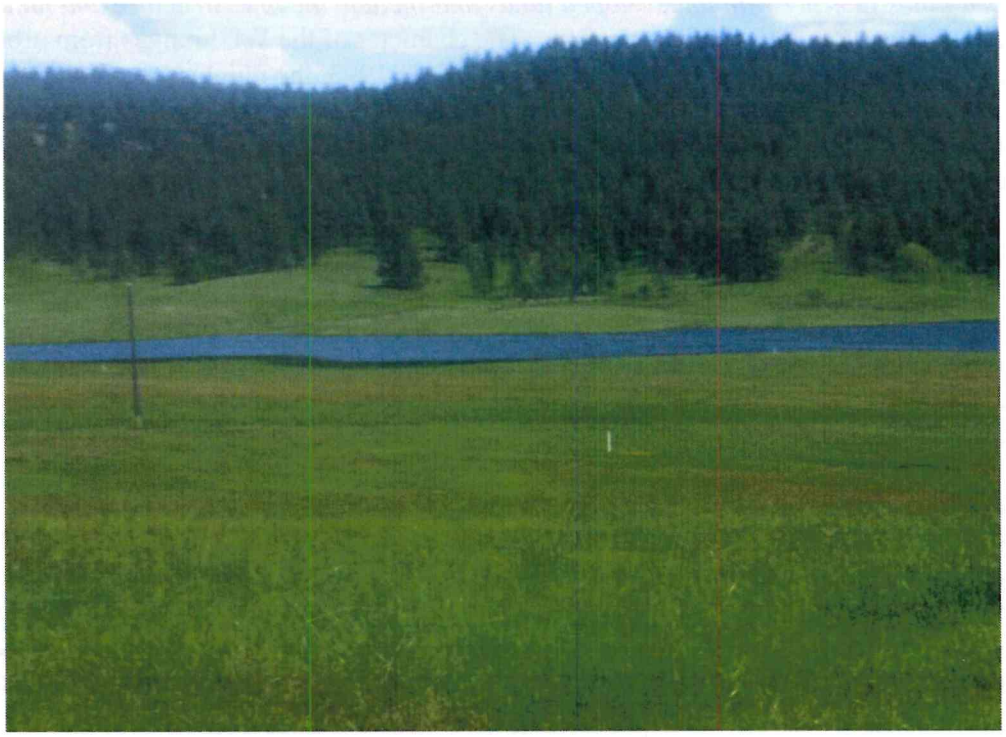
WILDLAND URBAN INTERFACE FIRE PROTECTION PLAN

Valley County Idaho
Title 10 Chapter 7

Eld Ranch Estates

A proposed subdivision located in the parts of S2SE Sec. 19; NW and W2SE Sec. 20, and NWNE and NENW Sec. 29 all in T16N, R4E B.M.

June 17, 2025



John Lillehaug
PO Box 1250 McCall, ID. 83638
Cell (208) 630-4076
john@allaboutforestry.com

Purpose

Valley County's Community Wildfire Protection Plan (CWPP) acknowledges that wildfire hazard areas exist throughout the county. Therefore, wildfire mitigation actions are prudent to enable safe habitation in these fire environments. The existence of said plans will assist Valley County Planning and Zoning Commission plus the structural fire districts and wildland fire agencies in satisfying the current subdivision regulation, subsection 10-3-2-6D7 of Valley County's Code of Ordinances (Ord. 10-07, 8-26-2010).

The wildland urban interface (hereafter referred to as WUI) is defined as *the area where developed lands interact with undeveloped lands and include the infrastructure and natural resources communities rely on for existence.* The character of the WUI ranges from urban areas adjoining wildlands to isolated ranches or cabins. Since 1993, the number of structures in the WUI has doubled and soon will triple. As the number of structures in the WUI continues to increase, concerns over public safety and the protection of improvements increase. The highest human-caused ignition sources in the WUI are miscellaneous and debris burning.

