



Boise County Idaho
Community Wildfire Protection Plan
2023



Pioneer Fire, 2016 – National Forest Service

This document is intended to be used for coordination and collaboration only.

The 2023 Boise County CWPP is not a decision document.

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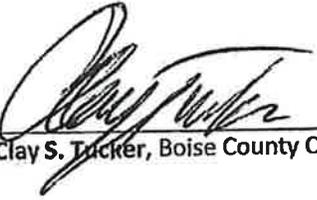
Declaration of Concurrence



Steven M. Twilegar, Boise County Commissioner

10.31.23

Date



Clay S. Tucker, Boise County Commissioner

10/31/23

Date



Lindy E. Lindstrom, Boise County Commissioner

10/31/23

Date



Colton McCarthy, Boise County Firefighters Association

10/30/23

Date



Tyre Hofeltz, Community Fire Program Manager,
Idaho Department of Lands

11-1-23

Date

Introduction

This Community Wildfire Protection Plan is the update to the 2012 Boise County CWPP, as well as the wildfire section of the Boise County Multi-Jurisdiction All Hazard Mitigation Plan (AHMP) that was completed May 23, 2018. This CWPP will be incorporated into the next update of the Boise County AHMP in the wildfire section and in the appendices.

Planning Participants

Boise County Emergency Management	United States Forest Service
Clear Creek Volunteer Fire Department	National Forest Foundation
Wilderness Ranch Fire Protection District	Idaho Department of Lands
Idaho City Fire Protection District	Boise County Planning and Zoning
Garden Valley Fire Protection District	Centerville Volunteer Fire Department
Thorn Creek Volunteer Fire Department	Robie Creek Volunteer Fire Department
Horseshoe Bend Fire Protection District	NOAA Boise

County Description

Geography

Boise County, Idaho consists of approximately 1,908 square miles, with elevations ranging from 2,700 feet to over 10,800 feet above mean sea level (AMSL). The mountainous terrain of Boise County includes the Boise River Mountains, the southern end of the Salmon River Mountains, and part of the Sawtooth Mountains. Federal or State managed lands constitute approximately 84% of the County and border much of the remaining 16% land base that is privately owned. Counties that border Boise County include Ada, Gem, Elmore, and Valley Counties.

Current Population and Population Trends

The population of Boise County is about 8,333 as of July 1, 2022, per the United States Census Bureau. The county seat is located in Idaho City, Idaho. Other populated areas include the communities of Horseshoe Bend, Crouch, Garden Valley, Placerville, Centerville, Lowman, Gardena, and Grandjean. Boise County is seeing a trend of increase in residents which will result in increased demand on County highways, emergency services and other County infrastructure assets.

Residential private land development in Boise County continues to increase. Some of the numerous subdivisions in Boise County include: Wilderness Ranch, Robie Creek, Duquette Pines, Star Ranch, Clear Creek, Terrace Lakes, Castle Mountain, Pine Tree Ranch, Rivers' Point, Scriver Bluff, Payette River Hot Springs, Valley Hi, and Frazier Creek. Many subdivisions in these and other areas are inadequately characterized, thereby hampering quick and efficient response during wildfires.

State Highways 21, 55, and the Banks-Lowman Highway provide convenient access from Boise County to the greater metropolitan Boise area, the state's economic and governmental hub. Driving times from Garden Valley, Horseshoe Bend, or the Highway 21 corridor range from 30 to 60 minutes, parts of the county are ideal for commuters seeking a scenic, rural lifestyle, or for part-time or second-home residents.

Climate

Climate in Boise County is extremely variable due to the altitude differences. Annual precipitation in Idaho City is 21.3 inches with Garden Valley registering 24 inches. Very little precipitation falls during summer months with most rain coming from thunderstorms. July is the driest month when precipitation averages 0.45 inches in Idaho City and .49 inches in Garden Valley. Climate records show that for the county, 43% of moisture is received during winter months, 25% in spring, 9% in summer and 23% in the fall. Snowfall provides 30% of the total moisture. Snowfall provides 30% of

the total moisture. Seasonal snowfall averages: 71 inches in Garden Valley, exceeding 300 inches above 6,500 feet (mean sea level) AMSL.

Summers are generally warm with temperatures averaging a high of 88 degrees Fahrenheit (°F) and a low of 44° during July in Idaho City, and a high-low average of 91° F and 47° F in Garden Valley during this same period. The climate record is based on weather observations made by NOAA's Cooperative Observer Program (COOP). These stations are located in Lowman at an elevation of 3,920 feet (1909-2008; Garden Valley, at elevation of 3,100 feet, 1893-2016 and Idaho City, at an elevation of 3,965 feet (1894-2013) and Centerville, at an elevation of 4209 feet (1949-2016, 2022-present).

Temperature data show that the average annual high temperature at Lowman, garden Valley, and Idaho City has risen, compared to previous years, with less average precipitation. This data appears to corroborate anecdotal observations of hotter, drier summers in Boise County in the last few decades. The weather conditions, coupled with the changed vegetation conditions described below, likely have contributed to larger, more severe wildfires in recent years.

Vegetation

Boise County is dominantly forested area, exhibiting timber species of Ponderosa Pine (*Pinus Ponderosa*), Douglas Fir (*Pseudotsuga Menziesii*), Subalpine Fir (*Abies lasiocarpa*), Grand Fir (*Abies Grandis*), Lodgepole Pine (*Pinus Contorta*) and Englemann Spruce (*Picea Engelmannii*). Understory within the forested areas consistz of arrowleaf balsam root (*Balsamoriza Sagittata*), Snowbrush (*Ceanothus Velutinus*), Pinegrass (*Calamagrostis Rubescens*), Elksedge (*Carex Geyeri*) Creeping Oregon Grape (*Berberis Repens*), Serviceberry (*Amelanchier Alnifolia*), Snowberry (*Symphoricarpos Alba*), Ninebark (*Physocarpus Malvaceus*), Wild Strawberry (*Fragaria Sp.*), Dogbane (*Apocynum Sp.*), and Syringa (*Philadelphus Lewisii*). Sagebrush/Grass Communities are common at lower elevations or on south and southwest aspects. The lower elevations transitions to Ponderosa pine Forests in most of the county with some mixed fir at higher elevations on north, west, and east aspects. At higher elevations Spruce/Fir and Lodgepole Pine Forests are common. Most privately owned lands are within the Sagebrush/Grass or Ponderosa Pine vegetative areas of Boise County.

Fire has played an important role in the development of the vegetation in the County. Exclusion of fire, or mechanical treatment of the Ponderosa Pine and other forests of the County, has resulted in increased wildfire fuels accumulation, with overabundant seedlings and saplings on areas of private and public lands. This accumulation, combined with development in, or adjacent to the Ponderosa Pine forests of the County, have increased risk of economic loss by wildfire to residents of these areas. Historic large wildfires that occurred in Boise County from 1910 to 1955 have produced regenerated stands of Ponderosa Pine. These areas have been protected from wildfires and represent a fire regime condition that can yield additional large wildfires.

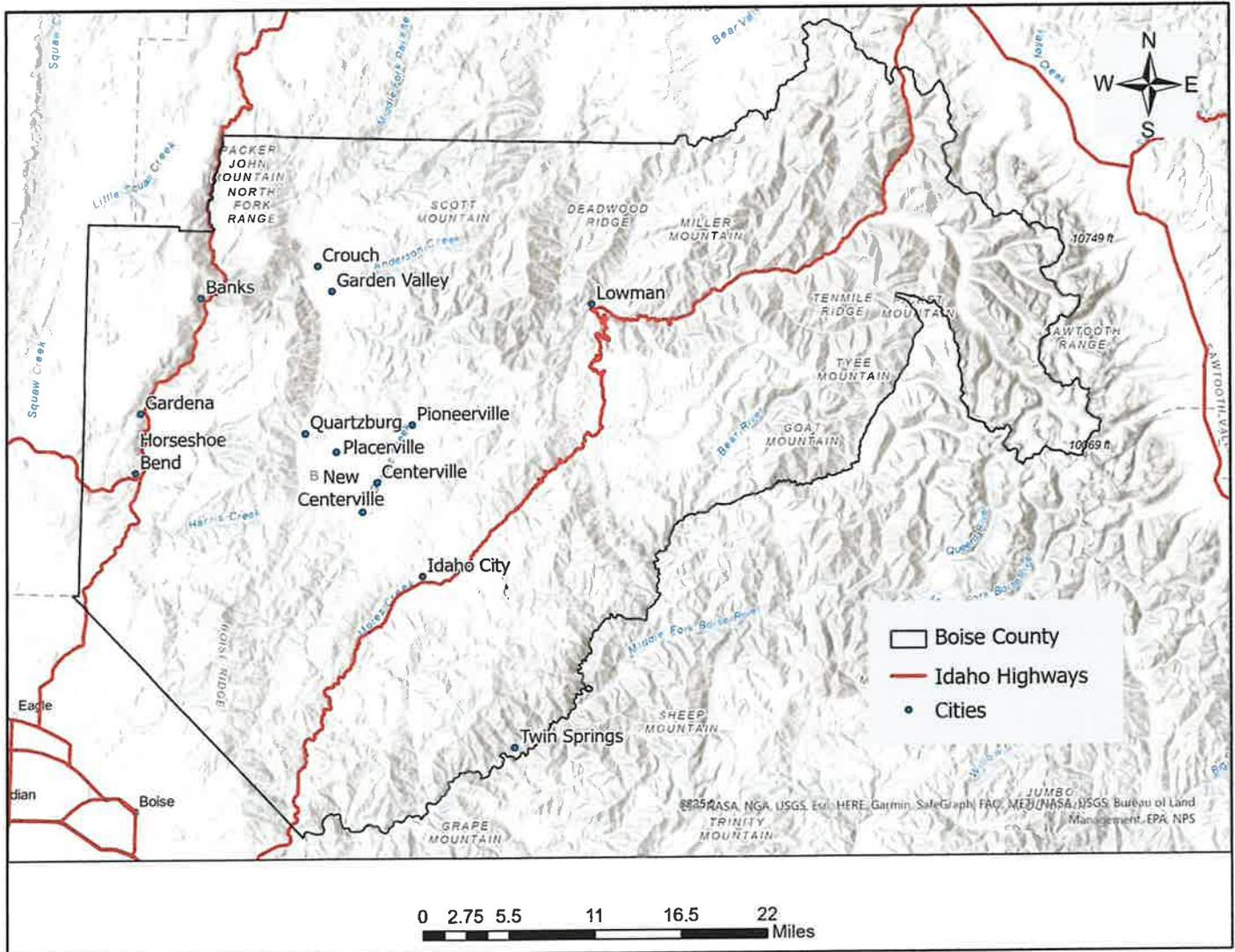
Invasive plant species in Boise County that were not historically present will out compete native vegetation after a wildfire. These invasive species (such as cheatgrass) cure early providing available fuel to carry wildfires at high rates of spread in steep terrain or windy conditions. The restoration of areas burned by wildfires is critical to native plant species being able to compete with invasive species. Post wildfire restoration (seeding) combined with watershed protection and soils stabilization is a priority for lands in Boise County. Vegetative restoration after large wildfires in Boise County is an added expense to landowners or managers.

