



BIGHORN BASIN FIRESMART



BIGHORN BASIN FIREWISE COMMUNITIES

ISSUE #42 — SPRING 2022

A FEW WORDS TO CONSIDER PRIOR TO THE 2022 WILDFIRE SEASON

By the time you receive this newsletter, it will be time to review the situation around your home and/or mountain cabin as it relates to wildfires and being Firesmart. Your first actions should be completing the Page 8 “Annual Defensible Space and FireWise Checklist,” and updating your family’s evacuation plan.

While the Page 6 wildfire prediction for June appears to be fairly calm, the continuing drought (See Page 6) and localized fuel conditions may make the late summer wildfires “exciting.”

If your home and/or mountain cabin has an approved Wildfire Mitigation Plan (WMP), give it a review, and correct anything around your place that doesn’t comply with the plan.

If your Washakie County home and/or mountain cabin doesn’t have an approved Wildfire Mitigation Plan (WMP), consider making a request to your County Firesmart Coordinator Chris Weydeveld, at cweydeveld@wytfs.com, Technical Forestry Services, LLC, 6628 W. Riverside Dr. Casper, Wyoming 82604, or (307) 272-9533 (mobile).

If you are on Facebook, browse the Firesmart pages for more info.

<https://www.facebook.com/BighornBasinFiresmart>

Should you be planning an ag burn or other prescribed burn:

- Call the National Weather Service 1-800-211-1448 for a forecast.
- Notify the local Fire Warden — Page 2 has contact information.
- Inform your neighbors of your plan, **before** you burn.
- Establish or use existing firebreaks completely around your burn.
- Have a readily available supply of water just in case.
- Have helpers on site as necessary, **before** ignition.
- Stay with your fire until it is completely out.

Firesmart information and all newsletter issues are available at:

www.bighornbasinfiresmart.com

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Special points of interest

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FUELBREAKS IN FORESTED LOCATIONS

Fuelbreaks are areas of forest where fuels available to a wildfire have been modified by thinning trees, and reducing the shrubbery and woody fuels on the ground. Strategically located along roads, or within forested housing tracts in dense timber, they reduce fire intensity, slow fire spread, and provide a safer place for firefighters to fight the fire. In some locations, limbs will be removed from the lower parts of trees. The below photo pairs show a timber stand within a mountain subdivision before and after treatment.

Several factors determine the need for fuelbreaks in forested subdivisions or to breakup fuels to separate forested areas.

- Potential hazardous fuel situations.
- Other wildfire hazard considerations.
- Slopes conducive to rapid fire spread.
- Other topography conditions (See Page 6).
- Tree density with potential to carry fire in the tree crowns.
- Potential fire ignition sources.



