Clark County Fire Community Wildfire Protection Plan

Prepared by Clark County Fire and Nevada Division of Forestry

INTRODUCTION

The Healthy Forests Restoration Act (HFRA) of 2003 provides the impetus for wildfire risk assessment and planning at the county and community level. HFRA refers to this level of planning as Community Wildfire Protection Plans (CWPP). The CWPP allows a community to evaluate its current situation with regards to wildfire risk and devise ways to reduce risk for protection of human welfare and other important economic or ecological values. The CWPP may address issues such as community wildfire risk, structure flammability, hazardous fuels mitigation, and non-fuels mitigation, community preparedness, and emergency procedures. The Project Team provided the collection of information used for the development of the CWPP and its implementation in Clark County.

The focus of the Clark County CWPP is county-wide. The plan emphasizes the communities at risk within the vicinity of federal lands that are most vulnerable to the threat of wildfire as identified in the 2001 Federal Register (Appendix G). Human life and welfare are values at risk to wildfire because of the buildup of hazardous fuels around communities and structures, poor emergency vehicle ingress and egress, major transportation routes and traffic flow, a large area to cover with the fire authorities, and volunteer (part-time) fire suppression authorities. Throughout the County, there are scattered small communities and ranches with houses and out-buildings without structural fire protection. Other economic values at risk include businesses, farmland, ranchland, grazing land, hunting and other recreational land, historic and cultural sites, and critical infrastructure.

The Nevada Department of Forestry contacted Clark County Fire Department who assembled a project team of experts in the fields of fire behavior and suppression, natural resource ecology, ranch management, county management, and geographic information systems (GIS) to review the assessment for each Clark County community listed in the Federal Register. The Nevada Division of Forestry (NDF) Project Team spent several days inventorying conditions in several communities within Clark County and completing the primary data collection and verification portions of the risk assessment.

The specific goals of the Nevada Community Risk/Hazard Assessment Project are to:

- Assess the wildfire hazards present in each community on the Federal Register list of communities at risk in Nevada.
- Identify firefighting resource needs (e.g. equipment and infrastructure).
- Conduct fuel hazard mapping for high fuel hazard communities.
- Describe proposed risk and hazard mitigation projects in enough detail to aid communities in applying for future implementation funds.
- Distribute assessment results and proposed mitigation project descriptions to each County in a format that will be easily updated and useful for public meetings and other public education activities.

During the 10 -year period of 2013 to 2023, there were 1,135 fires encompassing 145,691.14 acres. 755 fires were human caused, 160 were natural causes, and 220 were undermined. Although these fires have been predominantly in areas without residents or other structures, the economic impact to agriculture and environment remains substantial.

Signatures of Approval

In accordance with the Healthy Forests Restoration Act of 2003, the following entities mutually agree with and approve the contents of the Clark County Fire Protection District Community Wildfire Protection
Plan 2023 update that:

- Was collaboratively developed. Local, state, and federal government representatives and interested parties have been consulted.
- Identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatments that will protect at-risk communities and essential infrastructure.
- Recommends measures that homeowners and communities can take to reduce the ignitability of structures.

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PARTNER AGENCIES AND COLLABORATION

The CWPP plan area has a strong cadre of fire management agencies that have a long history of cooperation and partnerships in wildfire suppression and prevention. The partner fire agencies in the plan area all works cooperatively to provide the most successful response to wildland fire and hazardous fuels reduction. This includes sharing of resources, combined interagency dispatch centers, the utilization of closest forces regardless of jurisdiction, and providing training to all Nevada fire suppression forces. A core planning group was created with volunteer representatives from each Community Wildfire Protection Zone and fire agency personnel from the Nevada Division of Forestry (NDF), the Bureau of Land Management (BLM), the US Forest Service (USFS), and Clark County. This group developed the recommendations brought forward in this CWPP Update. In addition to specific recommendations that address conditions in each Community Wildfire Protection Zone, District-wide recommendations are included to address conditions and needs common to all areas. Meeting the objectives of this CWPP to support and expand Fire Adapted Communities, engage all stakeholders in preparing to withstand wildfire without loss of life or property, improving firefighter safety and suppression effectiveness, and continuing education for homeowners on defensible/survivable space strategies depend upon continued public involvement to accomplish the recommendations described in this CWPP Update.

Numerous agencies and individuals were involved in the planning and implementation of this effort. Special thanks and acknowledgement are given to:

- Bureau of Land Management (BLM)
- US Forest Service (USFS)
- Nevada Division of Forestry (NDF)
- University of Nevada Cooperative Extension (UNCE)
- Clark County Manager
- County residents
- Clark County Communities
- Fire Chiefs county-wide

1.0 COMMUNITIES ASSESSED

Sixteen communities in proximity to federal lands within Clark County were identified in the Federal Register (66 FR 160) and are included in this assessment:

- Cold Creek
- Kyle Canyon/ Lee Canyon
- Mountain Springs
- Nelson
- Torino
- Trout Canyon
- Indian Springs
- Goodsprings
- Sandy Valley
- Searchlight
- Blue Diamond
- Bunkerville
- Calnevari
- Palm Garden Estates
- Moapa/Logandale/Overton and Warm Springs (Assessed but they have their own response)

There may be additional rural areas or small subdivisions within Clark County that were not included on the Federal Register list, but are included in the scope of this project. Conditions in and around some of these communities may warrant future individual hazard/risk assessment. However, many of the recommendations developed for similar communities in this report may apply to additional areas.

1.3 COMMUNITIES NOT CURRENTLY ASSESSED

1.3.1 Laughlin, Las Vegas; North and South Las Vegas, Arden, Cottonwood Cove, Glendale, Henderson, Logandale, Mesquite, Overton, Primm and Sloan and Fort Mojave and Moapa Indian Reservation, Nellis and Creech Air Force Bases.

All but Sloan are outside the Clark County Fire protection. They have their own response and fire districts. For the purpose of this CWPP, it will be for Clark County Fire district jurisdiction.

Sloan is located in the southern Clark County area on the California/Nevada border along interstate 15 about 40 miles south of Las Vegas There is no residential community on the property and no one currently lives there. The risk/hazard assessment was not completed for Sloan because it is not a residential community.

2.0 METHODOLOGY

2.1 PROJECT TEAM

The Project Team was composed of experts in the fields of fire behavior and suppression, geographic information systems (GIS), and natural resource ecology who collaborated to complete a Community Risk/Hazard Assessment for each community. The Project Team included USFS and NDF fire specialists with extensive wildland fire prevention and suppression experience in Nevada, NDF Fire Adapted Partnership Coordinator, and University of Nevada Reno (UNR) natural resources specialists experienced in the Southern Nevada environment. The depth of knowledge of the Project Team was deepened through the addition of County government leadership, communities and Fire Protection District Fire Chiefs.

2.2 Base Map Data Collection

The Project Team compiled and reviewed existing statewide geospatial data to create field maps for recording baseline data and data verification. Data sources for the maps were the Nevada Division of Forestry and the Bureau of Land Management. Datasets and sources utilized are listed below:

- Land Ownership
- Vegetation Classes
- Fuel Types
- Fire History
- Rangeland Fire Protection Associations
- Greenstrip Projects
- Community Sites (Appendix C)

2.3. WILDFIRE HISTORY

Wildfire history was mapped using Bureau of Land Management and US Forest Service datasets that identify wildfire perimeters on federally managed lands covering the past 19 years. This dataset was updated at the BLM Nevada State Office at the end of each fire season from information provided by each Nevada BLM Field Office. The dataset is the central source of historical GIS fire data used for fire management and land use planning on federal lands.

Fires that occur on private lands are generally recorded on paper maps and have not been consistently included in federal agency GIS datasets. Additional fire locations identified during interviews with local fire personnel were recorded on the field maps where possible and added to the project wildfire perimeter dataset. In addition to the fire perimeter information, point data for all fire ignitions within Nevada from 2013-2023 was obtained from the Nevada Fire Intel within the National Interagency Fire Center (NIFC) of

Boise, ID. This dataset includes an ignition point coordinate and an acreage component as reported to NIFC through a variety of agencies.

The wildfire history and ignition history data were used to formulate risk ratings and to develop recommendations specific to areas that have been repeatedly impacted by wildland fires. Observations made from the Project Team and comments from local fire agency personnel were also used to develop recommendations in areas without recent wildfire activity where a significant buildup of fuels or expansion of urban development into the interface area represents a growing risk.

2.4 Community Risk/Hazard Assessment

The wildland-urban interface is the place where homes and wildland meet. This project focuses on identifying risks and hazards in the wildland-urban interface areas countywide by assessing each community individually. Site-specific information for each community was collected during field visits conducted between March 1, 2023, and April 30, 2023. The predominant conditions recorded during these site visits were used as the basis for the Community Risk and Hazard Assessment ratings. See Community Risk/Hazard Assessment reports in Appendix D.

To arrive at a score for the community, five primary factors that affect potential fire hazard were assessed: community design, construction materials, defensible space, fire suppression capabilities, and physical conditions that affect fire behavior such as fuel loading and topography. A description of each of these factors and their relative importance in developing the overall score for the community is provided below. Individual community score sheets presenting the point values assigned to each element in the hazard assessment are provided at the end of each community assessment.

2.5 Community Design

Many aspects of community design can be modified to make a community more fire safe. Factors considered include:

2.5.1 Interface Condition Community safety is affected by the density and distribution of structures with respect to the surrounding wildland environment. Four interface condition classes are used to categorize the wildland-urban interface.

2.5.2 Access. Design aspects of roadways influence the hazard rating assigned to a community. A road gradient of greater than five percent can increase response times for heavy vehicles carrying water. Roads less than twenty feet in width often impede two-way movement of vehicles and fire suppression equipment. Hairpin turns and cul-de-sacs with radii of less than 45 feet can cause problems for equipment mobility. Adequately designed secondary access routes and loop roads in a community can lower a hazard rating. Visible, fire-resistant street and address identification and adequate driveway widths also reduce the overall community wildfire hazard rating.

2.5.3 Utilities. Poorly maintained overhead power lines can be a potential ignition source for wildfires. It is important to keep power line corridors clear of flammable vegetation, especially around power poles and beneath transformers. Keeping flammable vegetation cleared from beneath power lines and around power poles reduces potential hazards from damaged power lines. Power failures are especially dangerous to a community without a back-up energy source. Many communities rely on electric pumps to provide water to residents and firefighters for structure protection and fire suppression.

2.6 Construction Materials

While it is not feasible to expect all structures in the wildland/urban interface area to be rebuilt with non-combustible materials, there are steps that can be taken to address specific elements that strongly affect structure ignitability in the interface area. Factors considered in the assessment include:

2.6.1 Structure Building Materials. The composition of building materials determines the length of time a structure could withstand high temperatures before ignition occurs. Houses composed of wood siding and wood shake roofing are usually the most susceptible to ignitions. Houses built with stucco exteriors and tile, metal, or composition roofing are able to withstand much higher temperatures and longer heat durations, thereby presenting a much lower ignition risk from firebrands or the proximity to advancing flames when defensible space conditions are adequate.

2.6.2 Architectural Features. Unenclosed or unscreened balconies, decks, porches, eaves, or attic vents on homes can create drafty areas where firebrands and embers can accumulate, smolder, and ignite, rapidly spreading fire to the house. A high number of houses within a wildland-urban interface area with these features imply a greater hazard to the community.

2.7 Defensible Space

The density and type of fuel around a home determines the potential fire exposure and the potential for damage to the home. A greater volume of trees, shrubs, dry weeds and grass, woodpiles, and other combustible materials near the home will ignite more readily, produce more intense heat during a fire, and increase the threat of losing the home. Defensible space is one of the factors that homeowners can most easily manipulate in

order to improve the chances that a home or other property avoids damage or complete loss from a wildfire.

2.8 Suppression Capabilities

Knowledge of the capabilities or limitations of the fire suppression resources in a community can help the residents take action to maximize the resources available. Factors considered in the assessment include:

RURAL APPARATUS ASSIGNMENTS

Revised 5/2023

Call #	ID#	YR	Make/Model	Tank Capacity	Pump Capacity	Type	Seats	License Plate	VIN. Number	STA. BAYS
Blue Diamond- 80										
S 80	10919	1996	Chevy/Cheyenne	250 Gallons	250 GPM	6	3	EX32029	1GBJK34J0TE232225	3
E 80	10575	1995	Ford 4WD	750 Gallons	1250 GPM	2	2	EX17074	1FDYF80E0SVA26997	
WT	18295	2021	Alexis	2000 Gallons	1500 GPM	T1	2	EX81125	3ALACYFE5MDMT4283	
Cold Creek- 82										
CART	17857	2019	John Deere Gator	70 Gallons	20 GPM	N/A	4	N/A		2
SQ82	14267	2007	Ford/F-350 4WD	250 Gallons	250 GPM	6	2	EX53790	1FDWF37R98EA18621	N/A
E 82	10126	1993	International 4WD	1000 Gallons	1000 GPM	2	2	EX28117	1HTSEPCR5PH509772	
Pump 82	4438	1980	Mobile Pump Trailer	N/A	500 GPM	N/A	N/A	EX16875	33180	
Indian Springs- 83										
R 83	12362	2003	Freightliner Rescue	N/A	N/A	I	2	EX43303	1FVABPBW73HK88697	4
S 83	17078	2017	Ford F-550 4WD	250 Gallons	250 GPM	6	2	EX72273	1FDUF5HT5HEE85984	
E 83	14224	2006	Pierce (CBRNE)	500 Gallons	1500 GPM	1	4	EX53736	4P1CU01S07A006930	
WT83	18270	2021	Alexis	3000 Gallons	1500 GPM	S3	2	EX81192	3HLHCYFE9MT4284	
Cal Nev-Ari- 84										
R84	14943	2009	Freightliner Rescue	N/A	N/A	N/A	2	EX57624	1FVACWDJ79HAG505	4
S84	13241	2003	Ford/F-550 4WD	400 Gallons	250 GPM	6	2	46789	1FDAF57P13EC28594	
E84	11973	2000	Pierce Quantum	500 Gallons	1500 GPM	1	4	EX57192	4PICT02SX1A001078	
Training Center-88										
UTV8	17724	2019	John Deere Gator	70 Gallons	60 GPM	utv	4	n/a		
Trailer	17780		Big Tex	N/A						
U88	15902	2009	Ford/F-350	N/A	N/A	UTIL	4			
OUT OF SERVICE APPRATUS										
Incident Management Team										
Truck	18045	2020	Ford F350				5	EX78738		
Traile	18075	2014	Look Enclosed Trailer					EX80517	53BLTEA23EF007368	

RURAL APPARATUS ASSIGNMENTS

Revised 5/2023

Call #	ID#	YR	Make/Model	Tank Capacity	Pump Capacity	Type	Seats	License Plate	VIN. Number	STA. BAYS
Trout Canyon- 70										
S 70	10465	1995	Ford/F-350 4WD	250 Gallons	250 GPM	6	2	EX30251	2FDKF38F5SCA40891	N/A
WT	11121	2001	International	4000 Gallons	250 GPM	S1	2	EX57889	1HTSHAAT9VH493544	
E-70	10603	1996	International 4WD	1200 Gallons	1000 GPM	S3	2	EX30990	1HTSEAAR8TH215969	
Bunkerville- 71										
R 71	11210	1997	Ford/E-350 Wheeled Coach	N/A	N/A	III	2	EX33231	1FDKE30F8VHB79246	4
S 71	17206	2017	Ford/F-550 4WD	250 Gallons	250 GPM	6	2	EX74771	1FDUF5HT1HEE85982	
E71	17302	2018	Spartan	1000 Gallons	1500 GPM	1	2	EX76292	4S9BCETA5KC419356	
Searchlight- 75										
R 75	15793	2012	Ford/E-350 4WD	N/A	N/A	III	2	EX64490	1FDWE3FS8CDA7976	4
S 75	17077	2017	Ford/F-550 4WD	250 Gallons	250 GPM	6	2	EX72272	1FDUF5HTXHEE85981	
E 75	11940	2000	International 4WD	1200 Gallons	1250 GPM	2	3	EX57951	1HTSEADR41H343974	
WT	14647	2006	International	3,000 Gallons	500 GPM	S2	2	EX57007	1HTWGAZT77J471739	
Sandy Valley- 77										
E 77	16558	2016	Freightliner	750 Gallons	1250 GPM	2	2	EX69266	3ALDCYCY5HDJB1851	4
R 77	16061	2014	Ford/E-350 4WD	N/A	N/A	III	2	EX66399	1FDWE3FS5EDB21009	
WT77	3692	1990	International	4000 Gallons	250 GPM	S1	3	EX43998	1HTSHTVR5LH275561	
S 77	17207	2017	Ford F-550 4WD	250 Gallons	250 GPM	6	2	EX74772	1FDUF5HT3HEE85983	
Goodsprings- 78										
WT78	13242	2003	Freightliner	1800 Gallons	500 GPM	S3	2	EX46790	1FVACYCS23HM06878	
E78	10329	1994	Freightliner	750	1250	3	2			
S 78	13037	2003	Ford/F-550 4WD	250 Gallons	250 GPM	6	2	EX45390	1FDAF57P73EC28597	
Mt. Springs- 79										
S 79	16172	2015	Ford/F-550 4WD	250 Gallons	250 GPM	6	4	EX67274	1FD0W5HT3FEB64814	2
E 79	11753	2000	E-One 4WD	1000 Gallons	1250 GPM	2	2	EX36941	1HTSEADR7YH203895	

2.9 Availability, Quantity, and Training Level of Firefighting Personnel

When a fire begins in or near a community, having the appropriate firefighting personnel available to respond quickly is critical to saving structures. Whether there is a local paid fire department, volunteer department, or no local fire department impacts how long it takes for firefighters to respond to a reported wildland fire or a threatened community.