The vegetation regimes in Boise County and their condition can serve as a significant factor in predicting wildfire hazard. Boise County Fire Regimes and Conditions displays these conditions and is correlated to the wildland Urban Interface Watersheds.

The grass and shrub and vegetation in the lower elevations of the South Fork and Main Payette River near Lowman, Garden Valley, and Banks is critical winter range for deer and elk. Lower elevation portions of the Boise River along Arrowrock and Lucky Peak Reservoirs and Mores Creek are also critical big game winter range. Vegetation in Boise County is instrumental in providing stability to and preventing soil erosion.

Geology

Boise County is within the Idaho Batholith, which is a granitic intrusion of the late Cretaceous period. Only small portions of the County are level, with the predominant mountainous landscape brought about by historic uplifts, faults, fault blocks, alluvial deposits and stream cutting action that has created steep narrow canyons. About 70% of Boise County has slopes steeper than 40%.



Wildlife

Boise County has over 80 different species of mammals occupying the County's wide variety of habitats. The Idaho Department of Fish and Game manages wildlife populations and the USDA-Forest Service, Bureau of Land Management, U.S. Army Corps of Engineers, and Idaho Department of Lands are responsible for wildlife habitats on lands they manage. Large mammals that are found in Boise County include: mule deer (*Odocoileus hemionus*), whitetail deer (*Odocoileus virginianus*), elk (*Cervus elaphus*), mountain goat (*Oreamnos americanus*), black bear (*Ursus americanus*), moose (*Alces alces*), mountain lion (*Puma concolor*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), wolverine (*Gulo gulo*), and gray wolf (*Canis lupus*). Other mammals within the county are snowshoe hare (*Lepus americanus*), cottontail rabbit (*Lepus sylvaticus*), red fox (*Vulpes vulpes*), badger (*Taxidea taxus*), beaver (*Castor Canadensis*), pine marten (*Martes Americana*), North American porcupine (*Erethizon dorsatum*), striped skunk (*Mephitis mephitis*), and several species of bats.

Uplandbirds present in Boise County include: blue grouse (*Dendragapus obscurus*), spruce grouse (*Falciennis Canadensis*), chukar partridge (*Alectoris chukar*), gray partridge (*Perdix perdix*), California quail (*Callipepla californica*), mountain quail (*Oreortyx pictus*), ring-necked pheasant (*Phasianus colchicus*), wild turkey (*Meleagris gallopavo*), Raptor species found are: golden eagle (*Aquila chrysaetos*), osprey (*Pandion haliaetus*), prairie falcon (*Falco mexicanus*), red-tailed hawk (*Buteo jamaicensis*), wintering bald eagles (*Haliaeetus leucocephalus*). Portions of Boise County is a major raptor migration route from parts of northern North America to wintering areas in the southern United States, Mexico, and parts of Central and South America.

Over 70 species of birds associated with water are found in meadows, rivers, streams, lakes, reservoirs, and small ponds within the County. Waterfowl present include: Canada goose (*Branta Canadensis*), wood duck (*Aix sponsa*), mallard (*Anas platyrhynchos*), gadwall duck (*Anas strepera*), common merganser (*Mergus merganser*), common goldeneye duck (*Bucephala clangula*), bufflehead duck (*Bucephala albeola*), Shore birds include: rails (*Rallidae*), killdeer (*Charadrius vociferous*), curlews (*Numenius sp.*), plovers (*Charadriidae*), sandpipers (*Scolopacidae*), yellowlegs (*Tringa sp.*), and phalaropes (*Phalaropus sp.*) common loon (*Gavia immer*) grebes (*Podicipedidae*), herons (*Ardeidae*) shearwaters (*Procellariidae*) cormorants (*Phalacrocorax sp.*), and American white pelican (*Pelecanus erythrorhynchos*) can also be found in the County.

Over 140 song birds are common to Boise County with more being identified each year through the Idaho Bird Observatory located adjacent to the Boise/ADA County lines. Common song birds seen in Boise County include: woodpeckers (*Picidae*), American robin (*Turdus migratorius*), crows and jays (*Corvidae*), dippers (*Cinclus sp.*) blue birds (*Sialia sp.*) hummingbirds (*Trochilidae*) sparrows (*Hirundinidae* and *Emberizidae*) finches (*Fringillidae*), grosbeaks (*Cardinalidae*), common raven (*Corvus corax*), waxwings (*Bombycilla sp.*), wrens (*Troglodytidae*), nuthatches (*Sitta sp.*), and warblers (*Parulidae*). Boise County also serves as a major migration route to songbird wintering areas.

Recreation

Boise County is the closest mountain recreation area to the Treasure Valley and as such, recreationists flock to federal and state lands within the county. Motorcycling, camping, fishing, and big-game and upland bird hunting are very popular during the summer and fall. The county includes portions of several Idaho Department of Fish and Game hunting units. In 2009, the Forest Service designated a system of routes for public motorized wheeled-vehicle travel on the Emmett and Idaho City Ranger Districts (including portions within Boise County) and eliminated use of unauthorized, user created routes.

The paved road system in Boise County is heavily used during all seasons by recreationists, as it connects Treasure Valley residents to major recreational activities in Boise County and counties to the north and northeast. This traffic affects and is affected by wildfire as highways are closed or lanes restricted to allow for safe suppression activities, smoke impairs visibility, and tourism and its economic effects are reduced.

The popularity of recreation within the county has implications for wildland fire and its management. Improperly extinguished campfires and warming fires are a common source of wildfires, especially since much of the camping within the county occurs along river canyons where ignitions can be accelerated by upslope winds, steep terrain and resulting "preheating" of uphill fuels. Campers, hikers and other recreationists may need to be evacuated as wildfires spread into remote areas with limited access. Hunters and outfitters and guides can be displaced if wildfire extends into hunting seasons, resulting in inconvenience and in some cases, loss of extensive revenue and investment.

Water based recreational activities in Boise County include: boating, water skiing, fishing, rafting, kayaking, swimming, and hot spring visitation. Land based activities include, but are not limited: camping, hiking, mountain biking, birding, hunting, snowmobiling, gold panning, snowshoeing, downhill and cross country skiing.

Bogus Basin Ski Area is located in Boise County and hosts numerous skiers during winter months; although, winter vehicle access to the ski area is through the City of Boise and portions of Ada and Boise Counties.

Bodies of Water: Rivers, Creeks, Watersheds

The main waterways in Boise County are the Main, North Fork, Middle Fork and South Fork of the Payette River, the Middle Fork and North Fork of the Boise River, the Deadwood River which enters the South Fork Payette west of Lowman, Idaho, Lucky Peak and Arrowrock Reservoir. The North Fork and South Fork of the Payette River are well known as white-water rivers. These bodies of water attract many visitors for recreation. Primary water recreational activities in Boise County are fishing, boating, whitewater rafting, kayaking, swimming, canoeing, and water skiing Lucky Peak and Arrowrock Reservoir.

In addition to recreation, the rivers provide a water source for engines and helicopters during wildfire suppression operations. Some rivers in Boise County are easily accessible, with either a direct or adjacent road access. Other rivers or portions of rivers are located in roadless or wilderness areas. River flow rates generally peak in June with low flow rates in August and September.

Other important creeks and/or drainages in Boise County include: Grimes Creek, which drains to Boise Basin; Clear Creek a tributary to the South Fork Payette River at Lowman; Mores Creek, adjacent to State Highway 21 through and North of Idaho City. Harris Creek, adjacent to the Harris Creek county road, is a tributary to the Main Payette River at Horseshoe Bend, and Alder creek county road. Numerous other creeks and watersheds support developed areas throughout Boise County.

Watersheds in Boise County directly influence downstream water use for irrigated farm lands in Gem County and electrical power generation at Black Canyon Dam, also in Gem County. Watershed protection, stabilization, and water quality is a high priority for the County's Private, State, and Federal land managers or owners.

Given the shallow, granitic surface soils throughout much of the county, large-scale, lethal wildfires can indirectly but significantly affect water quality. Throughout recent years, intense rainfalls on burned, denuded slopes have resulted in mudslides and debris flows that often block or temporarily reroute streams, and damage adjacent roads.

Boise County's streams and reservoirs provide diverse aquatic habitats and support a variety of fish species including cutthroat, rainbow, brook trout, steelhead trout, and northern squawfish and sculpins. Trout thrive in the cold, clear streams of the Boise and Payette River drainages.