A FEW BEFORE AND AFTER VIEWS OF COMPLETED 2021 FUELBREAK PROJECTS



2016 BEFORE THINNING AND FUELS REDUCTION



2022 AFTER FUELS REDUCTION AND SLASH BURNING

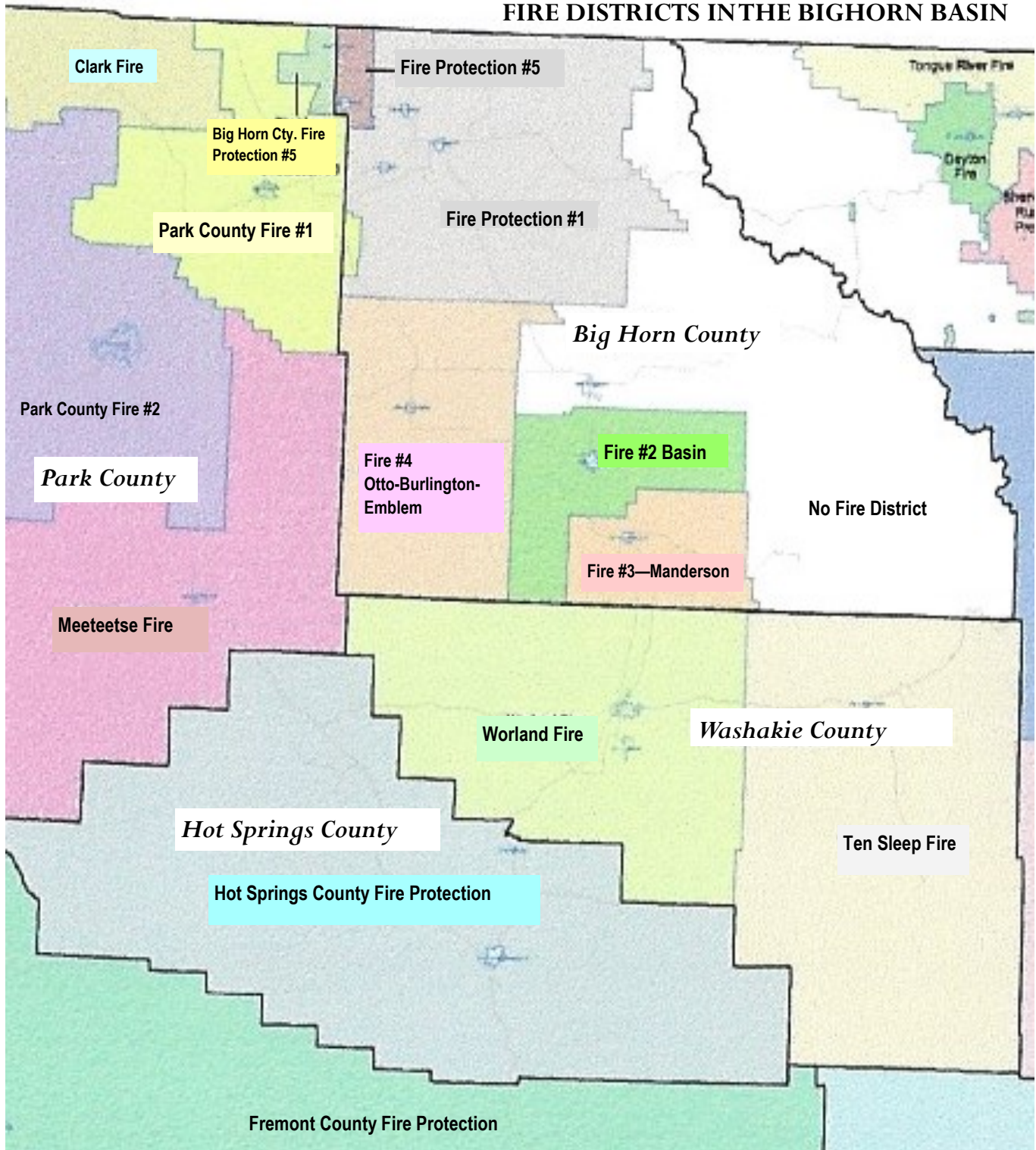


2018 BEFORE THINNING AND FUELS REDUCTION



2022 AFTER FUELS REDUCTION AND SLASH BURNING

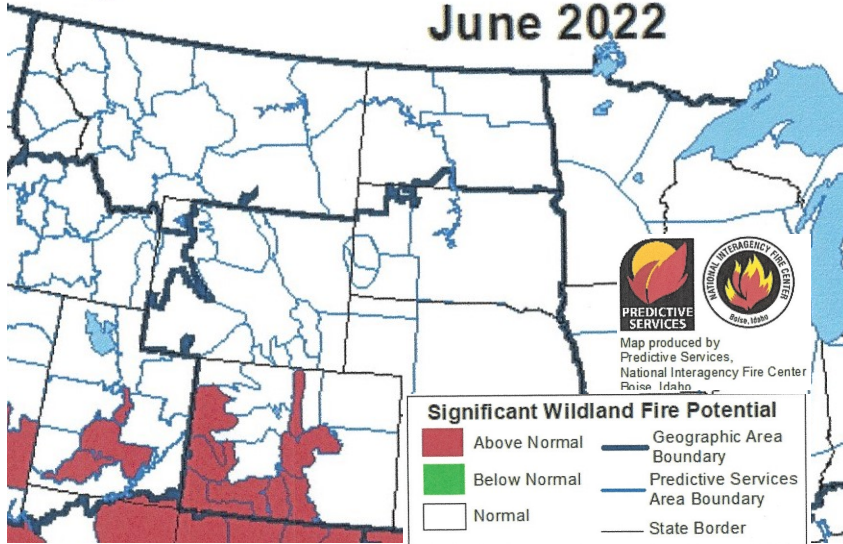
FIRE DISTRICTS IN THE BIGHORN BASIN



There are several Fire Districts that cover the Bighorn Basin, except for the eastern part of Big Horn County that has no Fire District. Fire Districts are responsible for structure fire protection, and in-district wildland fires in cooperation with overlapping and neighboring federal and state protection agencies. Fire Districts are funded by local tax dollars, and are under the County Fire