



COLORADO OUTDOOR EDUCATION CENTER
COMMUNITY WILDFIRE PROTECTION PLAN
JANUARY 20, 2009

**Colorado Outdoor Education Center
Wildfire Protection Plan Jan. 2009**

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This document was prepared and written by staff of COEC January 2009.

Colorado Outdoor Education Center Wildfire Protection Plan

For 60 years the Colorado Outdoor Education Center (COEC) has hosted summer camps for youth (Sanborn Western Camps), conferences and adult groups (The Nature Place) and school classes (High Trails Outdoor Education Center). The mission of the camp is:

*“To live together in the outdoors building a sense of self,
a sense of community, a sense of the earth,
and a sense of wonder through fun and adventure.”*

With this plan, COEC seeks to develop a rational and systematic approach to evaluation of the wildland fire risk to residents and high priority values, and to create a long term plan to maintain and improve the forest health for the 6000+ acres owned by the camp. The Camp property is covered by both Community Wildfire Protection Plans (CWPP) of Park and Teller Counties. Those plans are general in nature and this plan is intended to be a specific supplement to the county plans. The general fire hazard maps completed by each county indicate a high to severe wildfire hazard in the vicinity of COEC. At the more specific level of this property, there are areas of low to extreme risk. The portion of the camp that is in Park County is rated as “Priority Zone 2, Lake George” by the Park County CWPP.

LOCATION: In the heart of Colorado, the COEC is located five miles southwest of Florissant, Colorado. Elevation ranges upwards from 8400 ft. Vegetation consists of high mountain meadows, ponderosa and spruce/fir forests with a few bristlecone above 9000 ft. Pockets of aspen can be found in drainages and on some slopes. There is little surface water.



POPULATION: The number of people using the COEC facilities varies widely with the season. The summer program hosts over 400 campers and staff at each session, the school classes both spring and fall include 300 students from regional schools each “school week”, and 100 guests use The Nature Place facilities for each event. Additionally, there are a dozen staff homes scattered throughout the property, housing 27 permanent, year round residents.

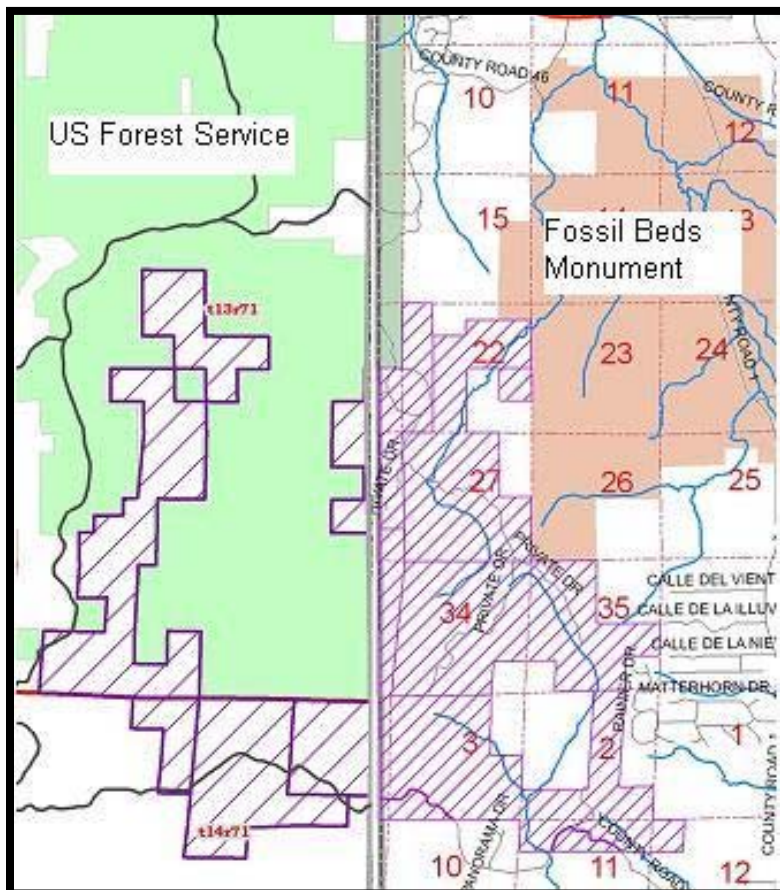
GENERAL FOREST CONDITIONS: The forest conditions on the COEC property are varied as would be expected on a tract covering 6000 acres. The majority of the forest is ponderosa pine, which is typical for the area. All of the populated areas of the COEC are in the ponderosa type. The trees are even aged in structure, commonly growing in a dense, closed canopy with numerous co-dominant and overtopped trees in the understory. Douglas fir is present as understory in many areas, and contributes significantly to the amount of ladder fuels. There is no evidence of any significant fire in recent years.