Transportation and Commuting

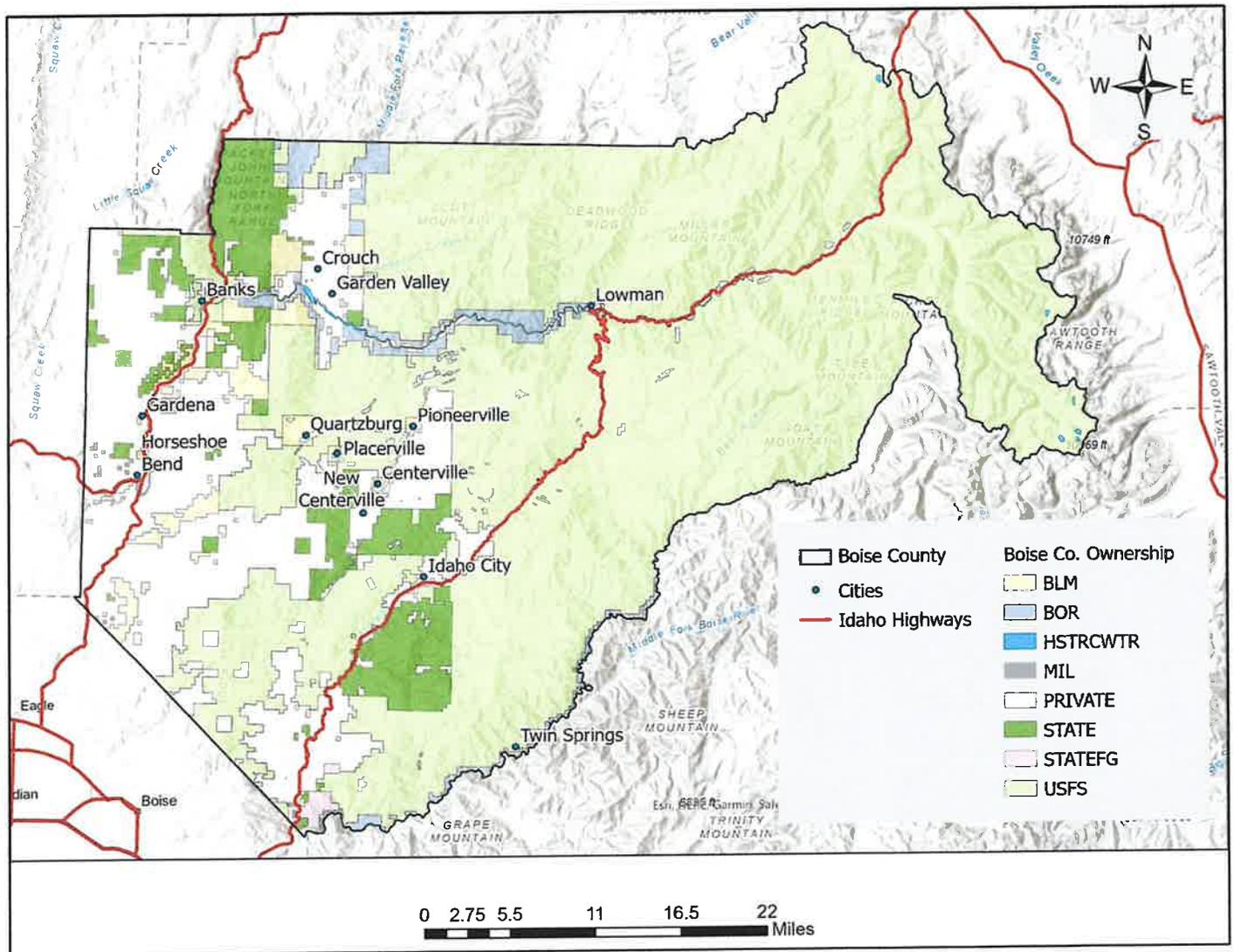
Although Boise County is relatively vast, it has a limited network of improved highways. Most traffic occurs on paved two-lane State Highways 21, 55 or 52 or the two-lane paved Banks-Lowman Highway, which provides access to the Crouch/Garden Valley area and which connects State Highway 55 to State Highway 21 at Lowman.

The county road department is responsible for maintaining 289 miles of roads. Historically, Forest Service timber revenues funded much of the road maintenance. Today, road funds come largely from Secure Rural Schools and Community Self-Determination Act (SRS), and from state sources. The SRS is designed to provide stability and predictability to the annual payments made to states and counties containing Forest Service and BLM lands. Further reauthorization is uncertain, and future, long-term funding for road maintenance from this source remains in jeopardy.

Many roads within the county are privately owned and the county is not responsible for their maintenance. Although early residential developments were often built with little attention to or requirements for firefighting or emergency access, new subdivisions are required to have private and public road design to comply with approved, strictly enforced county engineering standards.

There is extensive use of the road system in Boise County by out-of-county traffic. The existence of Federal and State forests draws high numbers of recreational users participating in various spring, summer, fall and winter activities. The paved road transportation system in Boise County connects Ada and Canyon County residents to major recreational activities in Boise County and counties north or northeast of Boise County. Weekend traffic flow on Highway 55 and

Highway 21 increases dramatically. Additional traffic control is needed on holidays and most weekends through the summer months at the Highway 55 junction with the Banks/Lowman Road. Boise County receives no additional funds for added maintenance or road deterioration associated with this use. There are no highway districts in Boise County except for the Middlefork of the Boise River Road, which is maintained by the Atlanta Highway District in neighboring Elmore County. The County Road and Bridge Department maintains all county roads, including the Banks/Lowman Road (formerly old Highway 17).



USDA-Forest Service Roads

The USDA-Forest Service, Boise National Forest, has built and maintained numerous two-lane gravel roads throughout the county for recreation, logging, and mining. Some of these have been closed and many are currently gated with access allowed for seasonal use or during a wildfire. The Boise National Forest has recommendations and requirements for these roads, and a travel plan with requirements for the trail system and off road or trail travel.

The Forest's Land and Resource Management Plan (Forest Plan) includes a Forest wide objective (FROB06) to identify roads not needed for land and resource management and evaluate them for decommissioning. For example, in 2005, approximately 114 miles of classified (authorized) roads were decommissioned and removed from the Forest transportation system. Approximately 87 miles of unauthorized roads were also decommissioned. All of these roads were located in the Rabbit Creek area on the Idaho City RD in Boise County. Many were overgrown, unused roads

revealed after the 1994 Idaho City Complex wildfire. Nonetheless, depending on the resulting road network, obliterating roads may decrease access and/or increase response time for firefighters.

Aviation Facilities

Boise County has no regularly scheduled commercial (passenger carrying) flights. Airstrips in Boise County are either privately or U.S Forest Service-owned or considered back country airstrips with or gravel surfaces. Forest Service stations at Garden Valley and Lowman both have heliports, the Lowman heliport is for limited use. The Garden Valley heliport is in use throughout the summer by U.S. Forest Service helicopters assigned to wildfire missions. The airstrips and heliports support various fixed and rotor-wing aircraft during large multiple fires.

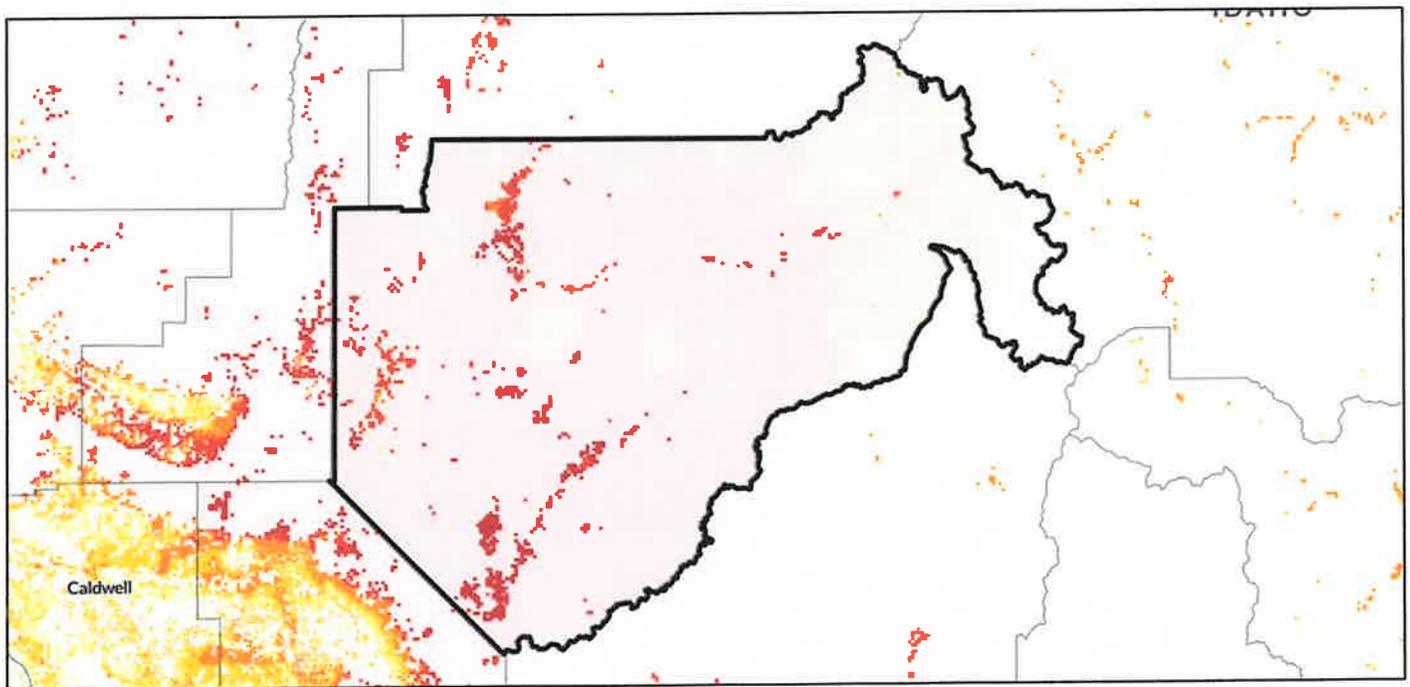
A grass airstrip is located in Garden Valley and maintained by the Idaho Department of Transportation (Division of Aeronautics). No services are available. The airstrip is snow covered during winter months. A grass airstrip is located at Warm Springs Campground northeast of Lowman on the north side of Highway 21 and the Payette River. No services are available. It is not maintained during winter months. The Idaho City airstrip is operated and maintained by the U.S. Forest Service. This is a gravel airstrip approximately 5,000 feet long, with daylight only landing, and no services. A private airstrip is located in the Horseshoe Bend area.

Most of the airstrips also experience increased traffic during weekends and holidays, largely for recreational use. Temporary Flight Restrictions (TRFs) implemented to restrict air access during wildfires can affect this recreational use.