2.9.1 Quantity and Type of Fire Suppression Equipment. The quantity and type of available fire suppression equipment has an important role in minimizing the effect of a wildfire on a community. Wildland firefighting requires specialized equipment.

2.9.2 Water Resources. The availability of water resources is critical to fighting a wildland fire. Whether there is a community water system with adequate flow capabilities, or whether firefighters must rely on local ponds or other drafting sites affects how difficult it will be for firefighters to protect the community. Additionally, communities served by water systems that are dependent upon electricity for operation may be left defenseless in the event of a power outage and backup power generation is not in place.

2.10 Physical Conditions

Physical conditions include slope, aspect, topography, fuel type, and fuel density. With the exception of changes to the fuel composition, the physical conditions in and around a community cannot be altered to make the community more fire safe. Therefore, an understanding of how these physical conditions can influence the behavior of a fire is essential to planning effective preparedness activities such as fuel reduction treatments. Physical conditions considered in the assessment include:

2.10.1 Slope, Aspect, and Topography.

In addition to local weather conditions, slope, aspect, and topographic features are also used to predict fire behavior. Steep slopes greatly influence fire behavior. Fire usually burns upslope with greater speed and longer flame lengths than on flat areas. Fire usually burns downhill at a slower rate and with shorter flame lengths than in upslope burns. West and south facing aspects are subject to more intense solar exposure, which preheats vegetation and lowers the moisture content of fuels. Canyons, ravines, and saddles are topographical features that are prone to higher wind speeds than adjacent areas. East facing slopes in the Great Basin routinely experience strong down slope winds in the afternoon that can rapidly push fires down slope. Fires pushed by winds grow at an accelerated rate compared to fires burning in non-windy conditions. Homes built mid-slope, at the crest of slopes, or in saddles are most at risk due to wind-prone topography in the event of a wildfire.

2.10.2 Fuel Type and Density.

Vegetation type, fuel moisture values, and fuel density around a continuous, vegetative fuels carry a higher hazard rating than communities situated in areas of irrigated, sparse, or non-continuous fuels. Several consecutive years of above normal precipitation will result in excessive cheatgrass growth and ground litter, ranging as high as two to four tons per acre. In Clark County, where a large percentage of BLM administered lands have converted to cheatgrass following wildfires, these conditions, in combination with steep slopes or high winds, can create a situation in which the worst-case fire severity scenario can occur. Photographs of representative fuel types in the interface area throughout Clark
County are provided in Appendix C.

2.11 Fuel Hazard Mapping

Fuel hazard maps were initially generated by the Bureau of Land Management Nevada and Utah State Offices. A total of 65 vegetation types were mapped statewide and reclassified into four wildfire hazard categories (low, moderate, high, and extreme) based on the anticipated fire behavior for each vegetation cover type.
The Project Team visited high and extreme hazard communities and verified the BLM fuel hazard information by comparing the hazard ratings on the existing fuel hazard map to vegetation, slope, and aspect conditions directly observed in the field. Where necessary, changes to the ratings were drawn on the maps and used to update the wildfire hazard potential layer of the project database.

2.11.1 Interviews with Fire Personnel

The Project Team interviewed local fire department personnel and local fire management officers to obtain information on wildfire training, emergency response time, personnel and equipment capability and availability, evacuation plans, pre-attack plans, and estimates of possible worst-case scenarios. Local fire personnel reviewed maps showing the history of wildfires to ensure that local information on wildfires was included. A list of fire agency personnel contacted for information used in the assessments is included in Appendix D.

2.11.2 Recommendation Development

A wide variety of treatments and alternative measures can be used to reduce ignition risks, mitigate fire hazards, and promote fire safe communities. Proposed recommendations typically include physical removal or reduction of flammable vegetation, increased community awareness of the risk of fires and how to reduce those risks, and coordination among fire suppression agencies to optimize efforts and use of resources.

The overall goal for Clark County communities is to create a sustainable balance that will allow both residents to live safely while maintaining environmental, quality of life and recreational opportunities in the Wildland Urban Interface setting. It is important for individual homeowners and the communities together, to balance fire protection

measures against certain flammable components, primarily vegetation. These choices directly relate to the ignitability of their home ignition zones during a wildfire incident.

2.11.3 COLLABORATION

A collaborative approach beginning with the community Homeowner Associations (HOAs) that represents the involved landowners, and includes local and state fire officials, builds understanding and trust. Realizing that maintaining a Fire Adapted Community requires ongoing commitment and on the ground treatments, the HOA or similar Community Fire Board can ensure mitigation activities continue over time in a prioritized manner.

Overall recommendations for Clark County Fire:

• Establishment of a collaborative approach to maintaining a Fire Adapted Community through the respective HOAs and/or Community Fire Boards.
• Living vegetation and fuel conditions are continually changing depending upon annual moisture and growing conditions. The communities must make a long-term commitment to vegetation management, fuel reduction and public education. Management of native and planted vegetation throughout both communities is necessary to keep plants healthy and resilient to wildfire.
• Cheatgrass and annual fuels should be assessed annually and treated as necessary. Shrublands should be assessed on a three to five-year cycle depending upon annual growing conditions.
• Annual fine fuels are highly flammable and should be replaced over time with perennial bunchgrasses and wildflowers.
• Breaking up a continuous fuel bed by modifying the spatial arrangement of the dominant and/or mature shrubs to create openings or a “mosaic” landscape.
• Prioritized treatment projects should be managed by a qualified wildland fire specialist.

3.0 Description of the County

3.1 Demographics, Location, Topography, and Climatic data

Clark County is on the southernmost tip of the state of Nevada and shares borders with Nye County and Lincoln County in Nevada. Interstate neighbors are California and Arizona. The majority of the County’s metropolitan area is located in the valley (Las Vegas Valley), surrounded by several mountain ranges. Clark County is approximately 270 miles northeast of Los Angeles, CA and 280 miles northwest of Phoenix, AZ. The County covers an area of 8,061 square miles, approximately 169 square miles of which are covered by water and the remaining 7,891 square miles are covered by land. The majority of the population, an estimated 2,205,207 (2016) is located in the Las Vegas Valley, with the area being made up of unincorporated Clark County, city of Las Vegas, city of North Las

Vegas, and There are 33 relatively small unincorporated communities and census-designated places in Clark County.
The unincorporated communities include: Arden; Cactus Springs; Cottonwood Cove; Coyote Springs; Glendale; Jean, Logandale; Mountain Springs; Nelson; Overton; Primm; Sloan; and Sutor. Census designated places include: Blue Diamond; Bunkerville; Cal-Nev-Ari; Crystal; Enterprise; Fort Mojave Indian Reservation (part); Goodsprings; Indian Springs; Laughlin; Moapa Town; Moapa Valley; Mount Charleston; Paradise; Sandy Valley; Searchlight; Spring Valley; Summerlin South; Sunrise Manor; Whitney; and Winchester. The Las Vegas Paiute Tribe and the Moapa Band of Paiutes make up the two tribes in Clark County.

The Colorado River forms the county's southeastern boundary, with Hoover Dam forming Lake Mead along much of its length. The lowest point in the state of Nevada is on the Colorado River just south of Laughlin in Clark County, where it flows out of Nevada into California and Arizona. Greater Las Vegas is a tectonic valley, surrounded by four mountain ranges, with nearby Mount Charleston being the highest elevation at 11,918 ft (3,633 m), located to the northwest. Other than the forests on Mount Charleston, the geography in Clark County is a desert. Creosote bushes are the main native vegetation, and the mountains are mostly rocky with little vegetation.[8] The terrain slopes to the south and east.[9] The county has an area of 20,879 km^2 (8,061 sq mi), of which 20,438 km^2 (7,891 sq mi) is land and 441 km^2 (170 sq mi) (2.1%) is water. Twenty official wilderness areas in Clark County are part of the National Wilderness Preservation System. Many of these are in, or partially in, one of the preceding protected areas, as shown below. Many are separate entities that are managed by the Bureau of Land Management (BLM).
Clark County has diverse desert flora and fauna, including higher-elevation mountain areas, the desert floor, and the Colorado River/Lake Mead ecosystems. Variations in diurnal temperature as well as seasonal swings in temperature create demanding adaptation elements on the species of this county. Population expansion, especially since 1970, has placed additional pressure on species in the area.

3.2 Wildfire History

During the 10 -year period of 2013 to 2023, there were 1,135 fires encompassing 145,691.14 acres. 755 fires were human caused, 160 were natural causes, and 220 were undermined. Although these fires have been predominantly in areas without residents or other structures, the economic impact to agriculture and environment remains substantial.

3.2.1 Ignition Risk Factors

Wildfire ignition risks fall into two categories: natural and human caused. Human caused ignitions can come from a variety of sources such as burning material thrown out of vehicle windows or ignited during auto accidents, off-road vehicles, railroads, arcing power lines, agricultural fires, unattended campfires, debris burning in piles or burn barrels, target shooting, and fireworks.

3.2.2 Fire Ecology

The science of fire ecology is the study of how fire contributes to plant community structure and species composition. A “fire regime” is defined in terms of the average number of years between fires under natural conditions (fire frequency), and the amount of dominant vegetation replacement (fire severity). Natural fire regimes have been affected throughout most of Nevada by twentieth century fire suppression policies. Large areas that formerly burned with high frequency but low intensity (fires more amenable to control and suppression) are now characterized by large accumulations of unburned fuels, which once ignited, will burn at higher intensities.

Big sagebrush is the most common plant community in Nevada with an altered fire regime, now characterized by infrequent, high-intensity fires. Sagebrush requires ten to twenty or more years to reestablish on burned areas. During the interim these areas can provide the conditions for establishment and spread of invasive species and in some cases inhibit sagebrush reestablishment. The most common invasive species that reoccupies burned areas in Nevada is cheatgrass.

3.3 Natural Resources and Critical Features Potentially at Risk

Critical features at risk of loss during a wildfire event can be economic assets such as agricultural and industrial resources or cultural features, such as historic structures, archaeological sites, and recreation-based resources.

3.3.1 Historical Registers

There are nine nationally protected areas in Clark County. The effects of fire on cultural and historical resources depend upon site-specific factors such as fuels, terrain, and cultural or historical buildings or resources present. Archeological sites and historic trails are not necessarily vulnerable to wildfire impacts. The historic resources that lie in the wildland-urban interface that could be negatively impacted by wildfire are:

- Desert National Wildlife Refuge (part)
- Humboldt-Toiyabe National Forest (part)
- Lake Mead National Recreation Area (part)
- Moapa Valley National Wildlife Refuge
- Red Rock Canyon National Conservation Area
- Sloan Canyon National Conservation Area
- Spring Mountains National Recreation Area (part)
- Toiyabe National Forest (part)
- Tule Springs Fossil Beds National Monument (part)

3.3.2 Natural Resources and Recreation

Clark County offers a wide range of outdoor recreation opportunities that depend on healthy rangelands and environments. Camping, fishing, hunting, touring, hiking and wildlife viewing are some of the outdoor activities that contribute to local economies.

Twenty official wilderness areas in Clark County are part of the National Wilderness Preservation System. Many of these are in, or partially in, one of the preceding protected areas, as shown below. Many are separate entities that are managed by the Bureau of Land Management (BLM):

- Arrow Canyon Wilderness (BLM)
- Black Canyon Wilderness (Nevada) (Lake Mead National Recreational Area [NRA])
- Bridge Canyon Wilderness (Lake Mead NRA)
- Eldorado Wilderness (Lake Mead NRA / BLM)
- Ireteba Peaks Wilderness (Lake Mead NRA / BLM)
- Jimbilnan Wilderness (Lake Mead NRA)
- Jumbo Springs Wilderness (BLM)
- La Madre Mountain Wilderness (BLM / Toiyabe National Forest [NF])
- Lime Canyon Wilderness (BLM)
- Meadow Valley Range Wilderness (BLM) mostly in Lincoln County, Nevada
- Mormon Mountains Wilderness (BLM) mostly in Lincoln County, Nevada
- Mount Charleston Wilderness (Toiyabe NF / BLM)
- Muddy Mountains Wilderness (BLM / Lake Mead NRA)
- Nellis Wash Wilderness (Lake Mead NRA)
- North McCullough Wilderness (part of Sloan Canyon NCA, which is managed by BLM)
- Pinto Valley Wilderness (Lake Mead NRA)
- Rainbow Mountain Wilderness (BLM / Toiyabe NF)
- South McCullough Wilderness (BLM)
- Spirit Mountain Wilderness (Lake Mead NRA / BLM)
- Wee Thump Joshua Tree Wilderness (BLM)

3.3.3 Sensitive Species

78 species are covered by the Multiple Species Habitat Conservation Plan (MSHCP's) Section 10(a)(1)(B) incidental take permit (14 reptiles, 1 amphibian, 8 birds, 4 mammals, 8 insects, 2 mollusks and 41 plants.) Of these, two are listed under the Federal Endangered Species Act, the threatened desert tortoise and the endangered Southwestern Willow Flycatcher. Conservation actions for the MSHCP focus on conservation of the habitat of covered species. Habitats for covered species are described and summarized within 11 ecosystem categories; alpine, bristlecone pine, mixed conifer, pinyonjuniper, sagebrush, blackbrush, salt desert scrub, Mojave desert scrub, mesquite/catclaw, and desert aquatic.