Mountain pine beetles have generally been at endemic levels over the past twenty years. The principle disease problem at this time is dwarf mistletoe and there are several large pockets throughout the ponderosa stands. Condition class in the ponderosa is "III" in most areas. Fire hazard in these areas is high.

On north facing slopes and in cooler drainages, the forest type is mixed ponderosa and Douglas fir in dense, closed canopy stands with high to extreme fire hazard. Currently, there are no major insect or disease issues in these stands.

Many of the meadows are managed to provide hay as well grazing for cattle and horses. The height of the grasses is kept to a minimum through these uses and little additional management is necessary to reduce wildfire hazards.

There are pockets of aspen scattered throughout the camp, but no large aspen stands. Mitigation projects within COEC will consider aspen management as part of the overall plan for forest health. Increasing the number and size of aspen stands will lessen the fire hazard, increase diversity and improve wildlife habitat.



ADJOINING LANDOWNERS:

The principle adjoining landowners are Federal agencies. Florissant Fossil Beds National Monument borders on the east, and has undertaken a program of thinning and pile burning along its borders.

The US Forest Service shares boundary lines central and west and is undergoing an extensive forest restoration project by thinning, broadcast burning and pile burning in areas adjoining the COEC. (see Appendix A2)

Parcels of private land are, as a rule, small residential parcels where limited or no mitigation has occurred.

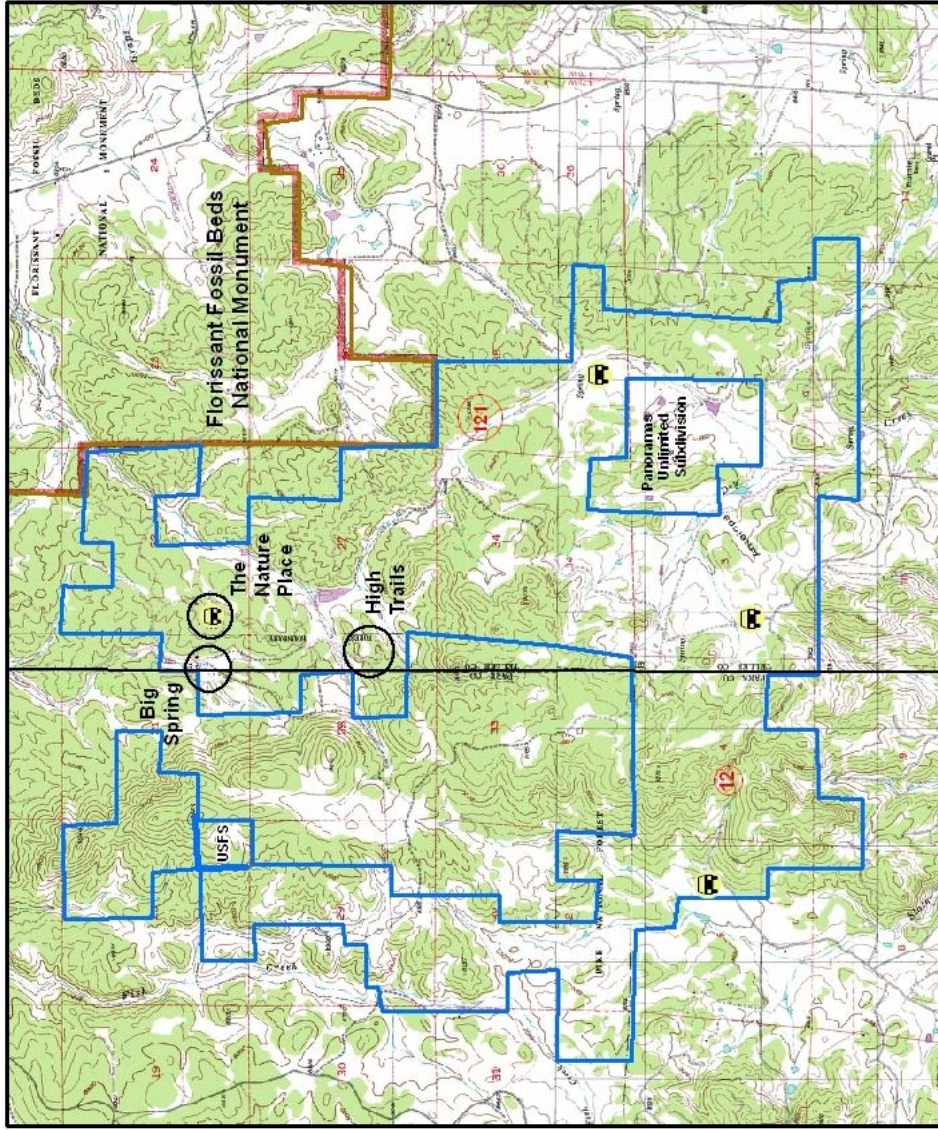
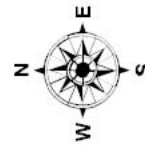
SAFETY: In the event a wildfire threatens the property, an evacuation plan is in place for the COEC guests. The primary access road runs north to south through the populated portions of the camp and allows egress in either direction. If evacuation in a timely manner is not possible, there are several large meadows on the property that could be used as safe or staging areas. A program of mowing boundaries of these meadow grasses would improve the safety of these areas. Weather and fire behavior conditions would determine the safety of these areas at the time of a fire. Use and safety of these areas should be determined by fire professionals.