Wildland Fire Risk Assessment

Wildfire Risk to Homes

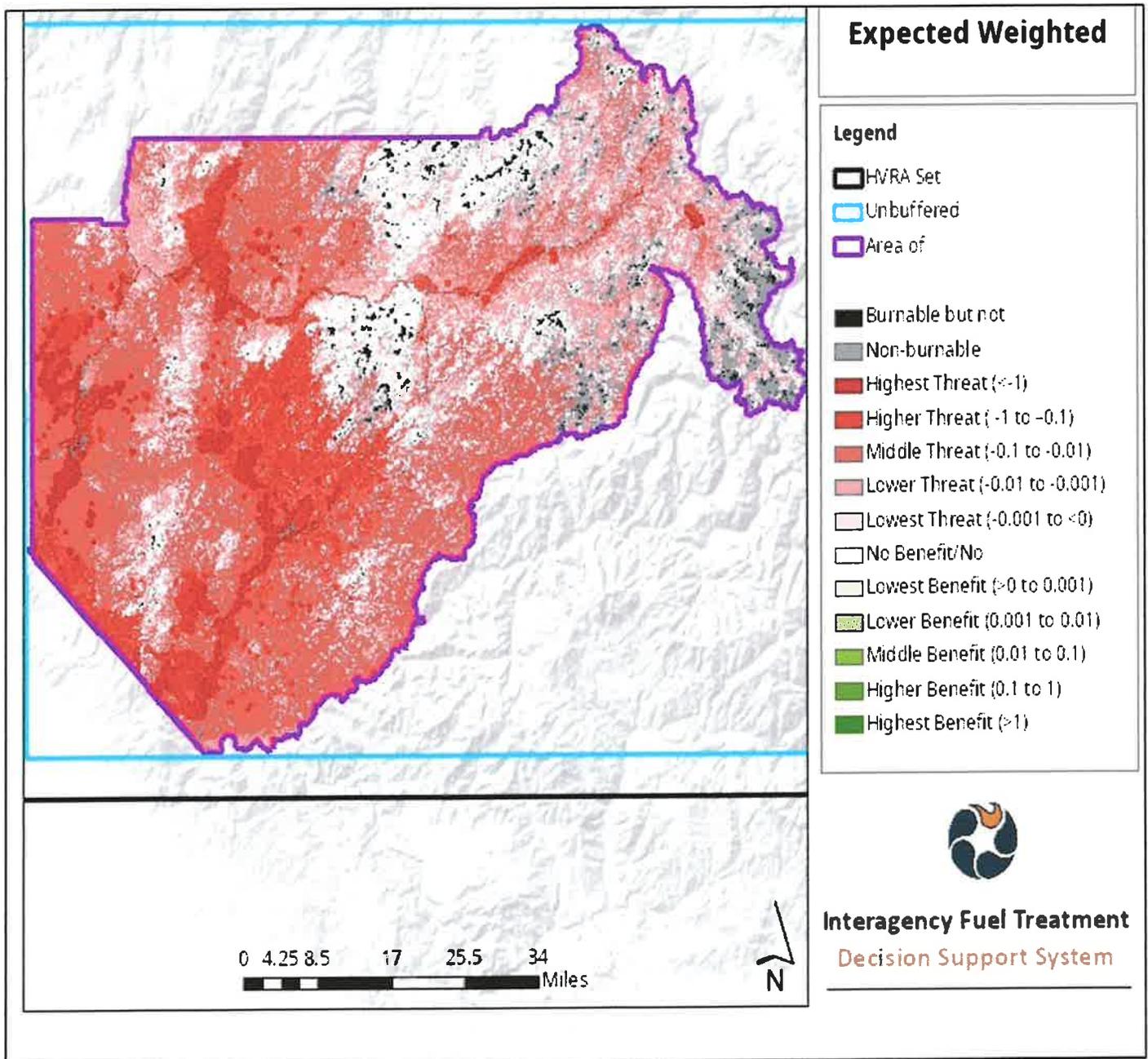
Boise County is in the 100th percentile in risk to homes in the US. The map below, highlighting Boise County, shows populated areas (places with homes) only. Dark red areas are where homes are most at risk. Populated areas in Boise County have, on average, greater risk than 99% of counties in the US.¹



¹ <https://wildfirerisk.org/explore/risk-to-homes/16/16015/>

IFTDSS Fire Risk Assessment and Map

Boise County conducted a risk assessment using the Interagency Fuel Treatment Decision Support System (IFTDSS).² The assessment produced a report with landscape burn probability model outputs. The model included for planning purposes in this CWPP is the Expected Weighted NVC (Net Value Change) which provides an overview of the relative magnitude and distribution of risk. This output combines inputs that address 1. Likelihood; 2. Intensity; and 3. Susceptibility & Importance. It is one tool available for determining where best to treat fuels or to allow for unplanned ignitions to reduce risk.³



² https://iftdss.firenet.gov/landing_page/

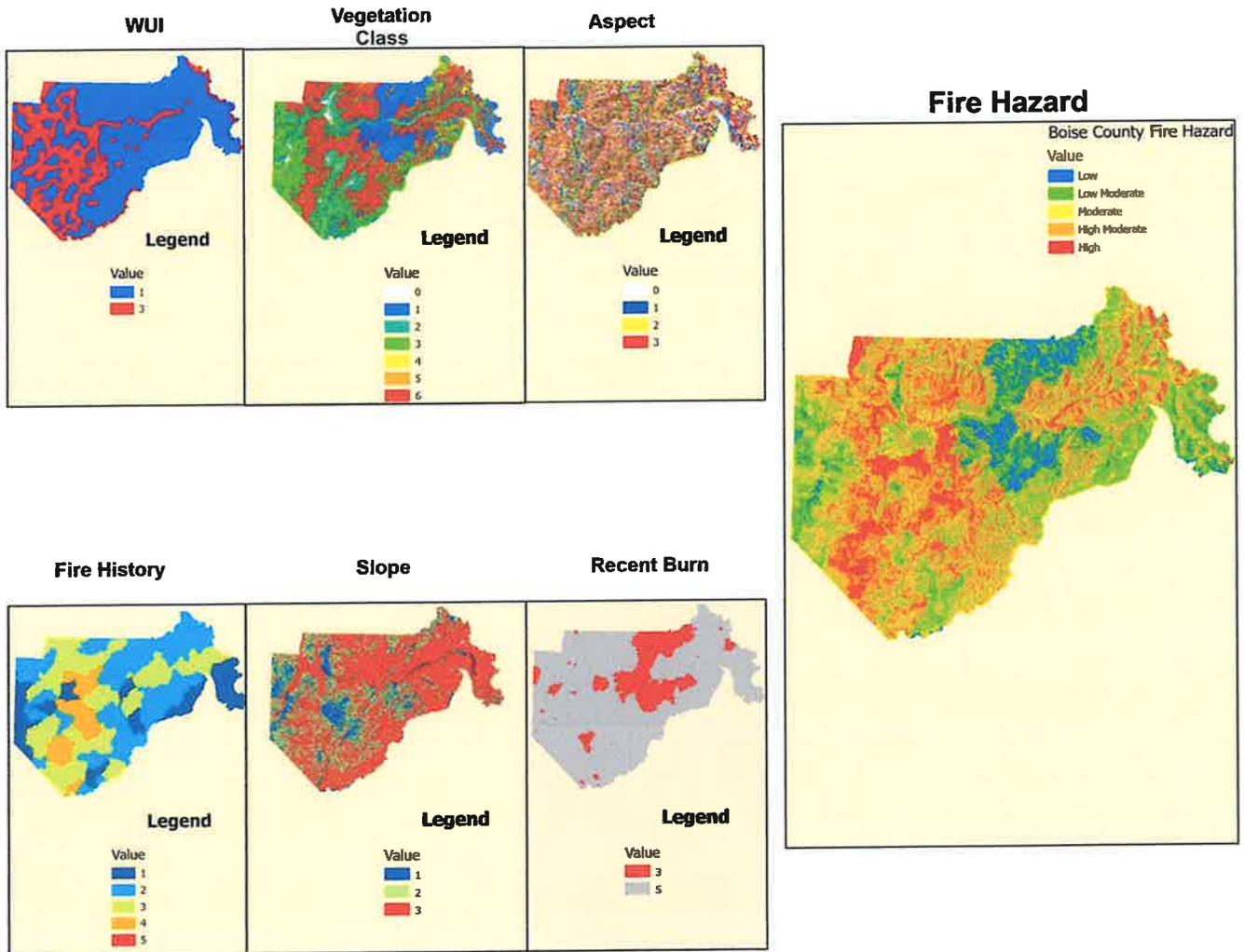
³ <https://iftdss.firenet.gov/firenetHelp/help/pageHelp/content/30-tasks/qwra/risk/out/outputexpnvc.htm?tocpath=Cycle%7CStrategic%20Planning%7CRisk%20Assessment%7COutputs%7C>

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The IFTDSS risk assessment report, in the Expected Weighted NVC model, shows the “Middle Threat” and “Lower Threat” classes are most prevalent throughout Boise County at 38% and 20% respectively. The “Highest Threat” and “Higher Threat” classes combined make up 13% of the county and are clearly concentrated in and adjacent to the populated areas as highlighted in the Risk to Homes model mentioned earlier. The full IFTDSS Risk Assessment report is housed with Boise County Emergency Management.

IDL Fire Hazard Map

Wildfire risk modeling is more accurately defined as probability of damage to features found within a geographic area. The modeling used in the Boise County Wildfire Protection Plan (CWPP) was built upon the modeling used in the Idaho Department of Lands Forest Action Plan. This model is based on the same inputs as all other wildfire models but is simpler in form as it used a liner additive model. Modeling natural systems and their various functions is complicated at best. Thus, it was felt that for the CWPP that value inputs that could be easily explained and understood by all who may read or utilize the document was best suited for this endeavor.



Model Comparisons

The two models come to similar conclusions and are consistent with one another in showing where wildfire risk is concentrated in the county. Both the IFTDSS map and the IDL map show the lower and higher risk areas in roughly the same areas with the exception of the western end of Boise County. This area includes the US-55 corridor and is mostly

classified as low to moderate fire hazard using the IDL model. It appears the reason for the lower hazard rating in this hazard model is heavily influenced by the Fire History and Vegetation inputs.

Fire History is expressed by looking at the density of fire points and polygons within the HUC12 watershed polygons. Fire points and polygons represent wildfire occurrence since 1980. The watersheds were then given a value based on wildfire occurrence density and the three lowest values dominate this part of the county. The Vegetation Class input reported that the most prevalent veg classes in this part of the county are grass, grass-tree, and grass-shrub, and these were also weighted lowest in the model. Also, because all lakes, rock, agriculture, and urban areas are classified to 0, parts of western Boise County were given a veg class of 0.

