Edelweiss Development Community Wildfire Protection Plan

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Edelweiss Development Methow River Drainage – Okanogan County, WA Community Wildfire Protection Plan

1. INTRODUCTION

Citizens in the Edelweiss Development of Okanogan County have been concerned about the effects of wildfire since their beginning in the early 1970's. The community was placed on a Level II Evacuation Order during the Whiteface Fire in 1994. The Fawn Peak Fire and recent major fires in the Pasayten Wilderness, and in the Chewuch Drainage keep this concern alive. The 2003 Needles Fire, that threatened the entire upper Methow Valley, provided another scare, evacuation alert and increased emphasis for fire safety. The Edelweiss Maintenance Commission (EMC), the association management body, took action in 2001 and applied for a National Fire Plan grant. They were successful in acquiring a \$145,700 grant to conduct a "Fire Wise" workshop and risk assessments, to develop a Community Wildfire Protection Plan, to develop a fuel break along the Goat Creek Road and begin fuels treatment on demonstration lots and on the first bench. In 2002 the grant was amended to add \$300,050 to continue additional fuels treatments. These funds have provided for increased awareness and support for the program and fuels treatment on 134 high priority acres, on about 25% of the development. But blocks of high-risk fuels still exist and the community desires to continue the program. Proposed projects are outlined in this Community Wildfire Protection Plan (CWPP).

Visions and Goals

The citizens value their homes, forested setting and privacy. Their overarching aim is to protect life and property of the community, its members, and essential infrastructure from fire through outreach, strategic planning and action.

The primary goal of the Edelweiss Community Wildfire Protection Plan (CWPP) is to identify and implement projects that will protect people in the CWPP area, including residents, and firefighters and emergency personnel, from injury and loss of life. The secondary goal is to minimize or eliminate damage or loss of property and essential infrastructure due to wildfire.

In an effort to remain true to the environment that the citizens live in, all options for the utilization of biomass produced from fuels reduction projects will be pursued.

Community Awareness

The Edelweiss community is very aware of the need to develop a Community Wildfire Protection Plan and reduce the fire risk in the area. Edelweiss was on a Level II alert for evacuation until the 1994 Whiteface Fire was brought under control. And the community was under a Level I alert during the 2004 Needles Fire. These fires, plus the large fires on Fawn Peak, in the Chewuch Drainage (Andrews Creek, Thirtymile and Chewuch) and the Pasayten Wilderness fires, continue to emphasize the severe fire risk in this area. An

electrical fire at the pump house along Goat Creek Road in 2002 provided an added emphasis for action.

The community is providing an example that other communities can apply to their areas. The Edelweiss leaders and EMC Board have provided the community energy, input and guidance essential for the creation of this document. Additionally, it is the hope of the Edelweiss community that residents and property owners of the area will continue efforts to make their properties "Fire Wise" and implement defensible space.

Values

The property owners of the Edelweiss area value their homes, forest setting and privacy. They want to improve the safety of their community, and many individuals have already conducted work to reduce fuels around their homes and implemented fuels reduction projects. The Edelweiss community involves about 338 properties on 600 acres with about 45% of these lots developed. With the strong covenants in the association, building values are significant. The assessed value of the Edelweiss community is approximately \$98,000,000.

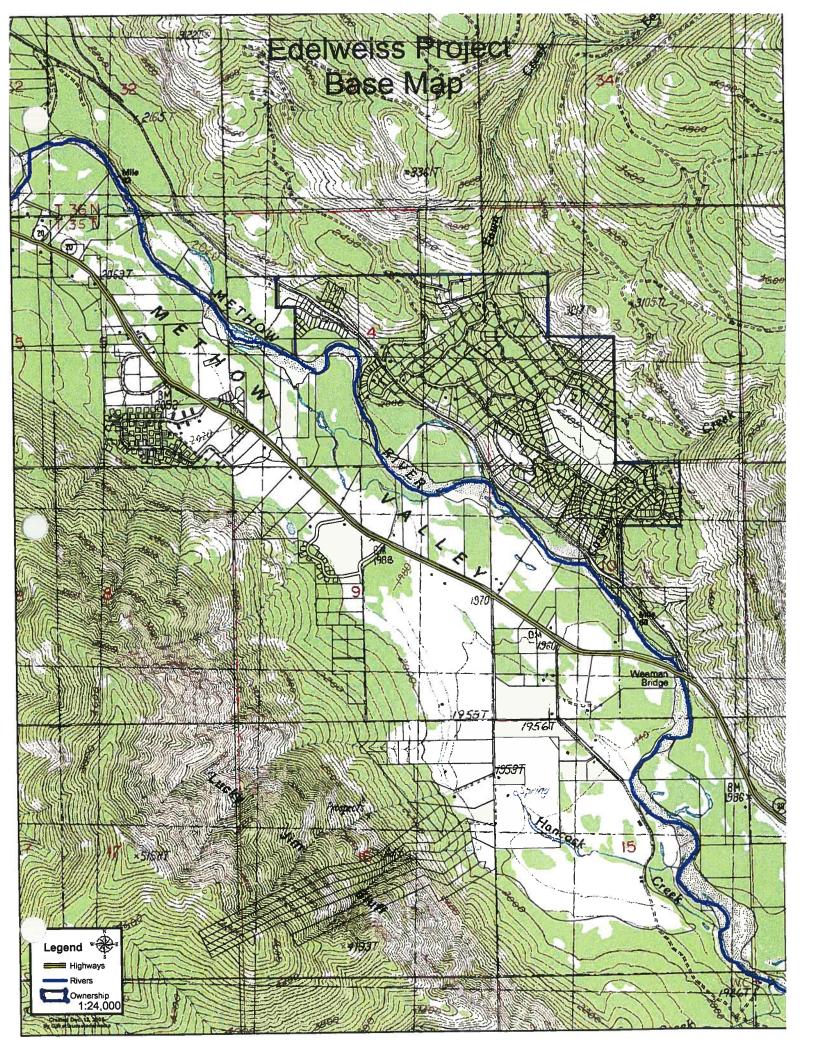
Through the CWPP effort they also hope to provide input on land management decisions for adjacent National Forest, Bureau of Land Management and State lands.