3.3.4 Multi-Agency Collaborative Fuel Reduction Treatments

Project Name	Estimated/Actua	Estimated/ Actual Co	Treatment Status	Treatment Type (1)	Treatment Type (2)	Treatm	Treatm	Treatment Comme	Funding Source (1)	Funding	Acres	Values/Benefits	Needs	Risks Mitigated
Project X	1/1/2023	8/1/2023	Planned	Aerial Herbicide	Aspen Restoration	Fuel En	Conifer	N/A	FEMA Grant	State Gr	100.5	None	None	None
McFarland Butterfly Habitat Improver	9/1/2023	3/1/2027	Implementation	Thinning and Pile Building	Pile Burning	Mastici	Seedlin	N/A	SNPLMA		378	Fuels reduction to improve wildlife ha	pile burning personnel	Hazardous fuels, invasive plants
Mud Springs Habitat Improvement	9/1/2023	3/1/2027	Implementation	Thinning and Chipping	Seedling Planting			N/A	SNPLMA		323	Fuels reduction to improve wildlife habitat and along USFS roadways		Hazardous fuels
Wheeler Habitat Improvment	9/1/2023	3/1/2027	Implementation	Thinning and Pile Building	Pile Burning	Mastici	Seedlin	N/A	SNPLMA		1444	Fuels reduction to improve wildlife ha	pile burning personnel	Hazardous fuels
Foxtail Butterfly Habitat Improvemen	9/1/2023	3/1/2027	Implementation	Thinning and Pile Building	Yarding & Biomass Removal	Mastici	Seedlin	N/A	SNPLMA		70	Fuels reduction to improve wildlife ha	Tree thining and yarding pers	Hazardous fuels
District Wide Pile Burning	1/1/2023	3/31/2025	Implementation	Pile Burning					USFS Hazardous Fuels		560	Fuels reduction to improve wildlife ha	Pile burning personnel	Hazardous fuels
SMNRA WUI Noxious Weeds	3/1/2024	3/1/2029	Implementation	Herbicide- Hand/backpack					SNPLMA		956	Invasive plants reduction in WUI		Invasive plants
SMNRA Highway Hazard Tree	9/1/2023	12/19/2028	Implementation	Fuels Reduction	Yarding & Biomass Removal				USFS Hazardous Fuels		300	Snag removal within State highway corridor		Hazardous fuels
SMNRA Eastside Fuels NEPA	3/1/2024	12/31/2026	NEPA Planning	Fuels Reduction	Habitat Improvement	Tree Planting			SNPLMA		11,000	Fuels reduction to improve wildlife habitat and along NV SR Highway		Hazardous fuels
SMNRA WUI Prescribed Fire	3/15/2024	9/1/2025	NEPA Planning	Fuels Reduction					SNPLMA		250	Fuel break maintenance using prescribed fire in WUI		Hazardous fuels
SMNRA Eastside Hazardous Fuels	1/1/2026	1/1/2031	Implementation	Thinning and Pile Burning	Lop and Scatter	Broadca	Seedlin	Planting	SNPLMA		4596	Fuels reduction to improve wildlife ha	Prescribed Fire personnel	Hazardous fuels
SMNRA Hazardous Fuels	1/1/2025	1/1/2030	Implementation	Thinning and Pile Burning	Mastication	Lop and	Broadca	Burning	SNPLMA		994	Fuels reduction to improve wildlife ha	Prescribed Fire personnel	Hazardous fuels
Lee Canyon Blue Butterfly Habitat Im	1/20/2025	1/1/2030	Implementation	Thinning and Pile Burning	Broadcast Burning	Seedling	Planting		SNPLMA		569	Fuels reduction to improve T/ES butterfly habitat		Hazardous fuels
NV Energy Powerline Hazardous Fuel	5/1/2023	5/1/2028	Implementation	Fuels Reduction	Yarding & Biomass Removal	Herbici	Road	Improvement	NV Energy	FEMA	500	Fuels and hazard reduction to protect powerline corridor		Hazardous fuels, invasive plants
Clark Canyon Restoration	10/1/2023	12/31/2027	Implementation	Broadcast Burning					USFS Hazardous Fuels		1340	Fuels Reduction to improve wildlife ar	Prescribed Fire personnel	Hazardous fuels
SMNRA Roaddways Hazardous Fuels I	1/1/2025	1/1/2030	NEPA Planning	Fuels Reduction	Broadcast Burning	Tree PL	Road	Improvement	SNPLMA		2000	Fuels reduction along USFS roads to establish fuel breaks for anchor		Hazardous fuels and roadway improv
Spring Mountains West Fuels Manage	10/1/2022	9/30/2023	NEPA Planning	Fuel Break	Fuels Reduction				SNPLMA		10000	Hazardous fuel treatments to reduce wildfire risk to protect wildlanc		Hazardous fuels
Red Rock EDRR	10/1/2023	9/30/2024	Implementation	Herbicide- Hand/backpack					BLM Hazardous Fuels		1000	Fuels reduction and invasive vegetati	Weed identification personne	Hazardous fuels, invasive plants
Red Rock Canyon Fuel Reduction EA	10/1/2022	9/30/2023	NEPA Planning	Fuels Reduction	Fuel Break				BLM Hazardous Fuels		66,740	Protect, maintain, and restore the landscape to be more resilient to		Hazardous fuels
Clark County Wetlands Park Masticati	10/1/2022	9/30/2023	Implementation	Fuels Reduction	Mastication	File Bur	Yarding	Masticate and burr	BLM Hazardous Fuels		15	Reduce community threat in WUI	Redience wildfire hazard	Hazardous fuels
Pahrump Fire Station Chem	10/1/2022	9/30/2023	Implementation	Herbicide- Hand/backpack					BLM Hazardous Fuels		5	Invasive weed control	Invasive weed control	Invasive weed control
Red Rock Fire Station Chem	10/1/2022	9/30/2023	Implementation	Herbicide- Hand/backpack					BLM Hazardous Fuels		5	Invasive weed control	Invasive weed control	
Sloan Fuel Break	10/1/2022	9/30/2023	Implementation	Fuels Reduction	Yarding & Biomass Removal				BLM Hazardous Fuels		500	Invasive weed control		
Wetlands Park BIL Funded	10/1/2022	9/30/2023	Implementation	Fuels Reduction					BLM Hazardous Fuels		11	Fuels reduction		
Red Rock Canyon Fuel Reduction Disa	10/1/2022	9/30/2023	Implementation	Fuels Reduction	Herbicide- Hand/backpack				BLM Hazardous Fuels	Disaster	1200	RR Fuels Reduction		
Wetlands Park Mastication	10/1/2023	9/30/2024	Implementation	Fuels Reduction	Mastication				BLM Hazardous Fuels		10	Reduce Homeless Ecampment Fires		
Sloan Fuel Break	10/1/2023	9/30/2024	Implementation	Fuels Reduction	Herbicide- Hand/backpack				BLM Hazardous Fuels		500	Fuel deuction near a shooting range		
Red Rocks EDRR	10/1/2023	9/30/2024	Implementation	Fuels Reduction	Herbicide- Hand/backpack				BLM Hazardous Fuels		1000	Fuels reduction in a recreation area		
Red Rocks Canyon Fuel Reduction	10/1/2023	9/30/2024	Implementation	Fuels Reduction	Herbicide- Hand/backpack				BLM Hazardous Fuels		1200	Fuel reduction at Red Rocks		
RRCNCA Hand Pile FY25	10/1/2024	9/30/2025	Implementation	Pile Building				Pinyon /Juniper rer	BLM Hazardous Fuels		50	Reduce community threat in WUI	Reduce wildfire hazard	Hazardous fuels
RRCNCA Mastication FY25	10/1/2024	9/30/2025	Implementation	Mastication				Pinyon /Juniper rer	BLM Hazardous Fuels		100	Reduce community threat in WUI	Reduce wildfire hazard	Hazardous fuels
RRCNCA Pile Burn FY25	10/1/2024	9/30/2025	Implementation	Pile Burning				Pinyon /Juniper rer	BLM Hazardous Fuels		50	Reduce community threat in WUI	Reduce wildfire hazard	Hazardous fuels
RRCNCA Seeding FY25	10/1/2024	9/30/2025	Implementation	Habitat Improvement				Seeding	BLM Hazardous Fuels		50	Increase resilience	Reduce wildfire hazard	Hazardous fuels, invasive plants
RRCNCA Thinning FY25	10/1/2024	9/30/2025	Implementation	Mechanical Thinning				Pinyon /Juniper rer	BLM Hazardous Fuels		50	Reduce community threat in WUI	Reduce wildfire hazard	Hazardous fuels
Hidden Valley Fuel Reduction FY25	10/1/2024	9/30/2025	Implementation	Herbicide- Hand/backpack	Invasive Species Eradication			Treating invasive a	BLM Hazardous Fuels	BIL	10000	Restoration of Desert Tortoise habitat	Habitat restoration	Hazardous fuels, invasive plants
Clark County Wetlands Park Masticati	10/1/2025	9/30/2026	Implementation	Mastication	Riparian Woodland Restoration			Clark County Hazar	BLM Hazardous Fuels		15	Reduce community threat in WUI	Reduce wildfire hazard	Hazardous fuels, invasive plants
Clark County Wetlands Park Thinning	10/1/2025	9/30/2026	Implementation	Mastication	Riparian Woodland Restoration			Clark County Hazar	BLM Hazardous Fuels		70	Reduce community threat in WUI	Reduce wildfire hazard	
Clark County Wetlands RX FY26	10/1/2025	9/30/2026	Implementation	Pile Burning				Air Curtain Burner	BLM Hazardous Fuels		15	Reduce community threat in WUI	Reduce wildfire hazard	
SNV Fuel Reduction FY26	10/1/2025	9/30/2026	Implementation	Mechanical Thinning				NDF Good Neighbc	BLM Hazardous Fuels		50	Reduce community threat in WUI	Reduce wildfire hazard	Hazardous fuels
SNV Chipping Fuel Reduction	10/1/2025	9/30/2026	Implementation	Mechanical Thinning				NDF Good Neighbc	BLM Hazardous Fuels		50	Pahrump Community	Reduce wildfire hazard	
Red Rock Fuel Reduction FY26	10/1/2025	9/30/2026	Implementation	Mastication	Invasive Species Eradication			RRCNCA	BLM Hazardous Fuels	BIL	500	Reduce community threat in WUI	Habitat restoration	Hazardous fuels, invasive plants
Red Rocks Canyon NCA	10/1/2025	9/30/2026	Implementation	Herbicide- Hand/backpack	Invasive Species Eradication			Fuel Reduction ar	BLM Hazardous Fuels	BIL 312	5000	RR Infrastructure & Desert Tortoise Ha	Habitat restoration	Hazardous fuels, invasive plants

4.0 County-Wide Assessment Results

4.1 COUNTY-WIDE RISK AND HAZARD ASSESSMENT OVERVIEW

The Project Team evaluated sixteen communities the from 2022 to 2023. Inventory and analyses of community design aspects (roads, signage, utility infrastructure), defensible space conditions, construction materials, architectural features, wildland-urban interface characteristics, fuel types, and fuel hazards resulted in an overall hazard rating for each community. The overall risk and hazard conditions for each community are summarized individually in this report.

4.1.1 Wildfire Protection Resources

The Bureau of Land Management and USFS administers the largest land base in Clark County. As such, The BLM and USFS generally manages the wildland-urban interface areas, responds to wildland fires, and is responsible for reducing fuel hazards adjacent to communities. Initial attack on wildfires in Clark County is provided by local volunteer fire departments. The BLM and USFS have cooperative agreements with each volunteer fire department in Clark County and has entered into a Memorandum of Understanding.

4.1.2 Wildfire Suppression Resources

RURAL APPARATUS ASSIGNMENTS

Revised 5/2023

Call #	ID#	YR	Make/Model	Tank Capacity	Pump Capacity	Type	Seats	License Plate	VIN. Number	STA. BAYS
Trout Canyon- 70										
S 70	10465	1995	Ford/F-350 4WD	250 Gallons	250 GPM	6	2	EX30251	2FDKF38F5SCA40891	N/A
WT	11121	2001	International	4000 Gallons	250 GPM	S1	2	EX57889	1HTSHAAT9VH493544	
E-70	10603	1996	International 4WD	1200 Gallons	1000 GPM	S3	2	EX30990	1HTSEAAR8TH215969	
Bunkerville- 71										
R 71	11210	1997	Ford/E-350 Wheeled Coach	N/A	N/A	III	2	EX33231	1FDKE30F8VHB79246	4
S 71	17206	2017	Ford/F-550 4WD	250 Gallons	250 GPM	6	2	EX74771	1FDUF5HT1HEE85982	
E71	17302	2018	Spartan	1000 Gallons	1500 GPM	1	2	EX76292	4S9BCETA5KC419356	
Searchlight- 75										
R 75	15793	2012	Ford/E-350 4WD	N/A	N/A	III	2	EX64490	1FDWE3FS8CDA7976	4
S 75	17077	2017	Ford/F-550 4WD	250 Gallons	250 GPM	6	2	EX72272	1FDUF5HTXHEE85981	
E 75	11940	2000	International 4WD	1200 Gallons	1250 GPM	2	3	EX57951	1HTSEADR41H343974	
WT	14647	2006	International	3,000 Gallons	500 GPM	S2	2	EX57007	1HTWGAZT77J471739	
Sandy Valley- 77										
E 77	16558	2016	Freightliner	750 Gallons	1250 GPM	2	2	EX69266	3ALDCYCY5HDJB1851	4
R 77	16061	2014	Ford/E-350 4WD	N/A	N/A	III	2	EX66399	1FDWE3FS5EDB21009	
WT77	3692	1990	International	4000 Gallons	250 GPM	S1	3	EX43998	1HTSHTVR5LH275561	
S 77	17207	2017	Ford F-550 4WD	250 Gallons	250 GPM	6	2	EX74772	1FDUF5HT3HEE85983	
Goodsprings- 78										
WT78	13242	2003	Freightliner	1800 Gallons	500 GPM	S3	2	EX46790	1FVACYCS23HM06878	
E78	10329	1994	Freightliner	750	1250	3	2			
S 78	13037	2003	Ford/F-550 4WD	250 Gallons	250 GPM	6	2	EX45390	1FDAF57P73EC28597	
Mt. Springs- 79										
S 79	16172	2015	Ford/F-550 4WD	250 Gallons	250 GPM	6	4	EX67274	1FD0W5HT3FEB64814	2
E 79	11753	2000	E-One 4WD	1000 Gallons	1250 GPM	2	2	EX36941	1HTSEADR7YH203895	

RURAL APPARATUS ASSIGNMENTS

Revised 5/2023

Call #	ID#	YR	Make/Model	Tank Capacity	Pump Capacity	Type	Seats	License Plate	VIN. Number	STA. BAYS
Blue Diamond- 80										
S 80	10919	1996	Chevy/Cheyenne	250 Gallons	250 GPM	6	3	EX32029	1GBJK34J0TE232225	3
E 80	10575	1995	Ford 4WD	750 Gallons	1250 GPM	2	2	EX17074	1FDYF80E0SVA26997	
WT	18295	2021	Alexis	2000 Gallons	1500 GPM	T1	2	EX81125	3ALACYFE5MDMT4283	
Cold Creek- 82										
CART	17857	2019	John Deere Gator	70 Gallons	20 GPM	N/A	4	N/A		2
SQ82	14267	2007	Ford/F-350 4WD	250 Gallons	250 GPM	6	2	EX53790	1FDWF37R98EA18621	N/A
E 82	10126	1993	International 4WD	1000 Gallons	1000 GPM	2	2	EX28117	1HTSEPCR5PH509772	
Pump 82	4438	1980	Mobile Pump Trailer	N/A	500 GPM	N/A	N/A	EX16875	33180	
Indian Springs- 83										
R 83	12362	2003	Freightliner Rescue	N/A	N/A	I	2	EX43303	1FVABPBW73HK88697	4
S 83	17078	2017	Ford F-550 4WD	250 Gallons	250 GPM	6	2	EX72273	1FDUF5HT5HEE85984	
E 83	14224	2006	Pierce (CBRNE)	500 Gallons	1500 GPM	1	4	EX53736	4P1CU01S07A006930	
WT83	18270	2021	Alexis	3000 Gallons	1500 GPM	S3	2	EX81192	3HLHCYFE9MT4284	
Cal Nev-Ari- 84										
R84	14943	2009	Freightliner Rescue	N/A	N/A	N/A	2	EX57624	1FVACWDJ79HAG505	4
S84	13241	2003	Ford/F-550 4WD	400 Gallons	250 GPM	6	2	46789	1FDAF57P13EC28594	
E84	11973	2000	Pierce Quantum	500 Gallons	1500 GPM	1	4	EX57192	4PICT02SX1A001078	
Training Center-88										
UTV8	17724	2019	John Deere Gator	70 Gallons	60 GPM	utv	4	n/a		
Trailer	17780		Big Tex	N/A						
U88	15902	2009	Ford/F-350	N/A	N/A	UTIL	4			
OUT OF SERVICE APPRATUS										
Incident Management Team										
Truck	18045	2020	Ford F350				5	EX78738		
Traile	18075	2014	Look Enclosed Trailer					EX80517	53BLTEA23EF007368	

4.1.2 Detection and Communication

Fires are reported in Clark County through 911 calls to the Clark County Sheriff's Office. The Clark County Sheriff's Office Emergency Dispatch in Las Vegas notifies the local Volunteer Fire Departments and the Southern Nevada Interagency Dispatch Center of the fire. The Clark County Sheriff's Office has access to state mutual aid frequencies, and the radio system is compatible with neighboring agencies. Fires are communicated to the BLM Southern Nevada District Field Office and the US Forest Service Humboldt Toiyabe Las Vegas District through the Southern Nevada Interagency Dispatch Center.

The BLM Southern Nevada Field Office and USFS have cooperative agreements and annual operating plans with all Clark County Fire Departments that outline how the BLM will conduct fire suppression activities.

4.1.3 Community Preparedness

Clark County has adopted an emergency plan that includes a hazardous materials response plan. The County also has an all-risk disaster response plan that is updated annually. The plan is routinely updated to reflect the inherent disasters related to wildfire, and especially those mentioned in the worst case wildfire scenario mentioned listed for each community.

5.0 Community Specific Reports

(All listed reports are included in Appendix A)

- Cold Creek
- Kyle Canyon
- Lee Canyon
- Mountain Springs
- Nelson
- Torino
- Trout Canyon
- Indian Springs
- Goodsprings
- Sandy Valley
- Searchlight
- Blue Diamond
- Bunkerville
- Calnevari
- Palm Garden Estates
- Moapa

5.1 Recommended Actions Throughout the Plan Area

This CWPP Update promotes community involvement and collaboration by identifying opportunities that strengthen communication and support between agencies and the public that will help create Fire Adapted Communities that can withstand an inevitable wildfire and minimize the potential for catastrophic loss of life or property The following recommendations apply to all Community Wildfire Protection areas in this CWPP and build upon common conditions and needs. The fundamental approach foreseen to foster formation of recommended partnerships is through Fire Adapted Nevada and communities composed of diverse private landowners, federal, state, local fire agency personnel and other interested parties. Strong partnerships will also facilitate implementation of Senate Bill 329 pertaining to requirements for electric utilities to develop and submit natural disaster protection plans.