INTERFACE: While the natural environment is considered high value to COEC, there are three primary developed zones with permanent structures within the camp property that will be the focus of this plan. Assessment and individual structure ratings are being done by the fire departments having jurisdiction using Red Zone software. Access roads are gravel, narrow in some places and offer limited fire breaks. The primary road travels through the eastern portion of the property (north to south) and does provide a narrow but usable emergency egress. All buildings, structures, residences, facilities and water are supplies are accessed from this road.

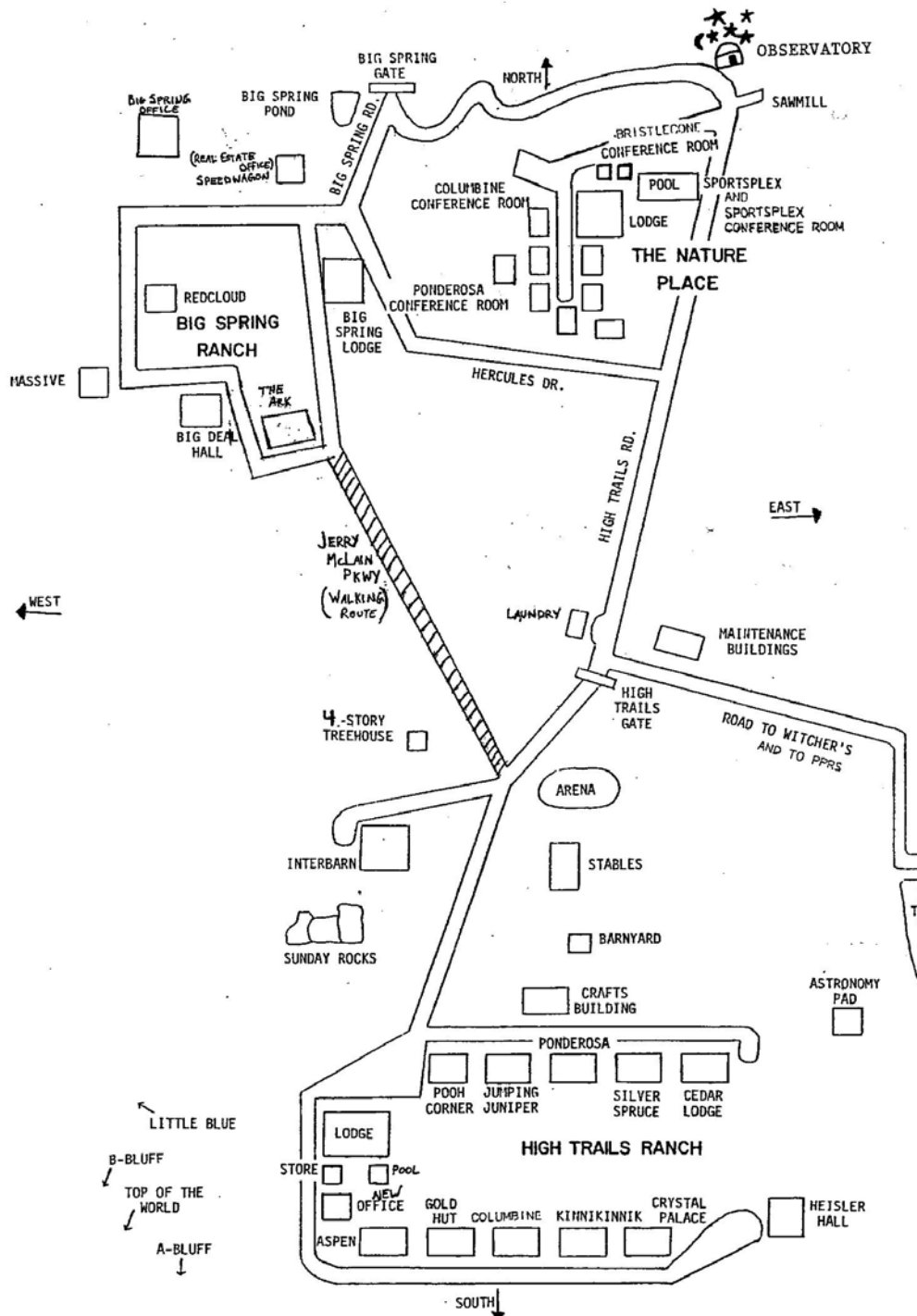
Colorado Outdoor
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Plan