2. PLANNING AREA

The Edelweiss CWPP planning area is approximately 600 acres lying along southwesterly slopes on the east side of the Methow River between Winthrop and Mazama, WA. The area includes all the platted Edelweiss subdivision area. The area is bounded on the west by the Methow River, and on the north and east by the Okanogan National Forest. A 40-acre parcel of Bureau of Land Management land lies inside the north boundary and a 40-acre parcel of Washington State Department of Natural Resources land just outside the north boundary. A 7-acre parcel of private land lies between the pumphouse on Goat Creek Road in the southeast corner of the subdivision. The area is within Okanogan County Fire District #6. The area is considered a portion of the Twisp-Winthrop Wildland/Urban Interface – communities of risk. (see Base Map-page 3.)

General Description of the Area

The Edelweiss CWPP planning area is defined as the area platted as the 338-parcel Edelweiss subdivision. It lies midway between Winthrop and Mazama on the east side of the Methow River. The Okanogan County Goat Creek Road runs long the valley bottom through the area. Access to the properties is provided by a system of interior roads. Two roads, Homestead and East Fawn, provide ingress/egress routes during emergencies for the majority of the area. However the East Fawn Road is substandard, very rough and steep. Some dead-end spur roads exist and the West Fawn and Sunflower portion of the area have only one ingress-egress route. The roads are either paved or graveled but are to varying standards and some are not suitable for travel with structural fire vehicles. The



development will be difficult to evacuate and defend in the event of a fast moving wildland fire.

Many of the home sites do not include adequate defensible space although individuals have initiated work and through the National Fire Plan grants fuels treatments were completed on 113 of the properties (134 acres). Fuel types are primarily overstocked, mixed conifer types with steep, arid, south slopes containing bitterbrush and grasses. Three open meadows, previously cultivated pastures, lie within the area. Heavy riparian vegetation exists along the Methow River and Fawn Creek that runs through the northern portion of the area. The terrain is gentle along the valley bottom and meadows but steep and broken through the remainder of the area. The meadow areas could serve as "safe zones" in case residents were trapped or for suppression forces in case of a fast moving wildland fire.

Power is provided by an overhead power line to the pump house along the Goat Creek Road. Underground lines provide power throughout the subdivision. Water is provided by a public water system maintained by the Edelweiss Maintenance Commission.

General Description of Edelweiss Existing Residential Area

Edelweiss is a recreational-residential subdivision containing 338 parcels on 600 acres. The development is about 45% built out, containing a total of 151 residences. There are strict building codes and many of these are high-quality structures. Shake roofs are prohibited but several buildings have shake or shingles siding. Defensible spaces have been developed around about 75% of the structures but the overall fire risk to the community remains high due to pockets of dense untreated fuels, the steep southwest aspect and ephemeral draws.

Water is provided from 2 wells and is pumped to two water tanks with 225,000-gallon total capacity. Standpipes are provided through the development but only one standard fire hydrant, at the east end, exists. This is because the water lines are too small to handle standard fire hydrant flows. Underground lines provide power throughout the development. In 2002 North State Consulting P.C. estimated it would cost \$880,000 to upgrade the system to 8" water lines with standard fire hydrants, but this could be accomplished in stages.

3. PLANNING PROCESS

Process and Partners

Over the last 15 years fire prevention and safety was a frequent topic at association meetings and in newsletter articles. The Forest Service, Washington Department of Natural Resources, the Fire Districts and the Sheriff's Department participated in these efforts. The community members continue to be very concerned about fire risk to their properties and their ability to evacuate the area should fires occur. About 39 are full-time residents with the remainder part-time users, primarily from the west side. It is a

continuing program to inform new members about the inherent fire risk to the entire community.

In September 2001 the Edelweiss Maintenance Commission (EMC) was successful in receiving a National Fire Plan grant of \$145,700, funded by the U.S. Bureau of Land Management. The grant provided for:

- Conducting risk assessments of community properties.
- Hold "Fire Wise" workshops for community members.
- Develop a fire protection plan for the community
- Develop a fuels break along the Goat Creek Road.
- Implement demonstration treatments and begin developing defensible spaces and fuels reduction treatments.

This grant was supplemented in September 2002 with an additional \$300,050 to continue the fuels treatments.

Fire protection to the community is provided by the Okanogan County Fire District #6 with Fire Stations at Winthrop, 9 miles to the east and the Mazama, 4 mile to the west. The department is primarily a volunteer organization with only the Fire Chief being a paid employee. The Fire Department, as well as the Department of Natural Resources and U.S. Forest Service, all recognize the extreme fire risk of the community and support remedial measures. The Bureau of Land Management added their support by funding the grants and treating the fuels on their property.

Risk assessments have been completed on a total of 344 properties and risk assessment brochures were made available to the residents. A special "Fire Wise" workshop was conducted on May 2002 with about 70 members attending. A potential fire occurrence was modeled that showed the fire running through the community in less than 30 minutes. This was a very effective demonstration.

Fuels reduction and defensible space treatments were accomplished on 113 properties, totaling 134 acres. Priorities were placed on treating developed sites and those along the first bench above the Goat Creek Road and along the upper perimeter of the development. EMC has contributed nearly \$70,000 to the project, primarily through timber receipts. The results were well-received by the community. There is now a better understanding of how wildfire risk can be reduced and many are initiating treatment actions on their own.

The EMC Board recognizes that there is still much work remaining to reduce the fire risk to the community and are committed to take additional actions. Before any additional grant assistance can be requested the Community Wildfire Protection Plan needed to be approved. This plan identifies the actions and priorities as identified by the Edelweiss community.

The Edelweiss Community Wildfire Protection Plan is the result of these locally led efforts and partnerships between private, local, state and federal interests. The Edelweiss CWPP serves as part of the foundation of the countywide wildfire protection plan that is

currently being developed. By basing the County-wide plan on individual CWPP's such as the Edelweiss plan, the goals, objectives and recommended projects will be developed by and remain specific to each community. (See Section 8, Mitigation Action Plan)

4. ASSESSMENT

Existing Information

A substantial amount of data is already available from several sources. Primary fire planning information used in this plan came from Okanogan County fire District #6 (structure protection plan, evacuation plan, etc.), USFS Wenatchee-Okanogan National Forest, Methow Valley Ranger District (fire history, base map, and some vegetation information), and Washington Department of Natural Resources.

