

**OLD BISBEE FIREWISE
ACTION PLAN
November 2022**



Photo taken May 16, 2021, at site of the ZacAttack Fire

OLD BISBEE FIREWISE ACTION PLAN, 2022

INTRODUCTION

Bisbee, Arizona, the current county seat of Cochise County, was founded in 1880 as an Old West mining camp and was found to be one of the richest mineral sites in the world, producing nearly three million ounces of gold and more than eight billion pounds of copper (not to mention silver, lead and zinc). By the early 1900's, the community had a population of 20,000. Activities slowed as the mines played out and the population shrank; large-scale mining operations shut down in 1975. Bisbee has since evolved into a tourist town thanks to its attractive county court administrative center, historic cultural center, thriving arts community, alternative holistic health center, natural beauty, and nearby portal to Mexico. A recreation-minded retirement community, Bisbee hosts frequent unique events which enhance its reputation as a tourist destination.

“Old Bisbee” is the informal name of one of the city’s three main residential neighborhoods. Old Bisbee Firewise was founded by Al Anderson and Anne Carl in 2018 and received a large DFFM grant for fuels reduction work which was unfortunately interrupted by the COVID-19 pandemic. In 2021 the group reorganized with an education-focused mission. As a town with an ever-growing number of new residents unaccustomed to living in wildfire country, we strive to keep locals informed about both Firewise practices and fire safety in general. The group is helmed by Cooper Raphael (cooperraphael@gmail.com, 415-302-7473) and Lindsay Koehler (lindsaykoehler@aol.com, 954-770-2221)

COMMUNITY LOCATION

Bisbee is located ninety miles southeast of Tucson, approximately fifty miles from Interstate 10. State Highways 80 and 92 meet at the city’s center, where Old Bisbee ends and the neighborhoods of Warren and then San Jose begin. Though founded in the Mule Mountains by the copper industry, development spread to the surrounding plains. Physical constraints as well as the geology and topography of the area have made the three developed sections of the city somewhat isolated from one another. The town is approximately four miles from the international border with the Mexican State of Sonora. Old Bisbee’s business, arts, and cultural district (including its historic post office/library building) is located at 31°26'29.30"N, 109° 54'56.32"W.

OWNERSHIP

Old Bisbee encompasses about .60 square miles of private land with approximately 517 residences, though many out-buildings (storage structures, garages, studios, and carports: commonly 1.5 per home) greatly increase the number of structures. With a seasonal influx of part-time residents, the local population of about 1163 grows to about 1337 during winter months. Bureau of Land Management- and Freeport McMoRan-owned lands border many private properties.

TOPOGRAPHY

The City of Bisbee is in the Mule Mountains and the surrounding plains to the south. These mountains have been vastly altered over time by mining activity and are honeycombed with tunnels. In addition, the Sacramento and Lavender Pits to the west of State Highway 80 altered the landscape of the area. Old Bisbee was the site of the original mining camp and early building was primarily in Tombstone

Canyon and Brewery Gulch. When space at street level was full, miners built their homes higher up the steep canyon walls (15% to 60% grade). Retaining walls, stair networks, deep drainage channels and narrow winding roads are characteristic of Old Bisbee. Development covers the mountainsides and will continue as infill takes place on vacant lots.

The terrain is rocky; in many areas, sewer and natural gas lines are above the ground. Drainage flows from the mountains down the Mule Gulch adjacent to Tombstone Canyon and Main Street in Old Bisbee; there is also drainage from the east of Old Bisbee down Zacatecas Canyon and through Brewery Gulch, intercepting the Mule Gulch drainage-way near Goar Park and Lyric Plaza.

VEGETATION

The community is within Madrean Evergreen Woodland and Chihuahuan Desert-scrub Biotic Communities, characterized by oak and juniper woodlands in the higher elevations and shrubs and grassland in the lower elevations like the San Jose district. Juniper and oak trees were formerly abundant in the Bisbee Quadrangle; neighboring hills were dotted with shrubs. As development occurred, these disappeared as they were used for mining, smelting, building construction, and fuel.

Over the years, secondary regrowth has begun a definite reestablishment of native oaks and shrubs on the mountain sides around Old Bisbee. Some areas now sport thick stands of oaks and brush. In addition, hills and plains abound with grasses. Most tailing piles from the mining days remain barren of any vegetation. The aridity of the climate is suspended after the summer rains, and the countryside experiences, for a brief period, a belated spring. Grasses wave over hill slopes and bright multi-hued flowers appear among the rocks. The change is transient, and the greenery soon fades into the aridity common to the high desert.

CLIMATE

Old Bisbee's location in the Mule Mountains protects it from extreme summer heat and winter cold. From October through March, the average daily high is 63 degrees Fahrenheit; average daily low is 36 degrees. From April through September, average daily high/low is 82.5 degrees/55 degrees. Since 1971, climate variability has led to a slight decrease in average high temperatures, while average low temperatures have increased by over one degree Fahrenheit. Annual rainfall is an average of 18.3 inches per year, though overall annual average precipitation has decreased since 1961 by over six inches a year. (Western Regional Climate Center/NOAA National Climatic Data Center 1981-2010, 1971-2000 and 1961-1990 Monthly Normal).