Base Map

-  COEC Boundary
-  Nat. Monument Boundary
-  Developed Areas
-  Staging Area
-  County Road Number



General Structure Layout of COEC

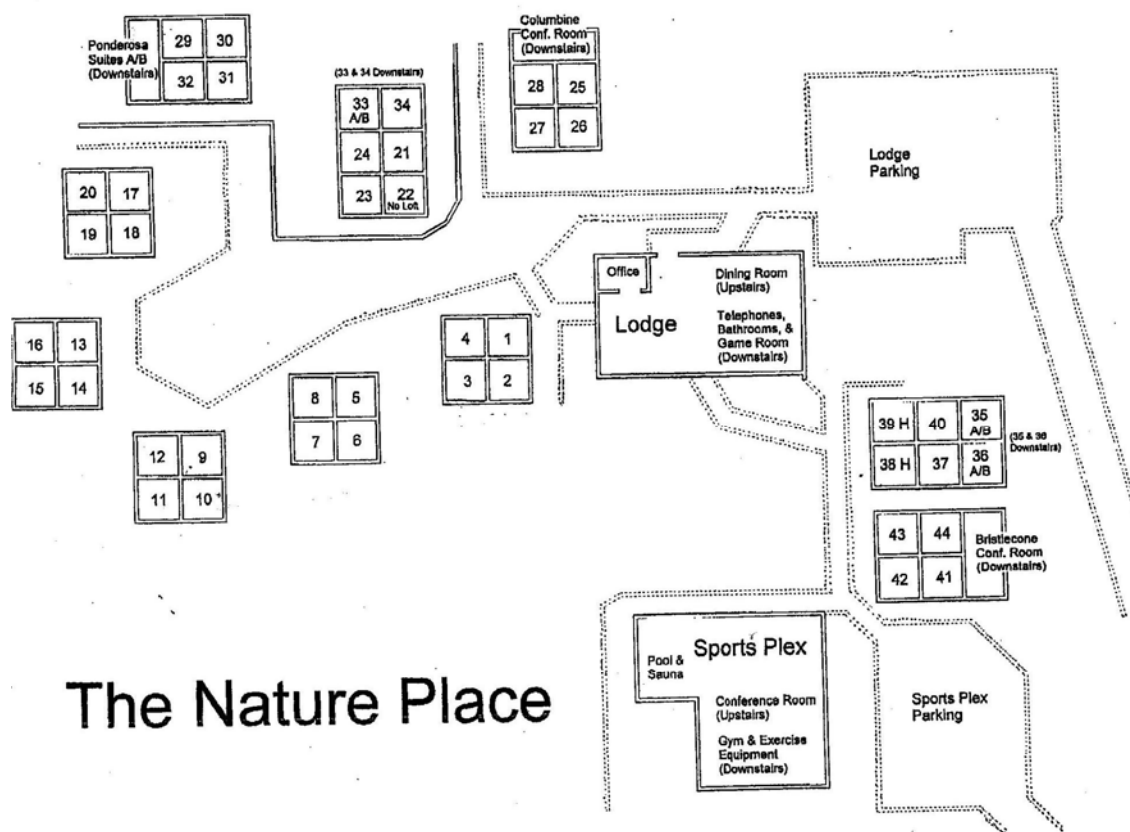


I. Big Spring Ranch for boys is at the northern most boundary of the camp and adjacent to USFS property. Structures consist of 32 wooden tent platforms and 3 canvas and wood yurts that are in use only during the summer months. These are arranged along ridges and around a 10 acre open area. There is one year round residence, the main office buildings and ten permanent structures used during the camp season within this interface.



