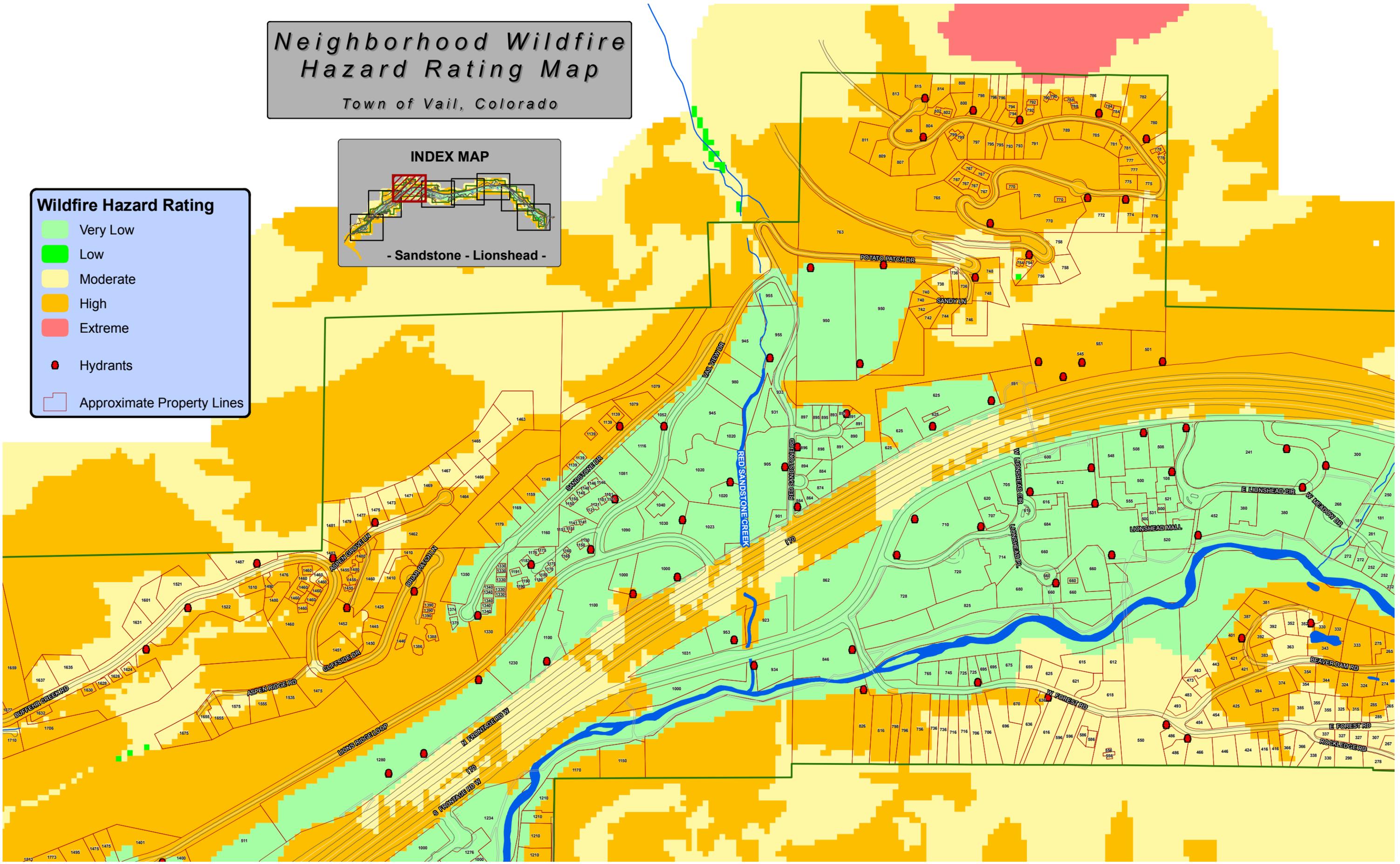
# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado



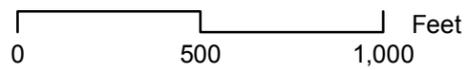
**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines



Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment – see Town of Vail’s Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15