Vegetation

The majority of the planning area contains a mix of Douglas-fir and ponderosa pine. Riparian vegetation, including cottonwood, exists along the Methow River. Western redcedar is added in the Fawn Creek riparian area. Grass shrub vegetation, predominated by bitterbrush, occurs on the droughty south slopes. Dry land grasses exist in the meadow areas. Understory vegetation includes pinegrass, snowberry, rose, ocean spray and serviceberry. The majority of the trees are 70-90 years old, coming in after the last harvest and major wildfire, with scattered remnant older trees. About 50% of the area is overstocked with 400-900 trees per acre averaging 7 inches diameter breast height. Ponderosa pine composition is being reduced by bark beetle attack and dwarf mistletoe is heavy in some pockets of Douglas-fir.

Historically, ponderosa pine predominated in these stands with a scattering of Douglasfir. Age classes ranged from seedling to very large diameters. Understory vegetation was reduced by recurrent low-intensity wildfires.

The planning area is predominately a ponderosa pine and mixed conifer dry forest type. Ponderosa pine is a shade intolerant species naturally adapted to survive in areas that experience fire on a regular basis (i.e. frequent fire regime, fire interval every 5-15 years). Fire plays a major role in how ponderosa pine is established and sustained on the landscape. Regular burning allows pine stands to flourish by removing underbrush and smaller competing trees. As the pines mature their bark thickens and their lower branches are self-pruned, which makes them better adapted in a fire environment. Older, pure ponderosa pine stands often have a wide, open, park-like feel with scattered large trees (12-25/acre) with grass and scattered brush species in the understory. Fire also provides benefits, and opportunities for a variety of plant species. The resulting increase in vegetation diversity benefits wildlife, as well as forest health-disease resistance.

When the natural fire regime is altered (primarily through fire suppression) ponderosa pine stands become denser. Shading and competition will inhibit the growth of pine and allow more shade tolerant species, such as Douglas-fir, to become established along with other underbrush species. This overstocked condition will produce vertical and horizontal fuel profile continuities, which often result in stand replacement fires.

Additionally, denser stands are often more susceptible to the spread of insects and disease which provide more dead fuels.

Frequent fire regimes (with fires at intervals of 0-35 years) become unstable as fire frequency is disrupted (e.g. by fire suppression). These forest types rely on the dynamics of fire to lower competition amongst species, keep areas of disease and insects in check and clean up the dead and downed materials (fuel). If there are no fires in a 0-70 year period to manipulate the dry forest, the forest is considered in a Condition Class II. No fires over a longer period produce a densely stocked stand of pine and shade tolerant species with often results in stand replacement fires. This Condition Class III situation will result in the loss of forest cover, damage to watersheds, altered wildlife habitat, and potential soil damage when the inevitable uncharacteristic high intensity fire occurs. Some fuels treatment has reduced the risk but most of the areas in the planning area are in Condition Class II. (see Condition Class Map – page 8.)