- Develop strong support from the Clark County Fire Board to promote adoption of a comprehensive International Wildland Urban Interface Code, consistent with Nevada State Law.
- Expand community outreach and education on the importance of the *Living with Fire* recommendations through annual events in Fire Adapted Nevada and other community events, and through social media. Formally adopt recommendations consistent with the *Living with Fire* model and the *International Wildland Urban Interface Code* as the minimum standard for desired conditions for defensible/survivable space on developed parcels in Community Wildfire Protection Zones.
- Coordinate with federal land managers to educate residents and visitors through signage, social media, and public service announcements on the dangers of recreational target shooting during high fire hazard days.
- Collaborate with homeowner associations and neighborhood groups to plan and construct fuels reduction treatments in and around their respective developments. Particular attention should be paid to brush pile, ornamental junipers, wood pile, and overgrown landscaping.
- Conduct education and outreach to residents regarding evacuation plans consistent with the Clark County Emergency Operations Plan. Prioritize fuel reduction treatment locations on Nonfederal land to compliment adjacent treatments on Federal and Tribal lands (USFS, BLM, and BIA) and develop holistic landscape scale fuels management goals.
- Identify areas within the District that are subject to a heightened threat of fire or other natural disaster
- Propose an approach for the mitigation of potential fires or other natural disasters that is cost effective, prudent, and reasonable.

5.2 PRIORITIES

5.2.1 Criteria for treatment prioritization

Projects may be prioritized through a variety of funding mechanism requirements recognizing that, at this time, no one funding source will provide enough resources to fully fund the entire CWPP Update. Treatment area prioritization will be developed within each Community Wildfire Protection Area by Fire Adapted Community Groups to meet their specific goals and objectives. Prioritization criteria may include:

- Cost effectiveness defined here as targeted fuel reduction treatments conducted at a reasonable cost that produces meaningful protection of life, property, and the environment.
- Ease of permitting and ease of treatment.
- Collaboration on multiple ownerships and jurisdictions.
- Potential to achieve landscape scale risk reduction.

5.3 District-wide priorities

The partners within Clark County Fire Department identified the following actions that are equal in order of importance.

- Expand public involvement with the Fire Adapted Nevada Communities. These
- groups allow land managers and other stakeholders to talk and work together, which tends to forge greater agreement on treatment objectives. Facilitate local groups to continue meeting and complete Fire Adapted Community Assessments.
- Support the efforts of landowners to reduce fuels on private land by implementing an aggressive fuels management program that includes survivable space enforcement, and fuels consultation with landowners
- Provide the framework of oversight, technical support, and administration for local groups who participate in planning and implementation of fuel reduction treatments.
- • Create and implement a regular maintenance schedule for fuel reduction treatments.
- Adopt priorities for submitting grant funding applications through Clark County Fire consistent with the stakeholder group and this CWPP.

Nevada Shared Stewardship

2022 Accomplishments

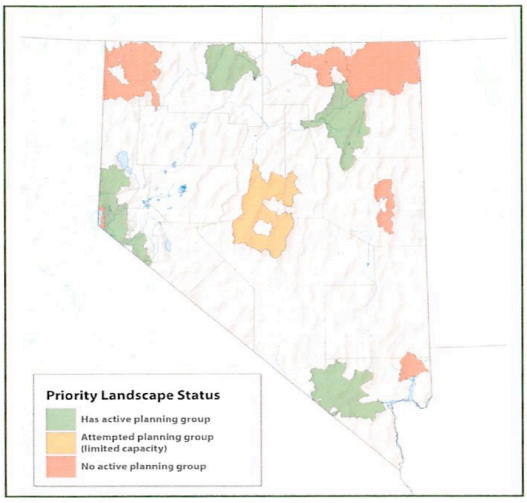



Background

In 2019, the State of Nevada and multiple federal agencies signed the Nevada Shared Stewardship Agreement to establish a framework to reduce wildfire threats across high-risk forests and rangelands (priority landscapes) throughout Nevada.

This five-year agreement provides a model for multi-agency collaboration to increase the pace and scale of critical landscape restoration work by sharing resources, equipment, labor, and expertise across state, federal, and private lands.

Priority Landscape Status



Goals

1. Identify priority landscapes where work will occur
2. Improve data sharing and create interagency planning groups for each individual landscape
3. Create comprehensive statewide strategic and landscape-specific 5-year plans of work
4. Increase annual acres treated across jurisdictions by 50 percent by 2025

Since 2019, Shared Stewardship partners have successfully completed many of these goals to ensure a more fire-resistant and resilient Nevada. Together, multi-agency partners have identified 13 high-risk landscapes to carry out critical conservation work, such as removing dry grasses and dense vegetation, targeted grazing, and building fuel breaks. Notably, Nevada recently received $57 million from the US Forest Service to restore high-risk landscapes across the Sierra and Elko fronts, and accomplish mutual goals.

Treatment Types and Acreage

Priority Landscape	Number of Treatments	Acres Treated
Basin and Range	16	205
Elko-Spring Creek-Lamoille-South Rubies	36	20,526
Paradise	11	28,577
Sierra Front-Carson-Walker	56	8,076
Spring Mountains-Pahrump	52	455
Totals	***171***	***57,840***

Progress in 2022

Acres Treated and Treatment Types

In 2022, numerous multi-agency planning groups treated 57,840 acres across 171 high-risk areas. This represents approximately a 350% increase compared to 2021.

Acres Treated

Within these landscapes, agency planning groups and a variety of stakeholders implemented the following projects to restore natural ecosystems and habitats, while helping to prevent catastrophic wildfire.

Treatment Types

Treatment	Acreage	
	2021	2022
Broadcast burning	-	76
Fuel Breaks/Green Stripping	1,343	34,469
Seeding/Planting/Rx Fire	20	2,181
Targeted Grazing	-	8,205
Thinning/Piling/Burning	1,005	1,639
Weed Control/Management	10,560	11,270
Total Acreage Treated	***12,927***	***57,840***

Learn more about Shared Stewardship in Nevada.

Collaboration

Planning groups and stakeholder collaboration grew significantly last year, resulting in plans and implemented projects with shared equipment, funding, labor and other resources.

Shared Stewardship partners consist of federal agencies (4), state agencies (7), local governments (14), non-profit organizations (5), tribes, private companies, contractors, and private landowners that were involved in accomplishing the activities reported for 2022. In addition to creating healthy landscapes, a significant amount of public outreach and coordination has contributed to the increased awareness of the public's role and supportive actions in ecosystem restoration and wildfire management. Through a combination of traditional and new media, along with in-person and virtual outreach events, Shared Stewardship partners engaged more than 50,000 Nevadans in fire prevention education in 2022.

Next Steps

1. Complete 5-year programs of work for all landscapes that have active planning groups and communicate treatment support needs to the Executive Committee.
2. Coordinate with landscape planning groups to apply Bipartisan Infrastructure Law and Inflation Reduction Act funding to shared priorities.
3. Continue working to establish a formal landscape planning group for the Basin and Range Priority Landscapes with required capacity.
4. Seek additional opportunities and resources to establish planning groups in landscapes that lack them.
5. Establish a strategic communication and outreach plan to publicize accomplishments, increase awareness, and promote cooperator and public participation in shared stewardship efforts.

NRCS · NDA Nevada Department of Agriculture · Nevada Department of Conservation & Natural Resources

Evacuation and Shelter

Evacuations are conducted by the LVMPD at the request of Unified Command during incidents that may threaten a community. These include wildfire, but are not limited to, and may also include flood, avalanche, earthquake, or other natural disasters. Evacuation should be conducted in order from most threatened to least in order to provide an orderly withdrawal from an area and relieve roadway congestion. Decision points will be established by Unified Command that prompt action due to imminent likely threats to communities. Messaging that follows the IAFC approved Ready, Set, Go! nomenclature will be used when homes have 12 hours or less time prior to fire arrival. Notification of evacuation will be conducted by the Clark County OEM emergency messaging app CodeRed and door to door by LVMPD. After resident contact by LVMPD an informational door hanger (attached) will be placed on the front door or nearby that describes the status of the residence (occupancy status and number). If the residents do not evacuate upon request a 5ft piece of yellow tape will be tied in an area visible from the street to mark homes that may need additional follow-up if the hazard increases.

The presence of residents in a home will not affect the home and its risk from fire. Firefighting crews will still triage homes by their ability to withstand fire effects from a passing fire front. Every home will be classified as either not threatened, threatened defensible, or threatened non defensible. Non defensible homes will be indicated with red flagging tape visible from the property line.

If possible, prior to evacuation of an area Unified Command will determine a shelter site for individuals. This will be facilitated by OEM, Red Cross and other supporting agencies. Sheltering, feeding, and reunification will be conducted according to the Clark County Office of Emergency Management EOP Basic Plan and ESF 6 Annex. This site will utilize a check in procedure to provide accountability for displaced residents from the area being evacuated.

APPENDIX A

Community Wildfire Risk Assessment

COLD CREEK

Total Assessed Rating

182 - High

Suppression Rating

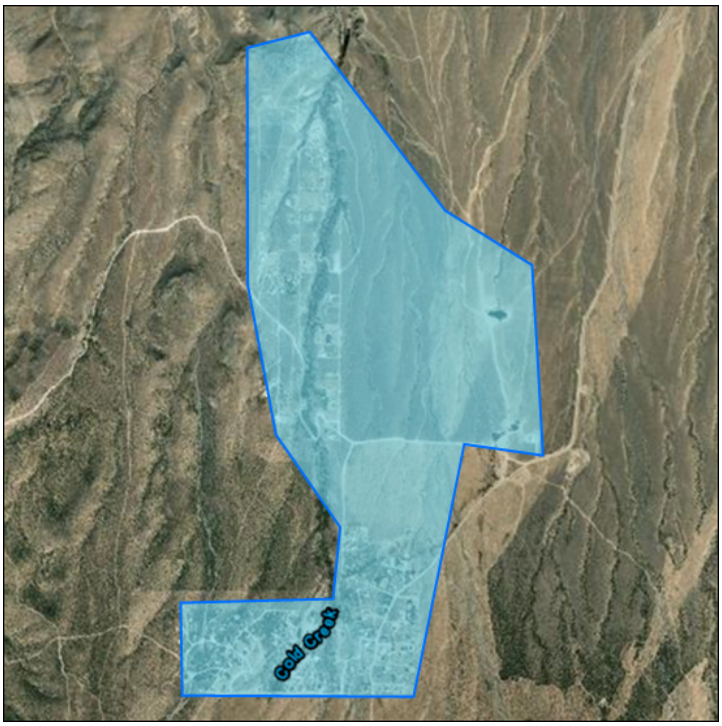
Extreme Hazard

Surrounding Environment Rating

Extreme Hazard

Structures Rating

High Hazard



Fire Protection District

Clark County

Fireshed(s)

Lower Indian Springs Valley

Community Information

Latitude	36° 25' 30"
Longitude	-115° 44' 22"

Dwelling Units	100
Size	734.27 acres
Community Type	Agricultural/Rural
Assessed By:	Raul Arroyo
Assessment Date:	06-03-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

→ **One road in and out (entrance and exit is the same)**

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation, vehicles, and/or any obstructions)
- Consider developing safety zones and a plan for Shelter-in-Place; consult with Local Fire Department
- Consider adding a secondary ingress / egress route for use in emergencies

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

Surfaced road

→ **Non-surfaced road, grade less than or equal to 5%**

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

→ **Roads ends in a cul-de-sac, diameter < 100 feet**

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Coordinate with emergency responders to test cul-de-sac turnaround with their emergency response vehicles

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

Average driveway allows access to homes

→ **Average driveway restricts access to homes**

Recommended Mitigation Strategies

- Improve driveway accessibility where possible
- Ensure emergency responders are aware of driveway restrictions

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

→ **Dry Hydrant(s) / Draft available within the community**

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Clearly mark and regularly test dry hydrants; coordinate with Local Fire Department
- Keep dry hydrants clear of obstructions and vegetation

Geographic Features

No notable geographical features present to hinder fire suppression

→ **Suppression efforts hindered by geographical features (e.g. hazardous terrain)**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of local geographic features that can hinder fire suppression efforts; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

→ **HOA present; LACKS structure for sustained fire prevention and mitigation**

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

→ **Medium (brush)**

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

→ **Fuels heavy/extreme amongst structures & other urban hazards/materials are present**

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- ConsiderÂ xeriscaping
- Plant a mixture of deciduous trees (e.g. oak and maple) and coniferous trees (e.g. pine)
- Create fuel breaks like driveways and gravel walkways
- Remove smaller conifers that are growing between taller trees
- Remove heavy accumulations of woody debris
- Clean up and remove flammable 'urban' materials within 30 feet of structures (garbage, abandoned vehicles, household debris, wood piles/debris, etc)

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up

- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

Slope 6 % - 10%

→ **Slope 11% - 30%**

Slope > 31%

Recommended Mitigation Strategies

- Increase defensible space in areas with steeper slopes

Vegetation on Electric Transmission Lines

→ **No above ground electric transmission lines present**

Above ground electric transmission lines are maintained

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

→ **Greater than 51% of lots are undeveloped**

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

→ **> 75% of homes have NO Wooden Attachments**

50-74% of homes have NO Wooden Attachments

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

Not applicable

→ **Greater than or equal to 30 feet from slope**

Less than 30 feet from slope

Recommended Mitigation Strategies

- Review suggested defensible space and vegetation management as pertains to building setback

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone**

Recommended Mitigation Strategies

- N/A

COMMENTS

fuels most definitely fuels reduction and education needed.
HOA present
100 homes
22 hydrants
1 pond
1 ccfd vdf
need to be able to have more selection instead of one.

Community Wildfire Risk Assessment

LEE CANYON/KYLE CANYON LADY OF THE SNOW

Total Assessed Rating

183 - High

Suppression Rating

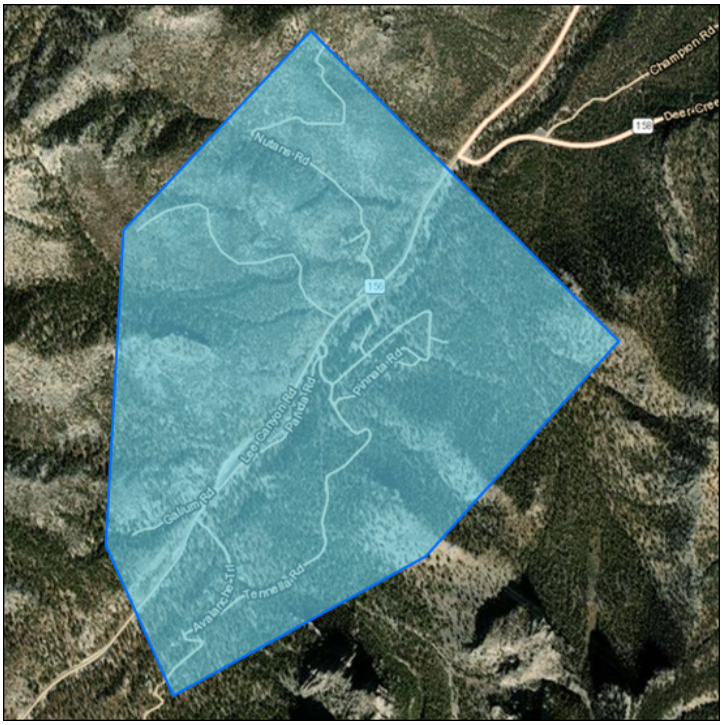
High Hazard

Surrounding Environment Rating

Extreme Hazard

Structures Rating

High Hazard



Fire Protection District

Mt. Charleston FPD

Fireshed(s)

Deer Creek-Las Vegas Wash

Community Information

Latitude	36° 20' 2"
Longitude	-115° 39' 29"

Dwelling Units	58
Size	588.80 acres
Community Type	Residential - Mixed
Assessed By:	Raul Arroyo
Assessment Date:	07-12-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

→ **One road in and out (entrance and exit is the same)**

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation, vehicles, and/or any obstructions)
- Consider developing safety zones and a plan for Shelter-in-Place; consult with Local Fire Department
- Consider adding a secondary ingress / egress route for use in emergencies

Road Width

Road width is > 24 feet

Road width is > 20 feet and < 24 feet

→ **Road width is < 20 feet**

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards for emergency vehicle use
- Coordinate with fire department to ensure they are aware of road width limitations
- Be aware that road width could limit emergency vehicles to brush trucks only

Road Accessibility

Surfaced road

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

→ **Non-maintained dirt road**

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk of emergency responders getting stuck in sand or mud, driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

→ **Roads ends in a cul-de-sac, diameter > 100 feet**

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Maintain unobstructed access into cul-de-sacs
- Ensure cul-de-sacs are free of vehicles and/or other items

Street Signs

→ **Present throughout, lettering 4 inches high, non-flammable and reflective**

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Keep street signs visible and clear of vegetation and fine fuels

Driveways

Average driveway allows access to homes

→ **Average driveway restricts access to homes**

Recommended Mitigation Strategies

- Improve driveway accessibility where possible
- Ensure emergency responders are aware of driveway restrictions