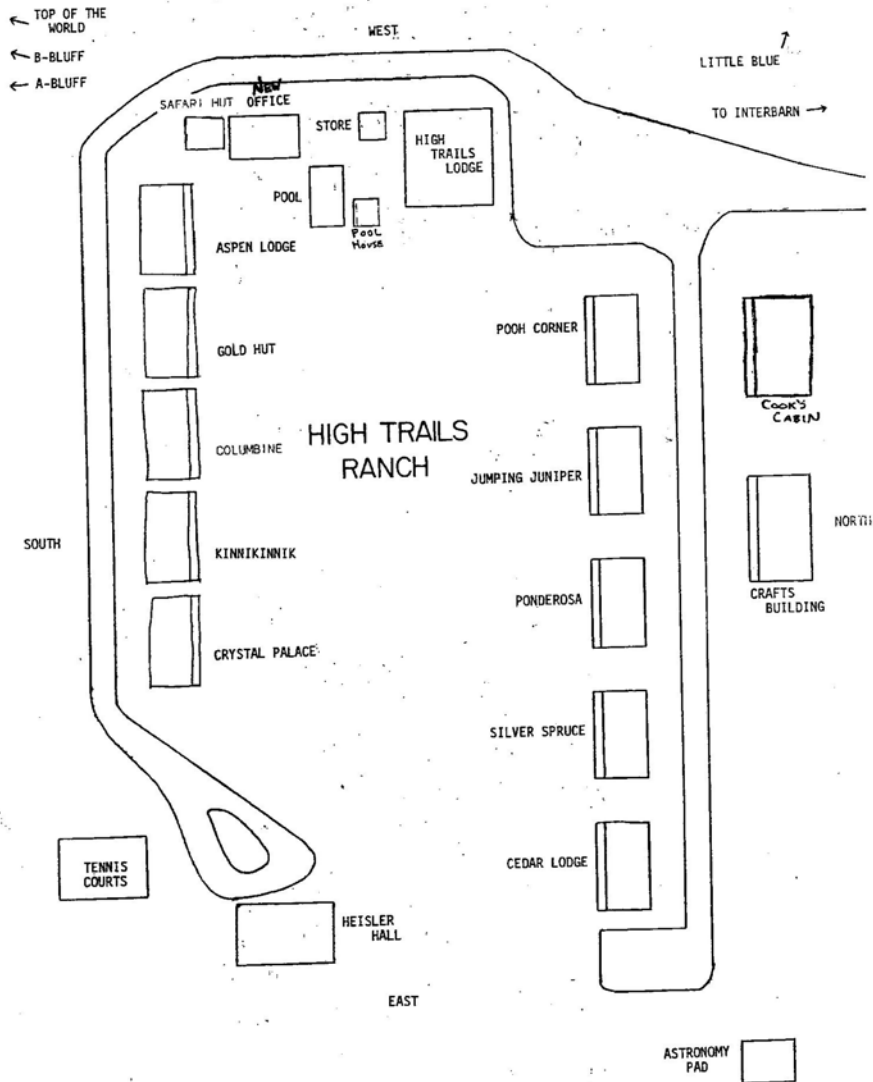
Central to the camp is a large grass meadow with few shrubs or trees, the terrain is gently rolling. This area would provide a staging area and fuel break to slow or divert a wildland fire. The outer perimeter is timbered with ponderosa and mixed conifers in a closed canopy. Fire hazard is low to moderate. Water sources include a 32,000 gallon pool during summer months, and limited water availability at other times of the year.

II. The next area of interface is the “campus” of The Nature Place adult education facility. This area is in use year round, has newer structures and has been the focus of the mitigation projects to date. Also occupying a ridge, there are small grassy openings, but forest type is primarily ponderosa, spruce in dense stands and small stands of aspen. A seven acre defensible space project was completed in 2007 to the west and south of the campus. The area east of the camp is an open stand of ponderosa with grassy understory. The ponderosa stand to the north is thick, closed canopy and presents a high fire hazard. The swimming pool at TNP is indoors but could be accessed by pumper truck with 75 feet of hose for emergency water supply.



The Nature Place

III. Moving further south, the High Trails Ranch for girls follows the same ridge top pattern of other COEC facilities. This camp is in use April to November. The campers are housed in wood sided cabins. As with the boy's camp, there is a 35,000 gallon outdoor swimming pool that could provide emergency water supply during summer months. The road into High Trails is a dead end with no secondary egress.



ADDITIONAL RESOURCES:

As a precaution, the camp has a brush truck with 250 gallon water capacity and a fire truck with 750 gallon capacity. An overhead fill pipe is located outside the laundry on the main road and can provide 80-100 gallons per minute by gravity or pumped flow. Trucks are kept in “stand by” during summer months and staff training on basic fire suppression response is completed each year.

