

# Disasters and Agriculture: Best Practices to Minimize Risk

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# Are you and your property ready for a disaster?

- Ranching and farming is complicated, and a disaster makes things much more so.
- Not only is your ranch your home, it is your business. All businesses make emergency plans, and yours should be no different. As the CEO, it's your responsibility to make that plan!
- Having plans and mitigation efforts in place NOW can help ensure you make it through a disaster event with less damages. That ultimately saves you time and money in a business where time and money are scarce commodities.

## If not, what are you going to do about it?



# What should you think about when making a plan?

- What plans/services are in place to help me?
- If I'm not here to carry out a plan, who will be responsible?
- Have my neighbors planned? How will what they do impact me?
- If my neighbors are gone, what are my responsibilities?



# What should you think about when making a plan?

- What would be the worst thing for you to have damaged or lose from a business perspective?
- From a personal perspective?
- An ethical perspective?



# Are you insured *enough*?

- What do you have insured?
  - Buildings? Livestock? Machinery? Tools and other business items?
- Do you have the documentation in a safe place?
  - Policies? Records of purchase? Depreciation schedules? Breed registrations? PHOTOS?
- Have you considered how what you have insured alters your plan?
  - As a business, have you thought through what you can replace financially given what is insured and what is not?

# How will the cavalry get in (or out)?

- Have you considered what the access to your place is like?
  - Bridges and culverts?
  - Narrow lane? Sharp curves?
  - Gates: Width? Locked or not? Are they easy to open?
  - Where's the septic and leach field?
  - Can they turn around?!?





## Too much weight?

If you can't build a better bridge, at least post the maximum weight it can hold.



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Do you have  
alternative ways in and  
out?

Lord willing and...



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If there's only one way  
in and one way out,  
what are the  
implications?

OOPS! Guess the creek *did* rise!



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# What about outbuildings?

## If you had one to save, which would it be?

- What types of outbuildings do you have?
  - Purpose? Size? Building materials? Historical or other values?
- What is in them and how does that impact how they burn? Or what would happen to downstream water if the building was flooded?
  - Grain, hay, oil/gas, pesticides?
- What is in them that you'll need to get back into business?
  - Tack, vet supplies, tools, fencing supplies, feed, machinery?







Beautiful, but...

What do you see good and bad about this situation?



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# What's outside that can impact the firefighting efforts?

- Do you have hay stored in a yard near buildings?
  - Is the ground cleared near it? What is its proximity to other items of value?
- How about the propane tank?
  - Above ground? Defensible space around it if fire? Might it float if flooded?
- Where is the farm fuel stored?
  - Above ground? Secondary containment? Location related to buildings?

## What can you do to mitigate these hazards?







## Fuel tank with secondary containment

Note the metal roof and the concrete pad, both of which will help in a wildfire situation;

Concrete wall will help keep spillage from moving downstream in a flood.



# Which pastures could be impacted?

- What type of animal do you have in each of those pastures and when?
  - Would you handle cows and calves the same way you would yearlings?
- What is the water source and how would it be impacted?
  - Spring, stock pond, creek impacted from upstream event?
- Which fences are most likely to go?
  - How will that impact animal movement? Will stock mix and if so, what are the consequences?

## Can you mitigate these impacts in advance?



# Remember, mitigation efforts apply around the *entire* ranch:

- Around the home and outbuildings
- The fuel tanks
- Hay storage
- Pastures
- Water sources
- ANYTHING ELSE YOU WANT TO DEFEND!

# Remember, fire can also begin AT the ranch:



## Don't be the cause of your own (and other's) disaster.



# At a minimum, do these things now:

- Make sure your address out front and clearly visible so first responders can find you
- Have sizeable, tested fire extinguishers at farm fueling location and barns (*outside* so all can see them) and in all equipment and vehicles
- Have hand tools outside around all buildings
- Good hoses hooked up to hydrants and ready to go (This way anyone can attempt to contain fire at any time)
- **Sign up for Reverse 911- it's easy and something you can do TODAY!**

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Resources to help plan and prepare for a fire.