This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)

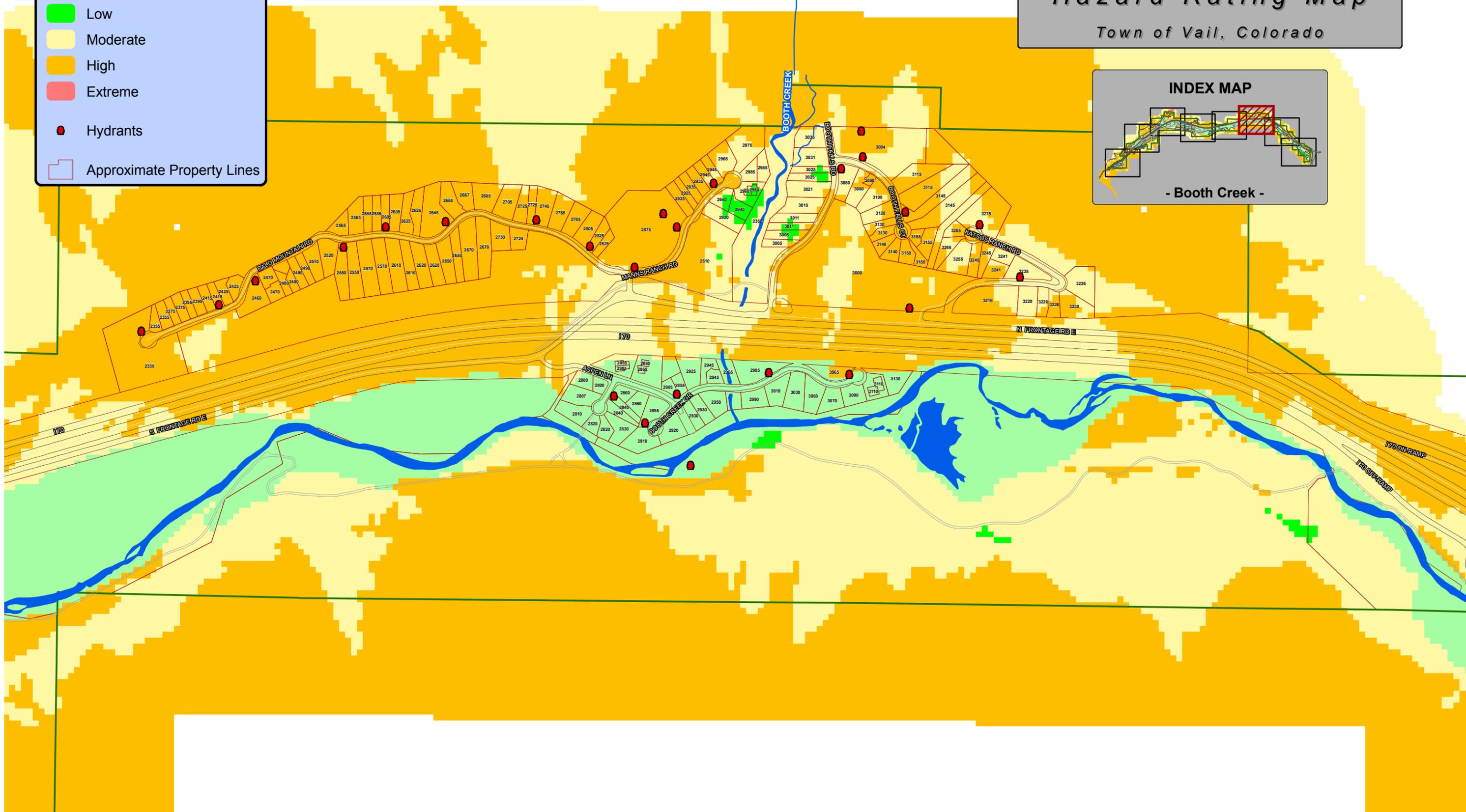
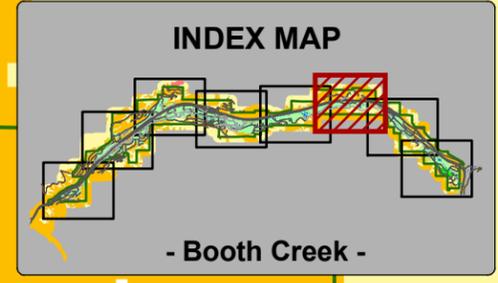