There are also several ponds on the property as shown on the base map. These rely on runoff from precipitation to fill and water volume is subject to current weather conditions. These ponds might provide an additional source of draft water in the event of a fire, but are not a dependable source.

OBJECTIVES, GOALS AND ACTIONS DEFINED IN THIS PLAN

From evaluation of the previous overview of existing conditions, the following presents more specific future plans to reduce the overall risk of catastrophic fire on COEC property. Priorities continue to be life safety, fire risk reduction to structures in areas of interface and forest health initiatives throughout the property.

OBJECTIVE 1:

Provide for increased safety of camp property, staff and guests.

Goal 1A: Involve local fire protection agencies in evaluation of existing conditions of structures, access, water supplies and evacuation plans.

Action 1: Meet with fire protection districts to tour camp property with special attention paid to structure locations, water supplies, and access roads.

Action 2: Review evacuation plan with focus on access issues.

Action 3: Share this information with both permanent and seasonal staff during training and with brochure at least once a year.

Goal 1B: Identify safe zones, natural fuel breaks, and treatment areas of adjacent public lands.

Action 1: Request participation of fire professionals in determining structural hazard concerns and to identify safe zones based on vegetative cover and fire behavior expectations.

Action 2: Meet with federal land managers to identify areas that have been or will be treated to reduce wildfire intensity.

Action 3: Research the development of an emergency egress south or east of High Trails structures.

Goal 1C: Improve the ability of firefighters to protect the camp by improving infrastructure and equipment to suppress fires.

Action 1: Identify strategic areas where water resources can be established or improved.

Action 2: Improve equipment to quickly respond to a fire such as standardized hose connectors, slip on water pumps for trucks, etc.

Action 3: Meet annually with responsible fire protection districts for review of resources and familiarity of property.

OBJECTIVE 2:

Reduce the vulnerability of individual structures within the WUI of COEC.

Definition of Wildland/Urban Interface (WUI): Locations where man made structures intersect with or are contained within natural vegetation of the adjacent or surrounding uninhabited areas.

GOAL 2A: Education of year round residents.

Action 1: Work with CSFS to hold a training session for all camp residents and maintenance staff to present “defensible space objectives”, and information regarding the evaluation of their homes and other structures.

Action 2: Provide appropriate literature to each resident for their personal use in developing strategies to reduce the vulnerability of their homes.

Action 3: Include reminders, ideas, and additional information in camp newsletter/updates to staff.

GOAL 2B: Reduce fuel hazards in the vicinity of multiple structures.

Action 1: Hold at least 1 group “work day” on each residence to begin reducing fuels in structure vicinity.

Action 2: Schedule maintenance personnel to assist in tree/branch removal requiring equipment such as chain saws.

Action 3: Provide equipment or service for removal of slash in hazardous areas.

Goal 2C: Maintain and improve fuel reduction strategies.

Action 1: Establish annual maintenance check list for all camp residents to maintain and improve the defensibility of homes and other structures.

Action 2: Hold an education meeting for staff to highlight needed changes in the vegetative structure to improve forest health, establish more natural forest conditions, and reduce the risk of catastrophic fire in this valuable asset.

Action 3: Establish more natural forest conditions and reduce the risk of catastrophic wildfire in this valuable asset.

Note: It may be possible for fire suppression personnel to focus their efforts on minimizing the potential environmental fire damage instead of structure protection if these structures have received the appropriate preventative treatments to reduce their vulnerability.

Objective 3:

Continue fuel modifications in all areas identified as WUI and expand those modifications to improve overall forest health and resistance to catastrophic fire in an effort to protect this irreplaceable camp asset.

Goal 3A Continue to modify the fuels adjacent to permanent structures in Defensible Space Zones 1-3.

Action 1: Encourage each resident to make note of any vegetation of concern at their individual residence (including dead or down, and insect or disease infestations) to be included in annual maintenance list.

Action 2: Provide assistance to residents such as labor by way of camp “work days”, equipment use and support of camp maintenance staff where appropriate.

Action 3: Pursue funding for assistance by contractors, forest and fire professionals in reducing the fuel hazards in areas identified as WUI in this plan.

GOAL 3B: Identify priority “natural areas” within the camp that should be managed to reduce the risk of catastrophic fire.

Action 1: Request information from camp staff regarding special habitats that have been observed.

Action 2: Continue maintenance practice of removing any trees deemed hazardous in the WUI or adjacent to critical access routes.

Action 3: Pursue funding for larger fuel modification projects to reduce risk in WUI and improve forest health.

GOAL 3C: Capitalize on partnerships with adjacent land owners and managers to maximize effectiveness of boundary line projects.

Action 1: Consult with federal land managers regarding areas of concern on shared boundary line and plan mitigation projects to address risk.