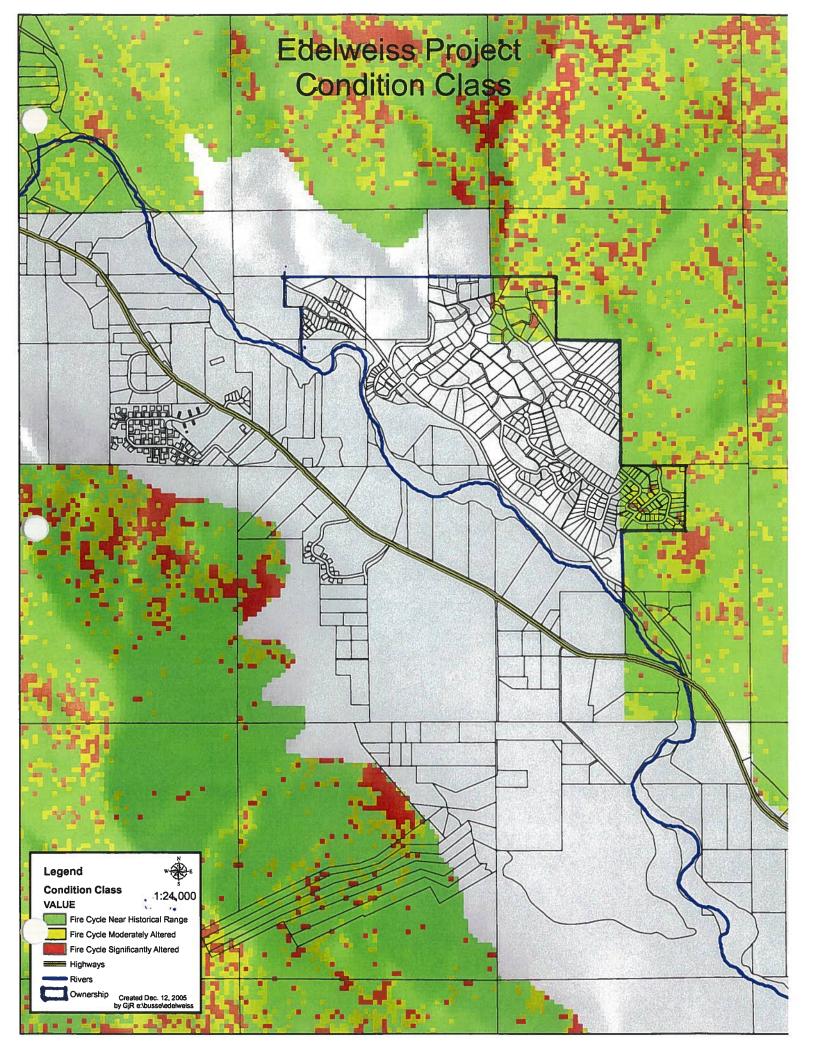
Fire Ecology

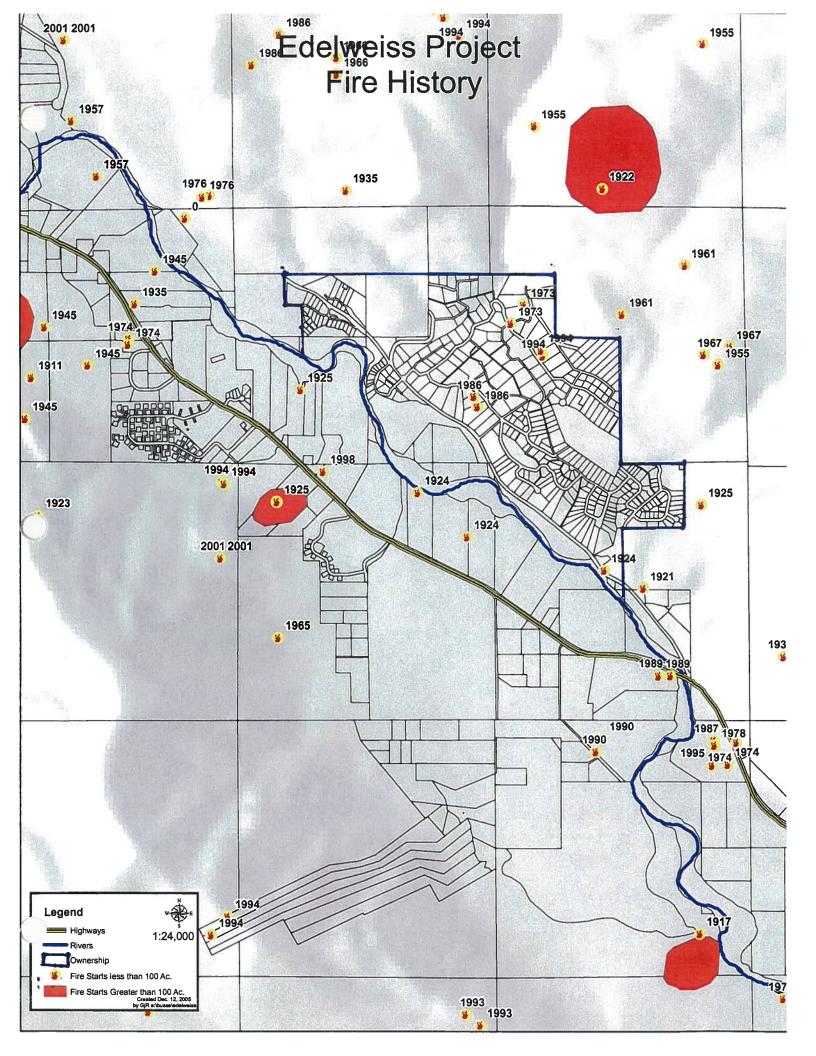
Weather, topography, and fuels affect wildfire behavior. The Edelweiss CWPP area, like other areas of Okanogan County, is prone to severe weather conditions that can support extreme fire behavior. The landscape within the developments is benchy and rolling with sharp, ephemeral draws running up from the Methow River that would act as fire chimneys. And the steep slopes above the Goat Creek Road would support severe fire behavior. Many of the stands have closed canopies, overstocked understory, and abundant ladder fuels. Insect and disease infestations of mountain pine beetle and dwarf mistletoe are prevalent.

Since the weather and the topography of the community cannot be changed, the best approach to minimize the risk to people and potential property losses is to modify and/or reduce fuels surrounding the home, as well as at the landscape level. Fuels treatments within and adjacent to a community can improve safety for firefighters, help overall suppression efforts to be successful, and reduce potential risk/damage to individual structures/property. Wildlife habitat benefits can also be gained through fuels reduction and natural vegetation restoration projects.

Fire History

Fires are started naturally by lightning, in and around the planning area, every few years. But fires are also often started as a result of other causes, such as campfires, and debris burning. The Forest Service has mapped the fire occurrences they have responded to. (see Fire History Map - page 9.) The size of the fires may vary, but typically small fires of a few to several acres occur at 1-5 year intervals. No large fires have been experienced in the planning area in nearly 100 years but conditions are conducive to large, high severity fires similar to those that have recently occurred in surrounding areas (1994 Whiteface Fire, 2002 Fawn Peak Fire and Chewuch Fires)





General Fire Behavior Potential

Some structures are located around the meadow perimeters but most structures inside the planning area are within heavily forested areas. The small lot sizes (average 1.5-2 acres each) within the Edelweiss community result in buildings being close together. Fires may move very rapidly through both the developed areas and the overstocked forested undeveloped areas. There is a high potential for spotting and control could be difficult if wind is a factor. The heavily forested ephemeral draws could produce fast moving fires when driven by the steep slopes and sustained winds. The threat would soon be in all areas of the planning area with fire potential to involve all structures.

A major concern is the draw at the east end of the community, between the pump house and Highland Meadows. It is a steep sloped ephemeral draw that is overstocked and with heavy ground and ladder fuels. If a fire ever started up this draw it would run through the community in minutes. The majority of the property is not within the Edelweiss community and to date the landowner has not agreed to have the fuels treated.

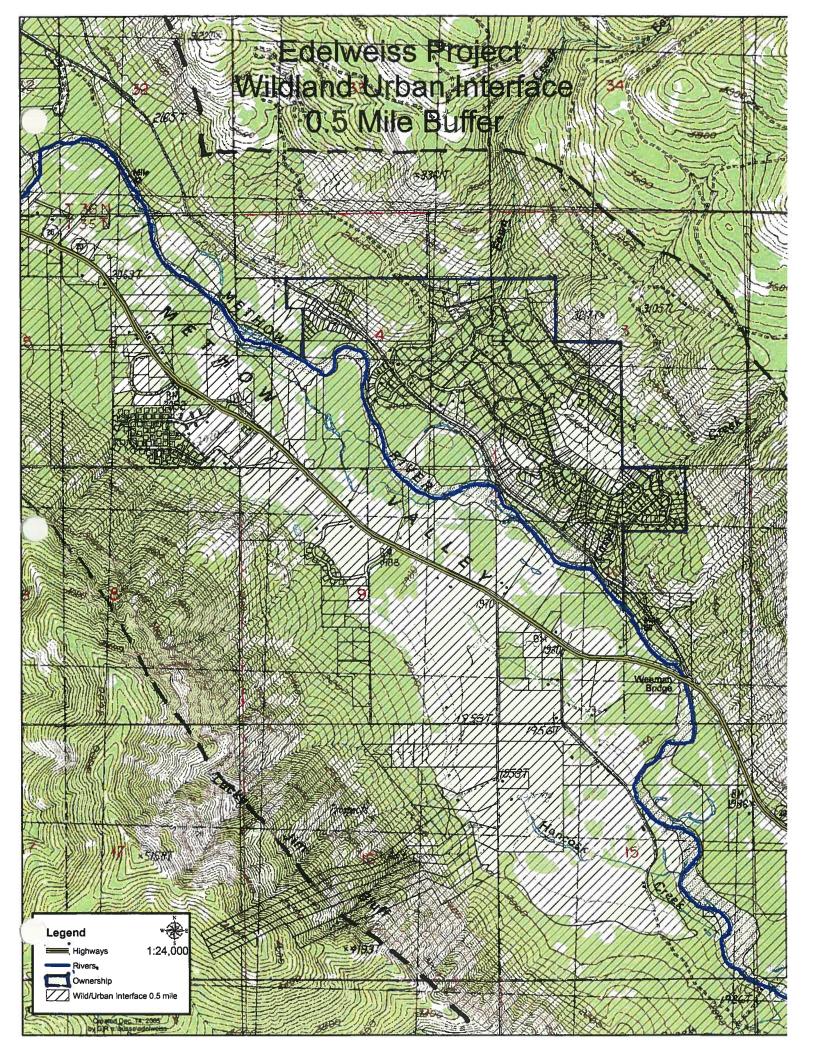
On the positive side shake roofs are not permitted. This reduces the risk of shakes becoming a firebrand source for starting new spot fires. But many have wood or even shake or shingle siding and there are many wood and lumber piles that could contribute to spotting. Should structures become involved, spotting potential from the structures themselves will be significant.