### Wildfire Hazard Rating

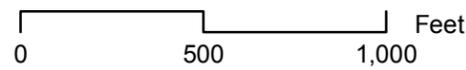
- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines

# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado



Data Sources:  
Town of Vail Community Development Department  
Eagle County GIS Department  
Eagle County Community Development Department (wildfire risk assessment – see Town of Vail’s Integrated Fire Plan for more details)  
Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15

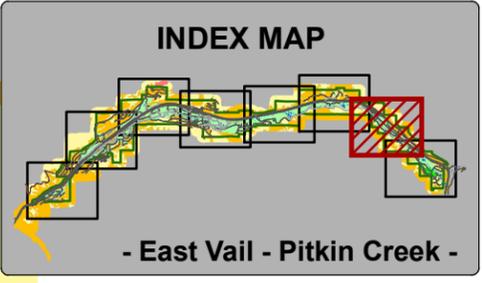


This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)



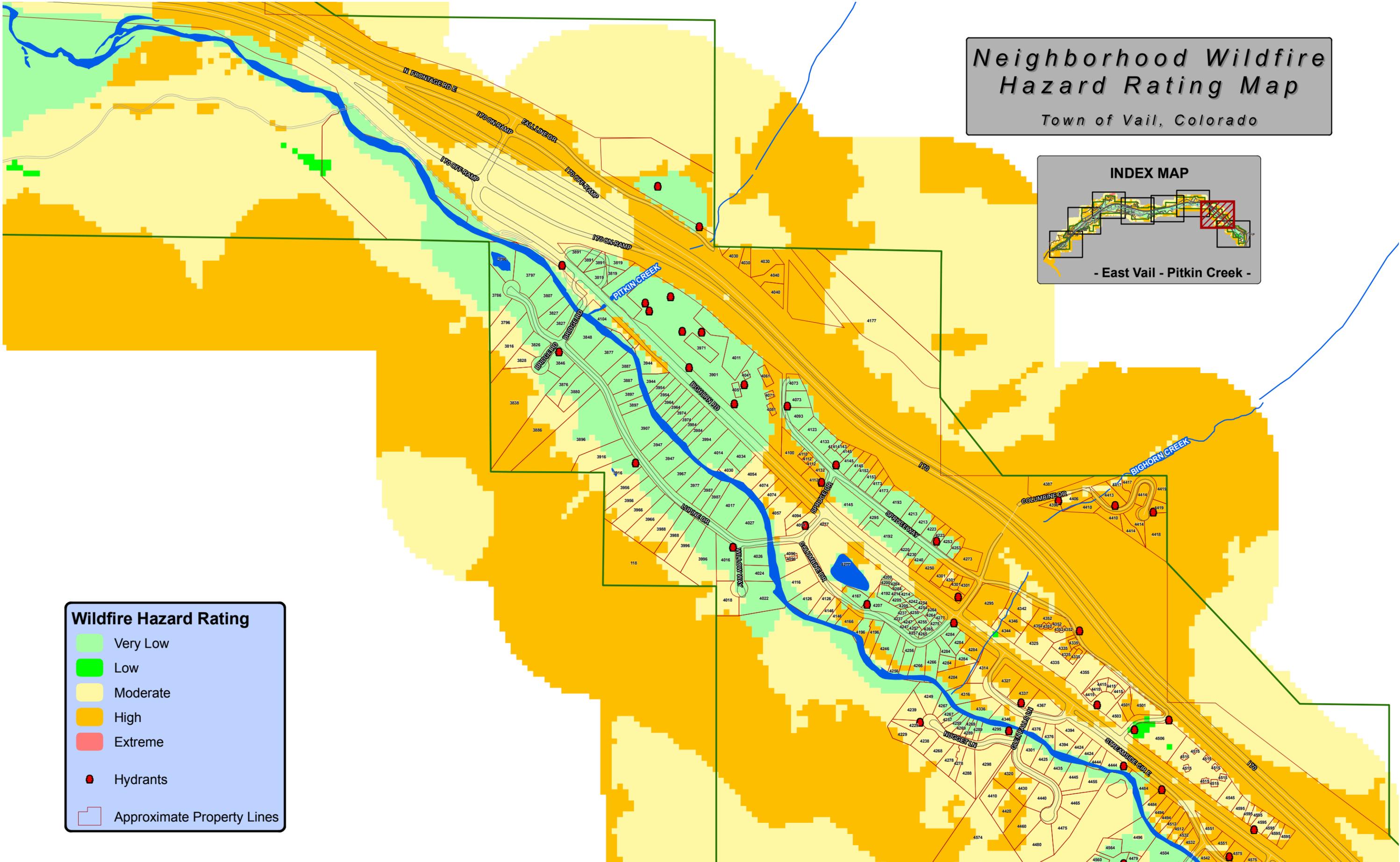
# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado



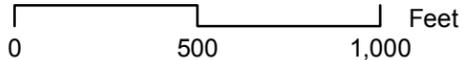
**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines



Data Sources:  
Town of Vail Community Development Department  
Eagle County GIS Department  
Eagle County Community Development Department (wildfire risk assessment - see Town of Vail's Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15



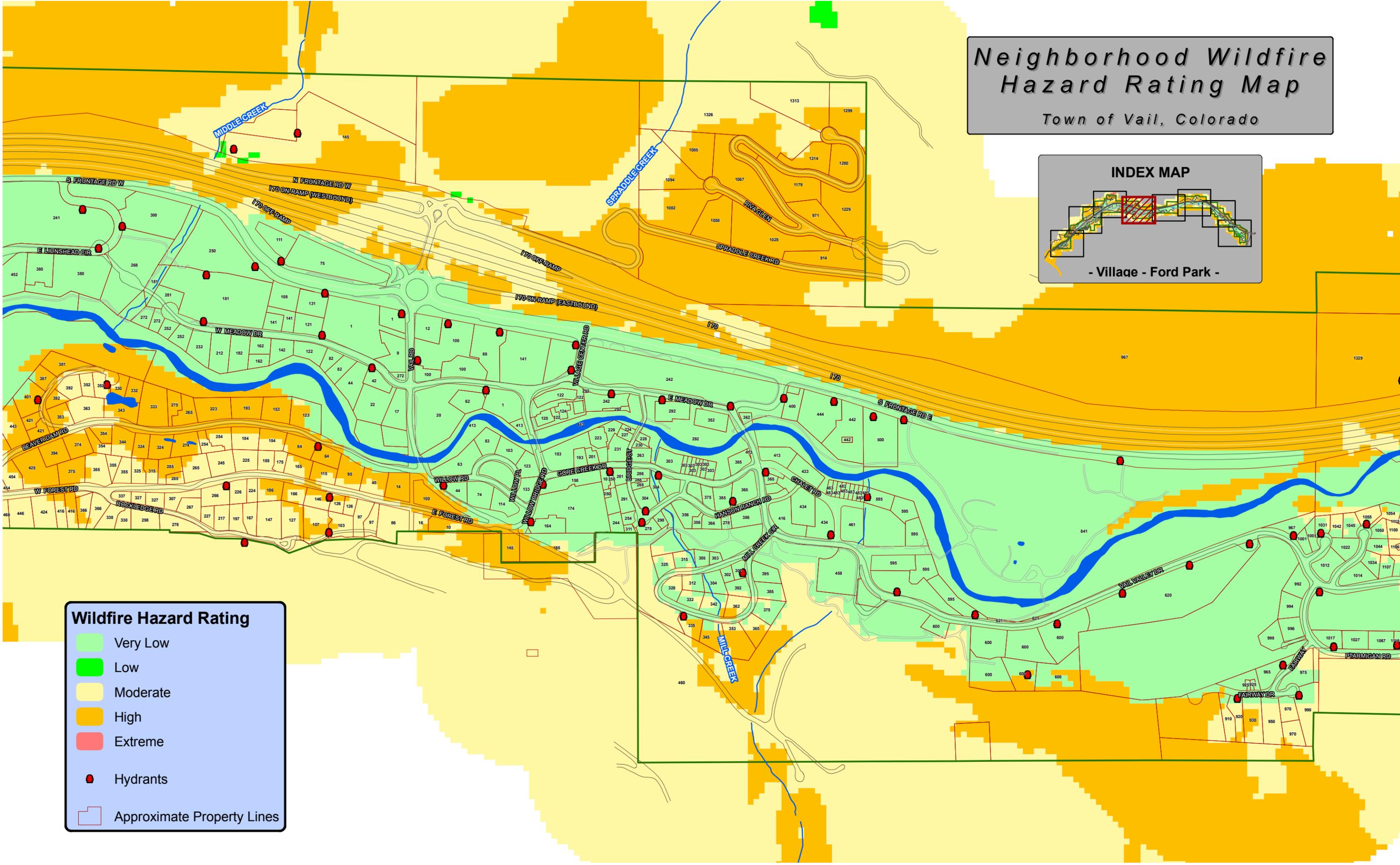
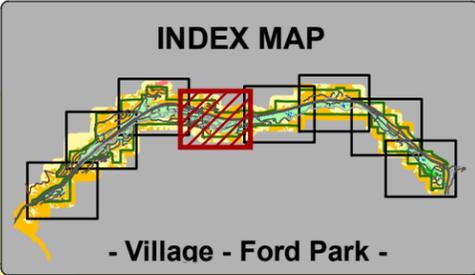
This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)