Water Supply

→ **Pressurized hydrants spaced less than 1000 feet apart**

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Ensure hydrants and water sources are marked, accessible and properly maintained
- Keep hydrants clear of obstructions and vegetation

Geographic Features

No notable geographical features present to hinder fire suppression

→ **Suppression efforts hindered by geographical features (e.g. hazardous terrain)**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of local geographic features that can hinder fire suppression efforts; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

→ **5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)**

5 mi. or less from Agency with Response Authority (VFD)

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

→ **HOA present; LACKS structure for sustained fire prevention and mitigation**

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site

- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

Medium (brush)

→ **Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)**

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

Slope 6 % - 10%

Slope 11% - 30%

→ **Slope > 31%**

Recommended Mitigation Strategies

- Increase defensible space in areas with steeper slopes

Vegetation on Electric Transmission Lines

→ **No above ground electric transmission lines present**

Above ground electric transmission lines are maintained

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

50-74% of homes have skirting underneath

→ **< 50% of homes have skirting underneath**

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

Not applicable

→ **Greater than or equal to 30 feet from slope**

Less than 30 feet from slope

Recommended Mitigation Strategies

- Review suggested defensible space and vegetation management as pertains to building setback

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

→ **Electric Underground**

Electric Overhead drop maintained

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable materials (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

1) PROPANE TANKS <50' FROM STRUCTURES
2) ONE WAY ENTRENCE/EXIT; NARROW RAODS
3) LOW PHONE LINES
4) HEAVY VEGITATION
5) FIRE WOOD PILES <20' FROM STRUCTURES
6) STEEP ROADS / DRIVEWAYS
7) NO POWER; GENERATOR DRIVEN
8) ONE COMMUNITY WATER TANK
9) 1 HYDRANT, 11 JONES VALVES
10) 58 STRUCTURES

Community Wildfire Risk Assessment

MOUNTAIN SPRINGS

Total Assessed Rating

238 - Extreme

Suppression Rating

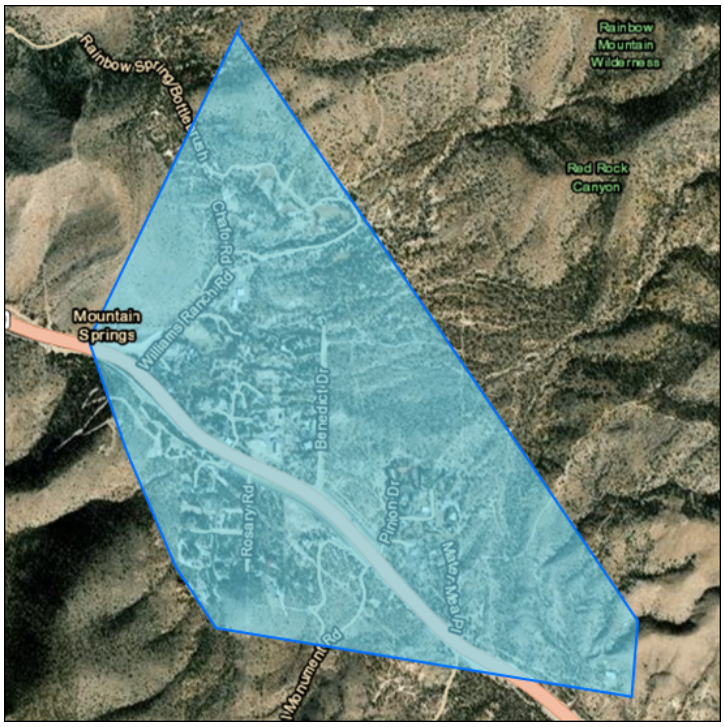
Extreme Hazard

Surrounding Environment Rating

Extreme Hazard

Structures Rating

Extreme Hazard



Fire Protection District

Clark County

Fireshed(s)

Lovell Wash, Red Rock Wash

Community Information

Latitude	36° 1' 9"
Longitude	-115° 30' 14"
Dwelling Units	29

Size	379.25 acres
Community Type	Residential - Mixed
Assessed By:	Raul Arroyo
Assessment Date:	06-10-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

→ **One road in and out (entrance and exit is the same)**

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation, vehicles, and/or any obstructions)
- Consider developing safety zones and a plan for Shelter-in-Place; consult with Local Fire Department
- Consider adding a secondary ingress / egress route for use in emergencies

Road Width

Road width is > 24 feet

Road width is > 20 feet and < 24 feet

→ **Road width is < 20 feet**

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards for emergency vehicle use
- Coordinate with fire department to ensure they are aware of road width limitations
- Be aware that road width could limit emergency vehicles to brush trucks only

Road Accessibility

Surfaced road

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

→ **Non-maintained dirt road**

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk of emergency responders getting stuck in sand or mud, driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

→ **Roads ends in a cul-de-sac, diameter < 100 feet**

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Coordinate with emergency responders to test cul-de-sac turnaround with their emergency response vehicles

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

Average driveway allows access to homes

→ **Average driveway restricts access to homes**

Recommended Mitigation Strategies

- Improve driveway accessibility where possible
- Ensure emergency responders are aware of driveway restrictions

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

→ **No water sources in or within 4 miles of the community**

Recommended Mitigation Strategies

- Be aware of limited access to a water source and coordinate with the closest Fire Department accordingly; consider pre-suppression plan
- Identify nearby potential water sources (e.g. pools); consider pre-suppression plan
- Plan for water source installations within or closer to community; consider pre-suppression plan

Geographic Features

No notable geographical features present to hinder fire suppression

→ **Suppression efforts hindered by geographical features (e.g. hazardous terrain)**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of local geographic features that can hinder fire suppression efforts; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

→ **HOA present; LACKS structure for sustained fire prevention and mitigation**

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

→ **Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)**

Recommended Mitigation Strategies

- Identify heavy fuel areas (jackpots) and consider removal or breaking them up
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

Slope 6 % - 10%

→ **Slope 11% - 30%**

Slope > 31%

Recommended Mitigation Strategies

- Increase defensible space in areas with steeper slopes

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

→ **10% to 30% of lots are undeveloped**

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **< 50% of homes have metal, tile or class A asphalt or fiberglass shingles**

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

50-74% of homes have NO Wooden Attachments

→ **< 50% of homes have NO Wooden Attachments**

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

Not applicable

→ **Greater than or equal to 30 feet from slope**

Less than 30 feet from slope

Recommended Mitigation Strategies

- Review suggested defensible space and vegetation management as pertains to building setback

Propane

> 30 feet from the house and surrounding vegetation maintained

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

→ **N/A**

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone**

Recommended Mitigation Strategies

- N/A

COMMENTS

About 29 homes.
We could not locate any fire hydrants around the community.
We located a waters tower inside a private property.
Talking to the VFD Chief they do fill in the NDOT yard.
HOA poorly managed.

Roads are not maintained. except in the newer community.

Community Wildfire Risk Assessment

ELDORADO COMMUNITY

Total Assessed Rating

121 - High

Suppression Rating

High Hazard

Surrounding Environment Rating

Moderate Hazard

Structures Rating

High Hazard

Fire Protection District

Clark County

Fireshed(s)

Jumbo Wash-Colorado River

Community Information

Latitude	35° 42' 33"
Longitude	-114° 48' 6"
Dwelling Units	1

Size	34.33 acres
Community Type	Unincorporated Town
Assessed By:	Raul Arroyo
Assessment Date:	06-14-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

→ **2 or more roads in/out with SLIGHT response/evacuation complexity**

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Ask Local Fire Department about Ready, Set, Go!

Road Width

→ **Road width is > 24 feet**

Road width is > 20 feet and < 24 feet

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use whenever possible

Road Accessibility

Surfaced road

→ **Non-surfaced road, grade less than or equal to 5%**

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

→ **Dead end roads >200 feet long**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of dead-end roads; Consider signing all dead ends.
- If dead-end roads are narrow, restrict access during an emergency

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

→ **Not present**

Recommended Mitigation Strategies

- Consider installing reflective, noncombustible street signs to support emergency response efforts

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

→ **No water sources in or within 4 miles of the community**

Recommended Mitigation Strategies

- Be aware of limited access to a water source and coordinate with the closest Fire Department accordingly; consider pre-suppression plan
- Identify nearby potential water sources (e.g. pools); consider pre-suppression plan
- Plan for water source installations within or closer to community; consider pre-suppression plan

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

5 mi. or less from Agency with Response Authority (VFD)

→ **> 5 mi. from Agency with Response Authority FD**

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Discuss with closest Fire Department to identify quicker response strategies and other potential solutions

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

→ **Lacks any structure for sustained fire prevention and mitigation**

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site

- Host a Community Education Event at least once a year
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan
- Ensure individual homes are ignition-resistant, hardened, and Firewise/Living with Fire concepts are followed

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

→ **Light (grass)**

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Use brick or stone along the edge of interior fuels/open space to slow the flame spread
- Consider landscaping using single plants or groups within interior fuels/open space to separate fuels
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

→ **50 to 75% of homes meet criteria in Zone 0, 1 & 2**

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- ConsiderÂ xeriscaping
- Plant a mixture of deciduous trees (e.g. oak and maple) and coniferous trees (e.g. pine)
- Create fuel breaks like driveways and gravel walkways

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

→ **Slope 6 % - 10%**

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

- N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

→ **10% to 30% of lots are undeveloped**

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **< 50% of homes have metal, tile or class A asphalt or fiberglass shingles**

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

50-74% of homes have non-combustible ventilation soffits with mesh or screening

→ **< 50% of homes have non-combustible ventilation soffits with mesh or screening**

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

→ **> 75% of homes have non-combustible siding**

50-74% of homes have non-combustible siding

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

→ **> 75% of homes have NO Wooden Attachments**

50-74% of homes have NO Wooden Attachments

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

→ **N/A**

Recommended Mitigation Strategies

N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

Â Keep vegetation pruned and mowed around electric cabinets

- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

El Dorado City was the site of the El Dorado Mills or Colorado Mills, first stamp mill in the canyon, and perhaps in all of Arizona Territory.

Just did a courtesy Assessment on this little town.

Community Wildfire Risk Assessment

NELSON LANDING

Total Assessed Rating

109 - High

Suppression Rating

High Hazard

Surrounding Environment Rating

Low Hazard

Structures Rating

High Hazard

Fire Protection District

Clark County

Fireshed(s)

Jumbo Wash-Colorado River

Community Information

Latitude	35° 42' 30"
Longitude	-114° 49' 32"
Dwelling Units	33

Size	93.87 acres
Community Type	Residential - Mixed
Assessed By:	Raul Arroyo
Assessment Date:	06-14-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

→ **2 or more roads in/out with NO response/evacuation complexity**

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- ☐ Keep community ingress/egress open and maintained (cleared of vegetation)
- ☐ Develop community plan for evacuation routes, safe zones, staging areas
- ☐ If community is gated, develop evacuation plan and ensure emergency responder access
- ☐ Ensure residents know their closest exit in case of emergency
- ☐ Ask Local Fire Department about Ready, Set, Go!

Road Width

→ **Road width is > 24 feet**

Road width is > 20 feet and < 24 feet

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use whenever possible

Road Accessibility

Surfaced road

→ **Non-surfaced road, grade less than or equal to 5%**

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

→ **Dead end roads >200 feet long**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of dead-end roads; Consider signing all dead ends.
- If dead-end roads are narrow, restrict access during an emergency

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

→ **Not present**

Recommended Mitigation Strategies

- Consider installing reflective, noncombustible street signs to support emergency response efforts

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

→ **Other accessible sources within community (pond, lake, etc.)**

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Coordinate with fire department and land owners to train/test use of local water sources (e.g. ponds, lakes)

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

5 mi. or less from Agency with Response Authority (VFD)

→ **> 5 mi. from Agency with Response Authority FD**

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Discuss with closest Fire Department to identify quicker response strategies and other potential solutions

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

→ **Lacks any structure for sustained fire prevention and mitigation**

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site

- Host a Community Education Event at least once a year
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan
- Ensure individual homes are ignition-resistant, hardened, and Firewise/Living with Fire concepts are followed

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

→ **Light (grass)**

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Use brick or stone along the edge of interior fuels/open space to slow the flame spread
- Consider landscaping using single plants or groups within interior fuels/open space to separate fuels
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

Defensible Space

→ **> 75% of homes meet criteria in Zone 0, 1 & 2**

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- Consider xeriscaping

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

N/A

Slope

Slope 0% - 5%

→ **Slope 6 % - 10%**

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

- N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- ☐ Use fire-resistant roofing material such as metal, tile or Class A shingles
- ☐ Inspect for and address gaps in roofing that can expose roof decking or supports
- ☐ Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- ☐ Clear branch, leaf-litter and other debris from roof and gutters regularly
- ☐ Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

50-74% of homes have NO Wooden Attachments

→ **< 50% of homes have NO Wooden Attachments**

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone**

Recommended Mitigation Strategies

N/A

COMMENTS

1) Power Line are well maintained.
2) 34 mixture of homes.
3) No Street signs
4) each home has own well.
5) Propane on some homes.
6) ***** Flash Flood Area At High Risk*****
7) No VFD, Boulder City Fire & CCFD VFD are out about 45 minutes out or more.
8) SR 165 High Risk if a Major incident would Happened. Steep hills / Narrow Lanes.

Community Wildfire Risk Assessment

TORINO RANCH

Total Assessed Rating

184 - High

Suppression Rating

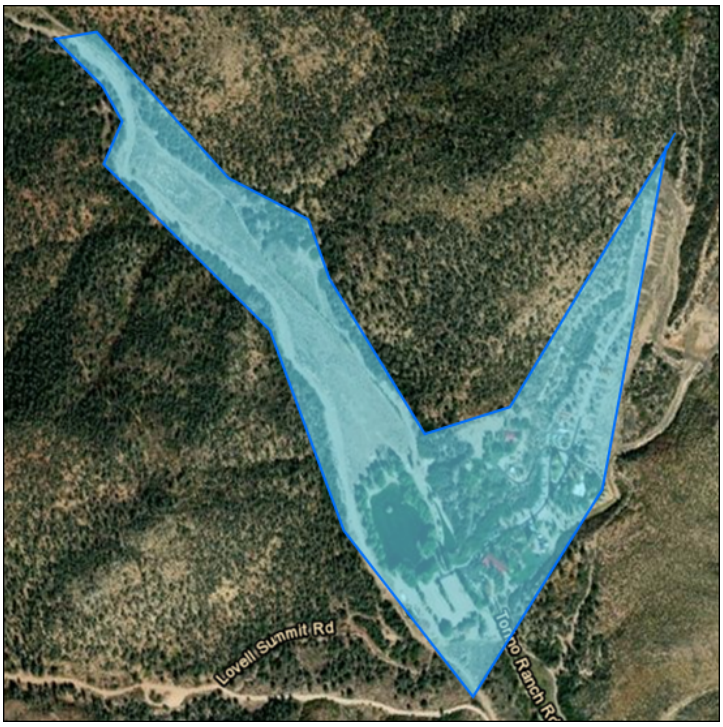
Extreme Hazard

Surrounding Environment Rating

Extreme Hazard

Structures Rating

High Hazard



Fire Protection District

Clark County

Fireshed(s)

Lovell Wash

Community Information

Latitude	36° 10' 13"
Longitude	-115° 34' 47"
Dwelling Units	20

Size 46.29 acres

Community Type Residential/Commercial

Assessed By: Raul Arroyo

Assessment Date: 07-14-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

→ **One road in and out (entrance and exit is the same)**

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation, vehicles, and/or any obstructions)
- Consider developing safety zones and a plan for Shelter-in-Place; consult with Local Fire Department
- Consider adding a secondary ingress / egress route for use in emergencies

Road Width

Road width is > 24 feet

Road width is > 20 feet and < 24 feet

→ **Road width is < 20 feet**

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards for emergency vehicle use

- Coordinate with fire department to ensure they are aware of road width limitations
- Be aware that road width could limit emergency vehicles to brush trucks only

Road Accessibility
→ **Surfaced road**
Non-surfaced road, grade less than or equal to 5%
Non-surfaced road, grade greater than 5%
Non-maintained dirt road
Recommended Mitigation Strategies
▪ Ensure that road maintenance plan is in place

Secondary Road Terminus
Roads ends in a cul-de-sac, diameter > 100 feet
Roads ends in a cul-de-sac, diameter < 100 feet
Dead end roads <200 feet long
→ **Dead end roads >200 feet long**
Recommended Mitigation Strategies

- Ensure emergency responders are aware of dead-end roads; Consider signing all dead ends.
- If dead-end roads are narrow, restrict access during an emergency

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

→ **Not present**

Recommended Mitigation Strategies

- Consider installing reflective, noncombustible street signs to support emergency response efforts

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

→ **Other accessible sources within community (pond, lake, etc.)**

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Coordinate with fire department and land owners to train/test use of local water sources (e.g. ponds, lakes)

Geographic Features

No notable geographical features present to hinder fire suppression

→ **Suppression efforts hindered by geographical features (e.g. hazardous terrain)**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of local geographic features that can hinder fire suppression efforts; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

5 mi. or less from Agency with Response Authority (VFD)

→ **> 5 mi. from Agency with Response Authority FD**

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Discuss with closest Fire Department to identify quicker response strategies and other potential solutions

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

→ **Lacks any structure for sustained fire prevention and mitigation**

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan
- Ensure individual homes are ignition-resistant, hardened, and Firewise/Living with Fire concepts are followed

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

Medium (brush)

→ **Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)**

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

→ **Fuels heavy/extreme amongst structures & other urban hazards/materials are present**

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- ConsiderÂ xeriscaping
- Plant a mixture of deciduous trees (e.g. oak and maple) and coniferous trees (e.g. pine)
- Create fuel breaks like driveways and gravel walkways
- Remove smaller conifers that are growing between taller trees
- Remove heavy accumulations of woody debris
- Clean up and remove flammable 'urban' materials within 30 feet of structures (garbage, abandoned vehicles, household debris, wood piles/debris, etc)

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up

- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

Slope 6 % - 10%

→ **Slope 11% - 30%**

Slope > 31%

Recommended Mitigation Strategies

- Increase defensible space in areas with steeper slopes

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

50-74% of homes have non-combustible siding

→ **< 50% of homes have non-combustible siding**

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter

- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

50-74% of homes have NO Wooden Attachments

→ **< 50% of homes have NO Wooden Attachments**

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

→ **> 30 feet from the house and surrounding vegetation maintained**

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

N/A

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

1) 10 miles in from SR 160 paved road, narrow road, one way in & out
2) 44 + acres
3) (1) 300 + year old pinyon pine tree
4) (600) indigenous, exotics and nonnatives trees
5) extreme floods zone
6) ranch has heavy equipment
7) large pond / swimming pool
8) water tank / ran by system
9) propane tanks.