Executive Summary

The proposed subdivision consists of a parcel of land (totaling about 374 acres in size) that is planned to be divided into five phases of development (5) that will eventually add more structures to the Valley County WUI. This *Fire Protection Plan* will assist in providing recommendations to minimize the wildfire risk to the property and proposed structures.

The current property consists of three (3) parcels-RP16N04E199005 (about 54 acres); RP16N04E204805 (240 acres); and RP16N04E290605 (80 acres) and comprises about 25% forestland, the pond or riparian area of Laffinwell Creek (about 8%), and the remaining acreage is open meadow (either irrigated or non-irrigated pasture). As Eld Ranch Estates is planned to be developed by phases this *Fire Protection Plan* will address all Phases in general mitigation treatments and then as each Phase is proposed for development addendums will be added.

General treatments to be completed to mitigate the wildfire hazard and provide protection for future homes are outlined in **Section B *Wildfire Risk Mitigation*** portion of this document and include the following:

1. All vegetation treatments must be completed before the final plat of each Phase is granted or the work to be accomplished financially guaranteed.
2. Provide Firewise Defensible Space Zones around each residence
3. Development of an evacuation plan
4. Install the proper water supply requirements for structural and wildland fire response

Section A *Wildfire Risk Assessment:*

1. Site Description:

The Eld Ranch Estates proposed subdivision lies within parts of Sections 19, 20, and 29 T16N R4E that is owned by Greater Good Investments LLC and consists of approximately 374 acres. The property lies about three (3) airmiles southeast of Donnelly, ID. Access is provided off East Roseberry Road, a paved county road, then onto Gold Fork Road, a gravel surface county road. The topography is primarily rolling with a primarily southwest facing aspect and slopes that range from 0-20%. The forested area along the eastern boundary has numerous ridges and draws with slopes that range from 5-45%. The topographic elevation is about 5000 feet, and average precipitation is around 24 inches. Laffinwell Creek, a Class I stream, flows into a pond (that was constructed many years ago) then exits the property and then flows into the Gold Fork River.

Phase One comprises a total of 54 acres which will be divided into 20 buildable Lots ranging in size from approximately 1.5 to 3.5 acres plus two open space areas. The remaining four phases range in size from about 40 to 120 acres is size with the number of Lots to be determined.

2. Existing Vegetative and Fuel Hazard Conditions:

The proposed subdivision is about 70% grass land that was irrigated wherever possible for cattle grazing use. The riparian area along Laffinwell Creek has sedges and willows. The forested area consists of six commercial tree species including Ponderosa pine, Douglas-fir, Grand Fir, Western Larch, Lodgepole pine, and some Spruce. The ground vegetation within the forested area consists of snowberry, Ninebark, Hawthorn, willows, forbs and grasses.

Phase One is about 95% open grassland with some Ponderosa pine and Aspen along the southern boundary line.

3. Fire History

The fire history records from all jurisdictional agencies show a very low occurrence from lightning or human caused ignitions in the past.

Thunderstorms that are common in the summer months could result in rapid changes in fire behavior that could increase the risks to homeowners and firefighters. The Fire Behavior Triangle consists of three factors that combine to determine how a fire burns on a site- they are topography, weather, and fuels.

The normal weather pattern and air flow comes from a south/southwest direction with average summer temperatures ranging from about 70 to 85 degrees. Given the right conditions, this property is at risk from wildfire being pushed by a strong wind racing across the grassland and into the timber slopes on the eastern boundary.

4.Existing Roads and bridges

There is a primitive two track road that accesses the property from the end of Wither's Lane. This native surface road travels through the pasture, across the pond's dam to the forested area. There are several old logging roads within the forested area. Currently the road is washed out at the dam spillway leaving limited access to the east part of the property.

5. Location of existing building structures and estimate of property density

There are no existing building structures on the property. There are three private residences with several outbuildings on the north and west side of the property as well as three developed subdivisions bordering the property on the north and south sides.