June, 2007



# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado

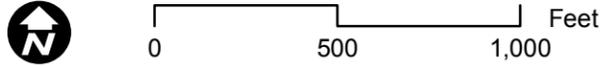


**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines

Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment - see Town of Vail's Integrated Fire Plan for more details)

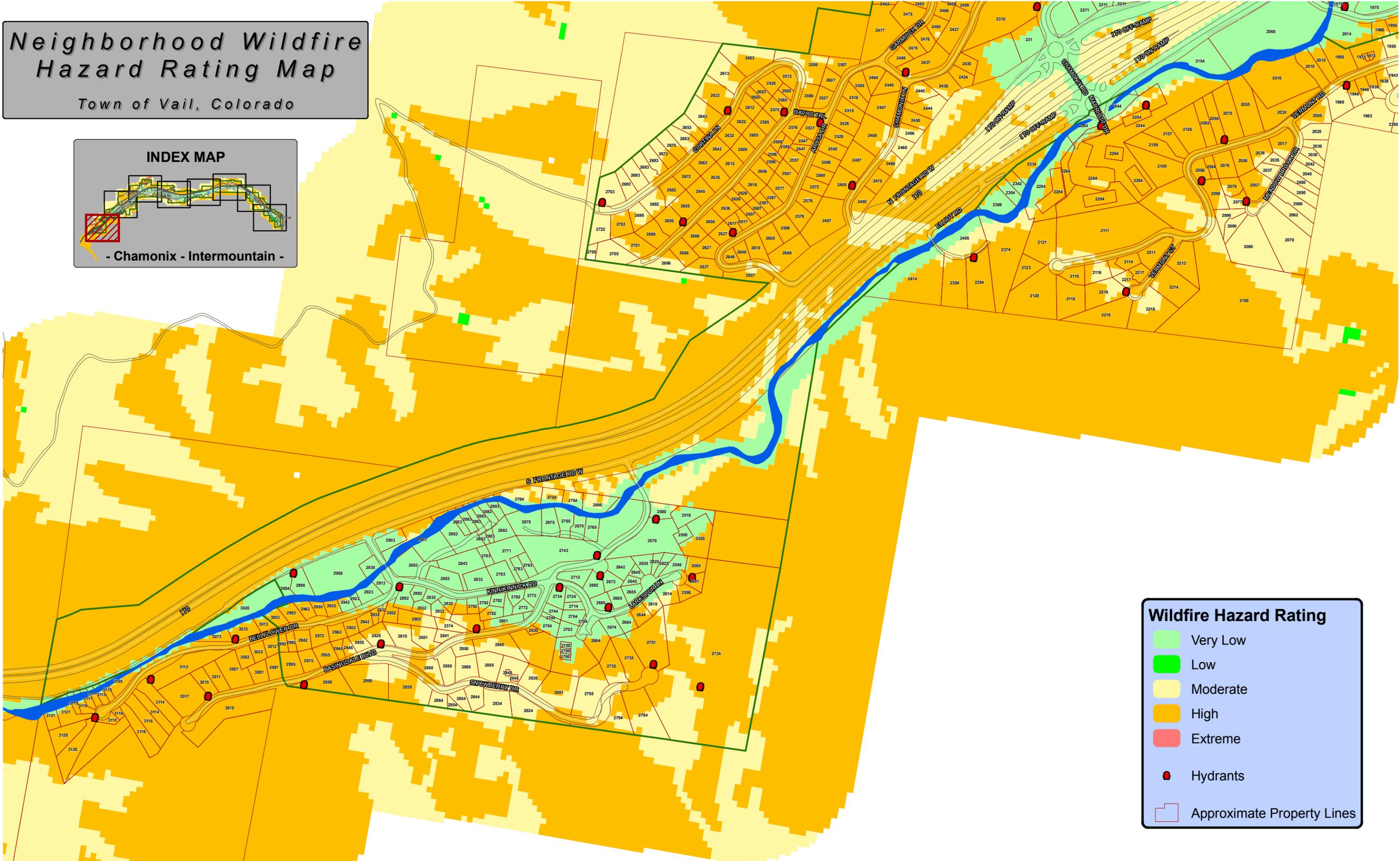
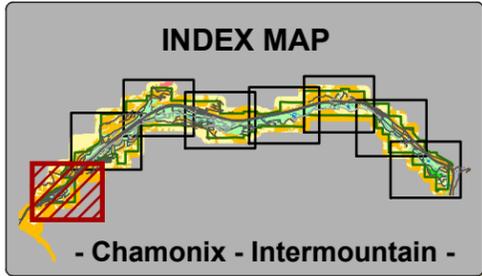
Hazard = [(Disturbance\_Rank)x0.35 + (Fuel\_Rank)x0.40 + (Aspect\_Class)x0.10 + (Slope\_Class)x0.15]



This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)

# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado



**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines

Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment - see Town of Vail's Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15