Community Wildfire Risk Assessment

INDIAN SPRINGS

Total Assessed Rating

213 - Extreme

Suppression Rating

Extreme Hazard

Surrounding Environment Rating

Extreme Hazard

Structures Rating

High Hazard

Fire Protection District

Clark County

Fireshed(s)

Calvada Springs, Pahrump Valley

Community Information

Latitude	36° 10' 48"
Longitude	-115° 40' 47"
Dwelling Units	35

Size	121.56 acres
Community Type	Unincorporated Town
Assessed By:	Josue Gonzalez
Assessment Date:	06-07-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

→ **One road in and out (entrance and exit is the same)**

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation, vehicles, and/or any obstructions)
- Consider developing safety zones and a plan for Shelter-in-Place; consult with Local Fire Department
- Consider adding a secondary ingress / egress route for use in emergencies

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

Surfaced road

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

→ **Non-maintained dirt road**

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk of emergency responders getting stuck in sand or mud, driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

→ **Dead end roads <200 feet long**

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Ensure emergency responder are aware of dead-end roads; Consider signing all dead ends.

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

→ **Not present**

Recommended Mitigation Strategies

- Consider installing reflective, noncombustible street signs to support emergency response efforts

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

→ **Other accessible sources within community (pond, lake, etc.)**

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Coordinate with fire department and land owners to train/test use of local water sources (e.g. ponds, lakes)

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

→ **HOA present; LACKS structure for sustained fire prevention and mitigation**

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

Community Wildfire Risk Assessment

INDIAN SPRINGS

Total Assessed Rating

99 - Moderate

Suppression Rating

Moderate Hazard

Surrounding Environment Rating

Low Hazard

Structures Rating

High Hazard

Fire Protection District

Clark County

Fireshed(s)

Lower Indian Springs Valley

Community Information

Latitude	36° 34' 14"
Longitude	-115° 40' 14"
Dwelling Units	671

Size	620.82 acres
Community Type	Residential - Mixed
Assessed By:	Raul Arroyo
Assessment Date:	06-23-2023

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

→ **2 or more roads in/out with SLIGHT response/evacuation complexity**

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Ask Local Fire Department about Ready, Set, Go!

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

→ **Dead end roads >200 feet long**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of dead-end roads; Consider signing all dead ends.
- If dead-end roads are narrow, restrict access during an emergency

Street Signs

→ **Present throughout, lettering 4 inches high, non-flammable and reflective**

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

→ **Pressurized hydrants spaced less than 1000 feet apart**

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Ensure hydrants and water sources are marked, accessible and properly maintained
- Keep hydrants clear of obstructions and vegetation

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

→ **Lacks any structure for sustained fire prevention and mitigation**

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan
- Ensure individual homes are ignition-resistant, hardened, and Firewise/Living with Fire concepts are followed

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

→ **Light (grass)**

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Use brick or stone along the edge of interior fuels/open space to slow the flame spread
- Consider landscaping using single plants or groups within interior fuels/open space to separate fuels
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

Defensible Space

→ **> 75% of homes meet criteria in Zone 0, 1 & 2**

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- Consider xeriscaping

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

- N/A

Vegetation on Electric Transmission Lines

→ **No above ground electric transmission lines present**

Above ground electric transmission lines are maintained

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

- N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

50-74% of homes have non-combustible ventilation soffits with mesh or screening

→ **< 50% of homes have non-combustible ventilation soffits with mesh or screening**

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

Not applicable

Greater than or equal to 30 feet from slope

→ **Less than 30 feet from slope**

Recommended Mitigation Strategies

- Review suggested defensible space and vegetation management as pertains to building setback

Propane

→ **> 30 feet from the house and surrounding vegetation maintained**

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

N/A

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

Creech air force base with fire resources. Store (dollar tree). Gas Station with restaurant, post office, CCFD vol. station # 83, NDOT satellite yard, NHP / Metro Office, Clark County School District (K-12). LDS Church, Baptist Church, Oasis bar,25,000-gal water tank, empty lots with heavy dead fuels through the community,30 fire hydrants, two new home communities, mobile Home parks. majority of mobile home park are not well kept. other mobile home park are kept very well. NO HOA.

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

→ **Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)**

Recommended Mitigation Strategies

- Identify heavy fuel areas (jackpots) and consider removal or breaking them up
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

→ **Fuels heavy/extreme amongst structures & other urban hazards/materials are present**

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- ConsiderÂ xeriscaping

- Plant a mixture of deciduous trees (e.g. oak and maple) and coniferous trees (e.g. pine)
- Create fuel breaks like driveways and gravel walkways
- Remove smaller conifers that are growing between taller trees
- Remove heavy accumulations of woody debris
- Clean up and remove flammable 'urban' materials within 30 feet of structures (garbage, abandoned vehicles, household debris, wood piles/debris, etc)

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

- N/A

Slope

Slope 0% - 5%

Slope 6 % - 10%

Slope 11% - 30%

→ **Slope > 31%**

Recommended Mitigation Strategies

- Increase defensible space in areas with steeper slopes

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

Above ground electric transmission lines are maintained

→ **Above ground electric transmission lines are NOT maintained**

Recommended Mitigation Strategies

- Work with NDF and/or local fire protection district to alert electric provider (NVEnergy) of needed line maintenance

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

10% to 30% of lots are undeveloped

→ **31% to 50% of lots are undeveloped**

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco

- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

→ **> 75% of homes have skirting underneath raised floors/decks**

50-74% of homes have skirting underneath

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter

- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

Not applicable

Greater than or equal to 30 feet from slope

→ **Less than 30 feet from slope**

Recommended Mitigation Strategies

- Review suggested defensible space and vegetation management as pertains to building setback

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

Electric Underground

Electric Overhead drop maintained

→ **Electric Overhead drop not maintained**

Recommended Mitigation Strategies

- Keep vegetation pruned and mowed around electric right of ways; Drop to home is homeowner responsibility

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

N/A

COMMENTS

35 structures in subdivision, 10 full families/residents in subdivision,
10 miles from state road 160 to subdivision. If flash flood happens subdivision road will be impacted and not travel.
water pipe from 3 miles away from mountain and a community well. water pipe can and has been impacted by wildland fires and floods.

residents have slash piles in and around property, need on wood chipper to remove the fire hazard from property.

Community Wildfire Risk Assessment

GOOD SPRINGS

Total Assessed Rating

114 - High

Suppression Rating

High Hazard

Surrounding Environment Rating

Moderate Hazard

Structures Rating

High Hazard

Fire Protection District

Clark County

Fireshed(s)

Goodsprings Valley-Frontal Ivanpah Lake

Community Information

Latitude	35° 50' 2"
Longitude	-115° 26' 2"
Dwelling Units	137

Size	192.01 acres
Community Type	Residential - Mixed
Assessed By:	Josue Gonzalez
Assessment Date:	06-15-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

→ **2 or more roads in/out with SLIGHT response/evacuation complexity**

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Ask Local Fire Department about Ready, Set, Go!

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

→ **Dead end roads >200 feet long**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of dead-end roads; Consider signing all dead ends.
- If dead-end roads are narrow, restrict access during an emergency

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

→ **Water sources located within 4 miles of community (incl heli dip sites)**

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Be aware of limited access to a water source and coordinate with the closest Fire Department accordingly

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

→ **Municipal govt present; LACKS structure for sustained fire prevention and mitigation**

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

→ **Light (grass)**

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Use brick or stone along the edge of interior fuels/open space to slow the flame spread
- Consider landscaping using single plants or groups within interior fuels/open space to separate fuels
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

→ **50 to 75% of homes meet criteria in Zone 0, 1 & 2**

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- ConsiderÂ xeriscaping
- Plant a mixture of deciduous trees (e.g. oak and maple) and coniferous trees (e.g. pine)
- Create fuel breaks like driveways and gravel walkways

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

- N/A

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

- N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

Above ground electric transmission lines are maintained

→ **Above ground electric transmission lines are NOT maintained**

Recommended Mitigation Strategies

- Work with NDF and/or local fire protection district to alert electric provider (NVEnergy) of needed line maintenance

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

Provide Living with Fire/Firewise construction guidelines to developers /owners

- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly

- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

50-74% of homes have non-combustible siding

→ **< 50% of homes have non-combustible siding**

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house

- Replace with noncombustible siding when possible

Underskirting

→ **> 75% of homes have skirting underneath raised floors/decks**

50-74% of homes have skirting underneath

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

50-74% of homes have NO Wooden Attachments

→ **< 50% of homes have NO Wooden Attachments**

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

Electric Underground

Electric Overhead drop maintained

→ **Electric Overhead drop not maintained**

Recommended Mitigation Strategies

- Keep vegetation pruned and mowed around electric right of ways; Drop to home is homeowner responsibility

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

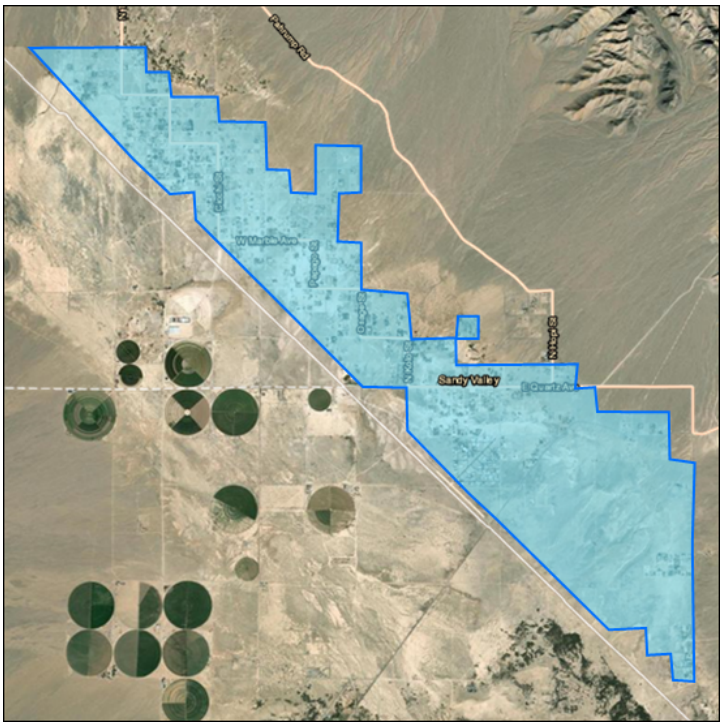
No fire hydrant, water source at fire station and locked.
Approx 10,000 gal tank at fire station.
Northeast corner property in drainage.

Community Wildfire Risk Assessment

SANDY VALLEY

Total Assessed Rating

72 - Moderate



Suppression Rating

Moderate Hazard

Surrounding Environment Rating

Moderate Hazard

Structures Rating

Moderate Hazard

Fire Protection District

Clark County

Fireshed(s)

Potosi Wash, Mesquite Valley

Community Information

Latitude	35° 48' 48"
Longitude	-115° 37' 58"
Dwelling Units	874

Size	6,635.15 acres
Community Type	Residential - Mixed
Assessed By:	Josue Gonzalez
Assessment Date:	06-23-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

→ **2 or more roads in/out with NO response/evacuation complexity**

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Ask Local Fire Department about Ready, Set, Go!

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

Surfaced road

→ **Non-surfaced road, grade less than or equal to 5%**

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

→ **Roads ends in a cul-de-sac, diameter > 100 feet**

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Maintain unobstructed access into cul-de-sacs
- Ensure cul-de-sacs are free of vehicles and/or other items

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

→ **No water sources in or within 4 miles of the community**

Recommended Mitigation Strategies

- Be aware of limited access to a water source and coordinate with the closest Fire Department accordingly; consider pre-suppression plan
- Identify nearby potential water sources (e.g. pools); consider pre-suppression plan
- Plan for water source installations within or closer to community; consider pre-suppression plan

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

→ **5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)**

5 mi. or less from Agency with Response Authority (VFD)

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency

Community Organization/Governance

→ **GID present; HAS structure for sustained fire prevention and mitigation**

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

→ **Medium (brush)**

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

→ **> 75% of homes meet criteria in Zone 0, 1 & 2**

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- Consider xeriscaping

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

N/A

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

- N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

→ **10% to 30% of lots are undeveloped**

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

→ **> 75% of homes have non-combustible ventilation soffits with mesh or screening**

50-74% of homes have non-combustible ventilation soffits with mesh or screening

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

50-74% of homes have skirting underneath

→ **< 50% of homes have skirting underneath**

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

→ **> 30 feet from the house and surrounding vegetation maintained**

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

N/A

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

→ **> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone**

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- Remove flammable materials and Create 5-foot non-combustible area (Zone 0) around house

COMMENTS

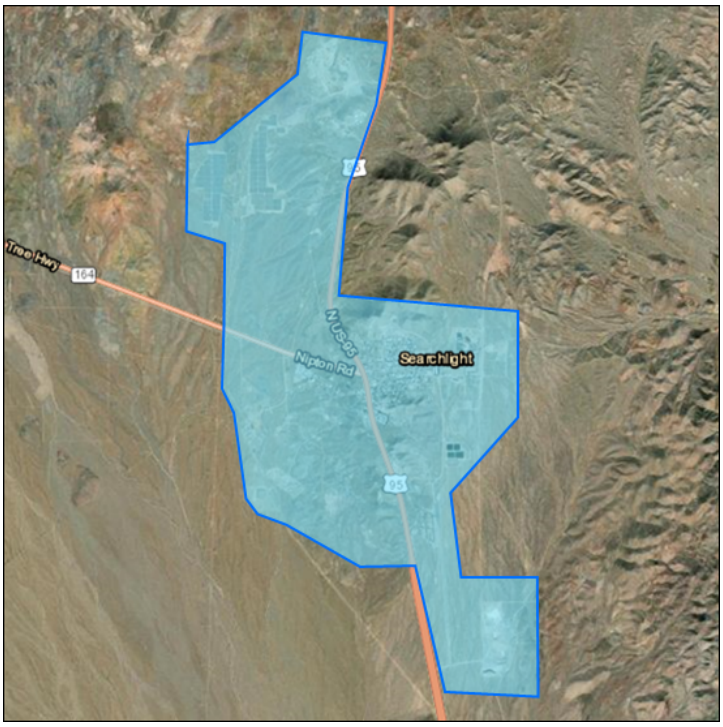
-street names faded or missing.
-one pave road
-water source at fire station

Community Wildfire Risk Assessment

SEARCHLIGHT

Total Assessed Rating

89 - Moderate



Suppression Rating

Moderate Hazard

Surrounding Environment Rating

Moderate Hazard

Structures Rating

Moderate Hazard

Fire Protection District

Clark County

Fireshed(s)

Lake Mohave-Colorado River, Ora Hanna Spring, Upper Piute Wash

Community Information

Latitude	35° 27' 57"
Longitude	-114° 55' 16"
Dwelling Units	367

Size	4,017.06 acres
Community Type	Residential - Mixed
Assessed By:	Josue Gonzalez
Assessment Date:	02-13-2023

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

→ **2 or more roads in/out with SLIGHT response/evacuation complexity**

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- ☐ Keep community ingress/egress open and maintained (cleared of vegetation)
- ☐ Develop community plan for evacuation routes, safe zones, staging areas
- ☐ If community is gated, develop evacuation plan and ensure emergency responder access
- ☐ Ensure residents know their closest exit in case of emergency
- ☐ Ask Local Fire Department about Ready, Set, Go!