Wildland-Urban Interface

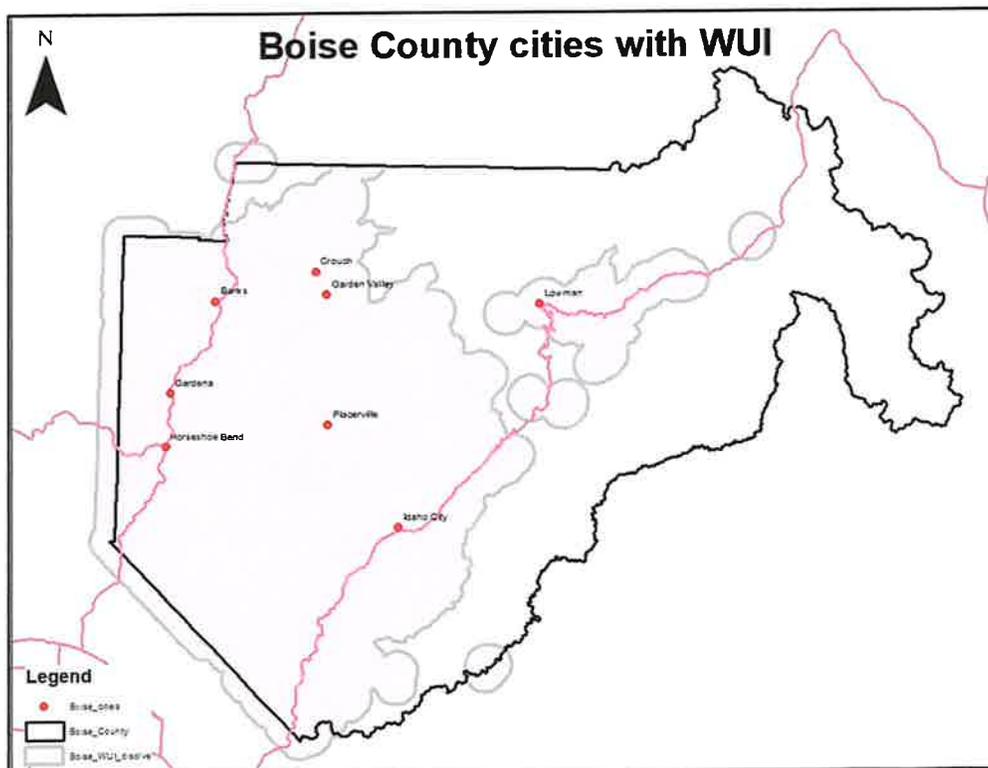
A key component in meeting the underlying need for protection of people and structures is the protection and treatment of hazards in the Wildland-Urban Interface (WUI). For the 2023 plan update, the county utilized a definition of WUI advocated by the Idaho Department of Lands, that can be easily mapped at a HUC12 level:

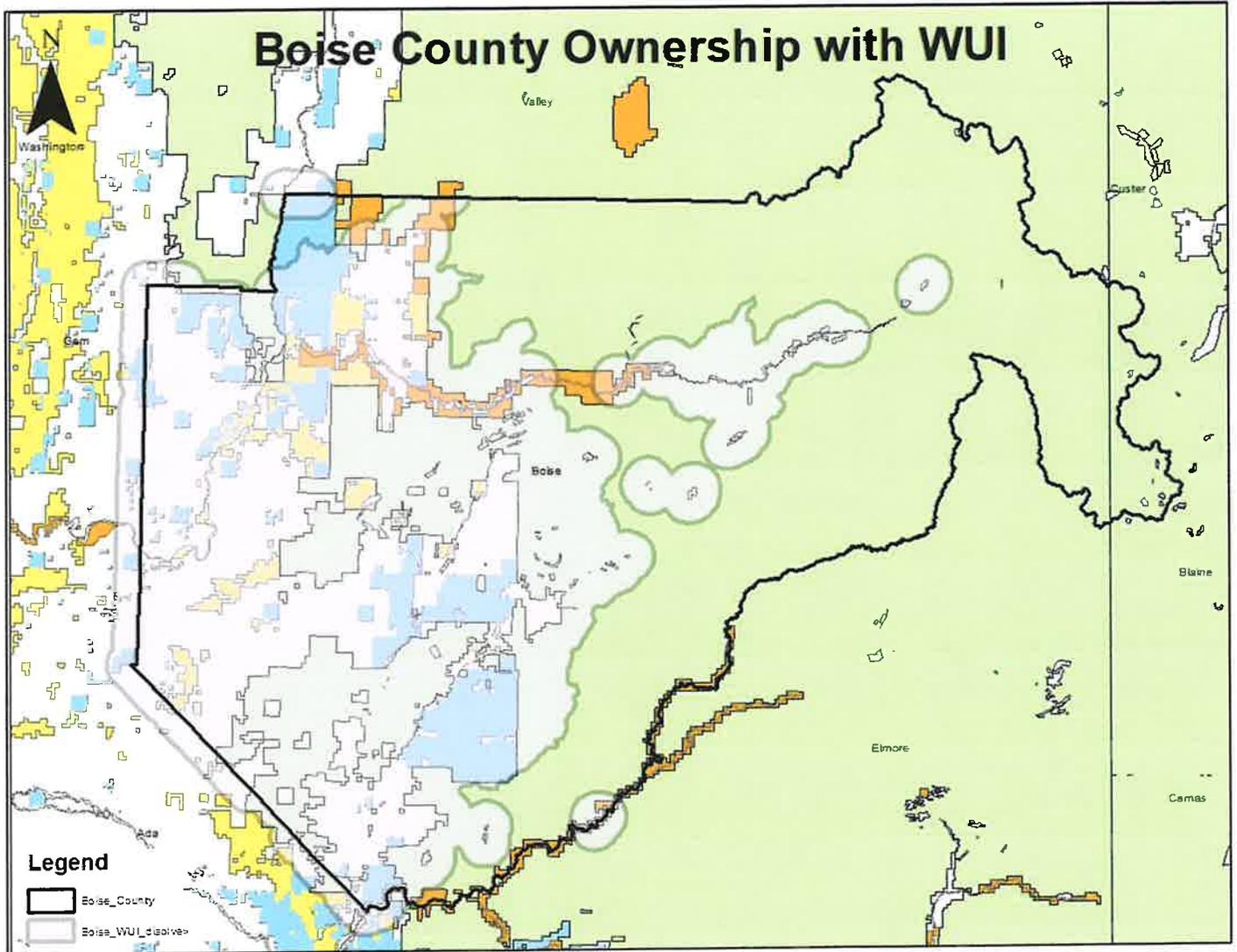
Definition: *An area where developed lands interact with undeveloped lands and includes the infrastructure and natural resources that communities rely on for existence.*

Location: *It is found in remote, scattered development areas to highly developed urban areas and everywhere in between.*

Mapping

1. All private land is extracted from the BLM ownership layer
2. Private Lands are buffered with a 1.5-mile buffer
3. The 1.5-mile buffer is put over the top of HUC12 watersheds
4. Those watersheds that by ocular estimation are more than 50% encompassed by the 1.5-mile buffer are selected
5. Finally, the 1.5-mile buffer is extended to the selected HUC12's to create the final WUI for a County





Potential Operational Delineations (PODs)

PODs are spatial fire management units developed collaboratively by fire, land, and resource managers with the goal of better aligning fire response with both fire management opportunities and land and resource management objectives. Fire managers provide local expertise on the potential control features to bound PODs such as roads, fuel breaks, ridgetops, and waterbodies.

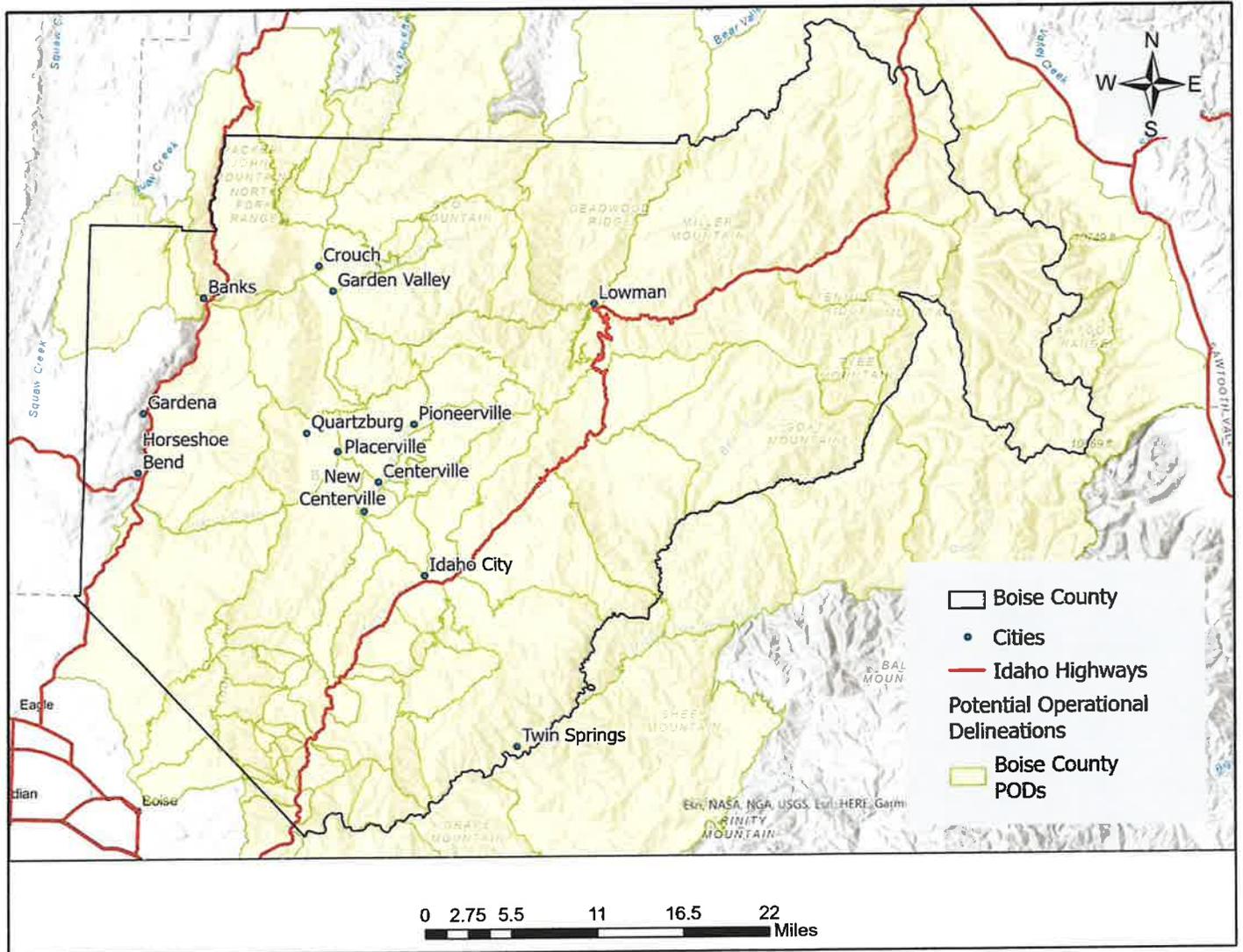
Incorporating collaboratively developed PODs into fuels treatment planning and project design can help provide a cross-boundary framework to:

- Develop trust and understanding among the cooperators and stakeholders.
- Connect treatments across the landscape.
 - Making them more useful during response to unplanned ignitions and
 - Making it safer and more efficient to implement prescribed fires in priority areas, project by project.
- Break up the landscape into manageable areas to help prioritize management investments both on Forest Service lands and for cross-boundary projects. Provide structure for the development of a sustainable maintenance schedule.
- Increase treatment effectiveness and increase the pace & scale of treatments in priority areas of mixed ownership.

- Align communication among cooperators about the expanded scale of land/fuels treatments to gain and maintain the necessary social license with the public.

For further information about PODs, refer to the following website:

<https://www.fs.usda.gov/research/rmrs/projects/pods>



Wildfire Mitigation Strategy

Wildfire Education

Fire prevention activities occur year-round throughout Idaho's communities to educate the public on wildfire ignitions, the prevention of human-caused wildfires, and protection of homes and property against wildfire. Fire prevention efforts are focused in the areas at highest risk for human-caused ignitions, such as high-use areas and along major travel corridors. Most human-caused fires are due to abandoned campfires, illegal use of personal fireworks on and adjacent to public lands during the dry season, and field/debris burning during high fire danger conditions. In addition to fire prevention education, it is important to mitigate wildfire impacts whether they are human-caused or natural-caused.

Firewise/Defensible Space

The threat to private property from wildland fires is increasing as more people choose to build homes, operate businesses, and recreate in areas where public lands border urban areas. Neither wildland firefighting agencies nor local fire departments can completely protect the growing number of structures in these interface areas. It is critical that private landowners take the proper precautionary steps on their own to protect their property.

Creating "defensible" or "survivable" space around structures (including sheds and outbuildings) can make the difference between returning to an intact home or a smoldering pile of ashes when a wildfire does move through the area. There are simple, affordable steps that can greatly increase your home's chances of surviving a wildfire. Research shows that most homes that burn do so as a result of flying embers rather than direct flame contact with the main fire. Embers can travel distances of a mile or more and land on or near the structure on flammable debris, including dead plant material or a path of dry vegetation leading directly to the structure.

The roof and exterior structure of your dwelling should be constructed of non-combustible materials such as fire resistant roofing materials, tile, slate, sheet iron, aluminum, brick, or stone. If you do have wood siding, cedar shakes, exterior wood paneling, and other highly combustible materials, ensure they are treated with fire retardant chemicals.

- Water and maintain your lawn consistently.
- Regularly remove dead plant material, such as pine needles, leaves, and branches, from roof surfaces, eaves, and gutters to avoid accumulation of flammable materials.
- Remove portions of any tree extending within 10 feet of the flue opening of any stove or chimney.
- Remove branches from trees to a height of 15 feet.
- Maintain a screen constructed of non-flammable material with openings not exceeding ½ inch over the flue opening of every chimney or stovepipe.
- Dispose of stove or fireplace ashes and charcoal briquettes only after soaking them in a metal pail of water.
- Landscape vegetation should be spaced so that fire cannot be carried to the structure or surrounding vegetation. Remove lower hanging branches as well as ladder fuels from under the branch line to prevent fire from being able to leap from grass or shrubs to tree tops.
- Maintain a fuel break – an area completely devoid of flammable shrubs and trees – around all structures. Keep it lean, green and clean at least 30 feet from your home.
 - You do not need a barren landscape to protect your home from fire. Make it both pleasing to the eye and defensible by planting fire resistant plants within this 30-foot break. See the Idaho Firewise website for tips and suggestions: <https://idahofirewise.org/firewise-landscapes/>
- All combustibles such as firewood, picnic tables, boats, etc., should be kept away from structures. Stack firewood at least 30 feet from your home.
- Store gasoline in an approved safety can away from occupied buildings.
- Propane tanks should be far enough away from buildings for valves to be shut off in case of fire. Keep area clear of flammable vegetation.
- Clear combustible materials out from underneath decks. Screen in under decks and over exterior vents with ¼-inch screens to keep out flying embers.

- Place non-flammable screens in home vents (openings should not exceed 1/8 inch).
- Create easy access to your emergency water source. Connect the garden hose to the outlet.
- Have fire tools handy: shovel, rake, a bucket for water, and a ladder long enough to reach the roof.
- Addressing should be indicated at all intersections. Clearly mark your street and house number so help can find you quickly.
- All roads and driveways should be at least 16 feet in width.
- Learn more from your local FD or www.firewise.org.

Campaign Methods for Distributing and Implementing Key Messages

A variety of forums exists to proactively share the fire prevention message. The following table illustrates which activities can achieve our purpose and the individuals associated with their implementation.

Activity	Purpose	Who	Due Date
Presence at community events	Deliver messages and develop awareness about fire prevention and defensible space	BLM, USFS, FD	Throughout the summer
Fire Patrols	During severe fire seasons this activity is highly visible, interacts with campers and extinguishes abandoned campfires	LEOs	All summer, with increased coverage during holidays such as July 4 th and Labor Day weekend and when conditions warrant
News Releases	Increase public awareness about fire danger and current fires	BLM, USFS, County	When appropriate; all summer, with special attention during Wildfire Awareness Month and over July 4 th and Labor Day holidays
Video PSAs (YouTube, social media platforms, TV, etc.)	Educate the public on proper techniques for putting out campfires, defensible space	Idaho Firewise BLM & USFS County	Wildfire Awareness Month; mid-August thru hunting season; and as conditions warrant
Social Media	Educate the public on defensible space, evacuations, wildfire as part of the ecosystem	BLM, USFS, County	Wildfire Awareness Month; mid-August thru hunting season; and as conditions warrant
Increased Fire Prevention Signing	Increase awareness of dry conditions, proper campfire techniques	BLM, USFS, County; work with Idaho Department of Transportation (ITD)	Change message/ issue to be pertinent to time of year
Distribute Key Fire Prevention Messages/Literature among County establishments	Provide printed information to the public to educate on driving/parking on dry grass, fireworks, etc.	BLM, USFS, County	Mid-August thru hunting season and as conditions warrant

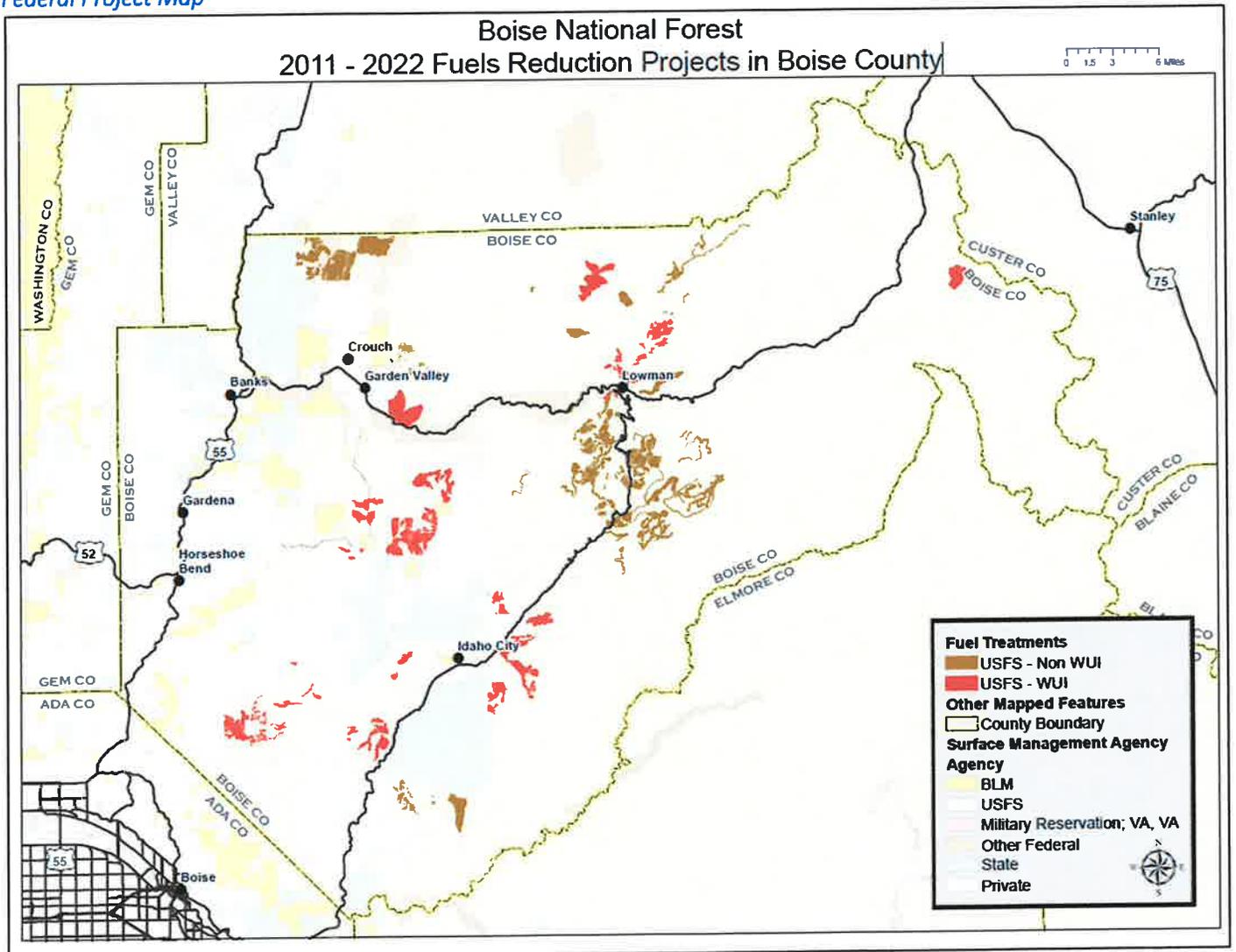
Mitigation Projects

Project Name	Description	Acres	Who	When	Funding
Alder Ridge Thinning Project	RX-Fire	300	USFS	2023	Federal
Mores-South Fuels Reduction Project	RX-Fire/Mechanical	569	USFS	2023	Federal
Little Ophir Hazardous Fuels Reduction	RX-Fire	300	USFS	2023	Federal
Bogus Basin Forest Health	Mechanical	400	USFS	2023	Federal