6. Infrastructure that may affect wildfire risk.

There is an existing power line that crosses (north to south) through the property. The property is bordered by three subdivisions (i.e., Simpco Estates, Gold Fork Reserve, and Elk Meadows) that are in various stages of development ranging from a few houses to numerous structures.

7. Description of existing features that may assist in wildfire control.

The large pond in the middle of the property would provide a dipping source for aircraft or drafting by fire engines. Laffinwell Creek provides a good firebreak that splits the property in two.

8. Current structural and wildfire jurisdictional agencies

The structural fire jurisdiction for this development would be Donnelly Rural Fire Protection District (DRFPD). Southern Idaho Timber Protective Association (SITPA) provides wildfire protection for all timber lands in the area.

Wildfire Risk Assessment Summary:

The property lies within Valley County's Geographic Hazard Assessment Wildland Urban Interface **high** level condition for overall wildfire risk due to the following reasons:

The property lies in a transitional zone between open grass land that has traditionally been grazed and forest land that is various stages of management.

- Areas dominated by native grasses are described as Fuel Model 1 whereas fire in this fuel type tends to spread rapidly but burn at relatively low intensities. If grass land is not managed by irrigation and grazing the fuel load increases dramatically then as the grass cures or dries out it can become highly volatile, and fires spread quickly. Flame lengths can reach three times the height of the grass. Thus, homes need to be protected prior to fire ignitions, as there is little time to defend a home in advance of a grass fire.

- The forestland on the property has been managed by timber harvest to maintain the overall forest health and increase the growth rate on fewer healthy, vigorously growing trees. However, the last harvest entry was about 20 years ago thus many little trees have become well established, often found growing in overcrowded conditions. The overstory trees now have crowns that are touching each other. Forest communities contain high fuel accumulations that have the potential to burn at moderate to high intensities. Highly variable topography coupled with dry, windy summer weather conditions can create extreme fire behavior.

Looking west from **Phase One** to the forested area of future Phases 4 & 5

Section B *Wildfire Risk Mitigation:*

The Fire Behavior Triangle consists of three factors that combine to determine how a fire burns- they are topography, weather, and fuels. *Topography* is fixed as it changes very slowly over time. Topography is an important factor with this property as the forested area is steep and upslope. *Weather* is highly variable and the ability to predict is somewhat limited. Temperature and wind speed can be two important factors in determining the rate of spread from a wildfire. *Fuel* is anything that burns and changes from season-to-season or time of day. This factor is the only one that can be manipulated to minimize wildfire risk.

1. Access-Planned ingress and egress routes

Goldfork Road will be the primary access road which is suitable for emergency vehicles and an adequate evacuation route to travel north or south. A new private road will be constructed off Goldfork Road to provide access for the subdivision and all future phases. This private road when completed for **Phase One** will be a dead-end road with a 20-foot running surface, paved, and with appropriate designed turnarounds. Future access roads for the additional **Phases** will be addressed in their addendum fire plans.

2. Water supply for structural and wildland fire responses

In accordance with **Section 507.1 IFC 2018** Donnelly RFD is requiring an approved water system capable of supplying the required fire flow for fire protection for the proposed number of structures within each phase (see proposed water system concept map in Appendix).

The current wildland fire protection water supply needs for this property are available by drafting from the existing pond whether it be from ground equipment or dipping by aircraft.

3. Estimated response time and distance for jurisdictional fire agencies

The estimated response time for Donnelly Rural Fire Protection District and SITPA is approximately at least 20-30 minutes. Additional wildfire resources (including aerial resources) from federal agencies are available on request. The extended response time of firefighting equipment and road access will be difficult to keep a grass fire from gaining large acreage or losing structures.

4.Proposed internal fire protection systems.

No internal sprinkler systems are planned for the individual residences. The buried water tanks and associated hydrants must be located no further than 1,000 feet from a residence.

5.Proposed infrastructure (including driveways, signage, and power connections).