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

→ **Roads ends in a cul-de-sac, diameter < 100 feet**

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Coordinate with emergency responders to test cul-de-sac turnaround with their emergency response vehicles

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

→ **Present or inconsistent but wooden, non-reflective, or lettering less than 4"**

Not present

Recommended Mitigation Strategies

- Consider upgrading to reflective, noncombustible street signs to improve emergency response efforts
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

→ **Pressurized hydrants spaced more than 1000 feet apart**

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- N/A

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

→ **GID present; LACKS structure for sustained fire prevention and mitigation**

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

→ **Medium (brush)**

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

50 to 75% of homes meet criteria in Zone 0, 1 & 2

→ **< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures**

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- N/A

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

→ **Slope 6 % - 10%**

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

→ **10% to 30% of lots are undeveloped**

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports

- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

→ **> 75% of homes have non-combustible siding**

50-74% of homes have non-combustible siding

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

→ **> 75% of homes have skirting underneath raised floors/decks**

50-74% of homes have skirting underneath

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS
16 commercial structures with no threat. Water source is pressure lower area of town has dry hydrants, on the slope areas of town have 2.45 stand pipe. Searchlight VFD extend to the following areas. US-95 south to California state line, Nevada state route 164 West to California state line, Nevada state route 164 East Cottonwood Cove RD to lake Mojave. 1% of residents leave away from Searchlight community.

Community Wildfire Risk Assessment

BLUE DIAMOND

Total Assessed Rating

122 - High

Suppression Rating

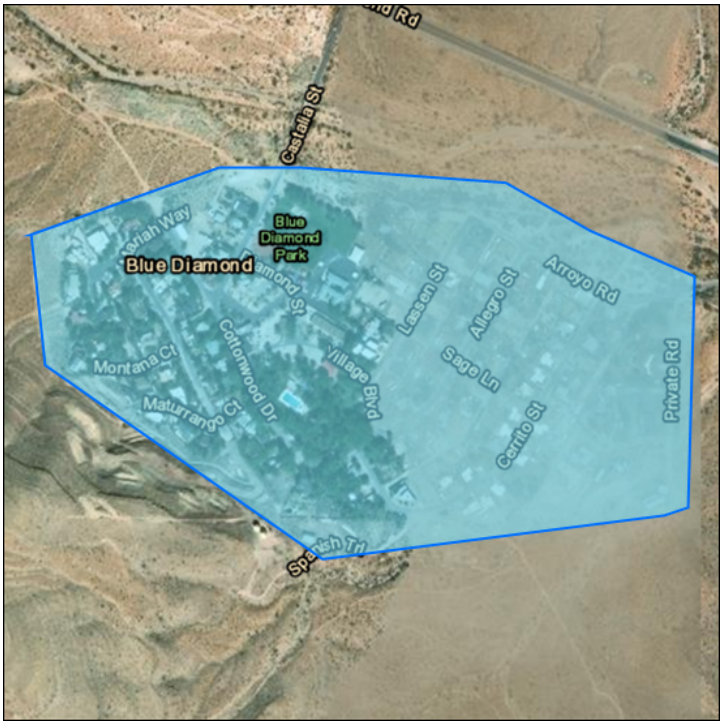
Low Hazard

Surrounding Environment Rating

Moderate Hazard

Structures Rating

High Hazard



Fire Protection District

Clark County

Fireshed(s)

Red Rock Wash

Community Information

Latitude	36° 2' 48"
Longitude	-115° 24' 19"

Dwelling Units	152
Size	86.86 acres
Community Type	Residential - Mixed
Assessed By:	Raul Arroyo
Assessment Date:	06-03-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

→ **2 or more roads in/out with NO response/evacuation complexity**

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Ask Local Fire Department about Ready, Set, Go!

Road Width

→ **Road width is > 24 feet**

Road width is > 20 feet and < 24 feet

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use whenever possible

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

→ **Roads ends in a cul-de-sac, diameter > 100 feet**

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Maintain unobstructed access into cul-de-sacs
- Ensure cul-de-sacs are free of vehicles and/or other items

Street Signs

→ **Present throughout, lettering 4 inches high, non-flammable and reflective**

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

→ **Pressurized hydrants spaced less than 1000 feet apart**

Pressurized hydrants spaced more than 1000 feet apart

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Ensure hydrants and water sources are marked, accessible and properly maintained
- Keep hydrants clear of obstructions and vegetation

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

→ **HOA present; LACKS structure for sustained fire prevention and mitigation**

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

→ **Light (grass)**

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Use brick or stone along the edge of interior fuels/open space to slow the flame spread
- Consider landscaping using single plants or groups within interior fuels/open space to separate fuels
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

Defensible Space

→ **> 75% of homes meet criteria in Zone 0, 1 & 2**

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- Consider xeriscaping

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

Slope 0% - 5%

→ **Slope 6 % - 10%**

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

- N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

No topographical features adversely affect wildland fire behavior

→ **Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)**

Recommended Mitigation Strategies

- Maintain situational awareness of fire danger in your area, as local topographical features can adversely affect wildland behavior

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

→ **> 75% of homes have non-combustible ventilation soffits with mesh or screening**

50-74% of homes have non-combustible ventilation soffits with mesh or screening

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

50-74% of homes have non-combustible siding

→ **< 50% of homes have non-combustible siding**

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

50-74% of homes have skirting underneath

→ **< 50% of homes have skirting underneath**

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

Not applicable

Greater than or equal to 30 feet from slope

→ **Less than 30 feet from slope**

Recommended Mitigation Strategies

- Review suggested defensible space and vegetation management as pertains to building setback

Propane

> 30 feet from the house and surrounding vegetation maintained

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

→ **N/A**

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets

- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone**

Recommended Mitigation Strategies

- N/A

COMMENTS

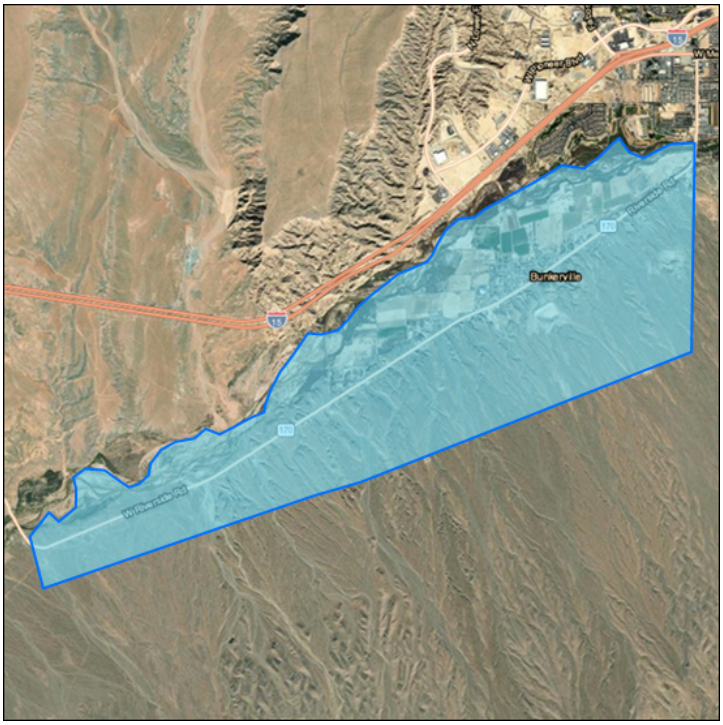
well maintain around the community
park and school with heavy trees present
we to be able to have more selections than just one on each drop down
1 CCFD Vol
10 fire hydrants
HOA present
1 pond Spring Mountain Ranch State Parks

Community Wildfire Risk Assessment

BUNKERVILLE

Total Assessed Rating

56 - Moderate



Suppression Rating

Low Hazard

Surrounding Environment Rating

Moderate Hazard

Structures Rating

Moderate Hazard

Fire Protection District

Clark County

Fireshed(s)

Halfway Wash-Virgin River, Sand Hollow Wash-Virgin River

Community Information

Latitude	36° 45' 31"
Longitude	-114° 8' 35"

Dwelling Units	393
Size	7,245.64 acres
Community Type	Residential - Stick-Built
Assessed By:	Josue Gonzalez
Assessment Date:	06-21-2023

SUPPRESSION ASSESSMENT

Ingress and Egress

→ **2 or more roads in/out with NO response/evacuation complexity**

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency

- Ask Local Fire Department about Ready, Set, Go!

Road Width

→ **Road width is > 24 feet**

Road width is > 20 feet and < 24 feet

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use whenever possible

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

→ **Roads ends in a cul-de-sac, diameter > 100 feet**

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Maintain unobstructed access into cul-de-sacs
- Ensure cul-de-sacs are free of vehicles and/or other items

Street Signs

→ **Present throughout, lettering 4 inches high, non-flammable and reflective**

Inconsistent throughout, lettering 4 inches high, non-flammable and reflective

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

→ **Pressurized hydrants spaced more than 1000 feet apart**

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- N/A

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

→ **Municipal govt present; LACKS structure for sustained fire prevention and mitigation**

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

→ **Medium (brush)**

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

→ **> 75% of homes meet criteria in Zone 0, 1 & 2**

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- Consider xeriscaping

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

N/A

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

- N/A

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

- When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

→ **> 75% of homes have non-combustible ventilation soffits with mesh or screening**

50-74% of homes have non-combustible ventilation soffits with mesh or screening

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

→ **> 75% of homes have non-combustible siding**

50-74% of homes have non-combustible siding

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

→ **> 75% of homes have skirting underneath raised floors/decks**

50-74% of homes have skirting underneath

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

50-74% of homes have NO Wooden Attachments

→ **< 50% of homes have NO Wooden Attachments**

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

→ **N/A**

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

→ **> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone**

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- Remove flammable materials and Create 5-foot non-combustible area (Zone 0) around house

COMMENTS

48 hydrants counted near, by roads. highest danger near river vegetation. structures approx. a quarter mile away from riverside.

Community Wildfire Risk Assessment

CAL/NEV/ARI

Total Assessed Rating

75 - Moderate

Suppression Rating

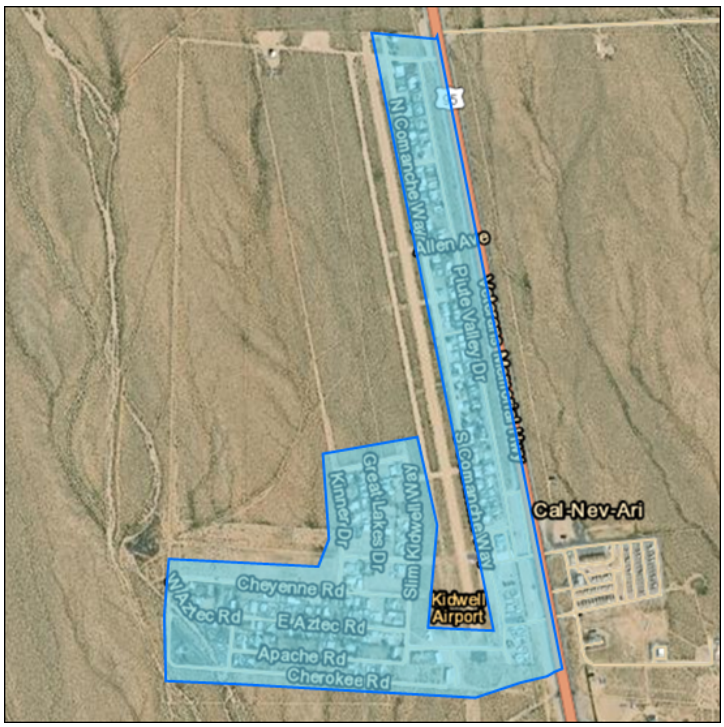
Moderate Hazard

Surrounding Environment Rating

Low Hazard

Structures Rating

High Hazard



Fire Protection District

Clark County

Fireshed(s)

Upper Piute Wash

Community Information

Latitude	35° 18' 9"
Longitude	-114° 52' 59"

Dwelling Units	205
Size	145.81 acres
Community Type	Unincorporated Town
Assessed By:	Josue Gonzalez
Assessment Date:	06-14-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

→ **2 or more roads in/out with NO response/evacuation complexity**

2 or more roads in/out with SLIGHT response/evacuation complexity

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Ask Local Fire Department about Ready, Set, Go!

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

Surfaced road

→ **Non-surfaced road, grade less than or equal to 5%**

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Consider road improvements to reduce the risk driving in extreme grades, tight corners, and road intersections
- Coordinate with fire department to test access with emergency response vehicles

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

→ **Dead end roads <200 feet long**

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Ensure emergency responder are aware of dead-end roads; Consider signing all dead ends.

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

→ **Pressurized hydrants spaced more than 1000 feet apart**

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- N/A

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

→ **5 mi. or less from Agency with Response Authority (VFD)**

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency
- Consider Volunteer recruitment from the Community

Community Organization/Governance

→ **GID present; HAS structure for sustained fire prevention and mitigation**

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

Lacks any structure for sustained fire prevention and mitigation

Recommended Mitigation Strategies

- Host a Community Education Event at least once a year; Become a Firewise USA® Site
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

→ **Light (grass)**

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)

Recommended Mitigation Strategies

- Use brick or stone along the edge of interior fuels/open space to slow the flame spread
- Consider landscaping using single plants or groups within interior fuels/open space to separate fuels
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation

Defensible Space

→ **> 75% of homes meet criteria in Zone 0, 1 & 2**

50 to 75% of homes meet criteria in Zone 0, 1 & 2

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly

- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- Consider xeriscaping

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

- N/A

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

- N/A

Vegetation on Electric Transmission Lines

→ **No above ground electric transmission lines present**

Above ground electric transmission lines are maintained

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

- N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

→ **Fewer than 10% of lots are undeveloped**

10% to 30% of lots are undeveloped

31% to 50% of lots are undeveloped

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- Provide Living with Fire/Firewise construction guidelines to developers /owners
- Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

→ **Electric Underground**

Electric Overhead drop maintained

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable materials (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

Community Wildfire Risk Assessment

MOAPA/LOGANDALE

Total Assessed Rating

120 - High

Suppression Rating

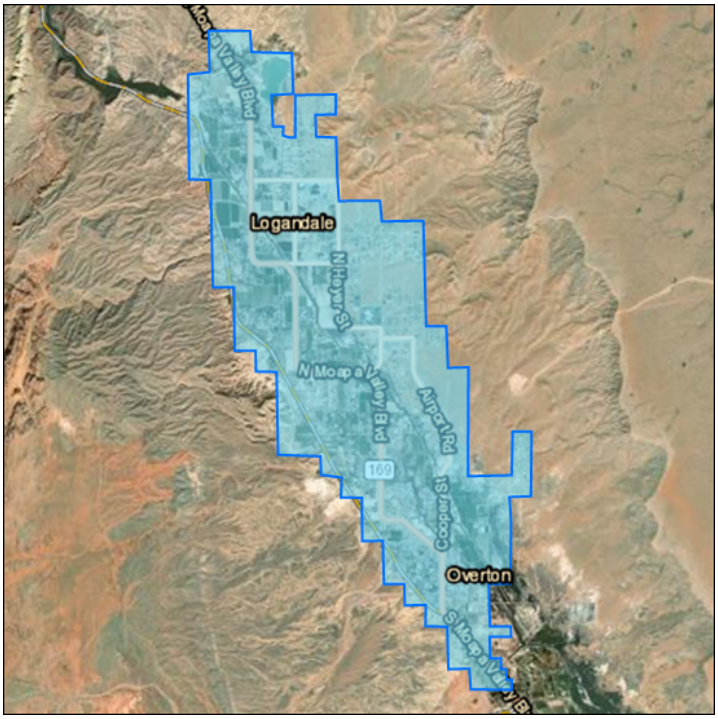
Moderate Hazard

Surrounding Environment Rating

High Hazard

Structures Rating

High Hazard



Fire Protection District

Moapa Valley FPD

Fireshed(s)

Lower Muddy River

Community Information

Latitude	36° 34' 47"
Longitude	-114° 27' 46"

Dwelling Units 1434

Size 8,524.33 acres

Community Type Residential/Commercial

Assessed By: Josue Gonzalez

Assessment Date: 06-13-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

→ **2 or more roads in/out with SLIGHT response/evacuation complexity**

2 or more roads in/out with MODERATE/HIGH response/evacuation complexity

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas
- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency

- Ask Local Fire Department about Ready, Set, Go!