Warden. Fire District vehicles wear Wyoming **FD** license plates, or Wyoming **GFD** plates if a vehicle is on loan from the federal government.



Significant Wildland Fire Potential June 2022

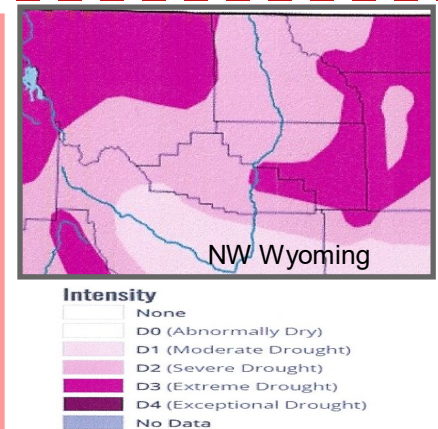


Although this short term wildland fire potential prediction doesn't reflect this, NOAA and other agencies continue to report that much of Wyoming and other western states are in a drought or extreme drought situation. Historically, these cyclic drought periods require extended periods of normal or more than normal precipitation to correct.

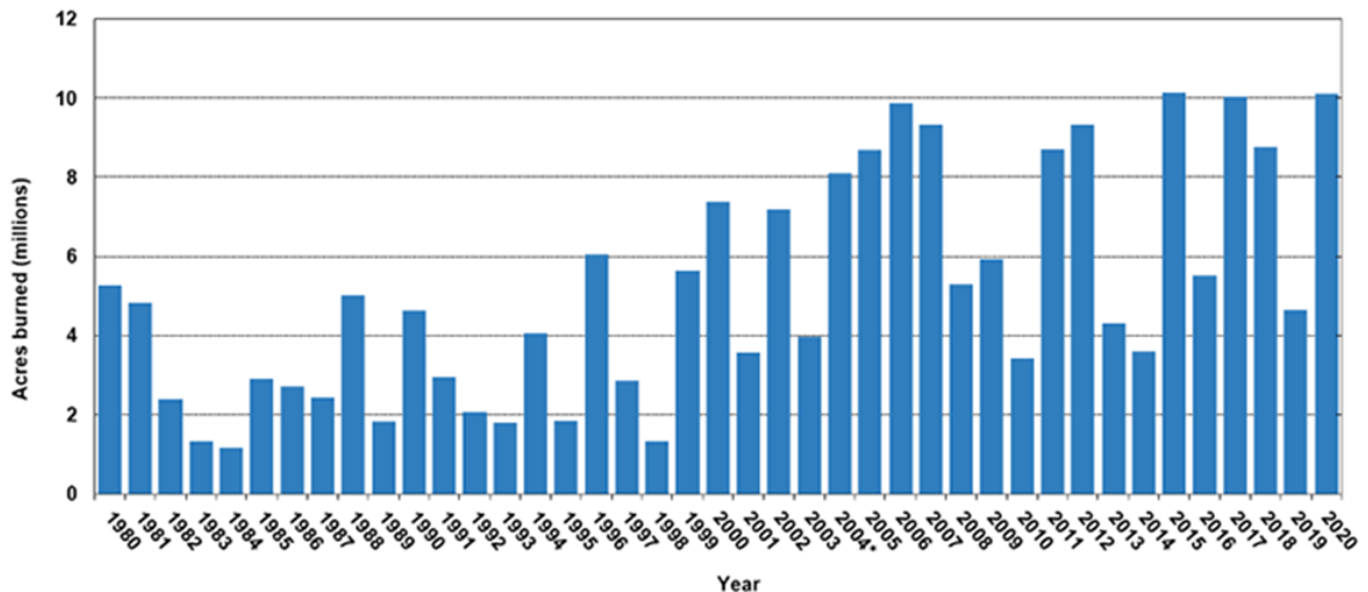
The WY Forestry Division page for current wildfires in Wyoming is:
<https://wsfd.wyo.gov/fire-management/fire-information-updates/current-fires>