Action 2: Participate in “Good Neighbor” agreements to reduce the risk of fire spread into or out of Camp property.

Action 3: Coordinate maintenance of boundary projects with appropriate land owners and managers.

SUMMARY:

The process of developing a Community Wildfire Protection Plan has proven to be advantageous to COEC. There is now a more complete overview of the values and wildfire hazards on camp property. This will be the foundation for a more focused and systematic approach to protecting those values and reducing identified hazards. The following summarizes the results:

- Life safety issues, particularly the evacuation plan, need to be re-examined in light of the CWPP and refined to reflect new information.
- Education of staff, residents and campers, youth and adult will be a vital component of this version of the CWPP.
- Structures have a measurable economic value, and hazard reduction should be accomplished at several levels.
- The forest environment is essential to the camp experience and must be protected through mitigation efforts and forest health improvement projects.

In general, the mitigation and forest health strategies will be to thin from below. This may involve removal of suppressed and overtopped trees from the understory and is well suited to fire mitigation projects by recreating the natural, open park like stands of ponderosa with herbaceous ground cover. Most large, dominant trees will remain unless removal is necessary to open the forest canopy. Thinning treatments may also be varied to achieve other resource objective such as insect or disease control and wildlife habitat improvement.

Additionally, the partnerships developed with local land managers and fire protection professionals will be maintained to provide for the highest levels of input regarding safety and forest management practice.

This Community Wildfire Protection Plan was prepared and written by staff of the Colorado Outdoor Education Center January 2009, and is approved by:

Jane Sanborn, Executive Director, Colorado Outdoor Education Center

Rob Jolly, Director, The Nature Place

Chief Lance Crummett, Four Mile Fire

Chief Robert Bertram, Florissant Fire

Chief Dutch Kleinhesselink, Lake George Fire

Sara Mayben, District Forester, US Forest Service, Fairplay

Dave Root, Colorado State Forest Service

Florissant Fossil Beds NM





Teller County

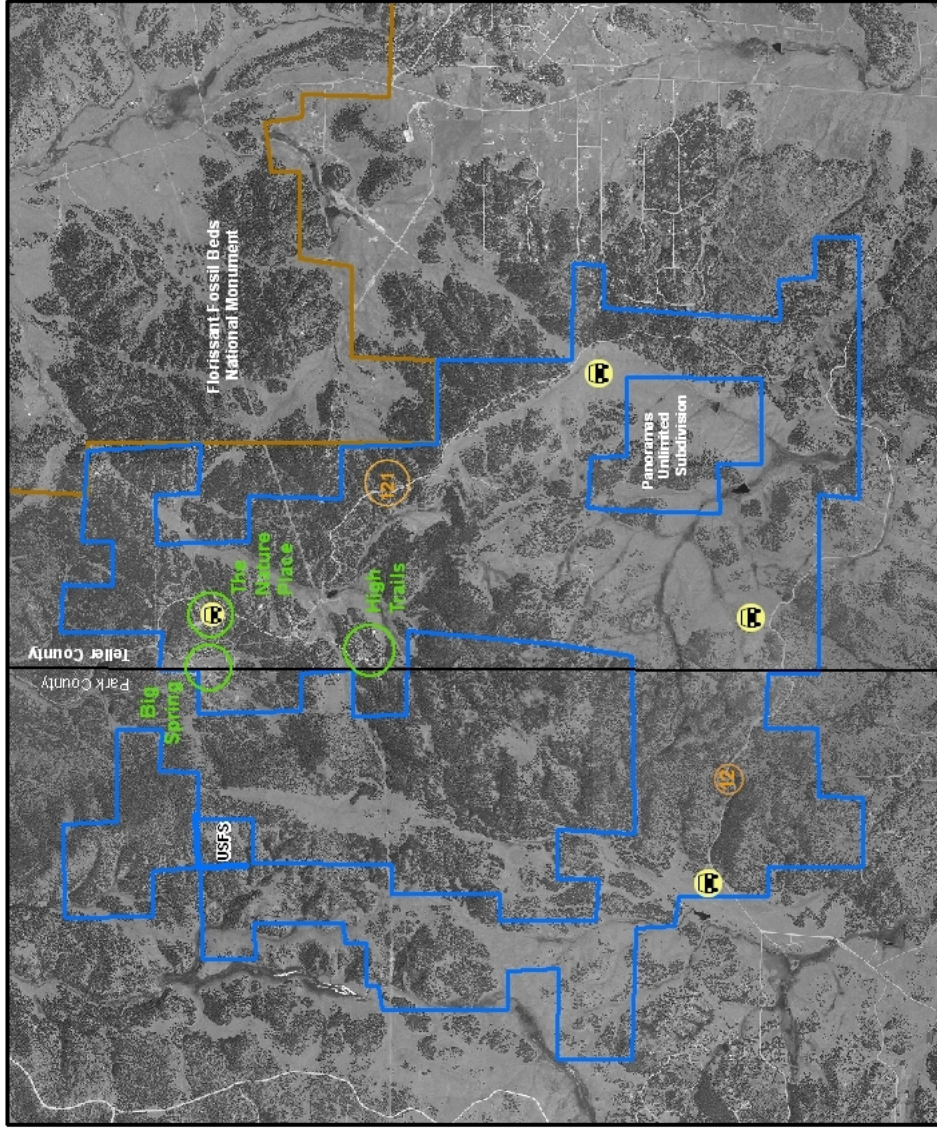
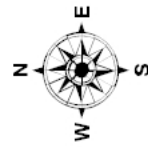
Park County