Recommend that individual driveways should not exceed 10% grade, be at least 12 feet running surface wide excluding shoulders, and shall be maintained to support fire apparatus up to 70,000 pounds.

New structures are strongly urged to utilize building materials meeting a standard of fire resistance advocated by the Valley County Building Department and the International Fire Code (IFC).

All new residences will have the address number posted as per Valley County standards (i.e., numbers posted at the entrance to the driveway or on the house and the numbers must be at least 3 and1/2 inches tall with a reflective coloring).

Electrical power is planned to be provided to the individual Lots via an underground service.

6. Evacuation and Pre-incident planning.

A pre-incident action plan is recommended to be developed to address the escape route and evacuation plan to encourage pre-planning for preparation in the event of an incident (see Appendix A for the **Wildfire Evacuation Checklist).** Every five years DFPD, SITPA, and the landowner should formulate an assessment of the existing structures and vegetation that will aid in addressing whether the current action plan needs to be updated.

7. Planned vegetation treatments to reduce fuel loads.

Each Phase may have different mitigation treatments and those will be addressed within the appropriate addendum. The entire property will continue to be grazed during the summer months until the necessary infrastructure work begins as each individual Phase is approved for development. This treatment will minimize the risk of wildfires both to the property and adjoining properties.

Phase One Treatments:

A. Within the 2 designated open space areas the overstory trees should be spaced about 20-25 feet apart to obtain a minimum 10-foot live crown distance, and younger trees (i.e., sapling/pole size age group) trees spaced about 12-15 feet apart to obtain a minimum of 6–8-foot live crown distance.
Prune all leave trees at least 10 feet above ground level of the lowest branch. Masticate all slash created from the thinning and pruning activity plus any dead material lying on the ground that is less than 10 inches DBH and 50% sound wood.

This fuel treatment will minimize the risk of a wildfire starting next to Goldfork Road and racing up the draw into the open grassland of ***Phase One****. It will also assist access out in case of evacuation.*

B. Construct a "Green Fuel Break" in the grassland along the south boundary fence line. The fuel break should be approximately 10-20 feet wide and planted with low shrubs and/or grasses that are fire resilient and remain green longer than the current native grasses. This should minimize the risk of fire entering the development and threatening the future residences.

C. Future Lot owners should install the following **Firewise Defensible Space Zone** guidelines **before** their residence is constructed as they will greatly minimize the risk of loss from wildfire.

The recommended **Defensible Space Zone** treatments are as follows:

1. ***Immediate Zone***- 0 to 5 feet around the building structures.
    a. I recommend using rock, gravel, pravers, or concrete instead of flammable vegetation or mulches next to the house.
    b. Do not allow low shrubs or other vegetation within this zone and no wooden fences or other structures within 5 feet of the residence.
    c. Do not stack firewood on or under decks.

2. ***Intermediate Zone***- the next 5 to 30 feet from the building structures.
    a. The landscape vegetation should consist of a well-maintained greenbelt. Cut grass to at most 4 inches in height and keep watered. Utilize native low-lying plants that are fire resilient (visit idahofirewise.org for list).
    b. Keeping this zone green as much as possible in the hot dry summer months will also minimize surface fire from reaching the buildings.

c. Shrubs can be limited to small clusters or groups of a few each to break up the continuity of vegetation across the landscape.
d. Place propane tanks on gravel or concrete pads at least 30 feet from structures and surround them with non-flammable fencing.