Both steep terrain and daily wind cycles (down-canyon evening and up-canyon morning) potentially contribute to severe fire behavior. Fire season typically extends from late winter through early summer. Beginning in late February or early March, Bisbee receives strong, drying winds from the 'tails' of frontal storms reaching this far south without the precipitation needed to boost fuel moisture significantly. Although winds can be strong in November/December, they are not normally accompanied by precipitation. Annual grasses begin to cure at the end of the monsoon; if winter rains begin soon after, grasses dry when those rains cease. Lightning is rare during this season, but extreme fire weather in March through May has spread fires ignited by humans at astonishing rates. The intensity of fire weather normally subsides in June and July, depending on the strength of the summer monsoon, but humidity remains low through mid-June.

WILDLIFE

Mammal species occurring regularly in our community include mountain lion, bobcat, black bear, Coues whitetail deer, collared peccary, coatimundi, raccoon, gray fox, skunks (striped, hooded, spotted and hog-nosed), woodrats, other cricetid, sciurid and heteromyid rodents, and 24 bat species, including the endangered lesser long-nosed bat. Among other animals, herptiles are represented by numerous lizard species, including Gila Monsters (a species of special concern), snakes, and amphibians. A remarkable diversity of passerine birds, including rare seasonal migrants, make Old Bisbee an internationally renowned birding destination. Other notable birds include the Mexican Spotted Owl (federally listed as threatened), Gould's Turkey and an unusually diverse community of nesting raptors (hawks and especially owls).

FIRE REGIME AND HISTORY

Grasses and heavy brush vegetation types dominate everywhere within the boundaries of our community. Private properties are numerous in this vegetation zone; most fires here have been ignited by human activities like brush burning and misuse of light equipment like welders. Campfires from a transient homeless population have also ignited fires in the past. Fires occur along Route 80 from dragging chains or cigarette butts. Old Bisbee typically experiences at least one brush fire each year and evacuations have been implemented. Bisbee has benefited greatly from the proximity of Libby Air Tanker Base in Sierra Vista, 26 air miles away. The Base hosts a revolving variety of aircraft that can include P2V, P3V, BAe-146's and RJ85. The steep terrain surrounding Bisbee hinders firefighting and this community recognizes that aerial firefighting assets may not always be available when we need them, making Firewise practices even more important to prepare for future fires.

In 1908 a fire ravaged Bisbee's commercial district along Main Street. Reconstruction began immediately, and by 1910 most of the historic district had been rebuilt and remains intact today.

COMMUNITY INFRASTRUCTURE

Ingress/egress to the Old Bisbee Firewise area is limited due to the confines of the canyon in which it lays. Tombstone Canyon (a.k.a. Main Street/West Boulevard) follows the canyon bottom and is the artery that serves most residential neighborhoods. Highway 80 runs parallel to Tombstone Canyon but perches on the canyon wall above town, with access at each end of Old Bisbee. Residential streets are extremely narrow as they originated as mule paths in the mining days.

The Arizona Water Company supplies drinking water to the entire City, but fire suppression water only to the Warren and San Jose sections. Old Bisbee's fire suppression water is primarily stored in a 2.9-million-gallon concrete reservoir which is open to the air. Three other reservoirs on the system need upgrading. Fire hydrants are gravity fed and may not be dependable.

The Bisbee Fire Department makes sure its 2,000-gallon water tender is available in Old Bisbee. The Department responds to all types of emergency situations, including but not limited to fire response within the city limits, wildland fires for the Arizona State Land Department, and hazardous material incidents. The Department inspects all businesses and public access areas for fire safety and is charged with investigating cause and origin of all fires, as necessary. The BFD provides Advanced Life Support

Ambulance Service over 400 square miles throughout Cochise County, as well as inter-facility transport from hospital to hospital. The Department follows the International Fire Code and when fully staffed employs 21 personnel that are trained and certified at levels to include: 1 Fire Chief, 1 Fire Marshall, 1 Captain EMT, 2 Captain Paramedics, 1 Lieutenant Paramedic, 2 Lieutenant EMTs, 2 Firefighter Paramedics and 11 FF EMTs.

COMMUNITY WILDFIRE PROTECTION PLANS/OTHER HAZARD RATINGS

The city of Bisbee has a 2007 CWPP. The land surrounding Old Bisbee was rated High risk due to volatile fuels, steep slopes, lack of recent fires, and difficult access. In 2009, Bisbee was one of ten Cochise County communities listed in the *Arizona-Identified Communities at Risk* (ASFD 2009a) and were given a WUI risk rating for catastrophic wildland fire.

The Cochise County CWPP is due for update in 2023. The application is submitted for a county wide update. The former CWPP identified 700,900 acres of land considered by the Core Team to be at risk of wildland fire and to be included in a community WUI.