From an April 7 National Resource Conservation Service report:

All major basins across Wyoming have snow water equivalents **below** medians for early April. **Moderate** to **severe** drought conditions continue for almost all basins in Wyoming. Any changes in drought conditions across the state will be totally dependent on the amount of spring precipitation that the state receives, as well as temperature trends during the spring. The latest long range outlook indicates that there will be a **warmer** than average as well as a **drier** than average spring and summer.



Annual Number of Acres Burned in U.S. Wildland Fires, 1980-2020



A BEAVER IS BLAMED FOR A WILDFIRE IN NORTHERN OREGON

Near Multnomah Falls, firefighters determined that a small wildfire was sparked after a tree fell against power lines, and that tree had been chewed off at the base by beavers.



YOUR LOCAL WILDFIRE ENVIRONMENT – FIRE BEHAVIOR

Fire Behavior: Do Fires Really Behave? How quickly a fire spreads (rate of spread) and in which direction, how hot it burns (heat output), fire intensity, flame length, residence time (the time for a flame to pass), and whether it is a surface or a crown fire—these are all aspects of what’s known as fire behavior. The faster, hotter, and bigger a fire becomes, the more difficult it is to control and the more destructive it can be. Knowing the attributes of fire behavior is important in order to communicate the various threats from any fire and the benefits of mitigation. This information helps us to understand fire’s resistance to control, the potential for damage, and the positive impacts of fire in nature’s balance.

Three major contributing factors that affect fire behavior: Fuels, Topography, and Weather.

Fuels are any combustible materials. For wildfire, fuels generally consist of living vegetation (trees, shrubs, grass) and dead plant material (dead trees, dried grass, fallen branches, pine needles, etc.). Homes in the path of a wildfire can become fuel too. The amount, size, moisture content, and arrangement of fuels have an influence on fire behavior. Drier fuels ignite more easily, and the more dense and continuous the distribution of fuels is, the more extreme the fire’s behavior will be. Grass is a light, flashy fuel that burns quickly, while heavier fuels such as downed trees take longer to ignite and burn for longer periods of time. A fire burning through fuels that are spaced farther apart will not burn as quickly, while a fire burning through fuels that are crowded and continuous will tend to burn hotter and more rapidly.

Topography refers to characteristics of the landscape, including slope, aspect, and surface configurations such as mountains, valleys, canyons, and drainages. Fire behavior tends to increase the steeper the slope, and is particularly rapid and erratic in narrow canyons and drainages, which can create a chimney effect whereby a convection column of heat drives the fire quickly upwards. Fire behavior also tends to be greater on slopes with south and southwest aspects, because they receive more sun during the hottest part of the day, drying out fuels and making them more ignitable.

Weather has the greatest influence on fire behavior. Characteristics such as wind, temperature, and relative humidity (i.e., moisture in the air) will influence fuels, making them more or less receptive to fire, and often creating conditions for increasing fire behavior. In general, winds, high temperatures, and low relative humidity will increase fire behavior.