Fuels Hazards

The WADNR has classified the planning area as a portion of the "high risk" Twisp-Winthrop Wildland Urban Interface area. The Forest Service considers the WUI to extend 0.5miles beyond the developed areas. (see Wildland Urban Interface Map – page11.) Past activities such as logging and fire suppression have altered the normal fire regime; stand species, composition and structure and forest health. Dense overstocked stands dominated by trees under 12 inches in diameter are increasing the fire hazard. Pockets of trees are affected by mountain pine beetle. Trees often have contiguous crowns and ladder fuels and underbrush and grasses predominate the landscape. The development lies on a southwest aspect with some steep slopes and deep, incised draws. All of these variables provide a continuous fuel profile, which can create conditions for an intense and fast moving fire.

Protection Capabilities

Okanogan County Fire District #6 with stations at Winthrop and Mazama is responsible for protection of the Edelweiss community. The surrounding private property is protected by the Washington Department of Natural Resources. The Forest Service has primary agency responsibility for the federal lands. The Fire District has a working relationship with the Forest Service and the Washington Department of Natural Resources and mutual aid agreements with all the fire districts within Okanogan County.



Fire District #6 is responsible for protection of the entire Methow Valley north of Gold Creek, covering a very large area (nearly 350 square miles). There is only one paid employee, Fire Chief Don Waller. There are an estimated 70 - 75 volunteers in the Department but availability is variable since many of these have jobs outside the valley. Fire stations are located at Lost River Airport, Mazama, Winthrop Twisp and Carlton.

```
Current Equipment
       Lost River Airport
              750 gal. Pumper
              3,000 gal. Tanker
       Mazama
              1,000 gal. Pumper
              3,000 gal. Tanker
             4 x 4 Brush Rig
       Winthrop
             2,000 gal. Pumper
             3,000 gal Tanker
             Type VI 4x4 Brush Vehicle
      Twisp
             1,000 gal. Pumper
             4,000 gal Tanker
             Type VI Brush Vehicle
             Backup 4 x 4 Brush Vehicle
      Carlton
             2,000 gal. Pumper
             3,000 gal. Tanker
             Type VI Brush Vehicle
```

The objective of the Okanogan Fire District #6's structure protection plan is to safely and efficiently manage resources to protect life, property and resources in the event of an approaching wildfire. Strategy decision shall take into account the following tactical considerations:

- 1. The Edelweiss community is in a very fire- prone setting. It lies on a southwest slope with variable terrain incised with step heavily timbered ephemeral draws. Fires would move rapidly through the area with spotting, torching and crowning common.
- 2. This is an up-scale community with significant structures. However many of the homes will require maximum effort to defend, requiring prompt implementation of this plan and the need for triage of structures.
- 3. The primary consideration of the District is the safety of the firefighters and the protection of the lives of the residents.
- 4. The District practices a policy of aggressive initial attack. For any fire call within Edelweiss both the Winthrop and the Mazama stations are dispatched, and the remaining stations are included when there is high fire danger. Response times would range from 10 to 30 minutes.

- 5. While structural protection is the primary responsibility of the District, they attack threatening wildfires in order to protect nearby structures.
- 6. Wildfires escaping initial attack rapidly expand and require a multi-jurisdictional response with a unified command. This requires joint training and communications. Currently there is a positive relationship with local partners but this requires constant maintenance.
- 7. Okanogan County Fire District #6 and its cooperators cannot assemble enough structure protection capabilities to protect all the development within the Edelweiss community. Successful defense from wildfire will depend upon structural triage, and time for pre-treatment with mobile tactics. Resources from state and federal agencies will be necessary to implement the strategies described.
- 8. The Edelweiss community has a community water system. There are water standpipes throughout the area but only one standard hydrant, at the upper east end. Water can be drafted from the Methow River but refill capacities for extended structural attack are not available.

Structural Vulnerability

Residences within the Edelweiss community are in a suburban forested setting somewhat entwined into the forested landscape. Access, topography, slope and fuels play a role in each structure's fire risk, as well as the condition of adjacent structures. Residents within the untreated forested sections are of highest potential for large fire loss. Timber mixed with light fuels creates a fast moving fire situation with the highest potential for large fire loss. Not having an adequate water system for structural fire suppression limits the amount of protection the district can supply. Actions implemented in the Mitigation Action Plan portion of this plan primarily address improving the ability of structures to be defended during wildfires.