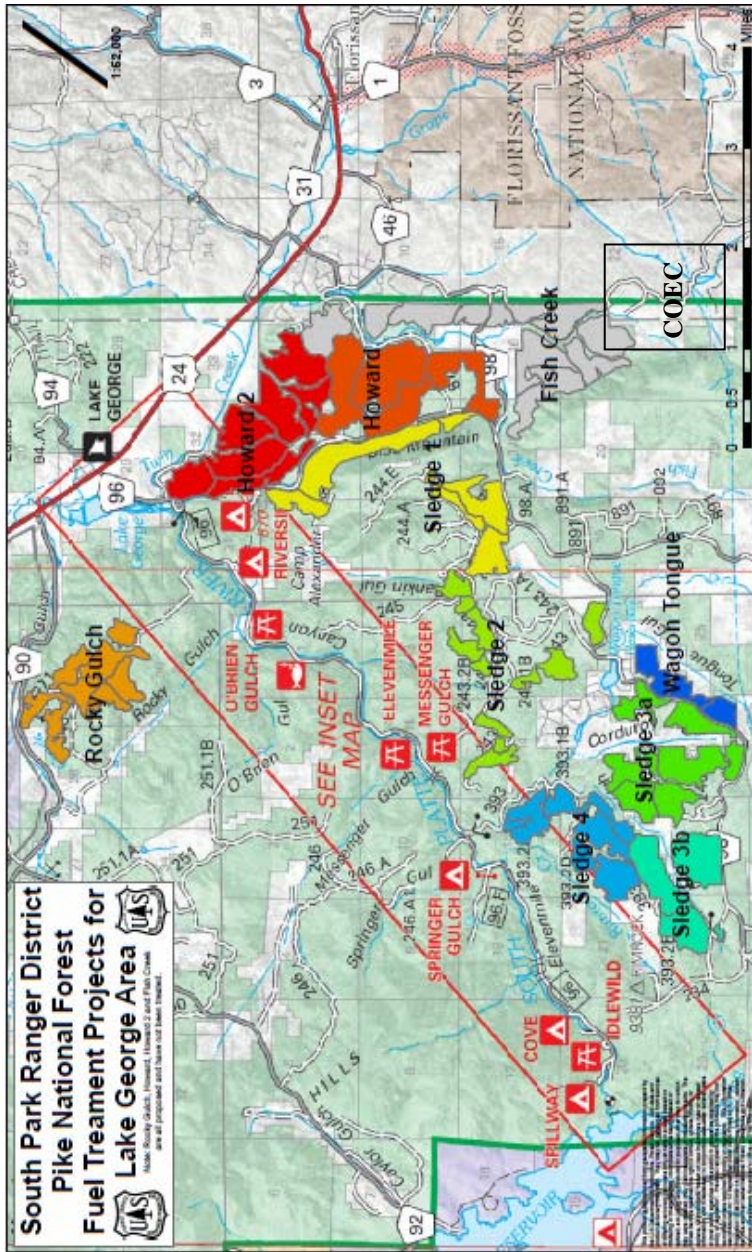
Appendix

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Aerial Photo

-  COEC Boundary
-  Nat. Monument Boundary
-  Developed Areas
-  Staging Area
-  County Road Numbers





US Forest Service Fuel Treatment Projects in Areas Near of Colorado
Outdoor Education Center Property

Suggested Reference Materials:

Creating Wildfire-Defensible Zones no. 6.302
Colorado State University Extension

Landowners Guide to Thinning
Colorado State University Extension

Is Your Home Protected From Wildfire Disaster
Institute for Home & Business Safety

Living With Fire. A guide for the Homeowner
Colorado State Forest Service

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