Buckskin Restoration Project	RX-Fire	1500	USFS	2023	Federal
Boise Basin Experimental Forest	RX-Fire/Mechanical	2000	USFS	2023	Federal
Sinker Creek-Boise Ridge Forest Health	Mechanical	1476	USFS	2023	Federal
Clear Creek Forest Health	Mechanical	850	USFS	2023	Federal
West Lowman WUI Hazardous Fuels Reduction	RX-Fire/Mechanical	850	USFS	2023	Federal
Lowman WUI Corridor Project	Mechanical	600	USFS	2023	Federal
Alder Ridge Thinning Project	RX-Fire	300	USFS	2024	Federal
Bogus Basin Forest Health	Mechanical	150	USFS	2024	Federal
Buckskin Restoration Project	RX-Fire/Mechanical	1600	USFS	2024	Federal
Boise Basin Experimental Forest	Mechanical	115	USFS	2024	Federal
Sinker Creek-Boise Ridge Forest Health	RX-Fire/Mechanical	1365	USFS	2024	Federal
Clear Creek Forest Health	Mechanical	1355	USFS	2024	Federal
Wash Creek	RX-Fire/Mechanical	400	USFS	2024	Federal
Cross Boundary	Mechanical	100	USFS	2024	Federal
Urban Lightning	Mechanical	200	USFS	2024	Federal
Pine Fuels	Mechanical	200	USFS	2024	Federal
South Zone Fuel Break	Mechanical	500	USFS	2024	Federal
West Lowman WUI Hazardous Fuels Reduction	RX-Fire	400	USFS	2024	Federal
Lowman WUI Corridor Project	RX-Fire/Mechanical	750	USFS	2024	Federal
Bogus Basin Forest Health	Mechanical	100	USFS	2025	Federal
Buckskin Restoration Project	RX-Fire/Mechanical	1600	USFS	2025	Federal
Sinker Creek-Boise Ridge Forest Health	RX-Fire	300	USFS	2025	Federal
Clear Creek Forest Health	Mechanical	200	USFS	2025	Federal
Southwest Idaho Resilient Landscape (Forestwide RX-Fire NEPA)	RX-Fire/Mechanical	1000	USFS	2025	Federal
Wash Creek	RX-Fire/Mechanical	400	USFS	2025	Federal
Cross Boundary	Mechanical	100	USFS	2025	Federal
Urban Lightning	RX-Fire/Mechanical	300	USFS	2025	Federal
Pine Fuels	Mechanical	200	USFS	2025	Federal
South Zone Fuel Break	RX-Fire/Mechanical	1000	USFS	2025	Federal
West Lowman WUI Hazardous Fuels Reduction	RX-Fire	400	USFS	2025	Federal
Lowman WUI Corridor Project	RX-Fire	200	USFS	2025	Federal
Buckskin Restoration Project	RX-Fire/Mechanical	1258	USFS	2026	Federal
Sinker Creek-Boise Ridge Forest Health	RX-Fire	300	USFS	2026	Federal
Clear Creek Forest Health	Mechanical	1200	USFS	2026	Federal
Southwest Idaho Resilient Landscape (Forestwide RX-Fire NEPA)	RX-Fire/Mechanical	1000	USFS	2026	Federal
Upper Mores	Mechanical	800	USFS	2026	Federal
Warm Springs	Mechanical	100	USFS	2026	Federal
Wash Creek	RX-Fire/Mechanical	400	USFS	2026	Federal
Cross Boundary	Mechanical	200	USFS	2026	Federal
Urban Lightning	RX-Fire/Mechanical	300	USFS	2026	Federal
Pine Fuels	Mechanical	200	USFS	2026	Federal
South Zone Fuel Break	RX-Fire/Mechanical	1000	USFS	2026	Federal
West Lowman WUI Hazardous Fuels Reduction	RX-Fire	400	USFS	2026	Federal

Sinker Creek-Boise Ridge Forest Health	RX-Fire	300	USFS	2027	Federal
Clear Creek Forest Health	RX-Fire	300	USFS	2027	Federal
Southwest Idaho Resilient Landscape (Forestwide RX-Fire NEPA)	RX-Fire/Mechanical	1000	USFS	2027	Federal
Upper Mores	Mechanical	800	USFS	2027	Federal
Warm Springs	Mechanical	100	USFS	2027	Federal
Wash Creek	RX-Fire/Mechanical	400	USFS	2027	Federal
Cross Boundary	Mechanical	200	USFS	2027	Federal
Urban Lightning	Mechanical	200	USFS	2027	Federal
South Zone Fuel Break	RX-Fire/Mechanical	1000	USFS	2027	Federal
Clear Creek Hazard Mitigation 21HFR	Manual/Mechanical	49	County	2023	State
Clear Creek Hazard Mitigation 22HFR	Manual/Mechanical	49	County	2024	State

Federal Project Map



Completed Projects

Name	Description	Who	When
Garden Valley Blowdown 2012 Timber Sale	Mechanical	BLM	2012
Dry Buck Timber Sale	Mechanical	BLM	2012
Banks Pumpkin Brainerd Mechanical	Mechanical	BLM	2014
Banks DryBuck Mechanical	Mechanical	BLM	2014
Banks Pumpkin Brainerd Mechanical 2 nd Entry	Mechanical	BLM	2016
Crouch Garden Mountain Pile Burn	RX-Fire	BLM	2017
Mile Marker 73 Fire Salvage	Mechanical	BLM	2018
Crouch Garden Mountain Pile Burn 2 nd Entry	RX-Fire	BLM	2018
Four Rivers Pile Burn RX	RX-Fire	BLM	2020
Charcoal Gulch Thin and Pile	Mechanical	BLM	2021
SWIRCD Grant Meadow Creek	Mechanical	BLM	2021
Charcoal Gulch Pile Burn	RX-Fire	BLM	2022
Clear Creek Hazard Mitigation 16HFR4	Manual/Mechanical	County	2020
Clear Creek Fire Mitigation 16WFM	Manual/Mechanical	County	2021

Planning Projects

Name	Description	Who	When
Review of CWPP		USFS, IDL, BLM, County	Annually
Restriction Enforcement	Ability to enforce wildfire restrictions across jurisdictional boundaries	USFS, IDL, BLM, County	Annually
Pre-evacuation Planning	Coordination document for community wildfire response and evacuation	USFS, IDL, BLM, County	Annually

Response and Capacity

Needs	Who	When	Funding
Mobile air curtain burner	All departments		
Fire Shelters	All departments		
SCBA tanks and masks	All departments		
Radios, pagers, repeaters, backup power	All departments		
Wildland and structural turnout equipment and PPE	All departments		
Rope rescue equipment	All departments		
Dip site	Centerville		
Brush Truck	Centerville		
Underground aquator to draft/fill from	Centerville		
Type 6 engine	Clear Creek		
Chase truck	Clear Creek		
Draft sites	Clear Creek		
Portable dip tanks	Clear Creek		
Powerline mitigation	Clear Creek		
Road work on Goldfork, Johnson Creek, Timberline	Clear Creek		

New Station (purchase land and build larger station with training space)	Clear Creek		
Connectivity upgrades in cellular denied area to augment VHF radio	Clear Creek		
Vehicle-mounted satellite internet and MANET systems for situational awareness/geospatial software	Clear Creek		
Type 4 engine	Clear Creek		
Reconstruct Station 1 to accommodate size and weight of existing vehicles and to improve infrastructure (including plumbing)	Clear Creek		
Tools and other items for engines (axes, radios, sirens, etc.)	Clear Creek		
Engine upkeep	Clear Creek		
Additional training	Clear Creek		
Improvement of existing roads to facilitate efficient response	Clear Creek		
Wildland and structural hoses (all types)	Clear Creek		
North Fork Rd through Clear Creek Loop needs to be opened back up and fuel mitigation work needs to be completed along road which could be utilized as a fire break	Clear Creek		
Type 1 to replace engine 803	Garden Valley Fire	2030	
Type 1 to replace engine 804	Garden Valley Fire	2024	
Water Tender to replace 821	Garden Valley Fire	2045	
Water Tender to replace 822	Garden Valley Fire	2028	
Rescue to replace 831	Garden Valley Fire	2023	
Type 6 engine to replace 841	Garden Valley Fire	2026	
Type 6 engine to replace 842	Garden Valley Fire	2039	
Command Vehicle to replace 851	Garden Valley Fire	2023	
Medic Unit to replace medic 1	Garden Valley Fire	2035	
Medic Unit to replace medic 2	Garden Valley Fire	2030	
Medic Unit to replace medic 3	Garden Valley Fire	2024	
Quick Response Unit to replace unit 4	Garden Valley Fire	2027	
Ranger UTV with tracks	Garden Valley Fire	2025	
Cataraft	Garden Valley Fire	2027	
Fuels mitigation for Elk Run and Duquette Pines	Idaho City		
Water Storage	Idaho City		
Ingress/egress for Elk Run	Idaho City		
Ingress/egress for Karney Lakes	Idaho City		