Key Contacts

Organization	Contact	Phone Number
Okanogan County Fire District #6	Central Dispatch	911
	Twisp Station	(509) 997-2981
Okanogan County Fire District #6	_	
Administration	Chief Don Waller	(O) (509) 997-2981
		(C) (509) 322-3605
	Mazama Asst. Fire Chief	, , , ,
	Dick Roberts	(509) 996.2334
Okanogan County Sheriff	Frank Rodgers	(509) 422-7200-7525
Methow Valley Ranger Dist.	_	
(USFS)	Pete Soderquist (FMO)	(509) 996-4003
Central WA Interagency Comm.	- ` ` /	•
Center (CWICC)		(509) 662-4393
Okanogan County Electric Coop.		(509) 996-2228
Edelweiss Maintenance Comm.	John Caesar, Manager	(509) 996-3377
	Steve Cleaves, Pres.	(509) 996-8238

Additional Operational Needs Identified by the District

- Two additional paid staff are requested to have sufficient staff available throughout the year to facilitate continued and improved coordination, training, communications, and other joint efforts and to be able to respond to structural fires with two first-responders.
- Two additional Type 4 Engines are required for adequate protection of the Wildland Urban Interface.

Acquiring these needs will largely hinge on funding available for the fire program and its various elements.

5. RISK EVALUATION

An area risk assessment was completed by WDNR (NFP-299 area risk assessment) that grouped the planning area rather than analyzing risk to individual structures. The fire risk assessment for the Edelweiss CWPP planning area is ranked as high.

Access

The Goat Creek Road is the primary evacuation route in and out of the planning area. Two access roads (Homestead and East Fawn) serve as ingress/egress to the Goat Creek and serve as evacuation routes for the majority of the community. However, the East Fawn Creek is substandard, steep, narrow and rough. The properties that are accessed by the West Fawn and Sunflower Roads have only one access route. The Goat Creek Road can be considered as a shaded fuel break. In order for the interior roads to act as shaded fuel breaks some additional clearing would be needed in portions of these roads where dense timber abuts the road.

The roads are either paved or graveled, but are narrow and passing is difficult. Segments have steep grades and wash-boarded when dry and graveled and icy in the winter. There are several dead end spurs to portions of the development, some with an inadequate turn-around at the end. Some of these roads are not in a suitable condition for structural fire equipment, especially in the steeper, dead end spurs. Improvement of the East Fawn Road as an evacuation route has been identified as a critical concern.

Evacuation

Okanogan County Emergency Management Program would organize any evacuation of the Edelweiss community. Since access routes for evacuation are limited, evacuation would have to occur well ahead of any approaching wildfire. An evacuation plan is being developed that addresses these concerns.

Staging Area for Tactical Resources

The Okanogan County Fire District #6 is the primary agency for supervising any fire originating within the Edelweiss community. Washington Department of Natural Resources is the primary agency for fire protection on the surrounding forested private and state lands and US Forest Service is the primary agency responsible for management of fires on federal lands. The District will respond from both the Winthrop and Mazama Fire Stations as first response with mutual aid resources available throughout the county. These resources may respond to a pre-designated staging area.

Staging area options include:

If fire threatens any portion of the Edelweiss area, the District will respond with mutual aid resources from throughout the Okanogan County. These resources may use any of the following pre-designated staging area locations:

- Walt Foster's Field, Mazama
- WA Fish & Wildlife Campground, Big Valley Ranch, Highway 20

Command Post Locations

The command posts would be established at the staging area, but additional phone lines and communications would have to be set up.

Command posts could also be located at the:

- Methow Valley Ranger Station, 24 West Chewuch Road, Winthrop
- Liberty Bell High School, 18 Twin Lakes Road, Winthrop

Water Supplies

The location of water sources and capabilities available for firefighting efforts have been identified. 225,000 gallons of water are stored in the community storage tanks. One standard fire hydrant exists at the east end of the development and water standpipes are located at intervals throughout the community. The Methow River can be accessed at camping area to draw additional water.

Fuel Breaks and Safety Zones

Previous fuels treatments have developed a shaded fuel break along the first bench above the Goat Creek Road and around most of the upper perimeter of the development. But there is still a real possibility of a fast moving fire engulfing the community and trapping residents. The three meadow areas (Highland Meadow, Community Pool Area and Campground Area) could act as safety zones for cut-off residents or as areas to stage strike forces so they could provide more efficient secondary protection of structures. For those along the West Fawn Road a possible safety zone could be the open bench just above the Forest Service cattle guard. There is no safety zone along the Sunflower Road.

A treatment goal is to develop a fire and fuel break along the interior road system. Considerable work has been done and an estimated 50% of the system could act as a shaded fuel break but to be effective the intervening sections need to be treated. This could be accomplished by treating the full right-of-way width. (see CWPP Project Map - Page 17.)

6. CURRENT ACTIVITIES

Protection Measures

The Okanogan County Fire District #6 provides fire protection for the Edelweiss area. Depending on time and location, response times average 10-30 minutes.