Extreme Fire Behavior “Extreme” implies a level of fire-behavior characteristics that largely precludes methods of direct control. One or more of the following behaviors are usually involved: high rate of spread, prolific crowning and/or spotting ahead of the main fire, presence of fire whirls, and a strong convection column. Predictability is difficult because such fires often exert some degree of influence on their environment and behave erratically, sometimes dangerously. Fire suppression and control is almost impossible when a fire exhibits extreme behavior. In recent years, some fires have exhibited extreme fire behavior. This is in large part due to weather and fuel conditions aligning to support rapid and extreme fire growth. **It is imperative that anyone living in these conditions be prepared to evacuate quickly.**



If You Are Unable to Evacuate Safely During A Wildfire

In a catastrophic event, residents and visitors may not be able to reach designated evacuation sites and must make decisions on their own about seeking shelter to try to survive the passage of a wildfire. Seeking shelter should be a last resort—when evacuation is not an option. It can be very difficult to determine the right thing to do as the fire approaches, which is why it is so critical to have a plan and to evacuate early, if possible. Research options individually and as a neighborhood or community before a wildfire threatens, and talk to fire and emergency-service personnel about evacuation procedures, expected fire behavior in your neighborhood, and what to do when trapped (**see the links below for suggestions**).

SURVIVAL TIPS While in your home:



- ☐ Stay calm, keep your family together.
- ☐ Call 911 and inform authorities of your location.
- ☐ Fill sinks and tubs with cold water.
- ☐ Keep doors and windows closed, but unlocked.
- ☐ Stay inside your house.
- ☐ Stay away from outside walls and windows.
- ☐ Wear long sleeves and long pants made of natural fibers, such as cotton.
- ☐ Place wet towels under doors to keep smoke and embers out.

While in your vehicle:



- ☐ Stay calm.
- ☐ Park your vehicle in an area clear of vegetation.
- ☐ Close all vehicle windows and vents.
- ☐ Cover yourself with wool blanket or jacket.
- ☐ Lie on vehicle floor.
- ☐ Use your cell phone to advise officials—call 911.

More tips and detailed instructions about what to do if you become trapped are provided by CAL FIRE and Idaho Firewise: ReadyForWildfire.org/What-To-Do-If-Trapped OR IdahoFirewise.org/Evacuation/If-You-Get-Trapped

It's spring and time to get your cabin and/or rural home and family ready for fire season. If you've been keeping your place Firesmart, putting check marks on this checklist should go quickly with little effort.

Maintaining Your Defensible Space

Your home is located in a forest that is dynamic, always changing. Trees and shrubs continue to grow, plants die or are damaged, new plants begin to grow, and plants drop their leaves and needles. Like other parts of your home, defensible space requires maintenance. Use the following checklist each year to determine if additional work or maintenance is necessary.

Defensible Space and FireWise Annual Checklist:

- ☐ Trees and shrubs are properly thinned and pruned within the defensible space. Slash from the thinning is disposed of.
- ☐ Roof and gutters are clear of debris.
- ☐ Branches overhanging the roof and chimney are removed.
- ☐ Chimney screens are in place and in good condition.
- ☐ Grass and weeds are mowed to a low height.
- ☐ An outdoor water supply is available, complete with a hose and nozzle that can reach all parts of the house.
- ☐ Fire extinguishers are checked and in working condition.
- ☐ The driveway is wide enough. The clearance of trees and branches is adequate for fire and emergency equipment. 12 to 14 feet clearance in all directions is recommended.
- ☐ Road signs and your name and house number are posted and easily visible.
- ☐ There is an easily accessible tool storage area with rakes, hoes, axes and shovels for use in case of fire.
- ☐ You have practiced family fire drills and your fire evacuation plan.
- ☐ Your escape routes, meeting points and other details are known and understood by all family members.
- ☐ Attic, roof, eaves and foundation vents are screened and in good condition. Stilt foundations and decks are enclosed, screened or walled up.
- ☐ Trash and debris accumulations are removed from the defensible space.