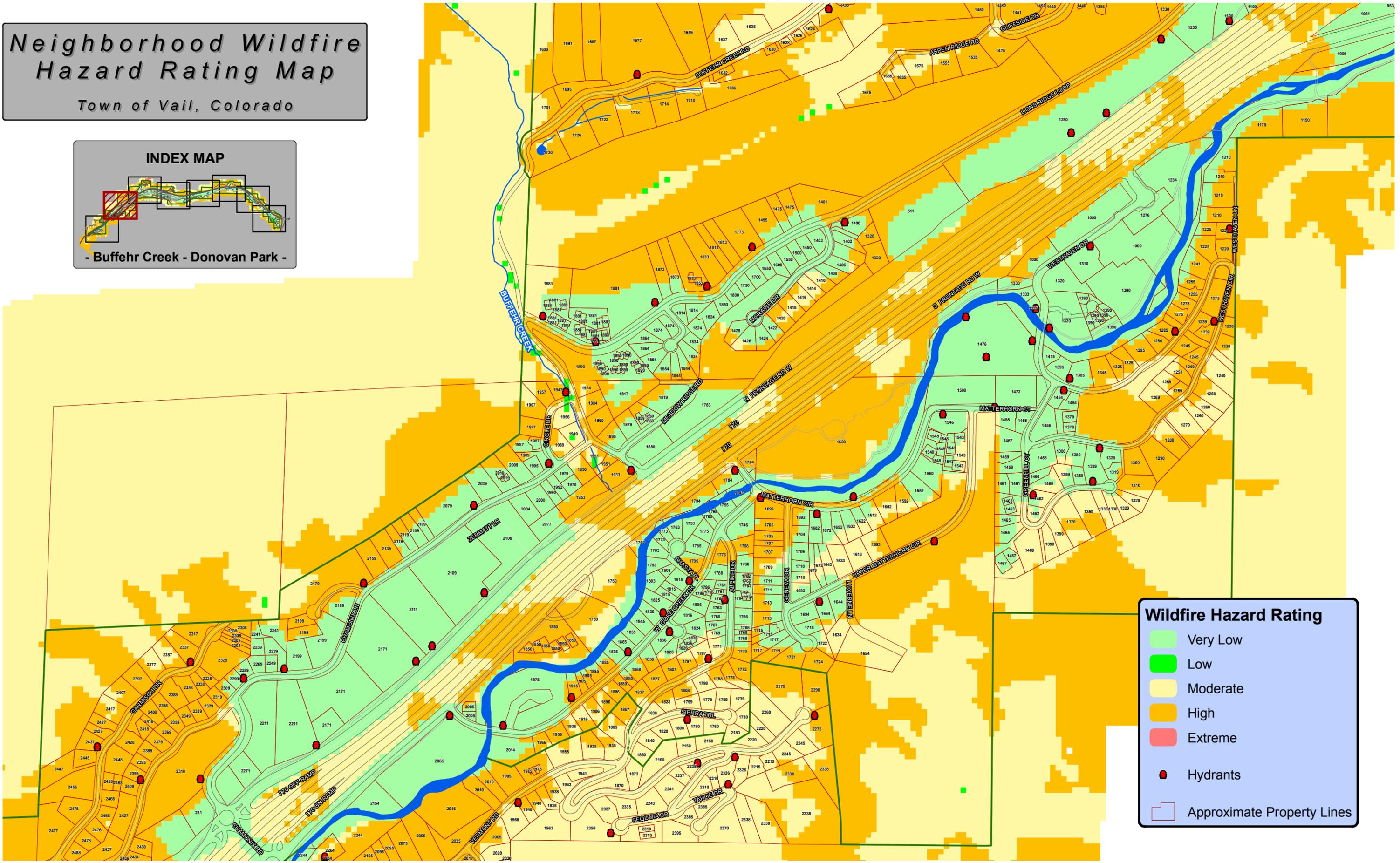
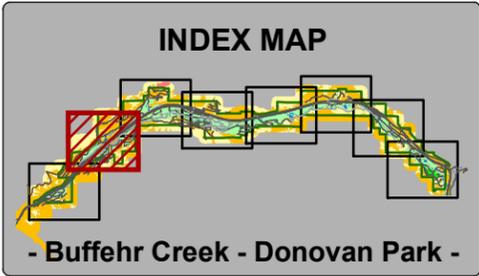


This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate).



# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado

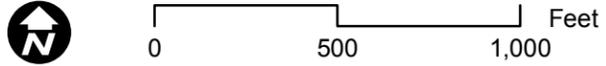


**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines

Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment - see Town of Vail's Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15