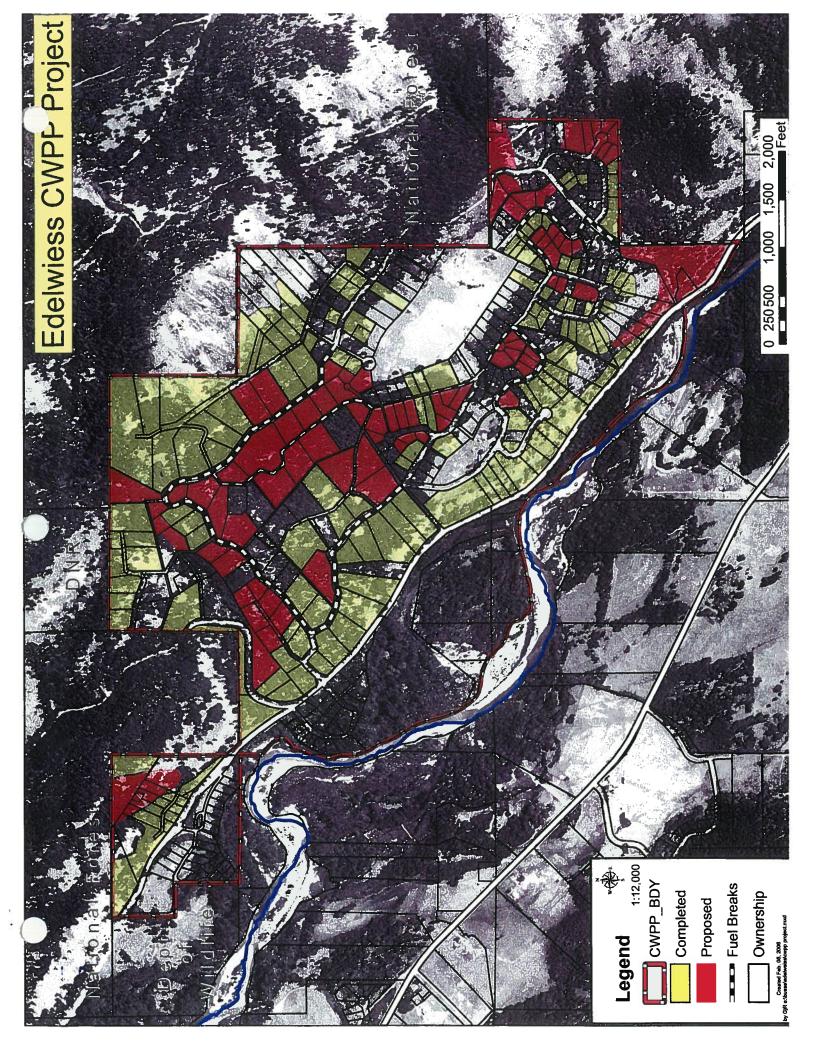
Existing Procedures

The Edelweiss community and its Maintenance Commission have organized and begun implementing community types of projects that have increased the awareness and understanding of the residents regarding the fire risk and the reduction of fuels loads around individual homes. Grant funds, obtained through the National Fire Plan program, have been utilized to treat over ½ of the high-risk fuels and have acted as a catalyst for individual efforts by property owners. The community desires to continue these fuels treatments and reduction of the fire risk. (see CWPP Project Map - page 17.)

Project Proposals

Approximately 50% of the high-risk fuels have been treated with the current National Fire Plan grants plus individual efforts. Dr. Jim Agee, fire ecologist, estimates 60%-75% participation is needed so, "the worst fire behavior might be fragmented enough to allow most of the subdivision to avoid being destroyed". The community recognizes more work needs to be done.

Priorities for additional fuels treatment include, treating the steep ephemeral channels that are heavily stocked and "wick" up from the Goat Creek Road into the community, completing the upper perimeter shaded fuel break in the northeastern corner and treating the remaining densely, stocked areas in the interior of the development. Completing shaded fuel breaks along the road system is another priority. Other priorities include upgrading the East Fawn Road to be an effective evacuation route and upgrading the water system to provide for standard hydrant coverage. (see CWPP Project Map - page 17.)



Coordination with Forest Service and Other's Activities

In order to maximize the fuels reduction work for private land, it would be desirable for complimentary projects to take place on adjacent lands, including Forest Service managed lands. The Bureau of Land Management recently completed a fuels treatment project on their 40-acre parcel that is within the subdivision perimeter. This compliments the work accomplished by the National Fire Plan grants.

The Washington Department of Natural Resources has a 40-acre parcel immediately north of the subdivision. A shallow draw along the subdivision boundary is heavily overstocked and high-risk to the community. It would be desirable to treat this boundary to provide an effective shaded fuel break along the boundary.

A high priority for additional fuels treatment is the 7-acre private parcel adjacent to the pump house along the Goat Creek Road. This parcel contains heavy, ladder fuels and is at the mouth of a steep ephemeral draw that feeds directly up to the subdivision. Numerous efforts have been made to contact the owner but to date these have been unsuccessful.

The Forest Service has initiated a fuels treatment project in the Fawn Creek Treatment Unit above the planning area. Two areas, that were not included as treatment units, contain extreme fuels loading and are considered a major threat to the homeowners. The Forest Service is currently exploring options on how to treat these areas that contain heavy, submerchantable material.

The CWPP is recognized as the instrument necessary to organize and educate the public and to further encourage and facilitate the design of such future projects.

7. PLAN MAINTENANCE

The Edelweiss Maintenance Commission Board will be responsible for monitoring existing projects and proposing and prioritizing future projects aimed at wildfire prevention and protection within the Edelweiss CWPP area. Board members will take on the task of coordinating with outside groups and agencies to investigate, write and submit future grants. This group is also responsible for partnering with appropriate agencies to review and update this CWPP at least once a year under the direction and assistance of the Okanogan County Fire District #6 and the Methow Valley Ranger District.

8. MITIGATION ACTION PLAN

The priority projects of the Edelweiss landowners are to continue the fuels treatment program by treating the high-risk areas of the ephemeral draws, the remainder of the exterior shaded fuel break, and the dense stands within the development. A second priority is the completion of fuel breaks along the interior roads and development of the East Fawn Road into a satisfactory evacuation route. (see CWPP Project Map – page 17.) The objectives of these projects are to better provide a safe evacuation route and

safe area if trapped and to reduce fire intensity within the community. Additional priorities are the continuing education of the landowners, upgrading the water system to provide standard fire hydrants and the ongoing maintenance that will be required.

The Edelweiss Community Wildfire Protection Plan has five categories of mitigation actions: Roads - ingress/egress, Fuels Reduction, Public Education and Outreach, Suppression Capability, and Public Agency Coordination. Natural Vegetation/Habitat Restoration is incorporated into the Fuels Reduction projects. Recommendations by category are provided below.

The Edelweiss Steering Committee has prioritized the recommendations (delineated as EMC High, Medium or Low). The (EMC High) items will be emphasized for accomplishment. They will be put into an action plan and funding will be sought to implement these projects. Additionally these priority items will be recognized as the highest priority projects for implementation by the Edelweiss area landowners.

- 1. <u>Issue Roads ingress/egress</u>
 - a. Fuels reduction along roads. (EMC High)
 - i. Mitigation goal develop shaded fuel break along the main loop roads.
 - ii. Mitigation Goal Extend the fuels breaks to the remaining spur and dead-end roads.
 - b. Dead end roads unsafe for firefighting personnel to access. (EMC Medium)
 - i. Mitigation Goal Map roads accessible by fire vehicles. Sign those that are dead end or are inaccessible.
 - c. Need improved secondary access in case of fire emergency. (EMC High)
 - i. Develop cooperative approach with the Forest Service to improve East Fawn Road into a safe ingress/egress access route.
 - ii. Implement the improvement work.
 - d. Develop uniformity of road and address signs and install signs at strategic locations. (EMC High)
 - i. Mitigation Goal Develop a road and address sign plan for the Edelweiss community.
 - ii. Mitigation Goal Provide means for acquiring standard signs and directions on installation.
 - iii. Mitigation Goal Install "dead end road" signs and warning signs on roads unsuitable for fire emergency vehicles.