Family/Home



Food/Water



Health/Medical



Landscape



Livestock



Money/Records

<https://extension.colostate.edu/disaster-web-sites/fire-resources/fire-resources-plan/>

**If a DISASTER hit your Farm or Ranch today, would you still be in business next month?**

- ☒ FLOOD
- ☒ DROUGHT
- ☒ POWER OUTAGE
- ☒ DISEASE OUTBREAK
- ☒ TERRORIST INCIDENT
- ☒ WINTER STORM
- ☒ FIRE
- ☒ OTHER

**ReadyAG**  
Disaster and Defense Preparedness for Production Agriculture

**BEFORE disaster strikes, ReadyAG can help you:**

- IDENTIFY vulnerable areas of production and management
- PRIORITIZE areas to strengthen
- Create an ACTION PLAN specific for your operation
- Develop an accurate INVENTORY of your assets
- Identify and engage LOCAL CRITICAL SERVICES
- Find additional HELP

**CATTLE CROPS DAIRY FRUIT & VEGETABLES SWINE POULTRY**

Information specific for every major agriculture commodity. Visit <http://readyag.psu.edu>

<https://extension.psu.edu/readyag-workbook>

# You have resources!

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# Ready, Set, Go!

Wildland Fire Preparedness  
for Farmers & Ranchers



## My Personal Wildland Fire ACTION PLAN

### Ready Before a fire occurs

#### Prepare yourself and your household

- ☐ Create a Wildland Fire Action Plan, visit [wildlandfireRSG.org](http://wildlandfireRSG.org).
- ☐ Know multiple evacuation routes.
- ☐ Keep emergency supply kits on property and in personal vehicles.

#### Prepare your property

- ☐ Ensure your address is clearly marked and visible from the street.
- ☐ Establish and maintain mitigated firebreaks around your pastures and structures.
- ☐ Assess your property for ignition sources.
- ☐ Create defensible space around all structures.
- ☐ Clearly mark water tanks, ponds, and other water supplies available for firefighting use.
- ☐ Reinforce bridges to ensure that fire engines or other fire suppression equipment are supported. Post bridge load limits and bridge heights.

#### Prepare your livestock

- ☐ Create a livestock relocation/evacuation plan.
- ☐ Ensure proper registration and branding of livestock.
- ☐ Establish a contingency plan for feeding livestock if grazing land is destroyed.

### Set As the fire approaches

- ☐ Monitor local radio or television stations for weather updates.
- ☐ Load vehicles with emergency supplies and valuables.
- ☐ Alert your household and workers of any changes in the situation.
- ☐ Turn on irrigation.
- ☐ Open gates to give access to firefighters.
- ☐ Relocate livestock.
- ☐ Close all doors and windows and turn on all lights in homes, barns, and other structures.
- ☐ Shut off propane tanks.
- ☐ Ensure all water source connections and locations are identified and operational.
- ☐ Move heavy equipment into non vegetated areas such as crop fields or mowed pastures.

Remember: During a wildland fire, responding resources may not be from the immediate area or have local knowledge. Clearly marked addresses, water supplies, and bridge load limits save valuable time.

#### If you are trapped or unable to evacuate:

- ☐ Call 9-1-1 immediately.
- ☐ Wear long sleeves and pants made of natural fibers, such as cotton. Boots, gloves, hats, goggles, and bandanas are also helpful against smoke and embers.
- ☐ Stay hydrated.
- ☐ Patrol your property for fires, if it is safe to do so.
- ☐ Take refuge inside a structure, away from outside walls.
- ☐ Place wet towels under doors to keep smoke and embers out.

Remember: The best thing you can do is evacuate early and let firefighters do their jobs. If you choose to stay, understand that severe fire behavior could prevent firefighters from rescuing you or other members of your household.

<https://www.iafc.org/docs/default-source/pdf/farmers-and-ranchers.pdf>

# You have resources!



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# Thank you

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