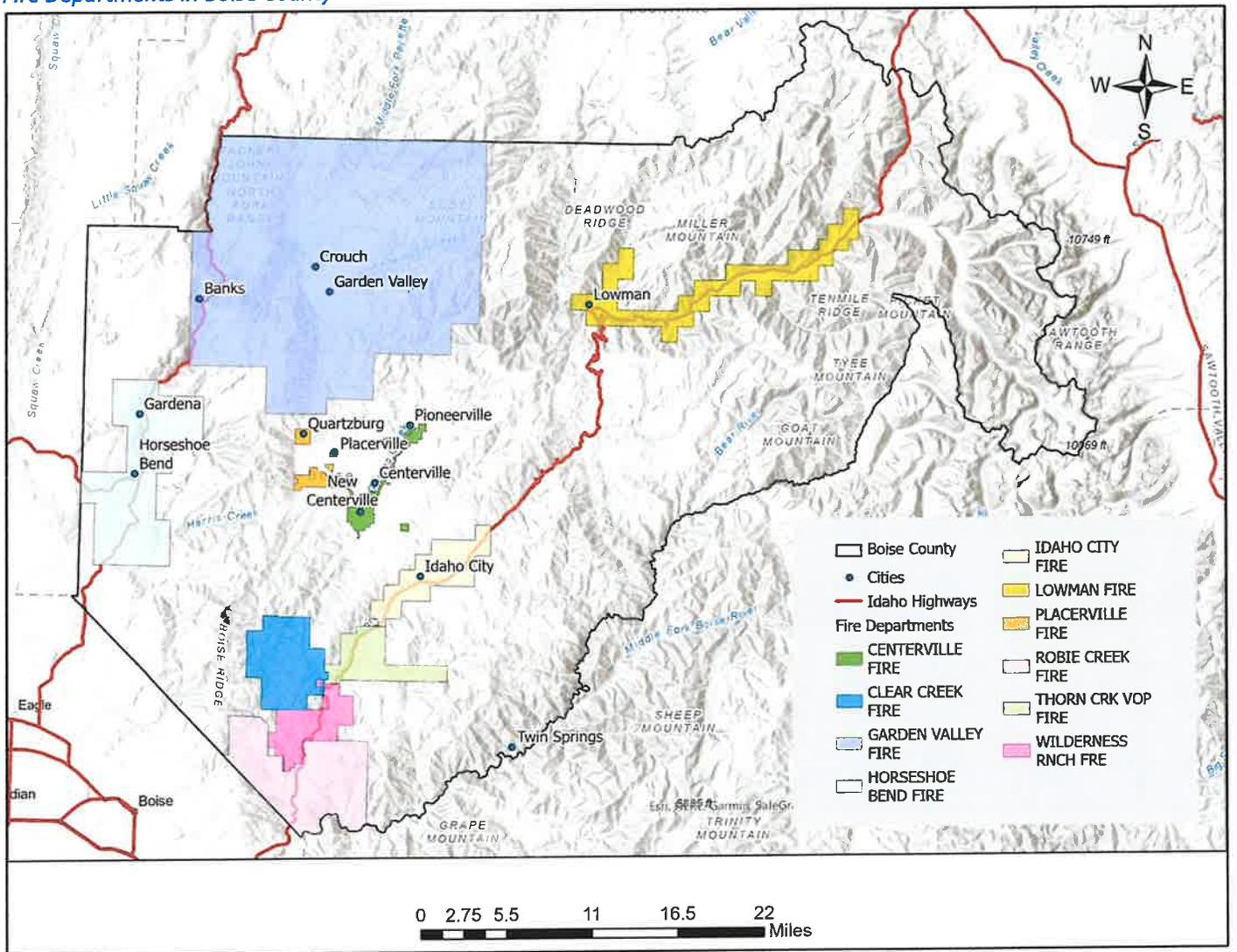
Connecting fiber optic cable to where Idaho City could connect T5 dedicated line	Idaho City		
New Station	Robie Creek		
4 WD Tender	Robie Creek		
Fuel Mitigation for Robie Creek, Rocky Canyon, Tollgate, Karney Lakes	Robie Creek		
Water Tender	Robie Creek		
Type 6 engine	Robie Creek		
Type 1 engine	Robie Creek		
Demo and build new station	Robie Creek		
Internet at stations	Robie Creek		
Base Station radios at both stations	Robie Creek		
Repair road 377 and put back in service	Thorn Creek		
Develop Helicopter dip site at Napias subdivision	Thorn Creek		
Tree thinning project for Valley of the Pines subdivision	Thorn Creek		
Repair exit road in Valley of the Pines for escape route for first responders and residents	Thorn Creek		
Repair road 389 for ingress/egress and first responders	Thorn Creek		
Landing Zone improvements at Thorn Creek Fire Station	Thorn Creek		
Evacuation plan for Valley of the Pines, phone and internet do not work during a power outage	Thorn Creek		
Potential Operational Delineation (POD's) fuels mitigation * see map and details below for more information	USFS, All departments		
Develop and maintenance of cross boundary tracking	USFS, All departments		
Water infrastructure	Wilderness Ranch		
Water storage dry hydrants	Wilderness Ranch		
Powerline mitigation	Wilderness Ranch		
Timber sales for common area, mainly off of existing roads and access points. Include surrounding interested parties to increase the area. Incorporate IDL Endowment Land to increase area and provide state access to their landlocked parcels.	Wilderness Ranch		

Roadside brushing/thinning along main corridors (Wilderness Way, Evergreen, Rush Creek, Daggett, Forest Lane, Meadow, Skyview.	Wilderness Ranch		
Periodic prescribed fire to maintain other projects	Wilderness Ranch		
New road construction and maintenance of old access roads for ingress/egress. One dropping off of NW side down to Daggett for emergency ingress/egress. Maintenance of Chaparral, Whitehawk, Middle road and water access road (Evergreen place). Maintenance and connection on two roads that drop down to Robie on the South upper side of WR (Schroeder/Wilderness Ranch LP). Improvement of the Idaho Power road from Daggett to Clear Creek.	Wilderness Ranch		
Osprey needs thinning along cliffside, thinning along south side of Osprey off of High Corral, thinning along North side of Osprey and neighboring properties bordering Minneha Creek	Wilderness Ranch		
High Corral 1 and 2 and surrounding lots need reproduction pine thinning, blading and thinning out the existing 4X4 trail along the ridge surrounding high corral for a fire break.	Wilderness Ranch		
Timber sale around Charger, Osprey and High Corral where appropriate	Wilderness Ranch		
Increased signage for fire prevention efforts on Forest Service ground around communities	Wilderness Ranch		
Rimview needs improved road from Rimview to Osprey for emergency access, ingress/egress, fuels mitigation along perimeter of neighborhood in terms of thinning/brush removal type fuel breaks	Wilderness Ranch		

Continued thinning on State land of reproduction pine where necessary around communities, timber sale for parcels connected to WR and Daggett in connection to Wilderness Ranch sale, dozer line fuel break along appropriate ridges within ownership around communities	Wilderness Ranch		
Highway 21 roadside fuels reduction plus no fuel zone 5-10' and continued maintenance of mowing out to 30' along highway from Boise to MP 22/23 at minimum but ideally to Idaho City	Wilderness Ranch		
Arrowrock Road roadside fuels reduction, no fuel or mowed area along road from highway 21 to end of Arrowrock reservoir	Wilderness Ranch		
Mowed areas around campsites around Arrowrock reservoir to be completed by responsible party	Wilderness Ranch		
Idaho Power to have no fuel zone around poles with transformers, increased effort to avoid Osprey fires, additional thinning	Wilderness Ranch		
Increased community awareness and education efforts for burning, fuel mitigation, fire prevention, etc.	Wilderness Ranch		
Firewise coordinators for associations/neighborhoods that don't have them	Wilderness Ranch		
Larger effort to ensure max number of people sign up with Alertsense	Wilderness Ranch		
Strategic road/dozer line cuts around clumps of houses that connect. Add in wind socks or other visual aid for aircraft of various colors on each corner of line for retardant	Wilderness Ranch		
Dry hydrants by each main bridge (Rush, Dunnigan, MM27, Grimes, and any others), one attached to moving dock at Spring Shores, one at Boat Ramp in Robie, others on Robie Creek Road, Daggett Creek Road, and by any ponds	Wilderness Ranch		
Develop safety zones for various sections of subdivisions	Wilderness Ranch		

Make maintenance agreements with landowners that hold landowner harmless of liability	Wilderness Ranch		
Type 1 or 2 structural engine with 750-1500 gallons of water, 4WD or AWD, CAPS System	Wilderness Ranch		
Type 5 or 6 Wildland Engine with CAFS System that can double as a light, wet rescue unit, 4wd 5500/550 chassis or higher	Wilderness Ranch		
Rescue Unit light or medium, consider wet with CAFS system, 4WD, 5500/550 Chassis or higher	Wilderness Ranch		
Rescue Raft motorized- Alumawatercraft PWC for rescue and disaster preparedness such as flooding, dam breach, land slide, terrorist attack. Consider 2	Wilderness Ranch		
Replacing current non-motorized rescue raft- Oceanid or NRS banana style rescue raft with full complements such as tow assist attachments and skirts for water rescue, ice rescue, and search and rescue efforts	Wilderness Ranch		
Type 1 or 2 structural engine with 750-1500 gallons of water, 4WD or AWD, CAFS sytem, etc. Consider platform, ladder, squirt or snorkel boom style truck	Wilderness Ranch		
Type 1 or 2 Tactical Water Tender, 4WD	Wilderness Ranch		
Type 5 or 6 Wildland engine with CAFS System that can double as a light, wet rescue unit, 4WD 5500/550 Chassis or higher	Wilderness Ranch		
Type 1 Tactical Tender	Wilderness Ranch		
UTV or ATV with patient hauling system and consider firefighting pump and tank	Wilderness Ranch		
Automatic Generator for Station 1	Wilderness Ranch		
Extrication equipment Cutter, Spreader, Ram (battery powered)	Wilderness Ranch		
Battery powered Portable light	Wilderness Ranch		
Station firefighter and gear decon equipment	Wilderness Ranch		
Mass casualty protection gear (ballistic vests and helmets)	Wilderness Ranch		

Fire Departments in Boise County



Boise County Satellite Imagery