Road Width

Road width is > 24 feet

→ **Road width is > 20 feet and < 24 feet**

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use at all times
- Consider providing pull-offs every 100 yards

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

→ **Roads ends in a cul-de-sac, diameter > 100 feet**

Roads ends in a cul-de-sac, diameter < 100 feet

Dead end roads <200 feet long

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Maintain unobstructed access into cul-de-sacs
- Ensure cul-de-sacs are free of vehicles and/or other items

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

→ **Pressurized hydrants spaced more than 1000 feet apart**

Dry Hydrant(s) / Draft available within the community

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- N/A

Geographic Features

→ **No notable geographical features present to hinder fire suppression**

Suppression efforts hindered by geographical features (e.g. hazardous terrain)

Recommended Mitigation Strategies

- Be aware of local geographic features and plan appropriately in the event of a wildfire approaching your area; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

→ **5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)**

5 mi. or less from Agency with Response Authority (VFD)

> 5 mi. from Agency with Response Authority FD

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Be aware of the importance of early detection and reporting of any emergency

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

→ **Lacks any structure for sustained fire prevention and mitigation**

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site
- Host a Community Education Event at least once a year
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan
- Ensure individual homes are ignition-resistant, hardened, and Firewise/Living with Fire concepts are followed

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

→ **Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)**

Recommended Mitigation Strategies

- Identify heavy fuel areas (jackpots) and consider removal or breaking them up
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Defensible Space

> 75% of homes meet criteria in Zone 0, 1 & 2

→ **50 to 75% of homes meet criteria in Zone 0, 1 & 2**

< 50% of homes meet criteria in Zone 0, 1 & 2 - Light fuels amongst structures

< 50% of homes meet criteria in Zone 0, 1 & 2 - Moderate fuels amongst structures

Fuels heavy/extreme amongst structures & other urban hazards/materials are present

Recommended Mitigation Strategies

- Be aware of the risks from falling embers in relation to nearby fuels and defensible space
- Mow lawns regularly
- Water grass, plants, trees and mulch regularly
- Create a spacing of 30 feet between tree crowns
- Create a non-combustible area (zone 0) within 5 feet of your home, using non-flammable landscaping materials
- Remove dead vegetation from under the deck and within 10 feet of the house; stack firewood away from structures
- ConsiderÂ xeriscaping
- Plant a mixture of deciduous trees (e.g. oak and maple) and coniferous trees (e.g. pine)
- Create fuel breaks like driveways and gravel walkways

Structure-to-Structure Ignition

No Possible Structure-to-Structure Ignition

→ **Possible Structure-to-Structure Ignition**

Recommended Mitigation Strategies

- Work with neighbors to remove/prune vegetation between houses to mitigate structure-to-structure ignition risk; consder non-combustible fencing 5 feet from structure
- Consider use of sprinkler systems to keep vegetation moisture levels up
- Replace flammable roofs, siding, soffits, etc. with nonflammable when possible

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

- N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

→ **Above ground electric transmission lines are maintained**

Above ground electric transmission lines are NOT maintained

Recommended Mitigation Strategies

- Know who to call should there be a problem with electric lines in community

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

- N/A

Adjacency to Wildlands

→ **Not adjacent to wildlands with accumulated fuels**

Adjacent to wildlands with accumulated fuels

Recommended Mitigation Strategies

- N/A

Undeveloped Lots with Restricted Access and/or Not Maintained

Fewer than 10% of lots are undeveloped

10% to 30% of lots are undeveloped

→ **31% to 50% of lots are undeveloped**

Greater than 51% of lots are undeveloped

Recommended Mitigation Strategies

- ☐ Provide Living with Fire/Firewise construction guidelines to developers /owners
- ☐ Consider developing covenant restrictions, if applicable

STRUCTURES ASSESSMENT

Roofing Materials

→ **> 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- ☐ Use fire-resistant roofing material such as metal, tile or Class A shingles
- ☐ Inspect for and address gaps in roofing that can expose roof decking or supports
- ☐ Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

No

→ **Yes**

Recommended Mitigation Strategies

- ☐ Clear branch, leaf-litter and other debris from roof and gutters regularly

- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

50-74% of homes have non-combustible ventilation soffits with mesh or screening

→ **< 50% of homes have non-combustible ventilation soffits with mesh or screening**

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

→ **50-74% of homes have non-combustible siding**

< 50% of homes have non-combustible siding

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house

- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

→ **50-74% of homes have skirting underneath**

< 50% of homes have skirting underneath

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

→ **> 30 feet from the house and surrounding vegetation maintained**

Fewer than 30 feet from the house and/or surrounding vegetation not maintained

N/A

Recommended Mitigation Strategies

- N/A

Electric Utilities

Electric Underground

→ **Electric Overhead drop maintained**

Electric Overhead drop not maintained

Recommended Mitigation Strategies

- Â Keep vegetation pruned and mowed around electric cabinets
- Place non-flammable mulch (rock, stone) around base of electrical cabinets
- Plant less flammable bushes and shrubs around electrical cabinets

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone**

< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone

Recommended Mitigation Strategies

- N/A

COMMENTS

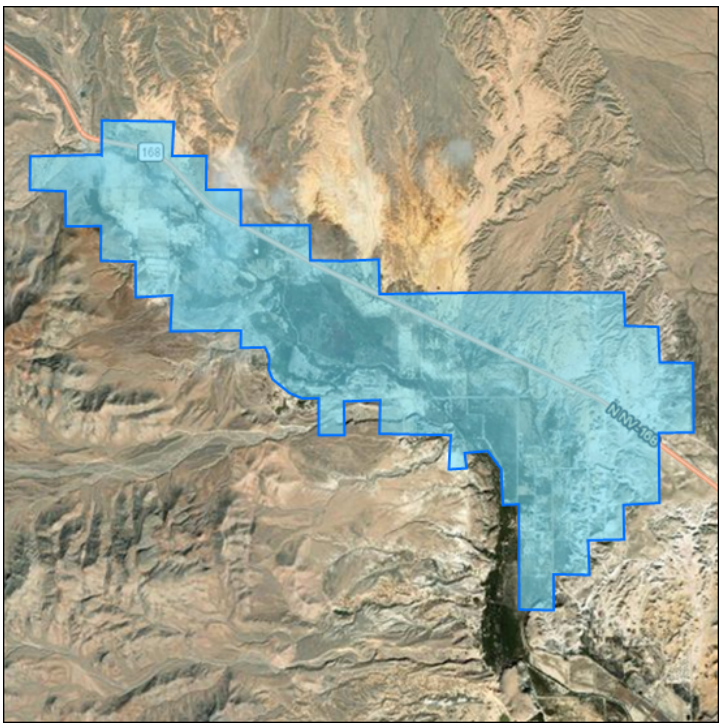
fire hydrants have reflected tape blue and green.
Driveways over irrigation have railroalties.
unpaved road have soft shoulders.
location of private property can be hender access from the river location.

Community Wildfire Risk Assessment

WARM SPRINGS

Total Assessed Rating

209 - Extreme



Suppression Rating

High Hazard

Surrounding Environment Rating

Extreme Hazard

Structures Rating

Extreme Hazard

Fire Protection District

Moapa Valley FPD

Fireshed(s)

Lower Pahranagat Wash, Upper Muddy River

Community Information

Latitude	36° 42' 59"
Longitude	-114° 41' 59"
Dwelling Units	65
Size	3,557.01 acres
Community Type	Residential - Mixed
Assessed By:	Josue Gonzalez
Assessment Date:	06-07-2022

SUPPRESSION ASSESSMENT

Ingress and Egress

2 or more roads in/out with NO response/evacuation complexity

2 or more roads in/out with SLIGHT response/evacuation complexity

→ **2 or more roads in/out with MODERATE/HIGH response/evacuation complexity**

One road in and out (entrance and exit is the same)

Recommended Mitigation Strategies

- Keep community ingress/egress open and maintained (cleared of vegetation)
- Develop community plan for evacuation routes, safe zones, staging areas

- If community is gated, develop evacuation plan and ensure emergency responder access
- Ensure residents know their closest exit in case of emergency
- Conduct an annual evacuation drill with ALL response agencies (Live/Sandtable)
- Ensure adequate notification plan exists/ALL residents know how and when to go.
- Ask Local Fire Department about Ready, Set, Go!

Road Width

→ **Road width is > 24 feet**

Road width is > 20 feet and < 24 feet

Road width is < 20 feet

Recommended Mitigation Strategies

- Keep shoulders of road clear for emergency vehicle use whenever possible

Road Accessibility

→ **Surfaced road**

Non-surfaced road, grade less than or equal to 5%

Non-surfaced road, grade greater than 5%

Non-maintained dirt road

Recommended Mitigation Strategies

- Ensure that road maintenance plan is in place

Secondary Road Terminus

Roads ends in a cul-de-sac, diameter > 100 feet

Roads ends in a cul-de-sac, diameter < 100 feet

→ **Dead end roads <200 feet long**

Dead end roads >200 feet long

Recommended Mitigation Strategies

- Ensure emergency responder are aware of dead-end roads; Consider signing all dead ends.

Street Signs

Present throughout, lettering 4 inches high, non-flammable and reflective

→ **Inconsistent throughout, lettering 4 inches high, non-flammable and reflective**

Present or inconsistent but wooden, non-reflective, or lettering less than 4"

Not present

Recommended Mitigation Strategies

- Replace missing signs; keep visible and clear of vegetation and fine fuels
- Keep street signs visible and clear of vegetation and fine fuels

Driveways

→ **Average driveway allows access to homes**

Average driveway restricts access to homes

Recommended Mitigation Strategies

- Maintain driveway access and clearance

Water Supply

Pressurized hydrants spaced less than 1000 feet apart

Pressurized hydrants spaced more than 1000 feet apart

→ **Dry Hydrant(s) / Draft available within the community**

Other accessible sources within community (pond, lake, etc.)

Water sources located within 4 miles of community (incl heli dip sites)

No water sources in or within 4 miles of the community

Recommended Mitigation Strategies

- Clearly mark and regularly test dry hydrants; coordinate with Local Fire Department
- Keep dry hydrants clear of obstructions and vegetation

Geographic Features

No notable geographical features present to hinder fire suppression

→ **Suppression efforts hindered by geographical features (e.g. hazardous terrain)**

Recommended Mitigation Strategies

- Ensure emergency responders are aware of local geographic features that can hinder fire suppression efforts; consider pre-suppression plan

Local Response Resources

5 mi. or less from Agency with Response Authority (Staffed FD)

5 mi. or less from Agency with Response Authority (Mixed Staff/VFD)

5 mi. or less from Agency with Response Authority (VFD)

→ **> 5 mi. from Agency with Response Authority FD**

Recommended Mitigation Strategies

- Establish and maintain contact with the closest Fire Department; consider pre-suppression plan
- Discuss with closest Fire Department to identify quicker response strategies and other potential solutions

Community Organization/Governance

GID present; HAS structure for sustained fire prevention and mitigation

HOA present; HAS structure for sustained fire prevention and mitigation

Municipal govt present; HAS structure for sustained fire prevention and mitigation

GID present; LACKS structure for sustained fire prevention and mitigation

HOA present; LACKS structure for sustained fire prevention and mitigation

Municipal govt present; LACKS structure for sustained fire prevention and mitigation

→ **Lacks any structure for sustained fire prevention and mitigation**

Recommended Mitigation Strategies

- Work with community to become more proactive towards protecting your life and property against wildfires; Become a Firewise USA® Site

- Host a Community Education Event at least once a year
- Complete Community Risk Mitigation Project(s) as identified by Community Action Plan
- Ensure individual homes are ignition-resistant, hardened, and Firewise/Living with Fire concepts are followed

SURROUNDING ENVIRONMENT ASSESSMENT

Predominant Vegetation

Light (grass)

Medium (brush)

Heavy (timber, overgrown sage, Pinyon/Juniper with dead/down, etc)

→ **Extreme / Slash (Any Combination of contiguous Light, Medium, Heavy)**

Recommended Mitigation Strategies

- Identify heavy fuel areas (jackpots) and consider removal or breaking them up
- Consider removal of ladder fuels that allow fire to climb from lower to higher vegetation
- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees
- Prune trees 6-10 feet from the ground

Structure-to-Structure Ignition

→ **No Possible Structure-to-Structure Ignition**

Possible Structure-to-Structure Ignition

Recommended Mitigation Strategies

N/A

Slope

→ **Slope 0% - 5%**

Slope 6 % - 10%

Slope 11% - 30%

Slope > 31%

Recommended Mitigation Strategies

N/A

Vegetation on Electric Transmission Lines

No above ground electric transmission lines present

Above ground electric transmission lines are maintained

→ **Above ground electric transmission lines are NOT maintained**

Recommended Mitigation Strategies

Work with NDF and/or local fire protection district to alert electric provider (NVEnergy) of needed line maintenance

Topographical Features

→ **No topographical features adversely affect wildland fire behavior**

Topographical features adversely affect wildland fire behavior (box canyons, chimneys, etc.)

Recommended Mitigation Strategies

N/A

Adjacency to Wildlands

Not adjacent to wildlands with accumulated fuels

→ **Adjacent to wildlands with accumulated fuels**

Recommended Mitigation Strategies

When possible, install firebreaks and reduce fuel loads around community boundary to reduce risk from adjacent wildlands; Work with neighboring land owners

STRUCTURES ASSESSMENT

Roofing Materials

> 75% of homes have metal, tile or class A asphalt or fiberglass shingles

→ **50 to 75% of homes have metal, tile or class A asphalt or fiberglass shingles**

< 50% of homes have metal, tile or class A asphalt or fiberglass shingles

Recommended Mitigation Strategies

- Use fire-resistant roofing material such as metal, tile or Class A shingles
- Inspect for and address gaps in roofing that can expose roof decking or supports
- Place angle flashing over openings between the roof decking and fascia board

Debris on Roof and/or Gutters

→ **No**

Yes

Recommended Mitigation Strategies

- Clear branch, leaf-litter and other debris from roof and gutters regularly
- Prune tree limbs away from roof

Ventilation and Soffits

> 75% of homes have non-combustible ventilation soffits with mesh or screening

→ **50-74% of homes have non-combustible ventilation soffits with mesh or screening**

< 50% of homes have non-combustible ventilation soffits with mesh or screening

Recommended Mitigation Strategies

- Â Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Enclose or box-in eaves with non-combustible materials such as metal, cement board or stucco
- Install a 1/8 inch metal screen behind roof vents

Siding

> 75% of homes have non-combustible siding

50-74% of homes have non-combustible siding

→ **< 50% of homes have non-combustible siding**

Recommended Mitigation Strategies

- Keep landscaping materials and vegetation away from combustible siding
- Create 5-foot non-combustible area (Zone 0) around house
- Replace with noncombustible siding when possible

Underskirting

> 75% of homes have skirting underneath raised floors/decks

50-74% of homes have skirting underneath

→ **< 50% of homes have skirting underneath**

Recommended Mitigation Strategies

- Remove combustible vegetation and leaf litter
- Spread gravel or other non-combustible material under the deck
- Screen in the bottom of the deck with metal 1/8-inch screening
- Separate wooden fences from the house with a stone or metal barrier

Wooden Attachments

> 75% of homes have NO Wooden Attachments

→ **50-74% of homes have NO Wooden Attachments**

< 50% of homes have NO Wooden Attachments

Recommended Mitigation Strategies

- Â Maintain debris-free decks (e.g. remove ignitable furniture, planters and covering propane grills, especially during high fire danger periods)
- Consider disconnecting fences from structures, or replacing materials directly attached to structures with fire resistant materials
- Be aware that wooden attachments can act as a fuse to the structure

Building Setback

→ **Not applicable**

Greater than or equal to 30 feet from slope

Less than 30 feet from slope

Recommended Mitigation Strategies

- N/A

Propane

> 30 feet from the house and surrounding vegetation maintained

→ **Fewer than 30 feet from the house and/or surrounding vegetation not maintained**

N/A

Recommended Mitigation Strategies

- Clear ALL flammable debris and materials from around propane tank regularly
- Consider setting propane tank on concrete or gravel pad

Electric Utilities

Electric Underground

Electric Overhead drop maintained

→ **Electric Overhead drop not maintained**

Recommended Mitigation Strategies

- Keep vegetation pruned and mowed around electric right of ways; Drop to home is homeowner responsibility

Non-Combustible Zone 0

> 75% of homes/outbuildings have adjacent 5-ft non-combustible zone

50-74% of homes/outbuildings have adjacent 5-ft non-combustible zone

→ **< 50% of homes/outbuildings have adjacent 5-ft non-combustible zone**

Recommended Mitigation Strategies

- N/A

COMMENTS

High dry fuel components in the area will make rapidly fire spread. Dirt road are not suitable for heavy vehicle driving.

Unknown fire hydrants locations and pressure.