3. ***Extended Zone***- the next 30 to 100 feet from the building structures.

a) Mow area before fire season when the vegetation is still green. Dry grass and weeds are very hot, flashy fuels that ignite easily and spread quickly.
b) Prevent invasive weed spread by treating them appropriately then replacing them with fire resilient vegetation.
c) Maintain grass along driveways by mowing or creating a gravel walking pat

Keeping this zone green as much as possible in the hot dry summer months will also minimize surface fire from reaching the buildings. *

8. Long-term maintenance schedule to sustain fuel treat effectiveness.

- Promote the opportunity to maintain native trees and shrubs resistant to fire.
- Vegetation encroachment within the 100' zone of each structure will be reduced annually. The woody debris will be collected each spring and removed to an approved facility such as the Valley County transfer site.
- No open fires will be allowed during the closed burn season (May 10- October 20). Fire pits, if installed, should be maintained to prevent a fire from escaping the structure. Recommend using metal containers for the fire pit.
- Keep the shrubs and tree branches cut back along the main access roads to maintain the 20-foot running surface to provide good access to firefighting equipment.

***Note:** It is important to maintain the undeveloped Lots green or treated throughout the dry summer season(s) to minimize wildfire risk until they are sold and the new owner can develop their residence.*

APPENDIX

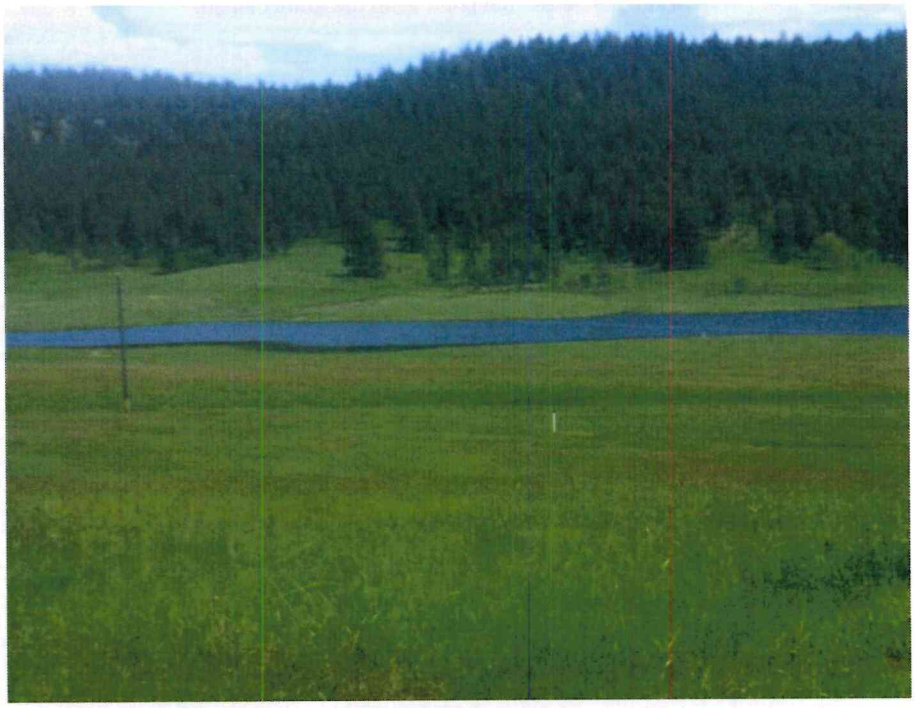
Pictures

Map: Preliminary site plan for Phase One
Proposed map of the future Phases
Proposed drawing of water supply locations

Information References:
Firewise Defensible Space Zones for grass land
Living with Fire in Valley County
VCFWG Wildfire Evacuation Checklist

Phase One consists of various species of grass that have been grazed. These grasses can reach a height of 1 to 2 feet tall and when cured a fire can spread quickly with flame lengths of 3 to 5 feet tall.

South fence line of **Phase One**. Right side of fence is **Phase One** and left side is sagebrush slope of a private Lot within Elk Meadows subdivision. Recommended area for installing a "Green Fuel Break".



Pond in the middle of property with timber stand in background that could eventually be subdivided.

Looking across the pond from the timber stand.

Simpco Estates is a subdivision with numerous residences which lies north of the property.

Wither Lane on the north side of the property.

Proposed open space area where the main access road begins.

Phase One where the main road then splits into two roads.