COMMUNITY ACCOMPLISHMENTS

Since our first Action Plan was created, fuels reduction work has become common practice in much of Old Bisbee. Many residents are enthusiastic about the topic, engaging neighbors and bemoaning those who do not employ Firewise practices. Abandoned, vacant and dilapidated homes are a problem here, with city government unable or unwilling to take meaningful action against those responsible. This creates a quandary for those who live nearby who take fuels reduction seriously.

Wildfire community preparedness days were held in 2019 and 2020; due to the COVID-19 pandemic in 2021 we urged residents to help neighbors instead of gathering in groups.

A generous gift from the former administrators of Old Bisbee Firewise was pre-payment for a dozen ads in our city's weekly paper (circulation 1,620). We have utilized ads to promote projects, recruit volunteers, educate residents on Firewise practices, and to request the reporting of hours worked/dollars spent to assure our national recertification with Firewise USA.

The former OBF administration also paid for a year of underwriting on our local low power radio station, KBRP (96.1 FM). Underwriting drives listeners to our website and ensures name recognition.

Since our re-invention as an educational organization in the fall of 2021, we have worked hard to spread the Firewise message. In April of 2022, we attempted to reach every home in town with info on Firewise practices, utilizing a 20-member crew of passionate OBF volunteers. When possible, volunteers engaged residents; if no one was at home, a packet of materials with a letter from OBF was left. The program kicked off with an informational table at our Old Bisbee Post Office (a powerful location as we do not get USPS mail delivery in Old Bisbee: all residents must visit the post office to receive mail). Cochise County's Deputy Director of Emergency Management joined us for the post office event, sharing "pillowcase preparedness," a demonstration of go-bag components, and signing residents up for the county's AlertSense program.

The winter of 2022/23 marks the third year of a partnership which extends our educational reach well beyond Old Bisbee. At the suggestion of a local Firewise fan and with generous local funding, we created a free space heater exchange program which swaps up to two new, safe heating units for older, unsafe

units (those either in bad repair or which do not have automatic tip-over shutoff). Old Bisbee Firewise manages advertising and social media; our Bisbee Fire Department does the exchanges; and Step-Up Bisbee/Naco a local organization involved with home repairs for those who cannot afford them, provides funding. The program has flexed through the years, sometimes offering free fire extinguishers, or installing combo CO/smoke detectors in the homes of program participants. The program is promoted thanks to our award-winning local library (both an in-library display and via their e-newsletter, circulation 550), an active town senior center, the Bisbee Wire (local e-newsletter, circulation 720), social media, and an announcement advertisement in our local weekly paper.

After six fires within the first four months of 2022 (both structure and wildfire), our town's senior center asked us to give a talk on Firewise practices. This drew attendees not just from Old Bisbee, but from the neighborhoods of Warren and San Jose, as well. County representatives presented info on the AlertSense program and at-risk population registry. We encouraged residents to prepare "go bags" and to consider evacuation planning in advance of an emergency.

Throughout the year, we utilize Facebook and Nextdoor posts to reach residents: these provide a two-way communication channel, allowing us to dispel myths and share Firewise practices. Again, this effort extends our reach well beyond Old Bisbee.

We continue to do homeowner assessments when asked.

Thanks to our relationship with our county's Deputy Director of Emergency Management, we recently participated in Cochise County's ongoing Multijurisdictional Hazard Mitigation Plan revision.

COMMUNITY PROJECT GOALS

A Wildfire Community Preparedness Day will occur on May 6, 2023.

To extend our reach beyond social media posts and single-issue newspaper ads, we are working on a yard sign project which we hope will cement Old Bisbee Firewise as a visible and potent force in the entire city. We are creating a javelina mascot who will share Firewise practices and fire safety tips. The signs will be available to any town resident for display and will feature the message "We CAN Protect Bisbee from Fire!" as well as a QR code to drive viewers to our website's educational section. We hope to roll out this program as the 2023 wildfire season begins.

We will continue to utilize Facebook, Nextdoor and our town's weekly newspaper to share Firewise practices and educate town residents about fire safety in general.

We have been tracking new home purchases in Old Bisbee, as many new residents have never lived in an area where wildfire is a risk. Our volunteers made a point of reaching these properties with an educational welcome packet in the April 2022 educational campaign; we hope to continue this New Homeowner campaign in the year ahead.

COMMUNITY INVESTMENT

Our website tracks hours worked and dollars spent on Firewise practices by Old Bisbee residents. As of October 28, 2022, the site reflected 1,401 hours worked and \$35,721 spent.

Not necessarily reflected in the above are the hours spent by the 20 volunteers who walked every street in town, either engaging with neighbors or leaving educational materials.

To continue to assure that Old Bisbee residents fulfill their minimum investment of time/dollars on Firewise projects, we will: continue to run advertisements in our town's weekly newspaper; post on Facebook and Nextdoor; send occasional email campaigns to the 364 members who use email.

COMMUNITY FIREWISE DAY

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A Community Preparedness Day is planned for May 6, 2023.