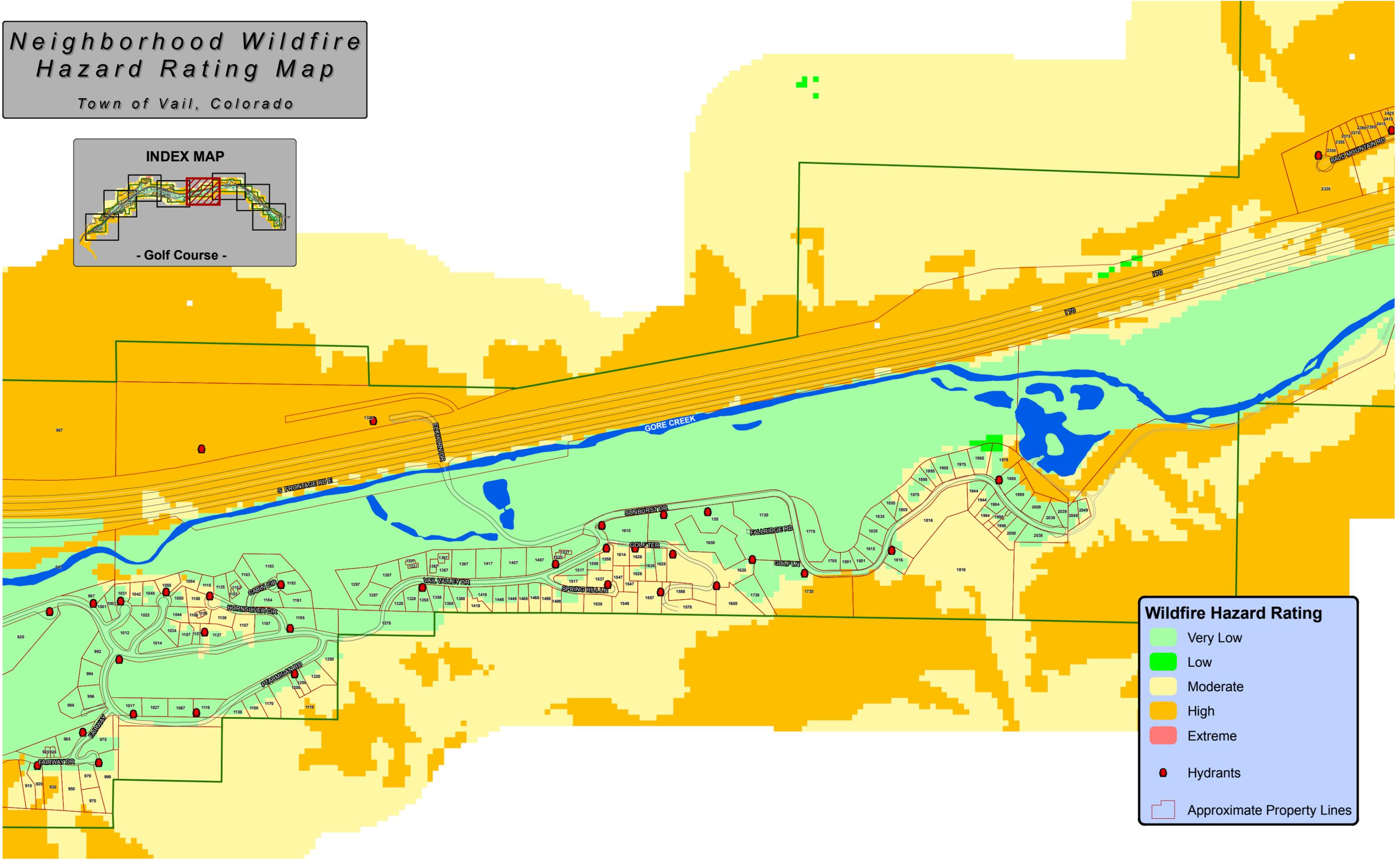
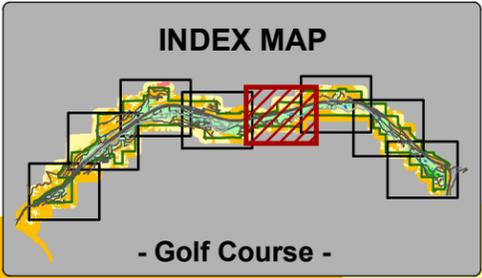


This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)



# Neighborhood Wildfire Hazard Rating Map

Town of Vail, Colorado

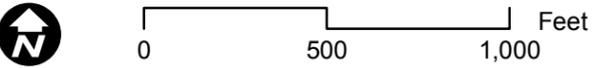


**Wildfire Hazard Rating**

- Very Low
- Low
- Moderate
- High
- Extreme
- Hydrants
- Approximate Property Lines

Data Sources:  
 Town of Vail Community Development Department  
 Eagle County GIS Department  
 Eagle County Community Development Department (wildfire risk assessment - see Town of Vail's Integrated Fire Plan for more details)

Hazard = [Disturbance\_Rank]x0.35 + [Fuel\_Rank]x0.40 + [Aspect\_Class]x0.10 + [Slope\_Class]x0.15



This map was created by the Town of Vail GIS workgroup. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein, (where shown, parcel line work is approximate)

June, 2007