- 2. <u>Issue Fuels Reduction for Edelweiss (a portion of the Twisp-Winthrop WUI, a community at risk (EMC High)</u>
 - a. Natural Resources Protection
 - i. Mitigation Goal Treat fuels in areas to protect communities and infrastructure at risk.
 - 1. Treat the ephemeral draw between pump house and Highland Meadows.
 - a. Reach agreement with adjacent landowner to conduct fuels reduction.
 - b. Treat the fuels.
 - 2. Complete shaded fuel break along top and east corner of the development
 - 3. Provide additional treatment on the steep slope and ephemeral draw from the Goat Creek Road to the Homestead Road.
 - 4. Treat remainder of dense stands in the interior of the community
 - ii. Mitigation Goal Maintain existing and future fuels reduction projects.
 - iii. Mitigation Goal Develop a team to locate and prioritize landscape scale fuels projects.

b. Homesites

- i. Mitigation Goal Implement defensible space guidelines and create defensible space around homes.
- ii. Mitigation Goal Provide information for homeowners for measures they can take to reduce ignitability of structures.
 - 1. With brochures, association meetings, newspapers, etc.
 - 2. During building permit review and approval process.

c. Utility Corridors

- i. Mitigation Goal Proactively trim growth and remove hazard trees along the power line to the pump house annually to prevent outages and fires.
- d. Disposing of Excess Fuels
 - i. Mitigation Goal Develop and implement plan to dispose of excess fuels generated during fuels treatment projects.
 - ii. Mitigation Goal Explore opportunities for utilization of material generated during fuels treatment projects.
- e. Monitor Effectiveness and Validate Work
 - Mitigation Goal EMC Board in conjunction with the Fire District, Forest Service, and Department of Natural Resources review the projects to see that work accomplished is what was intended, to see if it was effective and to learn how to adapt and improve.

3. <u>Issue – Public Education and Outreach (EMC Medium)</u>

- a. Community Preparedness
 - Mitigation Goal Implement risk assessment recommendations of individual properties with prescriptions as identified in the assessments.
 - ii. Mitigation Goal Develop and implement community fire emergency and evacuation plan, including how to contact and notify landowners (phone trees, sirens, radio stations, etc.) and interaction with firefighting officials. (See Appendix ___)
 - iii. Mitigation Goal Encourage individuals to develop personal emergency action plans, to include:
 - a. Individual responsibilities and residential and personal security, i.e., creating defensible spaces, landscaping in fire country, creating fire breaks, Fire Wise construction materials, visible house numbers, etc.
 - b. Individual preparedness: How to create a Personal Emergency Action Plan (personal escape routes, disaster supply list, personal communication plan),
 - c. What to do and what NOT to do in case of wildfire.
 - d. Interacting with local firefighting and law enforcement officials.
 - iv. Mitigation Goal Provide uniform signage for roads and addresses.

b. Prevention

- i. Mitigation Goal Residents aware of risks and responsibilities of living within Wildland Urban Interface
 - 1. Conduct Fire Wise Workshops.
 - 2. Provide information packets to all present and new landowners.
- ii. Mitigation Goal Include Fire Wise considerations in review process for building.
 - 1. Expand review criteria to include restrictions and/or recommendations regarding construction materials, landscaping materials, and road design.
 - 2. Provide information packets to those considering building or remodeling.
- iii. Mitigation Goal Initiate fire restrictions and provide notifications to landowners
 - 1. Develop and maintain fire message bulletin board at entrance of Homestead Road, to include:
 - a. Fire Danger Levels
 - b. Burn bans and other restrictions
 - c. Emergency call number Dial 911
 - 2. Winthrop and Mazama Fire Districts initiate burn bans and other fire restrictions.

- 3. Provide fire prevention messages and notifications on bulletin boards, signs and other media.
- 4. Prosecute violators.
- iv. Mitigation Goal Explore possibilities to receive incentives for construction with fire resistant materials.
- c. Emergency Services
 - i. Mitigation Goal Provide current road and address maps to all fire, law enforcement, and emergency medical entities.
- d. Outreach
 - i. Mitigation goal Compile and make available to general public fire risk information and actions being initiated to reduce these risks.
 - 1. Distribute information about Edelweiss' initiatives to media and surrounding communities.
 - 2. Emphasize how groups work collectively together.
 - ii. Mitigation Goal Encourage Edelweiss and neighboring residents to come together to promote community safety.

iii.

- 4. <u>Issue Suppression Capability</u>
 - a. Fire District Staffing (EMC Low)
 - i. Mitigation Goal Current staffing is inadequate to assure adequate protection, training and coordination.
 - 1. Provide 2 additional paid employees for District #6
 - b. Available Resources (EMC Low)
 - i. Mitigation Goal Continued development within the WUI requires increased suppression capabilities.
 - 1. Provide additional 2 Type 4 Engines for WUI protection
 - c. Water Availability (EMC High)
 - i. Mitigation Goal The community water system is inadequate for standard fire hydrants for structural suppression..
 - 1. Develop a strategic plan to upgrade the community water system to accommodate standard fire hydrants.
 - 2. Secure funding and implement the upgrading program.
- 5. <u>Issue Public Agency Coordination</u>
 - a. Agency and Group Collaboration (EMC Medium)
 - i. Mitigation Goal Participating agencies and Edelweiss continue to work together to monitor, improve, and adapt program.
 - 1. Work with the Methow Valley, Okanogan County and participating agencies and landowners to implement a County-wide CWPP.
 - b. Project Coordination (EMC High)
 - i. Mitigation Goal Edelweiss and Forest Service coordinate treatment of the National Forest areas that are a threat to the community.

- c. Process of Fire Response (EMC Low)
 - i. Mitigation Goal Describe fire response procedures and conditions:
 - 1. Within the Edelweiss community
 - 2. In surrounding forested areas
 - 3. Identify and distribute evacuation conditions and procedures
- d. Website Resources (EMC Low)
 - i. Mitigation Goal Identify and include in information packets information sources for Fire Wise development, emergency measures, current conditions, contacts, etc.